US Army Corps of Engineers ®
Portland District

Salmon Recovery through John Day Reservoir

John Day Drawdown Phase I Study

Public Involvement/ Agency Coordination Appendix

September 2000

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SECTION 1. Introduction

This technical appendix documents the results of the public involvement plan for the John Day Drawdown Phase I Study. This Phase I Study is a reconnaissance-level evaluation of the potential consequences and benefits of the proposed drawdown of the John Day Reservoir. This technical appendix supplements the main report, which describes more fully the alternatives, purpose, scope, objectives, assumptions, and constraints of the study.

SECTION 2. Background of the Project

In 1991, the National Marine Fisheries Service (NMFS) proposed that Snake River wild sockeye, spring/summer chinook, and fall chinook salmon be granted "endangered" or "threatened" status under provisions of the Endangered Species Act. Natural resource agencies believe that the drawdown of the 76-mile-long John Day Reservoir may provide substantial improvements in migration and rearing conditions for juveniles by increasing river velocity, reducing water temperature and dissolved gas, and restoring riverine habitat. It is also speculated that drawdown may improve spawning conditions for adult fall chinook by restoring spawning habitat and the natural flow regimes needed for successful incubation and emergence.

As a result, the NMFS Reasonable and Prudent Alternative Action #5 of its' Biological Opinion on Operation of the Federal Columbia River Power System (FCRPS), and subsequent reports recommended that USACE investigate the feasibility of lowering John Day Reservoir. In compliance with appropriation conditions, only two alternatives were to be evaluated: reduction of the current water surface elevation 265 to the level of the spillway crest that would vary between elevations 217 and 230, or reduction to natural river level elevation 165. Both alternatives were proposed by NMFS. These two alternatives were then expanded to consider each alternative with 500,000 acre-feet of flood storage and without such storage. Flood storage and hydropower are the current approved authorizations for the John Day project.

SECTION 3. Description of the Study Area

The Columbia River originates in Canada and flows for 300 miles through eastern Washington to Oregon and continues west to the Pacific Ocean, as shown in Figure 1. The adjoining region is mostly open country, with widely scattered population centers. The climate of the region is semiarid. Agriculture, open space, and large farms are prevalent. Lands adjacent to the reservoir are used to grow grains and other crops. The reach of the Columbia River under consideration in this report extends from John Day Lock and Dam at river mile (RM) 215.6, to McNary Lock and Dam RM 291. The body of water impounded by John Day Dam, Lake Umatilla, is referred to as the John Day Reservoir throughout this report. The John Day is the second longest reservoir on the Columbia River, extending 76 miles upstream to McNary Dam.

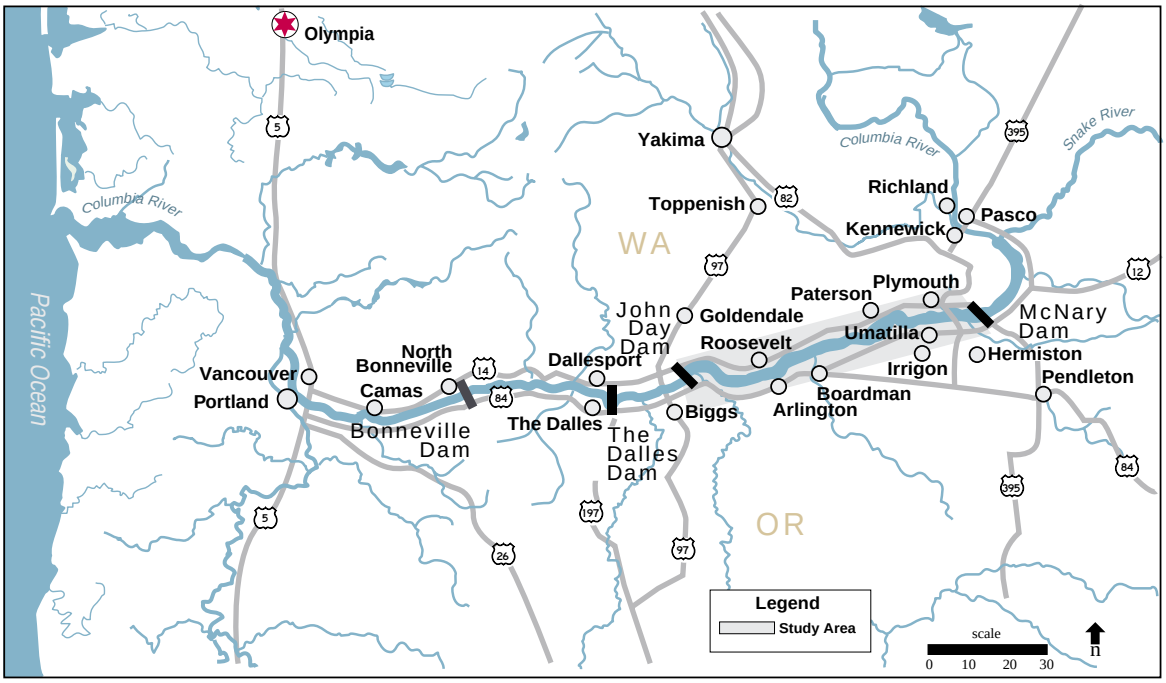


Figure 1. John Day Drawdown Phase 1 Study Area

John Day Dam and Reservoir are part of the Columbia-Snake Inland Waterway. This shallow-draft navigation channel extends 465 miles from the Pacific Ocean at the mouth of the Columbia River to Lewiston, Idaho. The entire channel consists of three segments. The first is the 40-foot-deep water channel for ocean-going vessels that extends for 106 miles from the ocean to Vancouver, Washington. The second is a shallow-draft barge channel that extends from Vancouver to The Dalles, Oregon. Although this section is authorized for dredging to a depth of 27 feet, it is currently maintained at 17 feet. The third section of the channel is authorized and maintained at a depth of 14 feet and extends from The Dalles to Lewiston. In addition to the main navigation channel, channels are dredged to numerous ports and harbors along the river.

The middle Columbia River area is served by a well-developed regional transportation system consisting of highways, railroads, and navigation channels. Railroads and highways parallel the northern and southern shores of the reservoir. Interstate 84 (I-84), a divided multilane highway, runs parallel on the south shore with the Columbia River from Portland, Oregon, to points east. Washington State Route 14 (SR-14) also parallels the Columbia River from Vancouver to McNary Dam on the north shore. Umatilla Bridge at RM 290.5, downstream from McNary Dam, is the only highway bridge linking Oregon and Washington across the Columbia River in the John Day Reservoir.

The study area includes lands directly adjacent to the reservoir as well as those directly and indirectly influenced by the hydrology of the reservoir (e.g., irrigated lands). It includes the reservoir behind the John Day Dam, and adjoining backwaters, embayments, pools, and rivers.

SECTION 4. Alternatives

The Phase 1 Study includes a preliminary evaluation of the impacts of the drawdown scenarios relative to the "without project condition," which is defined as the condition that would prevail into the future in the absence of any new federal action at John Day. The four alternatives are summarized below. One of the most important constraints on the alternatives is the requirement to pass fish for river flows up to the 10-year flood flow of 515,000 cfs. Under the four alternatives, John Day Reservoir would be drawn down at a rate of one foot per day. For greater detail, please refer to the main report, *John Day Drawdown Phase 1 Study*, and *John Day Drawdown Phase 1 Study, Engineering Technical Appendix, Structural Alternatives Section*.

4.1 Spillway Drawdown without Flood Control (Alternative 1)

The first drawdown alternative is based on requirements for improved downstream fish passage conditions during both low and flood flow conditions on the Columbia River. The existing 20-bay spillway will be operated differently from current operations, but without any structural modifications. All project inflows will be directly passed through the dam spillway with the spillway gates fully opened in free overflow condition, resulting in a pool elevation that will vary from elevation 217 to 230. Impacts downstream from John Day Dam were not studied.

4.2 Spillway Drawdown with Flood Control (Alternative 2)

The second study alternative is based on requirements for improved downstream fish passage conditions during low flow periods, while maintaining authorized flood control for the John Day Project. The existing 20-bay spillway will be operated differently from current operations, but without any structural modifications. During low flow periods, project inflows will be directly passed through the dam spillway with the spillway gates set in fully open, free overflow condition. During a flood event, however, the spillway gates will be controlled to reduce downstream flood flows based on using 500,000 acre-feet of allocated project storage space. Ponding will occur upstream from the dam. Impacts downstream from John Day Dam were not studied.

4.3 Natural River Drawdown without Flood Control (Alternative 3)

The third study alternative is based on a natural river drawdown for fish passage "without flood control" condition. Natural river conditions pertain to an opening at the John Day Dam that permits acceptable upstream fish passage conditions. The size of the total dam opening must conform to two criteria based on an invert elevation at the dam of 135. The first criterion is that the opening must be sufficiently large to meet maximum allowable stream velocity criteria for sustained swim speed for the weakest salmon species, which is estimated to be 10 feet per second (fps). The second criterion is that fish passage for this opening must correspond to the 10-year annual flood peak (515,000 cfs). This alternative will require extensive modifications to John Day Dam even beyond modification of the 1,228-foot long spillway structure. Impacts downstream from John Day Dam were not studied.

4.4 Natural River Drawdown with Flood Control (Alternative 4)

This fourth study alternative is based on natural river conditions for fish passage and includes the "with flood control" condition. It requires natural fish passage conditions for both upstream and downstream directions at the dam and includes a requirement for full authorized flood control. The calculated width of the total dam opening will correspond to that previously calculated for natural river conditions without flood control (Alternative 3). Impacts downstream from John Day Dam were not studied.

SECTION 5. Public Involvement

When this study was formulated, there were multiple public involvement goals: to get factual input from the public (general public, media, interest groups, tribes, congressionals) regarding the impacts of drawing down the John Day reservoir to spillway crest and natural river level; to give the public, through the media and directly, factual information to alleviate their concerns to the greatest extent possible; to help the public understand the Study and the implications of drawdown to them; and to present factual information in a timely, proactive manner to news media to encourage factual coverage of the Study.

The plan included involvement opportunities for a variety of target audiences: the general public; the tribes; special interest groups and organizations; state and federal agency representatives at local levels; county, city and port officials and citizen groups; the System Configuration Team; congressional staffers; the media; and the Corps family.

The methods used to reach those audiences, and to give them the opportunity to be involved and voice their feelings and concerns, were varied.

Public Involvement, initial: A first round of seven *public meetings* was held in 1999 in the following locations: during February, in Juneau, Alaska; Helena, Montana; Lewiston, Idaho; Portland and Umatilla, Oregon; Pasco; and in April, in Goldendale, Washington Each of those meetings began with an *open house* with topic tables staffed by the John Day study team members handling that topic, for example, irrigation, flood control, etc. *Comments* made during the public meetings, and responses to those comments, were recorded. Public meeting transcripts and written comments were included in the Public Involvement/Agency Coordination Appendix, of the Draft Report, and are included in the final report, which will be forwarded to Congress. Congressional staff members attended several of those meetings.

Information papers, 17 prepared by the Corps, three by National Marine Fisheries Service, and a graphic depicting the various drawdown alternatives, were provided at all public meetings, and also to meet individual public requests. Each meeting included a "big picture" presentation by a NMFS representative to lay out the reasons behind the many regional fisheries actions, and the John Day Drawdown Study.

Prior to each meeting, *editorial boards* were offered to local newspapers. Five editorial boards were held with: the Oregonian, Portland, Oregon; the Hermiston Herald, near Umatilla, Oregon; the Tri-City Herald, Pasco, Washington; the Goldendale Sentinel, Goldendale, Washington; and the Lewiston Tribune, Lewiston, Idaho. The Juneau Empire turned down the offer of an Editorial Board, but attended the public meeting. The Helena Independent Record was not interested and did not attend the meeting.

News releases were used to announce the Study, and provide information about the public meetings. Media interviews were given on request, with some of those interviews sparked by personal contacts.

Separate discussions, as appropriate, were held with Council members of the Yakama, Warm Springs, Nez Perce and Umatilla tribes, as well as the Columbia River Intertribal Fish Commission. Meetings were held with representatives of the Umatilla Electrical Coop, Pacific NW Project (irrigators/ farmers), IRZ consulting, and port officials as requested. Congressional staff members attended various meetings, as did representatives of various levels of local, state and federal governments. The project manager attended meetings of regional decision-makers, such as the System Configuration Team, to report on the Study.

Also, a *Planning Aid Team* was formed to analyze and comment on the fisheries aspects of the Study. People attending the public meetings were given the opportunity to volunteer for the PAT. Tribes also were invited to participate, but did not do so. The PAT met during summer 1999 and received and reviewed biological reports.

The U.S. Fish and Wildlife Service was consulted throughout the study and prepared a Planning Aid Letter that analyzes and details the anticipated affects to fish and wildlife resources.

A Study *web site* was established to provide easy access to information for members of the public who like the convenience of electronic information.

During the first series of public meetings sign-in sheets provided attendees the opportunity to request copies of the draft report in one of two forms: on CD or hard copy. Following that series of public meetings, it was decided that an Executive Summary of the draft report would be valuable, and could fulfill the needs of many members of the public for information. To ensure the public received what they really wanted, all on the mailing list received Executive Summaries, and then could make a choice of additional material, as desired: the draft report minus appendices, the draft report with appendices, or the executive summary. The quantity of material in each was noted. The draft report and appendices are online at: http://www.nwp.usace.army.mil/pm/projects/jddds

A news release announcing the public comment period on the draft report also listed ways the report could be obtained and a second expanded series of public meetings.

The second round of public meetings was held in February and March 2000.

Public meetings on the John Day Drawdown Phase I Study only were held in Umatilla, Oregon, and Goldendale, Washington, on Feb. 16 and 24, respectively. At those meetings, displays and information were available, and an overview presentation was given, followed by a comment and question/answer session. In addition, John Day team members participated in 15 additional public meetings in coordination with the Lower Snake River Study/ EIS and the Federal Caucus "All – H" Process, plus related studies. Meetings were held: Feb. 3, Portland, Oregon; Feb. 8, Spokane, Washington; Feb 10, Lewiston, Idaho; Feb. 15, Astoria, Oregon; Feb. 17, Pasco, Washington; Feb. 23, Boise, Idaho; Feb. 29, Seattle, Washington; March 1, Kalispell, Montana; March 2, Missoula, Montana; March 6, Ketchikan, Alaska; March 7, Idaho Falls, Idaho; March 7, Sitka, Alaska; March 8, Twin Falls, Idaho; March 8, Juneau, Alaska; and March 9, St. Petersburg, Alaska.

The transcripts of each meeting transcript were searched for comments relating specifically to the John Day Drawdown Study. Those comments are included in the Final Report, Public Involvement/Agency Coordination Appendix.

Editorial boards on the subject of John Day Drawdown were held in Hermiston, Oregon, which serves the Umatilla, Oregon, area, and Goldendale, Washington. Editorial boards were held by Federal Caucus members in many of the other meeting cities.

Based on untimely coverage of the first series of John Day Drawdown public meetings by print media, individual contacts were made with reporters and display ads were purchased in the Hermiston, Oregon, and Goldendale, Washington, newspapers. Also, because those requests could not ensure timely coverage, display ads were purchased in both newspapers.

John Day Study team members staffed a booth in the open house portion of each meeting to discuss the Study with the public. The Alaska sessions were the exception to that policy, as no open house sessions were held there. During the second series of public meetings,

signup sheets provided attendees the opportunity to request copies of the final report in one of two forms: on CD or hard copy.

Final Report: Comments on the draft report were received orally at public meetings, and in written form, both via the postal service and by electronic mail. All comments submitted were considered as the final report was prepared. In some cases, changes were made in the final report to reflect new or additional information provided by the public, interest groups and government agencies.

In general, comments were overwhelmingly in support of eliminating further study of John Day Drawdown. There were some requests, however, for further study. Oral comment transcripts, written comments and an overall comment summary are included as part of the Public Involvement/Agency Coordination Appendix in the final report.

Neither economic nor biological findings support further study of drawdown. The recommendation for no further study, which was made in the draft report, was not changed in the final report.

The final report and appendices can be found online at:
http://www.nwp.usace.army.mil/pm/projects/jddds

The public involvement process for the Phase I Study provided involvement opportunities for the general public, tribes, congressional offices, special interest groups/organizations, state and federal agencies, counties, cities, ports, the System Configuration Team, and the Northwest Power Planning Council.

SECTION 6. Attachments

Attachment A: Public Involvement Plan

PUBLIC INVOLVEMENT PLAN

Goals

a. To get factual input from the public (general public, media, interest groups, congressionals) for a Study regarding the impacts of drawing down the John Day reservoir to spillway crest and natural river level, the two options Congress directed the Corps to study.
b. To give the public, through the media and directly, factual information about the Study to alleviate their concerns to the greatest extent possible.
c. To help the public understand the Study and the implications of drawdown to them.
d. To present factual information in a timely, proactive manner to news media to encourage factual, positive coverage of the Study to the greatest extent possible.

Objectives

a. Inform target audiences (general public, media, interest groups, congressionals, internal) that the Study is underway and the various facets of that Study. Get facts into their hands.
b. Give the target publics a chance to voice their concerns regarding the Study and provide input to it.
c. Gain public understanding of Study components, methodology and potential outcomes.
d. Evaluate the plan and results of implementation.

Strategies

a. Identify and profile target audiences **(see Exhibit A)**.
b. Identify specific means of informing/reaching each target audience **(see Exhibit B)**.
c. Schedule public meetings/open houses (Oregon, Washington, Idaho, Montana, Alaska). **The first round of seven public meetings were held as noted: Portland and Umatilla, Ore., Feb. 17 and Feb. 23, 1999, respectively; Pasco and Goldendale, Wash., Feb. 25, and April 21, 1999, respectively; Lewiston, Idaho, Feb. 11, 1999; Helena, Mont., Feb. 9, 1999; and Juneau, Alaska, Feb. 4, 1999. A second round of public meetings is planned in early 2000, in the following locations: Portland and Umatilla, Ore; Pasco and Goldendale, Wash.; Lewiston, Idaho; and possibly Juneau, Alaska. Others may be held in the region if interest is expressed.**
d. Schedule editorial boards in same locations prior to each of the public meetings/open houses. **Prior to the first round of public meetings, editorial Boards were held with: The Oregonian, Portland, Ore.; the Hermiston Herald, near Umatilla, Ore.; the Tri-City Herald, Pasco, Wash.; the Goldendale Sentinel, Goldendale, Wash.; the Lewiston Tribune, Lewiston, Idaho. The Juneau Empire turned down the offer of an Editorial Board, but attended the meeting. The Helena Independent Record was not interested and did not attend the meeting. Editorial boards will be offered in the**

meeting locations prior to the second round of public meetings in early 2000.

e. Schedule one-on-one sessions with specific publics, if requested by some. **One-on-one sessions or small group discussions, as appropriate, were held as follows: Nov. 18, 1998, with representatives of the Umatilla Electrical Coop, Pacific NW Project, IRZ consulting, and the farming community; March 11, 1999, Umatilla Tribal Council; March 16, 1999, Nez Perce Tribe; on March 18, 1999, Columbia River Intertribal Fish Commission; Yakama Tribal Council, May 4, 1999; Warm Springs Tribal Council, June 8, 1999. Congressional staff members attended various meetings, as did representatives of various levels of local, state and federal governments.**

f. Provide news releases at appropriate points in the Study and prior to all public meetings/open houses. Evaluate media coverage and adjust for any misperceptions. **(10/21/99 – John Day Drawdown Options Subject of Study; 01/22/99 – John Day Drawdown Study Public Meeting Announcement; 01/29/99 – John Day Drawdown Study Information to be Shared at Juneau, Alaska; 02/02/99 – John Day Drawdown Study Information to be Shared at Helena, Mont.; 02/02/99 – John Day Drawdown Study Information to be Shared at Lewiston, Idaho; 02/08/99 – John Day Drawdown Study Information to be Shared at Portland, Ore.; 02/10/99 – Reminder, Lewiston, Idaho, meeting; 02/16/99 – John Day Drawdown Study Information to be Shared at Umatilla, Ore., and Pasco, Wash.; 02/16/99 – Reminder, Portland, Ore., meeting; 04/07/99 -- John Day Drawdown Study Public Meeting to be held at Goldendale, Wash.. Two additional news releases were issued in September 1999: (09/07/99—John Day Drawdown Phase I Study public comment period extended, information to be shared in October; 09/28/99—John Day Drawdown Phase I Study completion delayed). A news release will be issued when the draft report is released for public comment. A last news release will be issued when the report goes forward to Congress. Others may be issued at any time during the conclusion of the Study, as appropriate. We evaluated media coverage of public meetings and based on low-level or untimely coverage in some areas, began to do person-to-person contacts besides the Faxed news releases and reminder news releases.**

g. Establish a Study web site. Publicize same and create a "hit counter" to evaluate use. **The Study web site (http://www.nwp.usace.army.mil/pm/projects/jddds) was established by 02/01/99. He web site was listed on each information paper and announced at all public meetings. Study Information Papers, public comments and news releases are posted on the site. The Draft Report will be added to the site in early 2000, when it is released for public comment. Each public workshop was recorded, and comments transcribed. The transcriptions from each public workshop also are on the web site.**

h. Provide consistent information by designating media and public POCs and assuring they have the most up-to-the-minute information possible. Assure all information available to and understood by all members of the Team. **The project manager, technical team leader and public affairs specialist assigned**

to the Study were designated POC's for media and public information. Information papers on all aspects of the study were available to all team members. Media training was provided for team members who would be attending public meetings because media often does not seek one POC during those meetings. Also, media representatives were expected to talk to individual team members at stations set up during the open house portion of each public workshop. Media training also helped team members prepare for public inquiries at the meetings, and by telephone.

i. Create fact sheets/status reports at appropriate intervals during the Study. Those fact sheets to be sent on request to members of the public/media and used at public meetings. Post on Study web site. **These papers were printed as Information Papers. Seventeen papers were printed and distributed at public meetings, used in media packets, provided to individual members of the public and posted on the web site. Information papers also will be provided at the second series of public meetings in early 2000.**

j. Publicize methods public can use to provide input/get more information (telephone calls, letters, web site, comment cards**). Letters and flyers were sent announcing the first series of public meetings, and each contained a POC. Comment sheets were available at all public meetings. Telephone numbers were included in the Information papers. Each information paper included the web site, and POCs are listed on the web site. Comment sheets will be available during the second series of public meetings.**

k. Create a mailing list compiled of those attending public meetings, and those requesting information via other means (telephone calls, letters, etc.). Send new fact sheets or status letters to those on the mailing list, to automatically include Ports, Tribes, recreation associations, irrigation associations, Pacific Northwest Waterways Association, Columbia River Alliance, key environmental groups. **The initial mailing list was compiled from people who expressed interest in the Minimum Operating Pool study in 1994. Included were Ports, city, county, state and federal government representatives, and special interest groups. Sign-in lists were used at each public workshop and have been compiled into an overall mailing list that will be used for mailing copies of the draft report and any other future mailings.**

l. Publish proceedings from public meetings in report form; distribute to mailing list and post on web site. **The decision was made to only post the reports on the web sites, unless a special request was made for a hard copy. No requests were made for hard copies. The final report, however, will be distributed in format (hard copy or CD) requested. To ensure members of the public will receive what they really want, cards will be mailed in late November, outlining the various options available and the quantity of material in each: the draft report minus appendices, the draft report with appendices, or the executive summary.**

m. Publish news of the Study in the Corps'pondent and/or Newsbreak to keep internal audiences (District employees, retirees) informed. Approach Engineer Update with article to inform Corps-wide audience of important work underway in NWP. **Study beginning announced in Corps'pondent, Oct. 98; Update on**

John Day Study, Corps'pondent, Dec. 98; Drawdown public meetings, Corps'pondent, April 99.

n. Post news releases on the Study on the internal News Release folder and District homepage, and provide link to the Study web site. **Done as outlined.**

o. When completed and forwarded by Headquarters to Congress, place Study in its entirety on the Study web site. **To be done when study is forwarded to Headquarters, projected in July 2000.**

Timeline

a. Projected start date of Phase I Study (dependent on Congressional action): assume June 1, 1998. **Study actually began in October 1998.**

b. Establish web site: June 1 1998 or when Congressional directive received. **Web site was established by Feb. 1, 1999.**

c. Public meetings/open houses: by mid-September 1998

-- Oregon, Idaho, Washington, Montana, Alaska as noted above. **(Public meetings/open houses were held in February 1999, with a last requested workshop in April 1999. See above. A second round of public open houses will be held in early 2000.**

d. Editorial boards: week of public meetings/open houses (by mid-September 1998) Hermiston Herald (OR), Tri-City Herald (WA), Oregonian (OR), Anchorage Daily News (AK), Western News (MT), Lewiston Tribune (ID). **(Editorial boards were held with all but the Anchorage Daily News and Western News. The Anchorage Daily News had worked with the Public Affairs Office to obtain enough information preceding the meetings that they didn't feel an editorial board was needed. A reporter attended the public meeting. The Montana meeting was moved to another city, Helena, and the Helena Independent Record was not interested in an editorial board, or in the public meeting. A second round of editorial boards will be held in conjunction with the second series of public meetings in early 2000.)**

e. One-on-one briefings when requested by specific publics. **One-on-one sessions or small group discussions, as appropriate, were held: Nov. 18, 1998, with representatives of the Umatilla Electrical Coop, Pacific NW Project, IRZ consulting, and the farming community; March 11, 1999, Umatilla Tribal Council; March 16, 1999, Nez Perce Tribe; on March 18, 1999, Columbia River Intertribal Fish Commission; Yakama Tribal council, May 4, 1999; Warm Springs Tribal Council, June 8, 1999.**

f. Fact sheets/news releases/posts to web site, as appropriate**. (Posted on the study web site: http://www.nwp.usace.army.mil/pm/projects/jddds)**

g. Evaluation of effectiveness of public involvement methods used: immediately after each public workshop, mid-point of Study in late 1998, and at completion of Study (projected June 1999 – **actual July 2000**). **(Done. The Study team received many comments indicating that the format used for the first series of public meetings, with an open house preceding the public meeting, was well received. Information papers were available during the open house, and Study team members were there to talk one-on-one with members of the public. During the actual public meeting, comments were recorded and the**

project manager reiterated that the comments would go with the report back to Congress, the ultimate decision maker. That let people knew their comments would be heard and relayed. The successful format did not, however, allay a feeling by many attendees that the "decision was already made." A considerable amount of anti-government sentiment was voiced at some meetings.

Evaluation

a. Evaluate the use/success of material/events/methods used to inform the public by measuring numbers of workshop/open house attendees, evaluating feedback from attendees, requests to be on mailing list, telephone and letter inquiries/responses, hits on web sites, pick up by media and understanding indicated in media coverage of project, requests for speakers. **(All in all, the methods used to inform the public were successful, as noted directly above. At least 372 people attended the seven meetings, ranging from one attendee in Montana, to 150 in Goldendale, Wash. Although every attempt is made to get people to sign in, it is highly likely, especially in Goldendale, which was extremely crowded, that some did not register. The only glitch was with media coverage, which as indicated earlier, was too late and not as extensive as we would have wished. Thus, personal contacts were added to news releases, in an effort to increase timely coverage. There were 483 hits on the Study web site between Feb. 1, 1999, and June 14, 1999. One reason for the relatively low number of hits is that many members of the interested public do not have web access. Those who do have told us that the web site is appreciated Communication methods and success will continue to be evaluated as the Study concludes.)**

b. Adjust as appropriate following each evaluation. **(We adjusted per the evaluation of media coverage, and at each meeting to assure format/layout appropriate and conducive to imparting information effectively.)**

Exhibit A

Target Audiences:

a. Residents who live along the John Day pool
   -- general
   -- recreationists
   -- irrigators/farmers/ranchers
b. Tribes
c. Federal and State agencies
   -- System Configuration Team/Technical Management Team
   -- Individual agencies by request
d. Local agencies/political bodies/representatives of state agencies
   -- Port districts
   -- Hatchery personnel, ODFW
   -- City Councils (Boardman, Umatilla, Hermiston)
   -- County Commissioners (Sherman, Gillam, Morrow, Umatilla in Oregon, Klickitat, Benton in Washington)
   -- Columbia Gorge Commission
   -- Chambers of Commerce in affected communities
   -- Rotary/Kiwanis groups in affected communities
e. Special interest groups
   -- Irrigators
   -- Pacific Northwest Waterways Association
   -- Environmental organizations
   -- Oregon Wheat Growers
f. Congressional offices
g. District/Corps family
   -- Special attention/briefing: The Dalles/John Day and Bonneville employees
   -- Communicate with NWW to assure McNary employees informed of Study/impacts
h. Media
   -- Oregon, Washington, Idaho, Alaska, Montana
   -- Special attention: Hermiston Herald (Oregon), Tri-Cities Herald (Washington), Oregonian (Oregon), Spokesman Review (Washington), Lewiston Tribune (Idaho), Western News (Montana), Anchorage Daily News (Alaska)

Exhibit B

Specific means of informing/reaching target audiences:

a. News releases
b. Editorial boards
c. Public meetings/open houses
d. Fact sheets
e. Update mailings
f. Comment cards/sheets
g. Study web site
h. Flyers (at area businesses, meeting places – What, Why, Where, When, How to get Involved)
i. Corps'pondent/Newsbreak/Engineer Update
j. Meetings with individual groups/agencies/interests/congressionals, as requested or deemed necessary

Attachment B. Planning Aid Letter

(United States Department of the Interior – Fish and Wildlife Service)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Oregon State Office
2600 S.E. 98th Avenue, Suite 100
Portland, Oregon 97266
(503) 231-6179 FAX: (503) 231-6195

November 16, 1999

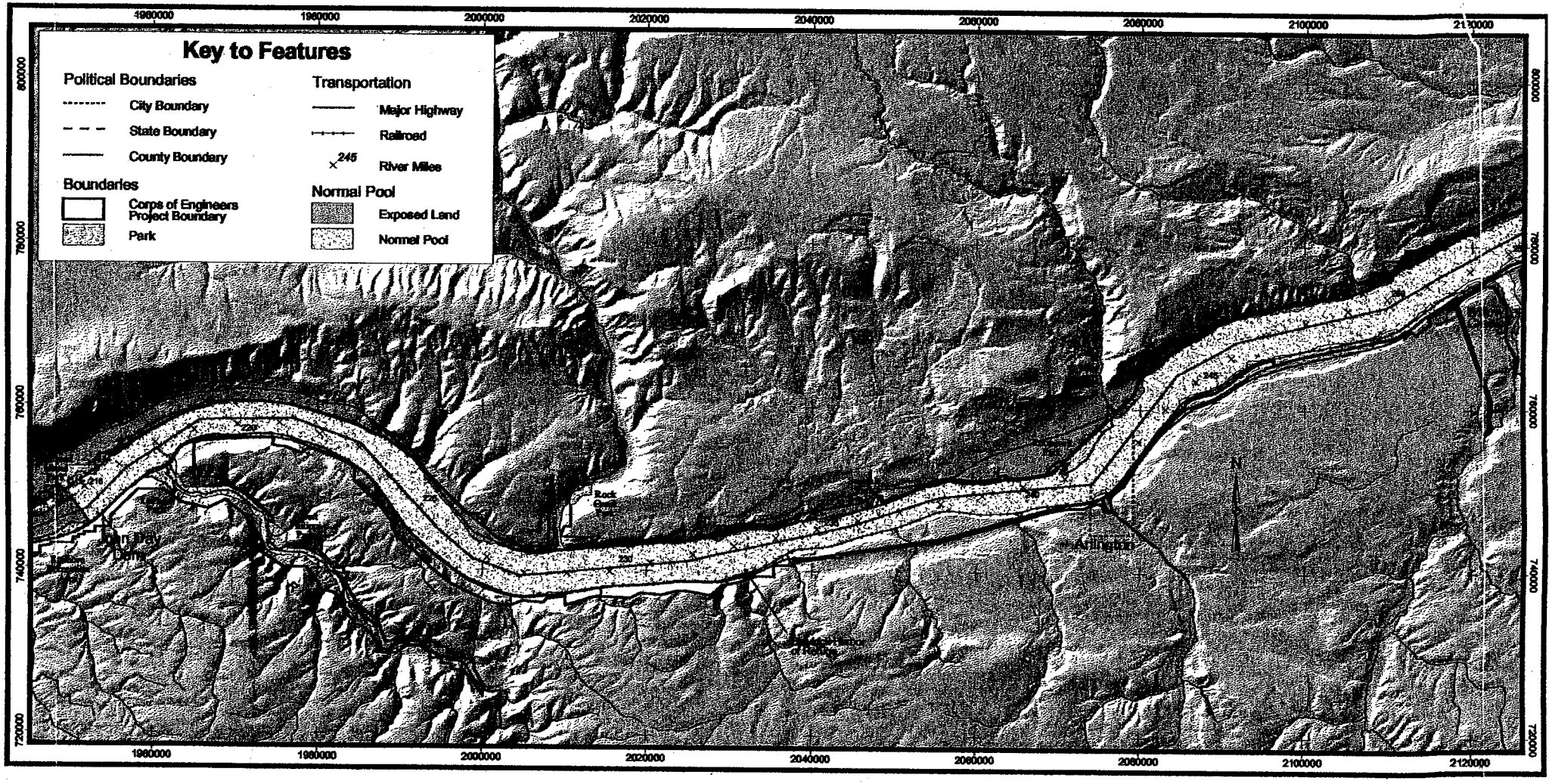
Reply To: 7365.002
File Name: John Day Drawdown-Phase 1

Colonel Randall J. Butler, District Engineer
Portland District, Corps of Engineers
P.O. Box 2946
Portland, Oregon 97208-2946

Dear Colonel Butler:

This is our Planning Aid Letter (PAL) describing the impacts to fish and wildlife resources from proposed drawdown of the Columbia River John Day Reservoir. Information in this letter is based upon existing information and general project data provided by the Portland District, Corps of Engineers (Corps) prior to October 1, 1999. The PAL is preliminary in nature, providing reconnaissance level information consistent with the Corps' Phase I study for the proposed project. This PAL does not indicate preferences for the drawdown alternatives described below and it provides only a preliminary outlook regarding mitigation for impacts to fish and wildlife. More detailed recommendations would be developed in a Coordination Act Report should the project proceed to Phase II.

This PAL has been prepared with input from the Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW), National Marine Fisheries Service (NMFS), Columbia River Inter-Tribal Fish Commission (CRITFC), and Confederated Tribes of the Umatilla Indian Reservation (CTUIR). These agencies also received a draft of this PAL and provided informal comments. The scope of this letter is general in nature and does not constitute the formal report on the project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401 as amended; 16 U.S.C. 661 et seq.).



Projection: State Plane, Oregon North Zone, NAD 27
Depths based on Corps of Engineers Hydrosurveys, 1994
Produced by GIS, Survey and Mapping Section
US Army Corps of Engineers, Portland District

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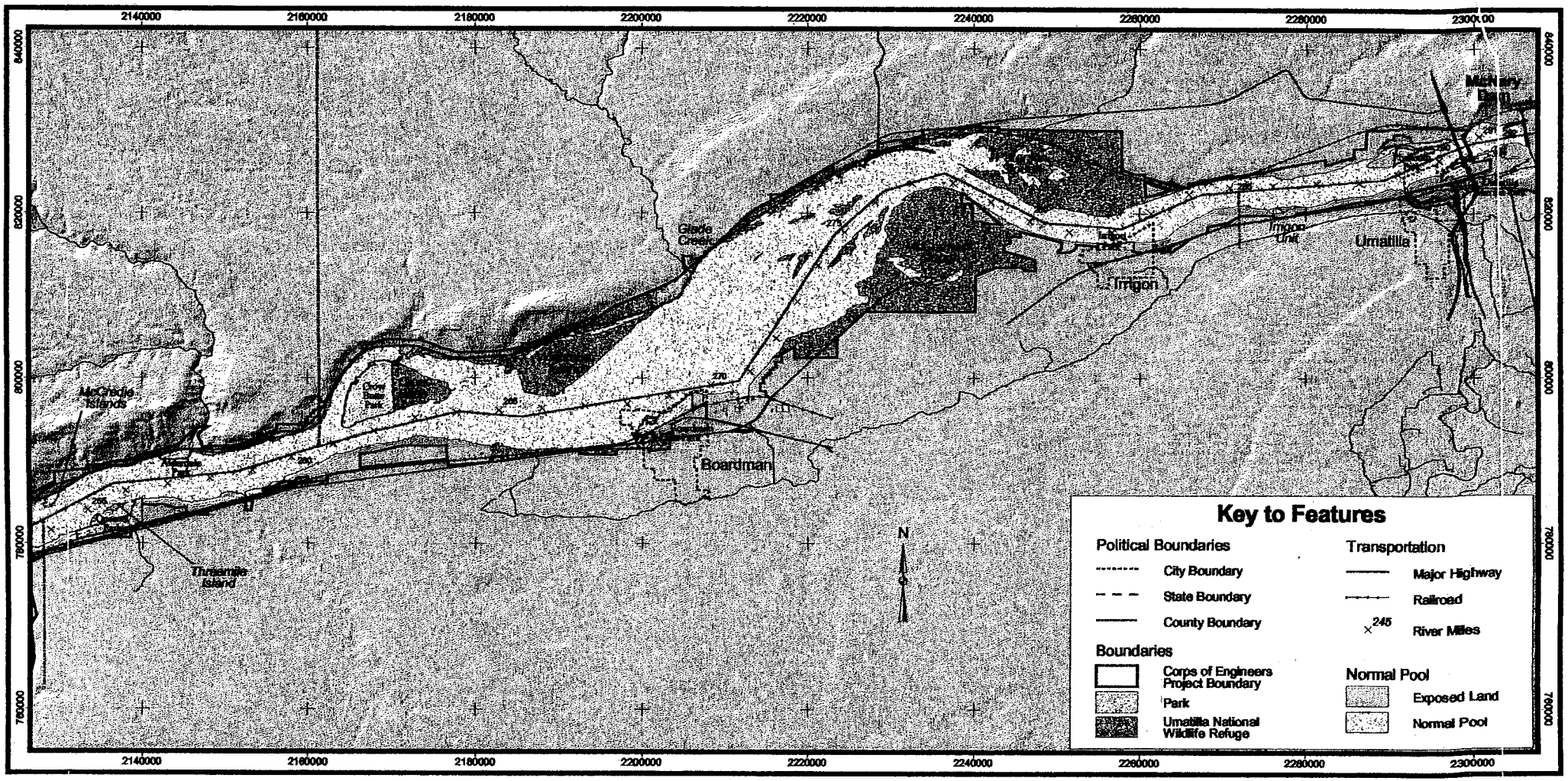
DRAFT
16 September 1999

US Army Corps of Engineers
Portland District

JOHN DAY DRAWDOWN PHASE I STUDY
Columbia River - Oregon / Washington

Study Area Overview Map

Figure 1 (a)



Projection: State Plane, Oregon North Zone, NAD 27
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JOHN DAY DRAWDOWN PHASE I STUDY
Columbia River - Oregon / Washington

Study Area Overview Map

Figure 1 (b)

DESCRIPTION OF THE PROJECT

Under the existing operation, John Day Reservoir ranges from an average low elevation (measured at the dam) of 262 feet in May to a high of 267 feet* in August (West Consultants 1999).

The proposed project would involve a reduction in the current reservoir elevations in the John Day Reservoir. Two major scenarios are being evaluated: 1) drawdown to spillway crest and (2) drawdown to natural river level. Under each of these two scenarios, a flood control and a no flood control operation is being evaluated. This results in four alternatives for evaluation.

Alternative 1. Drawdown to spillway crest without flood control. In this alternative, the spillway gates would be opened and the river would flow uncontrolled over the existing spillway. The powerhouse would continue to operate. Reservoir elevations measured at the dam in a normal (average) year similar to 1982 would range from a low of about 218.0 in October to a high of 230.7 in June (West Consultants 1999). Although some flow would occur over the spillway year-round, most spill would occur from April 1 through July 31 (CH2MHill 1999). Table 1 provides a summary of reservoir elevation data, measured at several sites, for each alternative.

Alternative 2. Drawdown to spillway crest with flood control. In this alternative, the gates would normally be raised and the river would flow uncontrolled over the existing spillway. However, approximately once every two to five years, the gates would be lowered to control floods. This would provide up to 500,000 acre-feet of flood storage space. In an average year, reservoir elevations measured at the dam would range from a low of approximately 218.0 in October to a high of 235.7 in June (West Consultants 1999). Highest spillway flows would occur in April, May, June, and July (CH2MHill 1999). The powerhouse would continue to operate.

Alternative 3. Drawdown to natural river without flood control. This alternative would involve breaching the dam and allowing the reservoir to be drawn down to the level of the natural river bed. The natural river level at the dam would range in elevation from a low of about 160.9 in October to a high of 165.8 in June. The powerhouse would be abandoned.

Alternative 4. Drawdown to natural river with flood control. In this alternative, the dam would be breached; however, piers and gates would be constructed in the center of the dam to provide capability for 500,000 acre-feet of flood control space. During flood control operations, closing the gates would raise the river about 50 feet at the dam. Power production would be discontinued. River elevations measured at the dam would range from a low of about 160.9 in October to a high of 184.8 in June.

About 30 irrigation pumping stations along the Oregon and Washington shorelines would be adversely impacted by the lower reservoir elevations. Most of the pump intakes now submerged in the river would be dewatered as the reservoir level recedes. To provide water to irrigators, project plans include the construction of two irrigation distribution canals. One canal would be constructed on the Oregon side of the Columbia River and one would be on the Washington side (Figures 2 and 3). The canal in Washington would be designed to carry about 1,640 cubic feet per

* All reservoir elevations are in feet, Nataional Geodetic Vertical Datum at John Day Dam

Table 1. Reservoir elevations by alternative at three sites on the John Day Reservoir.

RM 215.63 John Day Forebay

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	221.62	221.62	161.63	161.63
February	224.00	224.00	162.61	162.61
March	228.53	228.53	164.49	164.49
April	226.78	226.78	163.64	163.64
May	229.39	229.50	165.03	166.15
June	230.67	235.67	165.78	184.80
July	226.86	231.40	163.78	178.54
August	220.73	220.73	161.45	161.45
September	218.31	218.31	160.91	160.92
October	217.96	217.96	160.87	160.87
November	220.14	220.14	161.22	161.22
December	220.38	220.38	161.31	161.31

RM 276.41 McCormack Slough/Paterson Slough

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	234.89	235.08	234.79	234.79
February	237.48	237.71	237.16	237.16
March	241.78	242.07	240.90	240.90
April	240.11	240.37	239.47	239.46
May	242.74	243.07	241.70	241.70
June	244.06	246.52	242.78	242.85
July	240.01	242.45	239.28	239.36
August	234.04	234.22	233.95	233.95
September	231.95	232.08	231.95	231.95
October	231.83	231.95	231.84	231.85
November	233.45	233.61	233.41	233.41
December	233.71	233.88	233.67	233.66

RM 289.21 Umatilla River

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	254.53	254.53	254.53	254.53
February	256.78	256.78	256.78	256.78
March	260.23	260.24	260.21	260.21
April	258.93	258.93	258.91	258.91
May	261.03	261.04	261.00	261.00
June	262.12	262.38	262.06	262.07
July	258.78	259.04	258.76	258.76
August	253.76	253.76	253.76	253.76
September	251.88	251.88	251.88	251.88
October	251.81	251.81	251.81	251.81
November	253.21	253.21	253.21	253.21
December	253.46	253.46	253.46	253.46

FIGURE 2.
OREGON CANAL ROUTE

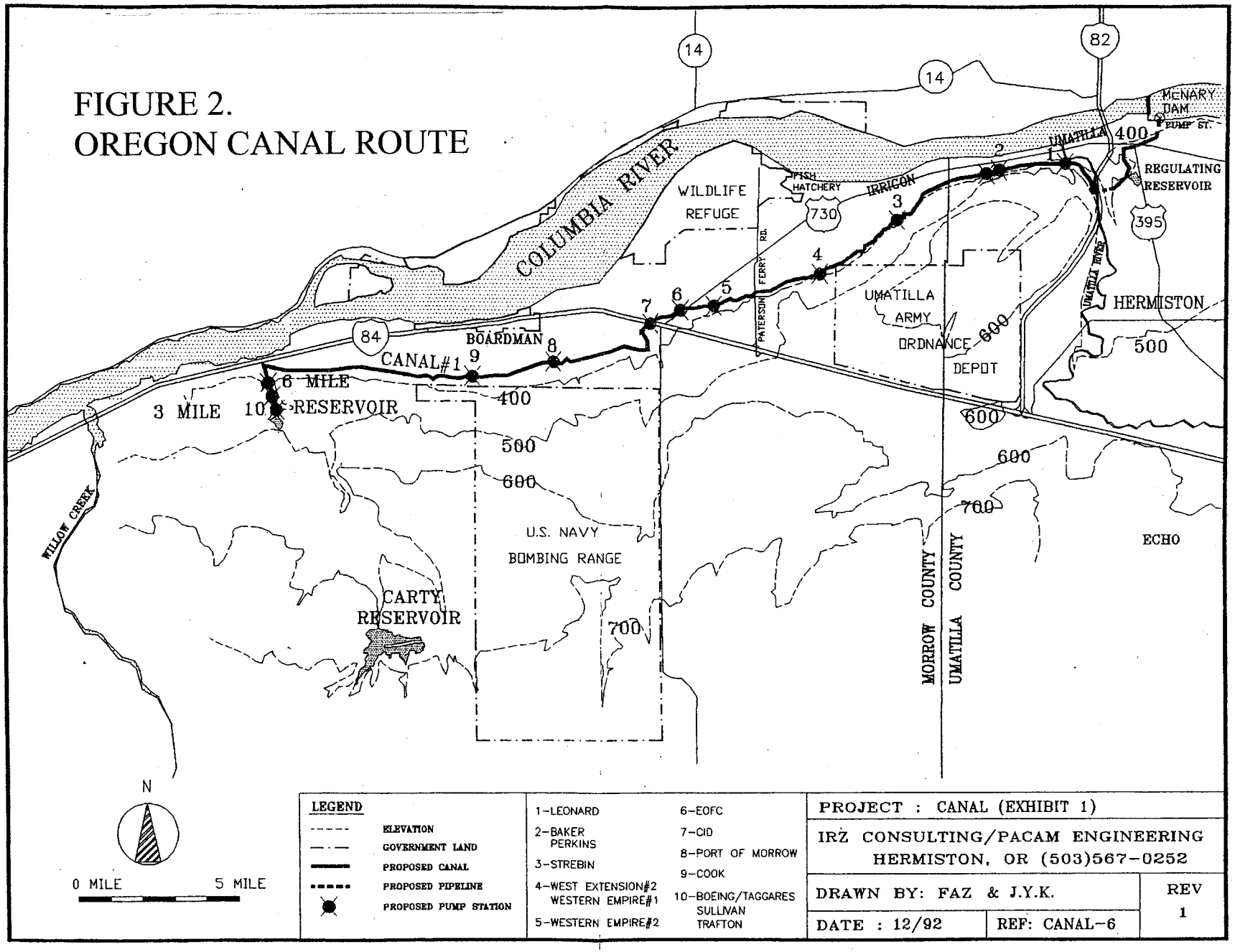
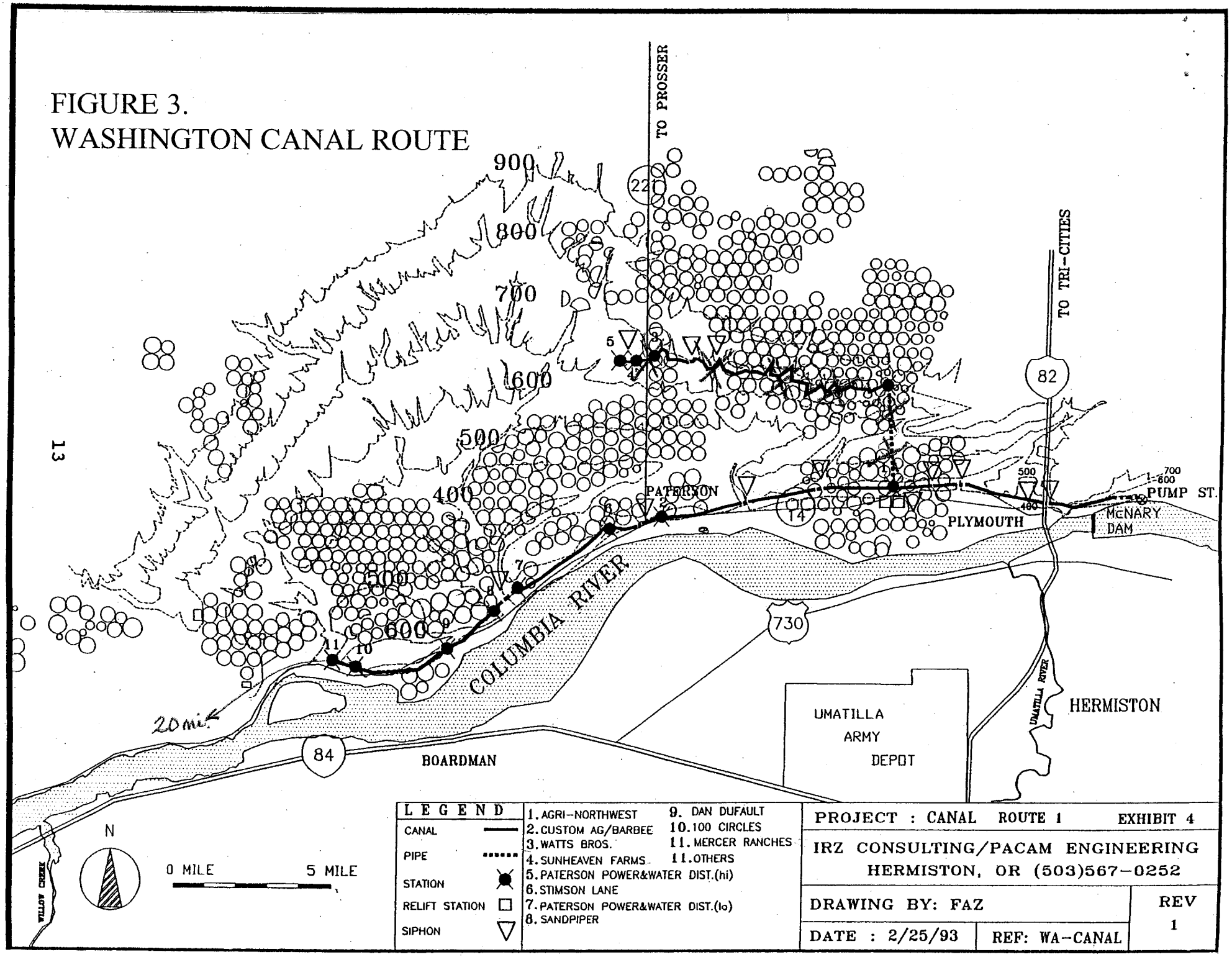


FIGURE 3.
WASHINGTON CANAL ROUTE



second (cfs). This canal would begin at a pump station in the Columbia River just upstream from McNary Dam and would terminate about 60 miles downstream. Another pump station would also be necessary on the Washington side of The Dalles pool to deliver water in a 1½ mile-long canal to Goldendale Aluminum. The canal in Oregon would be designed to carry about 1,990 cfs and would begin just upstream from McNary Dam and terminate about 5 miles west of Boardman. Total length of the canal would be about 37 miles.

Water for the canals would be provided by two pump stations located on the Columbia River, i.e., one approximately 1/2 mile upstream from McNary Dam and one immediately downstream from the Dalles Dam. The screens would be designed to meet NMFS fish screening criteria.

Corps project plans also include re-seeding the barren shoreline area of the drawdown zone. In addition, to protect existing railway lines, highways and other infrastructure from erosion and undermining, project plans include placing riprap on up to 48 miles of the new shoreline area.

FISH RESOURCES

WITHOUT THE PROJECT

The Columbia River System provides habitat for anadromous species such as chinook, coho, and sockeye salmon; steelhead trout; white sturgeon; American shad; and Pacific lamprey. While harvest yields have been drastically reduced from historic levels, some of these fish still contribute to commercial, sport, and Indian treaty fisheries. There are several treaty fishing access sites on the John Day Reservoir (Lake Umatilla) which have been developed or will be developed by the Corps of Engineers for tribal use. The treaty fishing access sites considered for development are North Shore, LePage Park, Goodnoe, Pasture Point, Rock Creek, Sundale, Roosevelt, Moonay, Pine Creek, Three Mile Canyon, Alderdale, Alder Creek, Crow Butte, and Faler Road near Boardman Park. Boat ramps, docks, and/or groins will be constructed at North Shore, LePage Park, Pasture Point, Sundale, Roosevelt, Pine Creek, Threemile Canyon (Quesnel), and Crow Butte.

The river in the project area is vital for passage of adult and juvenile salmonids. Adults migrate upstream to spawning and rearing waters in the upper Columbia and Snake River systems and each year, primarily from April through July, millions of juvenile salmonids migrate downstream through the project area to the ocean. Within the project vicinity the river and its backwater areas also provide habitat for salmonid rearing and, in the tailrace area, possibly spawning. For the 1988 to 1998 period, annual adult salmon runs passing over McNary Dam have averaged 123,000 chinook, 40,000 sockeye, and 2,300 coho. Steelhead counts for the same period have averaged 131,000. These numbers represent fish that have escaped sport, commercial, and Indian fisheries downstream.

Columbia River sockeye salmon runs have decreased dramatically. Sockeye runs past McNary Dam have decreased from over 100,000 fish in the mid-1950s to as few as 9,000 in 1998. The Snake River sockeye run has almost vanished; the number of adult sockeye returning to the Snake River (counted over Ice Harbor Dam) were one, fifteen, and three for 1996, 1997, and 1998 respectively. For this reason, the Snake River sockeye has been listed as an endangered species

and is protected under the Endangered Species Act (56FR 58611; Nov. 20, 1991). Snake River spring/summer and fall chinook salmon populations are also in a critical situation. Their runs have declined from about 123,000 in the 1950s to 26,000 in 1998. As a result of these diminishing returns, the Snake River spring/summer and fall chinook salmon have been listed as threatened species (57FR 14653; April 22, 1992).

The decline in salmon and steelhead runs can be attributed to many factors including habitat destruction, ocean conditions, harvest issues, and passage problems at dams and other man-made structures. Part of the passage problem occurs in the series of dams and pools on the Columbia and Snake Rivers that juvenile downstream migrants must negotiate on their journey to the ocean. Because of the slow moving water in these reservoirs, travel time for upper-Columbia River system smolts migrating in river to the ocean has increased significantly from historic conditions. One of the largest pools on the Columbia River that must be negotiated by downstream migrants is the 76-mile-long John Day Reservoir.

As travel time increases for smolts migrating down the Columbia River it reduces their chances for survival. There are several reasons that increased smolt travel time can be detrimental. The physiological condition of smolts changes as they migrate, preparing them for the transition to salt water. Increased travel time subjects the smolts to the possibility of missing their "biological window" for arriving in salt water. Additional migration time also increases the migrant's exposure to disease and predators within the Columbia River reservoirs. Predators such as the northern pikeminnow (formerly, squawfish) consume large numbers of juvenile salmon in the Columbia River each year. Some salmonid smolts, particularly steelhead trout, do not migrate but become "resident" fish. Extending their migration times may increase this rate of residualism.

The John Day and Umatilla Rivers, which enter the John Day Reservoir, both have runs of salmon and steelhead trout. The John Day River maintains runs of spring chinook salmon and summer steelhead. A popular troll fishery for steelhead begins each August in the John Day River arm. The Umatilla River supports runs of reintroduced spring and fall chinook and coho salmon as well as native summer steelhead. Spring chinook counts in the Umatilla River have ranged between 409 and 2,194 fish over the last three years. Fall chinook numbers have declined from 646 in 1996 to 286 in 1998. The coho run was 618, 670, and 3,081 fish for 1996, 1997, and 1998, respectively. Over the last four years, steelhead returns have averaged about 2,000 fish annually.

Both the Irrigon and Umatilla Fish Hatcheries are located in the project area adjacent to the Columbia River near Irrigon. The hatcheries, operated by the ODFW in cooperation with the Confederated Tribes of the Umatilla Indian Reservation (at the Irrigon Hatchery), produce a total of about 5 million salmon and steelhead smolts annually. The water supply for rearing these fish is provided by wells and the wells are extremely dependent upon the level of John Day Reservoir. Severe water supply problems now exist at the hatcheries when the reservoir drops to elevation 261.0

The run of Pacific lamprey over John Day Dam has decreased significantly in the past several decades (Jackson, personal communication). Presently, there is no longer a tribal fishery for lamprey in the Umatilla River and lamprey are now only caught incidentally as part of the spring chinook fishery in Granite Creek, a tributary to the John Day River. Both these rivers historically supported important commercial tribal fisheries.

The American shad run in the Columbia River continues to increase. Counting stations at McNary Dam noted 1,147 shad in 1968 while 393,000 were counted in 1998.

Principal resident game fish found in the vicinity of McNary Dam are rainbow trout and whitefish and channel catfish, bullhead, black and white crappie, largemouth and smallmouth bass, yellow perch, bluegill, pumpkinseed and walleye.

The Columbia River in the project area supports a significant sport fishery for warmwater game fish. A popular walleye fishery exists on the main river from McNary Dam down to the Boardman area. Numerous bass or walleye tournaments have taken place on the John Day Reservoir over the past several years. However, about 50 percent of the angling for resident game fish occurs in the many protected backwater areas of the reservoir. The John Day River backwater, for example, supports a popular smallmouth and channel catfish fishery.

These shallow backwater areas are of significant importance to warmwater game fish for spawning and rearing. Studies in the area have shown that bass migrate up to 40 miles in the Columbia River to spawn in the sloughs (Montgomery and Fickeisen 1975). Major backwater areas include Paterson Slough (494 acres) , Glade Creek (30 acres), Willow Creek, and the John Day River. Other areas important to resident fish include Plymouth Park, McCormack Slough, Whitcomb Island, and Crow Butte.

Nongame fish populations in the project area include northern pikeminnow, redside shiner, dace, peamouth, chiselmouth, sculpin, stickleback, sand roller, sucker, carp, and goldfish. Of special significance is the sand roller which is being considered for sensitive species status by ODFW. Large numbers of carp often occupy the shallow waters of the reservoir and eliminate much of the aquatic vegetation. This has resulted in lower game fish populations and reduced food for waterfowl.

WITH THE PROJECT

Drawdown to Spillway Crest

Under this alternative, the river would flow uncontrolled over the existing spillway, except under the flood control option where the spillway gates would be lowered about once every two to five years to provide 500,000 acre-feet of storage. Powerhouse operation would continue. During an average water year, reservoir elevations would range from 218.0 to 230.7 without flood control and from about 218.0 to 235.7 with flood control (Table 1).

Compared to existing conditions, water particle travel time through the reservoir would range from 1.7 to 4.8 days less with flows between 200,000 cfs and 500,000 cfs. For example, at a flow of 300,000 cfs (average May flow) water particle travel time under the existing operation would be 3.8 days compared to 1.9 days with the spillway crest alternative. This is a reduction of 1.9 days travel time. Average flows are usually 300,000 cfs in May, peak around 500,000 cfs in June, and drop off to 200,000 cfs in August. Table 2 shows water particle travel time for three reservoir operation scenarios at several flows.

Table 2. Water Particle Travel Time (in days) Through John Day Reservoir

Flow (1,000 cfs)	Existing Operation	Spillway Crest	Natural River
200	5.7	2.5	0.9
300	3.8	1.9	0.8
500	2.4	1.4	0.7

The decrease in water particle travel time is expected to result in potential decreased travel time for actively migrating yearling and sub-yearling anadromous fish moving downstream through John Day Reservoir. Decreased travel time through the reservoir means the smolts may suffer less mortality and arrive at the estuary sooner. This could result in increased numbers of returning adult salmon and steelhead in the Columbia Basin.

Adult salmon and steelhead trout would also realize long term benefits from the proposed drawdown. Over a period of several years, the upper one fourth of the reservoir (approximately 20 miles) would return to a free flowing river with a sand/gravel/cobble substrate. Historically, this part of the Columbia River provided significant mainstem spawning for anadromous fish. Drawdown to spillway crest should restore some of this habitat and provide suitable spawning areas for anadromous fish, particularly fall chinook. An estimated 31,000 fall chinook would be expected to spawn in this area (USGS 1999). New fish ladders would be constructed on both the north and south shores. If the ladders are properly designed, adult fish passage conditions should not change significantly.

Although there would be benefits to adult and juvenile salmonids, there are also a number of adverse impacts which are anticipated as a result of the reservoir drawdown. These impacts could cause direct losses to migrating juvenile salmonids and could reduce available rearing habitat. For example, the lower pool level will result in a smaller size reservoir which will concentrate both smolts and the population of fish which prey on smolts. Initially, this could result in increased predation on downstream migrants, primarily in the slower moving water. However, as predator populations reach equilibrium in the smaller, faster moving reservoir, the overall predation mortality should be lower than existing levels. A lower water level in the upper John Day Reservoir (tailwater of McNary Dam) will cause decreased submergence of the turbines at McNary Dam. This condition causes subatmospheric pressures which could increase mortalities to downstream migrants. This increased mortality could be in the range of one percent. When little or no water is going over the John Day spillway (during flood storage), all downstream migrants will be forced to negotiate the turbine screens and bypasses. This will result in continued losses and injuries to downstream migrants. New juvenile fish collection facilities will be built into the dam in an effort to keep these losses at a reduced level.

An almost total loss of fish habitat would occur in backwater areas such as Paterson Slough, McCormack Slough, Willow Creek, Glade Creek, the Plymouth Park area, the area between

Whitcomb Island and the mainland, the area behind Crow Butte, Mesner Pond, and in those areas between the railroad and highway fills along the Columbia River. The 50-foot drawdown at the mouth of the John Day River would also eliminate most of that backwater area. An estimated 8,836 acres of backwater fish habitat would be dewatered with this alternative.

The shallow water shoreline and backwater areas provide important foods and nutrients to the Columbia River ecosystem. Large numbers of aquatic invertebrates are produced in these areas. Juvenile salmonid smolts, including large numbers of fall chinook fry, utilize these areas for feeding during their downstream migration. Dewatering the sloughs and backwaters would eliminate this important food source for migrating juvenile salmonids. The loss of the backwater areas would also eliminate their contribution to the food chain and nutrient supply in the Columbia River. It is expected, however, that some shallow water zones would be reestablished along the new shoreline and would eventually contribute as food production areas.

Sediment deposition within the tributary channels due to backwater from the John Day Pool has significantly changed the geometry on several of the tributary streams. To insure the continuous passage of migrating adult fish in these tributaries following drawdown, modifications to the current channel geometry may be required. The modifications could include dredging in Willow Creek, Umatilla River, Rock Creek, and Wood Gulch to open the channel to adult fish passage under the proposed drawdown conditions. Dredging would not likely be required on the John Day River due to upstream bedrock control on the stream. For two of the four major tributaries to the John Day Pool, annual maintenance dredging may also be required to maintain fish passage. The dredged channels for Willow Creek and Rock Creek would be designed to transport the incoming sediment load. However, the dredged channels would be highly entrenched within the existing sediments. These sediments would be subject to erosion rates the first several years after drawdown occurs. Neither the John Day nor the Umatilla Rivers are expected to require maintenance dredging. The sediment transport capacity of the Umatilla River under spillway freeflow and natural drawdown conditions is in excess of the incoming sediment load. This would maintain the dredge channel or possibly cause additional degradation. Dredging at the mouths of these tributaries is expected to produce about 5,774,000 cubic yards of sediment. Potential passage problems could also occur upstream near Chinaman's Hole where channel modifications were recently made to facilitate fish passage.

Reservoir drawdown is expected to cause severe impacts to the Umatilla and Irrigon Hatcheries. The well water supply for both hatcheries is directly dependent upon the level of the Columbia River and hatchery operation is severely impacted when the John Day Reservoir drops as low as elevation 261.0. With the proposed drawdown, these hatcheries could no longer operate with the present water supply systems. This would mean an annual production loss of about 5 million salmon and steelhead smolts. If satisfactory replacement water sources were provided, these losses could be reduced.

Significant spawning and rearing habitat losses for warmwater game fish would occur with the reservoir drawdown. Dewatering shallow backwater areas would result in spawning habitat losses to species such as smallmouth bass, which travel many miles in the Columbia River to reach sloughs and backwaters to spawn. Beneficial effects would result if spawning areas of undesirable species (such as carp and northern pikeminnow) were dewatered or became unsuitable. Increased water velocities in the river could adversely affect walleye spawning success which is best when

the river is high and slow. As the reservoir level drops, all fish species will be subject to stranding in isolated pools that remain in the backwater areas. The loss of the aquatic invertebrate population associated with the shallow waters would cause additional losses to warmwater game fish which depend on invertebrates for a significant part of their food supply.

Depending on which alternative is selected, there would be varying impacts on the treaty fishing access sites in the John Day Reservoir. Several of the sites do not have inwater facilities associated with them and would probably not be affected by drawdowns. However, for those sites with existing or planned construction of boat ramps, docks, groins, and/or breakwater structures, there would be adverse impacts on the use and operation of these facilities. Treaty fishing access sites which would be impacted by drawdown include North Shore, LePage Park, Pasture Point, Sundale, Roosevelt, Pine Creek, Threemile Canyon, Alderdale, and Crow Butte. Under the spillway crest drawdown scenario, all of these sites would become unuseable for some period of time. The Corps plans to replace these access sites in-kind, but until reconstruction occurs, tribal fishing opportunities would remain limited.

Angling opportunities and success would be significantly reduced. Popular angling areas in the backwaters would be eliminated and fishermen would then have to fish along the new barren shoreline created as the river receded. Angling in areas such as the John Day River arm, which supports a significant smallmouth bass and channel catfish fishery, would be mostly eliminated.

Boat ramps now used by anglers will be unusable when the river level drops. Some of the more popular ramps which would be affected are at Sundale, Threemile Island, Paterson Ferry Road, Plymouth, and the Umatilla River. Other more primitive boat launch sites around the reservoir would also be affected. Boat marinas on the John Day River arm (LePage and Phillipi Parks) would be left dry as the reservoir would be from 35 to 50 feet lower than existing conditions. The drawdown would also eliminate marina operations at Boardman, Arlington, Crow Butte State Park, Irrigon, and Umatilla. As with the tribal fishing access sites, angling opportunities would remain limited or non-existent until in-kind replacement of these facilities is accomplished.

The pump stations to be installed for supplying irrigation water to the proposed canals would be designed in accordance with fish screening criteria acceptable to State and Federal fishery agencies. Therefore, impacts to juvenile fish from these facilities are not expected. Although the specific alignments of the canals are not yet known, they are not expected to significantly impact fish resources.

Drawdown to Natural River

With this alternative, John Day Dam would be breached. The powerhouse would be abandoned. Piers and gates would be constructed if the flood control option were implemented. In an average water year similar to 1982, reservoir elevations with this alternative would range from 160.9 to 165.8 without flood control and from 160.9 to 184.8 with flood control structures (Table 1).

Overall, the long-term effects of the natural river drawdown alternatives would be beneficial to anadromous fish stocks which migrate above John Day Dam. While the following beneficial effects on anadromous fish are anticipated, they have not been quantitatively assessed at this stage. Quantitative biological benefit estimates would be refined if a Phase II study was implemented.

Existing passage delays to juvenile salmonids caused by the dam and reservoir would be eliminated. Downstream migration rates of juvenile salmonids should be similar to that of passage through free flowing sections of river. Without the dam, water particle travel time through the reservoir would range from 1.7 to 4.8 days less than existing conditions (at flows between 200,000 cfs and 500,000 cfs). For example, at a flow of 300,000 cfs (average May flow), water particle travel time would be 3.8 days under existing conditions, compared to 0.8 days with the natural river drawdown. This a reduction of 3.0 days travel time. Average flows are usually 300,000 cfs in May, peak around 500,000 cfs in June, and drop off to 200,000 cfs in August. Table 2 shows water particle travel time for three reservoir operation scenarios at several flows.

The decrease in water particle travel time is expected to result in decreased travel time for smolts moving through John Day Reservoir. Decreased travel time through the reservoir means the smolts suffer less mortality and arrive at the estuary sooner. This could result in increased numbers of returning adult salmon and steelhead in the Columbia Basin.

Breaching the dam would also eliminate juvenile losses now caused by turbines, bypass systems, and spillways. Each of these factors contributes significantly to the mortality rate of downstream migrants. Juvenile losses now caused by supersaturated gas below John Day Dam would be reduced. The "without flood control" option would essentially eliminate the supersaturated gas now created by John Day Dam. The spillway constructed for the "with flood control" option would still add some supersaturated gas to the river.

Long term benefits are also anticipated for returning adult salmon and steelhead. Without the flood control option, this alternative would eventually change an existing 76-mile-long reservoir into a free flowing river environment more closely resembling historical river conditions. Historically, this reach of the Columbia River provided significant mainstem spawning for anadromous fish. Breaching the dam should restore many miles of this habitat and again provide extensive suitable spawning areas for anadromous fish, particularly fall chinook. This restored habitat would support an estimated spawner capacity of 55,000 fall chinook (USGS 1999). If salmon spawning is restored in this section of the river, it could reduce the current fish mitigation levels at Spring Creek, Ringold, Little White Salmon, and Bonneville Hatcheries. The potential for this effect exists because some of the production at these hatcheries is linked to mitigation of fish losses caused by John Day Dam.

The rate of upstream passage of adult fish is not expected to change significantly. Adult fish passage through the natural river channel would probably be slower than passage through the existing reservoir. However, migration delays that may now occur at the dam would be eliminated. Water velocities through the breach in the dam could reach 10 fps during a 10-year flood event. Therefore, some delay could occur when fish attempt to move upstream during such a flood event. Passage would also improve for adult and juvenile lamprey, i.e., adults would experience fewer passage delays in the ladders at the dam and juveniles would be subject to fewer bypass delays and reduced predation in the reservoir.

A number of adverse fishery impacts are anticipated as a result of the reservoir drawdown, including potential losses of rearing habitat and predation impacts on migrating juvenile salmonids. For example, the lower river level may concentrate both smolts and the population of Quantitative biological benefit estimates would be refined if a Phase II study was implemented.

migrants, primarily in isolated areas of slower moving water. As predator populations reach equilibrium in the faster moving river, however, the overall predation mortality should be lower than existing levels. Without the upper John Day Reservoir (tailwater of McNary Dam), there would be decreased submergence of the turbines at McNary Dam. This condition could cause increased exposure of fish to subatmospheric pressures resulting in increased mortalities to downstream migrants. This increased mortality could be in the range of one percent.

There would be a total loss of all existing backwater fish habitat including Paterson Slough, McCormack Slough, Willow Creek, the John Day River arm, Glade Creek, Plymouth Park area, the area between Whitcomb Island and the mainland, the area behind Crow Butte, Mesner Pond, and those areas between the railroad and highway fills along the Columbia River. An estimated 8,836 acres of backwater fish habitat would be dewatered with this alternative. Approximately 6,968 acres of shallow waters along the main river shoreline would also be dewatered. Associated with this loss would be a net increase of 81 linear miles of shoreline that would occur with the proposed project, primarily due to increased island habitat. These shallow water shoreline and backwater areas provide important foods and nutrients to the Columbia River ecosystem. Large numbers of aquatic invertebrates are produced in these areas. Juvenile salmonid smolts, including large numbers of fall chinook fry, utilize these areas for feeding during their downstream migration (Zimmerman and Rasmussen 1981). Dewatering the sloughs and backwaters would eliminate this important food source for migrating juvenile salmonids. The loss of the backwater areas would also eliminate their contribution to the food chain and nutrient supply in the Columbia River. It is estimated that 8,412 acres of new shallow water zones would be created along the shoreline of the river after removal of the dam and, once established, they could develop into valuable aquatic food production areas.

Breaching John Day Dam is expected to expose large mud flats at the mouths of the tributaries of the Columbia River such as the Umatilla River, John Day River, Willow Creek, Glade Creek, and Rock Creek. Some of these tributaries carry a heavy silt load into the Columbia River. This silt has been settling out where the tributaries meet the Columbia River backwater since John Day Dam was completed in 1968. The proposed natural river will be lower than the existing level of the river mouths where the sediments have accumulated. This will likely result in the tributary rivers cutting a channel into the sediment deposit down to the new river level. The removed sediment will be redeposited in the immediate river area and carried and distributed downstream. There is concern regarding the potential impact of this channel cutting realignment on tributary anadromous fish. If the river mouth should spread out into many small channels, fish passage could be restricted. Plans are in place to, if necessary, dredge Willow Creek, the Umatilla River, Rock Creek, and Wood Gulch to maintain a well defined channel in these streams and allow for upstream passage of anadromous fish. Additional passage problems are possible in the Umatilla River near Chinaman's Hole where channel modifications were recently made to facilitate fish passage. If passage problems should occur at any of the tributaries, additional channel modifications would be required to enable fish passage. Dredging at the tributary mouths could produce an estimated 9,346,000 cubic yards of sediment material.

Eliminating John Day Reservoir would cause severe impacts to the Umatilla and Irrigon Hatcheries. The well water supply for both hatcheries is directly dependent upon the level of the Columbia River. Hatchery operation is severely impacted when the John Day Reservoir drops as low as elevation 261. With the proposed breaching of the dam, these hatcheries could no longer

operate which would mean an annual production loss of about 5 million salmon and steelhead smolts. If a new water supply system were supplied that was not dependent on river water elevations, these losses could be mitigated.

Major losses of spawning and rearing habitat for warmwater game fish would occur with the dam breaching. Dewatering 8,836 acres of shallow backwater areas described above would result in spawning habitat losses to species such as smallmouth bass, which travel many miles in the Columbia River to reach sloughs and backwaters to spawn. Beneficial effects could result if spawning areas of undesirable species (such as carp and northern pikeminnow) were dewatered or became unsuitable. Increased water velocities in the riverine system could adversely affect walleye spawning success which is best when the river is high and slow. During the initial drawdown period, all fish species will be subject to stranding in isolated pools that remain in the backwater areas. The loss of shallow water habitat and associated aquatic invertebrates is expected to cause additional losses to warmwater game fish which depend on the invertebrates for a significant part of their food supply. Over a period of time, however, new populations of aquatic invertebrates would become established in the Columbia River.

Drawdown to natural river levels would permanently eliminate use of the inwater facilities at the tribal fishing access sites. This would have a severe negative impact on tribal fishing in the John Day Reservoir, amounting to an average loss to the commercial fishery of about 12,000 chinook salmon and steelhead (based on 1994 to 1998 figures).** Eventually, however, tribal fishing could resume in the river if access were provided along the new river shoreline.

Warmwater game fish angling opportunities and success would be drastically reduced. Popular angling areas in the existing large backwaters would be eliminated and fishermen would then have to seek out smaller isolated backwater locations along the new barren shoreline created as the river receded. Angling in areas such as the John Day River arm, which supports a significant smallmouth bass and channel catfish fishery, would be eliminated.

Boat ramps now used by anglers will be unusable when the river level drops. Some of the more popular ramps which would be affected are at Sundale, Threemile Island, Paterson Ferry Road, Plymouth Park, and the Umatilla River. Other more primitive boat launch sites around the reservoir would also be affected. Boat marinas on the John Day River arm (Lepage and Phillipi Parks) would be left dry as the reservoir would be over 100 feet lower than existing conditions. The drawdown would also eliminate marina operations at Boardman, Arlington, Crow Butte State Park, Irrigon, and Umatilla.

The pump stations to be installed upstream of McNary Dam and downstream of The Dalles Dam for supplying irrigation water to the proposed canals are to be designed in accordance with fish screening criteria acceptable to State and Federal fishery agencies. Therefore, impacts to juvenile fish from these facilities are not expected. Although the specific alignments of the canals are not yet known, they will be located upland and are not expected to significantly impact fish resources.

**From Treaty Indian Fall Gillnet Daily Landings (phone survey report), 1994 to 1998
screening criteria acceptable to State and Federal fishery agencies.

It would take several years for the new aquatic environment to stabilize. During that time some significant short-term adverse affects on anadromous fish would occur. These impacts would occur during the construction period and for a limited time thereafter. Dam breaching and construction activities would take from 4½ to 10½ years (depending on "with" or "without" flood control). Inwater work would be carried out from December 1 through February 28 to minimize adverse effects on anadromous fish. However, construction and removal activities would cause turbidity levels to increase during that time. In addition to construction turbidity, when the dam is breached, the accumulated bedload behind the dam would be carried downstream. This bedload movement would occur over a period of time (probably several years) during high flow periods. The material would move downstream as suspended sediment and heavier gravel and cobble. Much of the accumulated sediments at the mouths of tributaries such as the Umatilla River, Willow Creek, Glade Creek, and the John Day River would also be carried downstream.

All forms of aquatic life could be adversely affected by the suspended sediment released from John Day reservoir after the dam is breached. Lifeforms both in the reservoir and downstream of the dam would be affected. Short term exposure (less than 6 days) of very high sediment concentrations (excess of 3,000 to 20,000 mg/l) might cause some salmonid mortalities (Newcombe and Jensen 1996; Newcombe and MacDonald 1991, Alabaster and Lloyd 1982; Servizi Martens 1987). Long-term exposure (several weeks or months) to sediment concentrations over 200 mg/l might cause death to some fish (Alabaster and Lloyd 1982). Much lower concentrations (20 to 50 mg/l) can reduce the rate of feeding, increase stress, and adversely impact fish in the sac fry stage (Newcombe and Jensen 1996). Populations of invertebrates are also affected by increased sediment loads. Temporary reductions in aquatic insects and other benthic invertebrate populations would occur following dam breaching. Since these invertebrates are a primary food source for some species of fish, those populations would also be affected. Sediment deposits in the upper portions of the reservoir would likely remain because they would rarely be in water or have little current to move them. High turbidity levels would provide some short term benefits to juvenile salmonids by creating increased cover which would result in their predators being less effective.

WILDLIFE RESOURCES

WITHOUT THE PROJECT

Vegetation surrounding the project area consists primarily of the shrub/steppe/grassland type. Big sagebrush and rabbitbrush are the most common shrub species. Closer to the water, riparian herb, shrub, and tree habitats present a more varied vegetative cover. Common riparian shrubs include young trees, willows, and false indigo. The dominant riparian tree stands are black cottonwood, but Russian olive, large willow, and some alder are also present. Much of the reservoir shoreline is bordered by riprapped highway or railroad fill with no vegetation adjacent to the water. From John Day Dam upstream to the Whitcomb Island area almost all vegetation behind the riprap consists of shrub/steppe/grass. Riparian shrub and tree habitats generally occur from Whitcomb Island up to McNary Dam. Much of this riparian habitat is located on the Umatilla National Wildlife Refuge around Paterson and McCormack Sloughs. Approximately 350 acres of emergent wetland and riparian vegetation are present on Paterson Slough and 270 acres are found on McCormack Slough. Other significant riparian habitat includes 228 acres on the Irrigon Wildlife

Management Area (which is managed by the ODFW), Plymouth Park, Glade Creek, and Whitcomb Island. Important riparian and emergent wetlands are also found in the Willow Creek Wildlife Management area.

Some of the most valuable habitats in the reservoir are the islands. These are used extensively by a wide variety of wildlife species. Islands are used for nesting, almost to the exclusion of shoreline habitat, by the Great Basin Canada goose. The Great Basin Canada goose, a year-round resident, nests on islands free of mammalian predators and requires suitable brooding pastures nearby for rearing the young. Goose nest surveys on the Umatilla National Wildlife Refuge islands found up to 240 nests in 1991 but this figure has gradually declined to around 200 nests in recent years. River island habitat was once abundant in the John Day Pool. However, construction of John Day and McNary projects inundated thousands of acres of islands, which included most of the goose nesting islands. John Day reservoir alone inundated 6,700 acres of islands (Rasmussen and Wright 1990). Today, only about 1,900 acres remain. Historically, goose production was distributed on islands from John Day Dam to McNary Dam. Now, essentially all nesting is concentrated on the few remaining islands in the Paterson area. These remaining islands are rapidly being reduced in size by wind and wave erosion and flooding. This is readily apparent when looking at the acreages of five islands during the 1973 to 1989 period in the Paterson-Irrigon area of the John Day Reservoir (Table 3).

Table 3. Acreage Figures for Islands in John Day Reservoir

Island	1973	1979	1989
Straight Six	10.6	0	0
Blalock	92.8	86.8	82.6
Coyote	36.1	0	0
Long Walk	129.6	101.3	64.3
Sand	140.6	25.7	18.5
Total Acres	409.70	213.80	165.40

Colonial nesters such as California and ring-billed gulls, Caspian and Forster's terns, and great blue and black-crowned night herons also utilize the islands for nesting purposes. The black-crowned night heron populations are very low and are listed in Oregon's "Fish and Wildlife Habitats and Species of Special Concern." Threemile Island supports 7,000 to 10,000 nesting ring-billed and California gulls, some Forster's and Caspian terns, and about 35 nesting black-crowned night herons. Other species of waterfowl, shorebirds, and nongame birds also concentrate on island habitat.

Mule deer are the principal big game species found in the project area. These animals are partially dependent upon islands for fawning where mammalian predators are not present. Deer populations represent an important part of the island and riparian community. About 400 deer presently utilize this habitat on the Umatilla Refuge.

Common upland game along the shoreline areas include ring-necked pheasant, chukar, valley quail, and mourning dove. These species are found in the shrub-steppe vegetation bordering the

river.

The river and riparian areas support a variety of fur animals; common species include beaver, muskrat, mink, otter, skunk, raccoon, bobcat, and coyote. Some trapping occurs in the reservoir area.

Waterfowl are the most common and abundant wildlife species within the project area. This portion of the Columbia River attracts large numbers of mallard, American wigeon, pintail, green-winged teal, and three subspecies of Canada geese. Other species found in the area in lesser numbers include the white-fronted goose, snow goose, tundra swan, canvasback, lesser scaup, northern shoveler, cinnamon teal, redhead, and ruddy duck. Waterfowl numbers are highest during winter months but large numbers of waterfowl also use habitat in the project area for resting and feeding during spring and fall migration. Total wintering waterfowl on the Umatilla Refuge range from a high of 560,000 birds in 1985 to a low of 17,000 in 1996. A maximum of 131,000 wintering ducks have been documented (USFWS 1997) using the area of the John Day Pool upstream of RM 250. Wintering Canada geese populations have averaged 33,550 birds from 1987 to 1992 (USFWS 1997) in this same area. Concentrations are highest in the area around Umatilla Refuge. In 1992, there were 12 species of waterfowl nesting on McCormack Slough. Waterfowl production fluctuates, but good conditions in 1992 found 76 broods totaling over 600 ducklings on McCormack Slough. In addition to waterfowl, there were also rail, coot, killdeer, common snipe, spotted sandpiper, avocet, black-necked stilt, long-billed marsh wren, grebe, and blackbirds nesting around the slough.

During the spring months, geese and ducks nest along shorelines and on river islands where suitable nest sites and brooding areas for young are available. Considerable duck nesting also takes place in the subimpoundments constructed on the wildlife refuges.

Waterfowl hunting is a popular activity in the project area. Hunting occurs during the late fall and early winter and largely on the refuge and management areas.

Numerous species of songbirds, shorebirds, and raptors also inhabit the riparian zone. The northern bald eagle (classified as a threatened species) is among the raptors present in the project area. The white pelican and longbilled curlew are also found on the John Day Reservoir.

There are many species of small mammals found in the project area including mountain cottontail, blacktail jackrabbit, porcupine, short-tailed weasel, and a variety of rodents.

All of the aforementioned wildlife species provide environmental education, wildlife observation, and photographic opportunities. Most of these activities are concentrated within the managed wildlife areas.

WITH THE PROJECT

Spillway Crest and Natural River

The analysis of both spillway crest and natural river impacts on wildlife is combined into one section because the impacts are very similar. Essentially, all of the wetland and riparian habitat would have already been eliminated even with the spillway crest drawdown to elevation 218.0. The only additional impact from the more severe natural river drawdown to elevation 160.9 would be the loss of some additional open water areas in the lower portions of the John Day and Willow Creek arms and the main reservoir.

Major adverse impacts to wildlife and their associated habitats are expected with the proposed reservoir drawdowns. Approximately 8,836 acres of shallow water habitat (almost all of the available shallow water habitat in John Day Pool) would be dewatered with a reservoir drawdown to elevations 213.0 or 165.0. These aquatic areas and adjacent riparian zones represent a valuable and unique habitat for fish and wildlife in the desert areas of eastern Oregon and Washington.

The extensive backwater areas at McCormack Slough, Paterson Slough, Willow Creek, Glade Creek, Whitcomb Island Slough, and Crow Butte Slough would cease to exist. The large backwater areas in Willow Creek and the John Day River would also disappear as the water levels drop to 50 feet below existing elevations with a drawdown to spillway crest. A drawdown to natural river would lower the latter backwater areas by about 100 feet. Total losses of riparian, emergent, and submergent vegetation would occur in all of these backwater areas. This represents a loss of an estimated 2,854 acres of extremely valuable riparian and wetland habitats along with hundreds of thousands of animals dependent upon this habitat. Shallow water habitat losses would amount to 8,836 acres. Just within the Umatilla National Wildlife Refuge, about 4,960 acres of shallow water habitat would be lost. Loss of these backwater and shallow water habitats would mean the destruction of extensive areas of aquatic vegetation. Much of this vegetation, such as sago pondweed, provides an important food source for waterfowl. Emergent beds of bulrush and cattail would also be eliminated. An estimated 1,899 acres of established riparian communities and wetlands along the main reservoir area, including the Irrigon Wildlife Management Area, would also be desiccated. The benthic communities of the shallow water areas would also be destroyed. This biomass of aquatic invertebrates represents a major food source for fish and wildlife and is a vital part of the aquatic ecosystem.

Drawdown of John Day Pool would essentially eliminate the use of Umatilla Refuge as a source of wintering waterfowl habitat. From 1984 to 1988, the average number of waterfowl use days supported by Umatilla Refuge was 34,416,934 (ducks) and 2,672,838 (geese). The immediate effect of drawdown would be the short-term loss of habitat and use of the Refuge by waterfowl. The long-term outlook would also involve substantial reductions in waterfowl use of the area because of decreased carrying capacity.

Loss of aquatic plant and benthic communities would create severe food shortages in a critical period for hundreds of thousands of waterfowl during their migration stopover each fall. In the spring and summer, waterfowl nesting and rearing activity would be eliminated in most of the dewatered backwater areas. This is expected to result in a significant reduction in waterfowl production. At McCormack Slough alone, a production loss of 400 ducks could occur.

Production losses to rail, snipe, sandpiper, avocet, and stilt populations would also occur in these backwaters.

The loss of water and, subsequently, the riparian habitat in the many backwater areas would significantly impact aquatic furbearers such as beaver, muskrat, mink, and river otter. With very little alternative habitat available, most of the furbearers would not survive. Some may move down to the new shoreline, but most of the new water's edge would have inadequate cover. It would take a number of years to establish a new riparian zone with adequate habitat for furbearers.

Numerous wetland areas not directly connected to but near the John Day Reservoir would also be severely impacted. These wetlands and ponds, like those in the Irrigon Wildlife Management Area, go dry almost immediately when the reservoir level drops. It is anticipated that these ponds and wetlands will be gone with the proposed drawdown levels. Like the backwater areas described above, these wetlands are very important habitat for many species of wildlife. Waterfowl, shorebirds, nongame birds, and furbearers all utilize this habitat. A population of western painted turtles, listed as a sensitive species by the State of Oregon, would also be lost or severely impacted by the loss of these ponds.

Other impacts are expected along the main reservoir. The drawdown would create large exposed mud flats between the water's edge and the former shoreline. Canada goose goslings would have to traverse large, open, exposed areas to and from feeding sites located above the original shorelines. This increased vulnerability to predators would cause additional losses to juvenile geese. This would occur along the main Columbia River shoreline as well as backwater areas like the Willow Creek arm. Many of the grass areas adjacent to the shoreline that are now popular grazing sites for goslings would be lost because of the lack of subirrigation from the reservoir.

Some of the existing islands within the reservoir would become connected to the main shoreline as the water level drops. This land-bridging would allow mammalian predators easy access to the islands. Significant losses to island nesters such as waterfowl, gulls, terns, and shorebirds would result. Approximately 50 nests each of great blue herons and black-crowned night herons would be vulnerable at the low reservoir level. Islands of particular concern include Threemile, Longwalk, and McCredie. On Threemile Island alone, there is a potential impact for 7,000 to 10,000 nesting gulls, Caspian terns, and Forester's terns. An evaluation of other islands and water depths is necessary to determine all potential land-bridge sites.

This loss of island habitat would be offset by the restoration of from 77 to 84 new islands totaling about 5,000 to 6,200 acres. The new islands, however, would initially be barren, lacking adequate vegetative habitat to accommodate most nesting birds. Eventually, the island vegetation and cover would develop and provide some of the most important wildlife habitat in the reservoir area. It is expected that there would be significant use of the islands by Canada geese, other waterfowl, great blue and black-crowned night herons, gulls, terns, shorebirds and nongame birds. Mule deer would also be expected to use the new islands as fawning areas each spring.

The riparian herb, shrub, and tree habitat that is adjacent to the main reservoir shoreline would be severely impacted. As the water recedes away from the shorelines, much of the riparian vegetation would die. This would impact many species of wildlife dependent upon the riparian vegetation. Some of the impacted wildlife includes beaver, muskrat, mink, river otter, mule deer, California

quail, songbirds, cottontail rabbit, heron, raptors (including bald eagles), and woodpeckers.

Some wildlife habitat losses may be reduced by the re-seeding effort planned by the Corps. However, the extent of the habitat recovery from re-seeding, and how long it would take to become usable habitat, are unknown at this time.

The Umatilla National Wildlife Refuge operates five wells along the Columbia River. Operation of these wells, which are utilized for irrigation and domestic purposes, would be eliminated by the proposed drawdown. As a result, refuge operations would be adversely affected.

Construction of the irrigation canals in Oregon and Washington is expected to cause some adverse impacts to wildlife resources. A primary concern is that mammals, especially deer, will become trapped and die in the canals. Impacts along the canal in Oregon would primarily be to shrub steppe habitat within the right of way of the existing WEID canal which is not a major concern. Potential impacts associated with the Washington canal would be to shrub-steppe habitat except where the canal would cross riparian or wetland areas such as Glade Creek. These crossings are of special concern since these habitats are very limited in the project vicinity.

A possible beneficial effect, although probably short-term, would be increased shorebird habitat. As the reservoir shoreline recedes, new mudflats would appear that would attract many feeding shorebirds. However, since the water level would remain low, the flats would dry out, no longer providing good shorebird habitat. Increased nesting habitat may be available for killdeer and spotted sandpiper, and, where water remains nearby, avocets and stilts.

DISCUSSION

Each of the four alternative drawdown levels would be expected to cause both beneficial and adverse impacts to fish and wildlife in the John Day Reservoir area. The lower reservoir levels and the natural river option may significantly benefit anadromous fish. Decreased travel time for downstream migrants and the restoration of spawning habitat could result in an overall increase in run sizes. The restoration of valuable island habitat would also benefit Canada geese and other species of wildlife which utilize island habitat. However, in conjunction with these benefits, there would also be adverse impacts to aquatic habitat, anadromous fish, wildlife habitat, and wildlife species. A total of 8,836 acres of backwater areas, which are important food production zones for fish and wildlife, would be eliminated. These shallow waters are a significant food source and rearing area for both resident and anadromous fish species as well as wildlife, particularly waterfowl. A significant number of acres (2,854) of emergent marsh and riparian habitat would also be eliminated by the drawdown. Loss of this habitat would impact anadromous and resident fish, shorebirds, waterfowl, passerine birds, aquatic and terrestrial furbearers, raptors, big game, reptiles and amphibians. These overall benefits and losses need to be carefully considered before a decision is made to do a Phase II study.

Mitigation

Major losses to backwaters, wetlands, riparian zones, and island habitat would result without

measures to reduce drawdown impacts. Therefore, efforts to reduce these losses must be considered in the project plans. Providing water to diked off portions of Paterson Slough, McCormack Slough, Willow Creek, Glade Creek (and possibly other areas) would reduce impacts to existing slough and backwater habitats and should be evaluated. Water could also be provided to the numerous ponds and wetlands in the Irrigon Wildlife Management Area. One potential source for this water would be the new irrigation canals. Studies are necessary to determine how much water would be needed to maintain existing backwater levels, other sources of water, and the best way to distribute the water. Plans should also be developed to irrigate key riparian habitats that would be dewatered by the drawdown.

Some of the wildlife habitat losses caused by the reservoir drawdown will be offset by the reestablishment of vegetation, including riparian habitat, along the new reservoir shoreline. However, the new vegetative community is not likely to be the same as that present during pre-project conditions. Sedimentation, land use, seeding sources, and other influences would probably result in a different vegetative matrix. Further, the composition and location of reestablished vegetation along the perimeter of the new shoreline would be different for each alternative. The re-seeding effort planned by the Corps would be in conjunction with natural vegetative development. The re-seeding should include both shoreline and island areas.

The new habitat would require many years to reach maturity and significant reductions in wildlife populations would occur in the interim. Mitigation measures would need to be developed and implemented to maintain existing wildlife habitat and values as the replacement habitat becomes established. The goal of this effort would be to allow no net loss of wildlife values between the time of impact and actual compensation. Mitigation plans and levels could be different depending on the project alternative selected. Post project monitoring and evaluation in an adaptive management approach would be necessary to assess the changes in conditions and the success of mitigation features. This would require followup studies to determine the quantity and quality of the new habitat. If mitigation efforts are not successful, contingency funds should be provided by the project to develop alternative mitigation features. All mitigation actions should be coordinated with and approved by the ODFW, WDFW, Tribal interests, and the FWS. It would also be necessary to develop detailed estimates of all wildlife losses and measures to compensate these losses with little or no loss between impact time and actual compensation. Project funds should provide for this mitigation effort.

If dredging is performed to maintain anadromous fish access to tributary streams of the reservoir, up to 9,346,000 cubic yards of sediment could be removed. This could cover an area up to 519 acres. It is important that all dredge spoils be placed in upland sites away from waterways and wetlands.

Potential wildlife losses from habitat changes and drowning or injury associated with the proposed canals is a concern. Canals can be designed so that losses are significantly reduced. It is important, therefore, that the appropriate State and Federal wildlife agencies are involved in the decisions regarding canal location and design.

Implementation of any of the alternatives would require years of construction activities to complete. During that time, safe fish passage conditions must be provided. This would involve many modifications and/or new construction of fish ladders, screens, and bypass facilities. Close

coordination with the NMFS, ODFW, WDFW, Tribal interests, and FWS would be required to assure that the best procedures to protect fish are incorporated into construction plans. Proper design of the water intake facilities in The Dalles and McNary Reservoirs also requires coordination with the fisheries agencies. These agencies should also be consulted to make certain adequate passage for anadromous fish continues at the mouths of tributary streams.

Substantial losses to the hatchery system are expected with the drawdown. The Irrigon and Umatilla Fish Hatcheries would be inoperable. A production loss of about 5 million salmon and steelhead is expected with the proposed project if a new water supply is not provided. Finding an alternative water supply for the hatcheries would be difficult because of the stringent water quality and temperature requirements for rearing salmonids. Studies would be necessary to determine if an alternative water supply for the hatcheries is available. If water is not available, a search must be made to determine if there are any satisfactory sites for constructing new facilities to replace the Irrigon and Umatilla Hatcheries.

RECOMMENDATIONS

To protect and restore fish and wildlife resources in conjunction with the John Day Reservoir Drawdown, we recommend that:

1. Should a Phase II study be conducted, the Corps complete a detailed assessment to document and quantify specific net impacts to fish and wildlife resources, including potential anadromous fish benefits in terms of increases in smolt survival numbers, increases in adult returns, and the economic value of these increases. Reduced mitigation needs at Federal and state hatcheries because of increased salmon spawning habitat and capacity in the mainstem Columbia River should also be investigated.

2. There be development of appropriate detailed and specific mitigation and enhancement recommendations under the Fish and Wildlife Coordination Act that includes:

    a) Project plans to maintain water levels in portions of McCormack Slough, Paterson Slough, the Willow Creek backwater area, Glade Creek, Mesner Pond, and Irrigon Wildlife area ponds;

    b) Identification of key areas of riparian vegetation that would be dewatered by the drawdown and plans to retain those habitats through irrigation;

    c) Water from irrigation sources to ponds being made available to sustain turtle populations;

    d) Close coordination with the WDFW, ODFW, NMFS, Tribal interests, and the Service in locating and designing the proposed irrigation canals and the water intake structures (in McNary and The Dalles Reservoirs) for the canals (and any other changes to the irrigation infrastructure) to minimize adverse impacts to wildlife;

e) Development of an acceptable alternative water supply for the Irrigon and Umatilla hatcheries or locating sites for constructing new hatchery facilities;

f) Coordination with fisheries agencies and Tribal interests in: 1) development of plans and schedules for drawing down the level of the reservoir, 2) the design and location of new fish ladders, screens, and bypasses, and 3) the evaluation of anadromous fish passage at the mouths of the tributary streams;

g) Development of post-project monitoring and evaluation of mitigation actions to determine their success. This work would be coordinated through interagency meetings of the Corps, WDFW, ODFW, NMFS, and Tribal representatives. Contingency funds would be provided by the project for alternative measures if the mitigation goals are not being achieved; and

h) Provisions to assure that drawdown areas are seeded, initial drawdown rates are ramped to reduce stranding losses, and other drawdown issues related to sediment transport and fish passage are identified and plans are developed for mitigation.

Sincerely yours,

Ronald L Hirsch

for State Supervisor
Oregon State Office

LR/lr,kl/jondaydd

cc: ODFW, Pendleton
ODFW, Portland
WDFW, Vancouver
WDFW, Spokane
NMFS
Umatilla NWR
Columbia River Inter-Tribal Fish Commission
Confederated Tribes of the Umatilla Indian Reservation
Irrigon and Umatilla Hatcheries

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Zimmerman, M.A. and L.A. Rasmussen. 1981. Juvenile salmonid use at three Columbia River backwater areas proposed for subimpoundment. U.S. Fish and Wildlife Service, Ecological Services, Portland, Oregon.

Attachment C. Local, State, and Federal Agency Coordination

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Fisheries Science Center
Fish Ecology Division
2725 Montlake Boulevard East
Seattle, Washington 98112-2097

January 18, 2000

Colonel Randall J. Butler, Commander
Portland District
U.S. Army Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

Dear Colonel Butler:

As requested by your agency, the National Marine Fisheries Service has reviewed the information summarized by the Corps as the basis for a reconnaissance-level assessment of potential biological benefits associated with alternative drawdown scenarios for the John Day Dam project on the mainstem Columbia River. The information included historical reports, contract studies, and results from the Regional Planning for Analyzing and Testing Hypotheses (PATH) process. Given the emphasis on PATH results in the assessments of juvenile migrant survival impacts, we coordinated our review with members of the PATH Planning Group.

We concur that the analytical approach you used covers an appropriate range of assumptions and uncertainties. The projected survival effects on listed salmon runs of the alternative John Day project configurations that you report are consistent with available information and reasonable for an assessment at the reconnaissance level. If the decision is made to proceed into a feasibility study phase for this project, we expect that further biological studies will be conducted in an effort to better resolve important uncertainties and to refine benefit estimates. We look forward to providing you more specific comments on the draft reconnaissance study as part of the upcoming public review.

Sincerely,

Michael H. Schiewe
Director

cc: F/NWC - Varanasi
F/NW - Stelle
F/NWO3 - Brown
F/NWO3 - Cooney

AUG 4 1999

Engineering and Construction Division

Dear Planning Aid Team Volunteer:

During the first Planning Aid Team (PAT) meeting at John Day Lock and Dam on June 1, 1999, we discussed a second meeting during late August or early September. We have scheduled the second meeting on August 25, 1999, at the Desert River Inn, 705 Willamette Avenue, Umatilla, Oregon. Maps are attached.

The meeting will begin at 10 a.m. We will have a number of reports to review and discuss, and plan to continue working through the lunch hour. We hope to be able to conclude the meeting by 3 p.m. because many people must travel for several hours to return home.

It is a "Buy your own lunch day" and box lunches will be available at a cost of $9.14 per person, including gratuity. Sandwich choices are Roast Beef, Smoked Turkey and Ham, but you must indicate your choice by calling it in as indicated below by noon Friday, Aug. 13, 1999. You may pay on the day of the meeting.

In the current John Day Drawdown Phase I Study, which began October 1, 1998, the U.S. Army Corps of Engineers will identify and evaluate biological, social and economic impacts and costs of two options: natural river, 100 feet below the normal reservoir operating level; and spillway crest, 50 feet below normal reservoir operating level. Both will be evaluated with and without flood control.

At the initial PAT meeting, we described the studies and types of existing biological information being analyzed to assess potential fisheries benefits and impacts associated with John Day Drawdown alternatives. The analytical approach and our progress to date were discussed. We also described the process for review and comment on study data. Draft reports will be discussed at this second meeting and are available on the internet at http://www.nwp.usace.army.mil/pm/projects/jddds/afpat.

If you are unable to attend the meeting, you may also participate by calling into the meeting at (541) 922-1000, and request connection to the conference room.

To indicate your sandwich choice, or if you have questions regarding this August 25, 1999, meeting, please call Ronda Leffner, (503) 808-4761.

Sincerely,

/S/ Bob Willis

for Howard B. Jones, P.E.
Chief, Engineering and Construction
Division

Enclosures

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DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

May 21, 1999

Reply to
Attention of:

Engineering and Construction Division

Dear Planning Aid Team Volunteer:

As you will remember, you signed up to be part of a Planning Aid Team (PAT) when you attended a public meeting concerning the John Day Drawdown Phase I Study. The first meeting of the PAT will be held in the conference room at John Day Lock and Dam from 10 a.m. until about 3 p.m. on June 1, 1999. The conference room is on the Oregon side of the dam on the upper deck level. Directions are provided on the attached sheet.

We know this is a considerable distance to drive, but have tried to place the meeting somewhat close to the geographic center of the project interest area.

In the current John Day Drawdown Phase I Study, which began Oct. 1, 1998, the Corps will identify and evaluate biological, social and economic impacts and costs of two options: natural river, 100 feet below the normal reservoir operating level; and spillway crest, 50 feet below normal reservoir operating level. Both will be evaluated with and without flood control.

At the conclusion of the first phase, the Corps will make a recommendation to Congress on whether or not further study of lowering the John Day reservoir is appropriate, or whether drawdown of John Day should be dropped completely from regional consideration. That recommendation will be based on all the information gathered during the study. The final report will be forwarded to Congress in December 1999.

A second phase of the Study, if directed and funded by Congress, would evaluate the costs, benefits and physical impacts of a wide range of alternatives, including potential physical modifications to the dam. That phase would likely include an Environmental Impact Statement (EIS) and related National Environmental Policy Act (NEPA) coordination. A second study would be a five-year feasibility level study to more accurately determine the benefits and impacts that are likely to result from drawdown of the John Day pool. In any such study, drawdown would be compared with other river system changes.

At this initial PAT meeting, we will describe the studies and types of existing biological information being analyzed to assess potential fisheries benefits and impacts associated with John Day Drawdown alternatives. The analytical approach and our progress to date will be discussed. We will describe the process for review and comment on study data, and we will let you know about when draft report materials will be available for your review.

The Corps will begin to receive draft report products from our biological analysis team during late May 1999. Some of these products may be available for distribution at the meeting. If you are unable to attend the meeting, you will receive study data for review and comment by mail as it becomes available. You may also participate by calling into the meeting.

If you have questions regarding this June 1, 1999, meeting, or would like the telephone number so that you may call in, please call Dawn Edwards at (503) 808-4510.

Sincerely,

Howard B. Jones, P.E.
Chief, Engineering and Construction
Division

Enclosure

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ANNOUNCEMENT

John Day Drawdown Study
Planning Aid Team (PAT) Meeting
John Day Lock and Dam
June 1, 1999
10 a.m. to 3 p.m.

From Interstate 84 take Exit 109 (Rufus). At the off-ramp stop sign, turn left and travel under the freeway. Follow the approach road by curving right and paralleling the river as you head toward the dam. After passing through the entry gate, take the first right turn to "Business Offices." Pass a blue building, it will be on your right, and follow the curve to your left which will take you up a ramp to the top of the dam. As you near the top of the ramp, park either along the cyclone fence just before the top, or adjacent to the shelter at the top. Do not block access across the top of the dam. Walk to the building which has John Day signage at the top, enter the north end of the structure through the downstream (westerly) door. You will find yourself in the hallway of the conference room. Proceed down the hallway and you will be there.

John Day Drawdown Phase I Study
Planning Aid Team Meeting
June 1, 1999

Subject: Meeting Minutes

Ron Campbell summarized the kinds of information being gathered. Discussed the literature database developed. Presented the summary report outline.

Issues: Reservoir rearing, passage, etc. (from outline)

Jim Pettersen

Many years of studies since 1981.

1. '84 - '85 and '95 comparative studies of juvenile resident fish composition in John Day pool.

   Reservoir fish population is changing based on catch/sein haul data.

   >Introduced predators, like yellow perch, have become more abundant.

   Shade abundance has changed substantially; probably now the largest overall biomass.

   Rooted vegetation has greatly increased, though we can't quantify the change since data on vegetation was not collected in 1984-85.

   Will be doing some additional analysis on size data.

2. Predation studies: NS
   SMB 1984-85
   W
   CHCAT

   1995: + Yellow Perch, pumpkin seeds,
   - Can look at habitat used > nearshore, shallow water areas.
   - Salmonids comprise a small portion (40 – 60% Forebay up to 90% Tailrace) of predators diets; probably less under natural stream (8%).
   - Under drawdown, NS would probably increase white SMB would decrease.

Mike Parsley – DSS

- Graduate students working on historic JD conditions.
- NBS data gathering & analysis since 1981.
- Two-dimensional hydraulic modeling.
  - Criteria: Biological, economic, etc.

    A. Normal operating pool
    Minimum operating pool
    Spillway crest
    Natural stream level

    B. 90% Discharge in May (?)
    50% Discharge in May (?)
    10% Discharge in May (?)

    Forgiven A. & B., you can look at spawning area available (based on water depth and velocity; no substrate data).

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

FEB 26 1999

Engineering and Construction Division

Dear System Configuration Team member and Interested Parties:

As you are aware the U.S. Army Corps of Engineers, Portland District, is undertaking a reconnaissance level study of drawdown of the John Day reservoir. Since this study has been re-funded, our list of contacts from regional fisheries managers does not appear to be up to date. We request you send the names, phone numbers, and addresses (both mailing and electronic) of the person or persons from your agency that will be participating on this study. Your quick reply to this request will insure all interested parties have input into the final report.

We look forward to your continued assistance and coordination on this program. If you have any further questions regarding this program please contact Blaine D. Ebberts of my staff at (503) 808-4763, or electronically at Blaine.D.Ebberts@nwp01.usace.army.mil. For resource concerns on this project, the key wildlife contact will be Robin Leighty at (503) 808-4765, or electronically at Robin.L.Leighty@nwp01.usace.army.mil. The key fisheries contact will be Chuck Willis at (503) 808-4775 or electronically at Chuck.Willis@nwp01.usace.army.mil.

Sincerely,

FOR Howard B. Jones, P.E.
Chief, Engineering and Construction Division

Enclosure

Copies Furnished:

CENWP-PM (Clarke)
CENWP-EC-E (Ebberts/Peters)
CENWP-EC-DS (Etzel)
CENWP-OP-B (Johnson/Sprague)
CENWP-OP-B (Schwartz/Sturgill)
CENWD-PE-ER (Athearn)
CENWD-PM-FI (Arndt)

System Configuration Team (SCT) Member or interested party:

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Rich Berry
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Portland, OR 97207

Dale Bambrick
Regional Director
Washington Dept of Fish & Wildlife
1701 South 24th Ave
Yakima, WA 98902-2740

Agenda

Inter-Agency Meeting

John Day Drawdown - Wildlife Issues

Thursday, 18 March 1999, 8:00 a.m. – 12:00 p.m.

Umatilla Refuges Complex, 830 Sixth St., Umatilla, Oregon 97882

Invited Participants

Gary Hagedorn, US Fish and Wildlife Service, Umatilla

Bob Krein, OR Dept of Fish and Wildlife, Heppner

Paul Ashley, WA Dept of Fish and Wildlife, Spokane

Larry Rasmussen, US Fish and Wildlife Service, Portland

Kevin Blakely, OR Dept of Fish and Wildlife, Pendleton

Meeting called by: Robin Leighty and Geoff Dorsey, Corps of Engineers, Portland

Agenda

Time	Description	Sponsor
8:00– 8:15	Introductions and Overview	Robin
8:15 – 8:35	Current Drawdown Proposal and Work Schedule	Robin and Geoff
8:35 – 9:45	Overview and Review of Impacts	Robin and Geoff
9:45 – 10:00	*Break*	-
10:00 – 11:30	Issues and Concerns	All
11:30 – 11:45	Discussion of Mitigation Needs and Opportunities	All
11:45 – 12:00	Review and Summation	Robin

Notes

Please bring the attached information sheets with you to the meeting.

If you need directions to the Umatilla Refuges Complex office, please call 541-922-3232.

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

SEP 27 1999

Engineering and Construction Division

SUBJECT: John Day Drawdown

DISTRIBUTION LIST

Dear Colleagues:

Please find enclosed the *Draft Wildlife Resources Appendix, John Day Drawdown Phase 1 Study*, for your information and review. We sincerely apologize for the delay in providing you with actual data and maps for the alternatives under consideration. When we first met in March, we did not anticipate it would take this long to get the hydrology, engineering, and other detailed information needed to determine the nature and magnitude of anticipated effects to wildlife resources. We would greatly appreciate hearing any feedback, concerns, and/or recommendations you have on the enclosed draft document before it is released to anyone else. Our hope is that if you see something missing, incomplete, confusing, or inaccurate, you will advise us so we can remedy the situation. We also hope this draft report answers many of the questions that were raised in the meeting last March. You can provide us with your comments either in a letter, hand-written into the document, or via fax or e-mail by close of business October 12, 1999. We appreciate your time reviewing this report.

We would like to follow up this document review with a ½-day meeting sometime during the week of October 18-22, 1999 (or sooner if possible) to discuss your comments. The Port of Morrow building has been suggested as a good meeting place. We would be grateful if each of you would contact Robin Leighty, Wildlife Biologist, of my staff, at your earliest convenience to indicate your availability to meet during that week. If you are unavailable during that time, please feel free to call or e-mail her if you have any questions, comments, or require further information. She can be reached at (503) 808-4765 or you can e-mail Robin at robin.l.leighty@usace.army.mil. Her fax number is (503) 808-4756. We hope you all had a pleasant and enjoyable summer, and we look forward to seeing you at the meeting. Thanks again for your time.

Sincerely,

Howard B. Jones, P.E.
Chief, Engineering and Construction
Division

Enclosure

Copies Furnished:

Mark Henjum, ODFW LaGrande
Larry Rasmussen, USFWS, Oregon State Office
Stuart Stanger, CENWP-PM
Chris Ferguson, CENWP-EC-DC
Dawn Edwards, CENWP-PA

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Portland, Oregon 97266
(503) 231-6179 FAX: (503) 231-6195

November 16, 1999

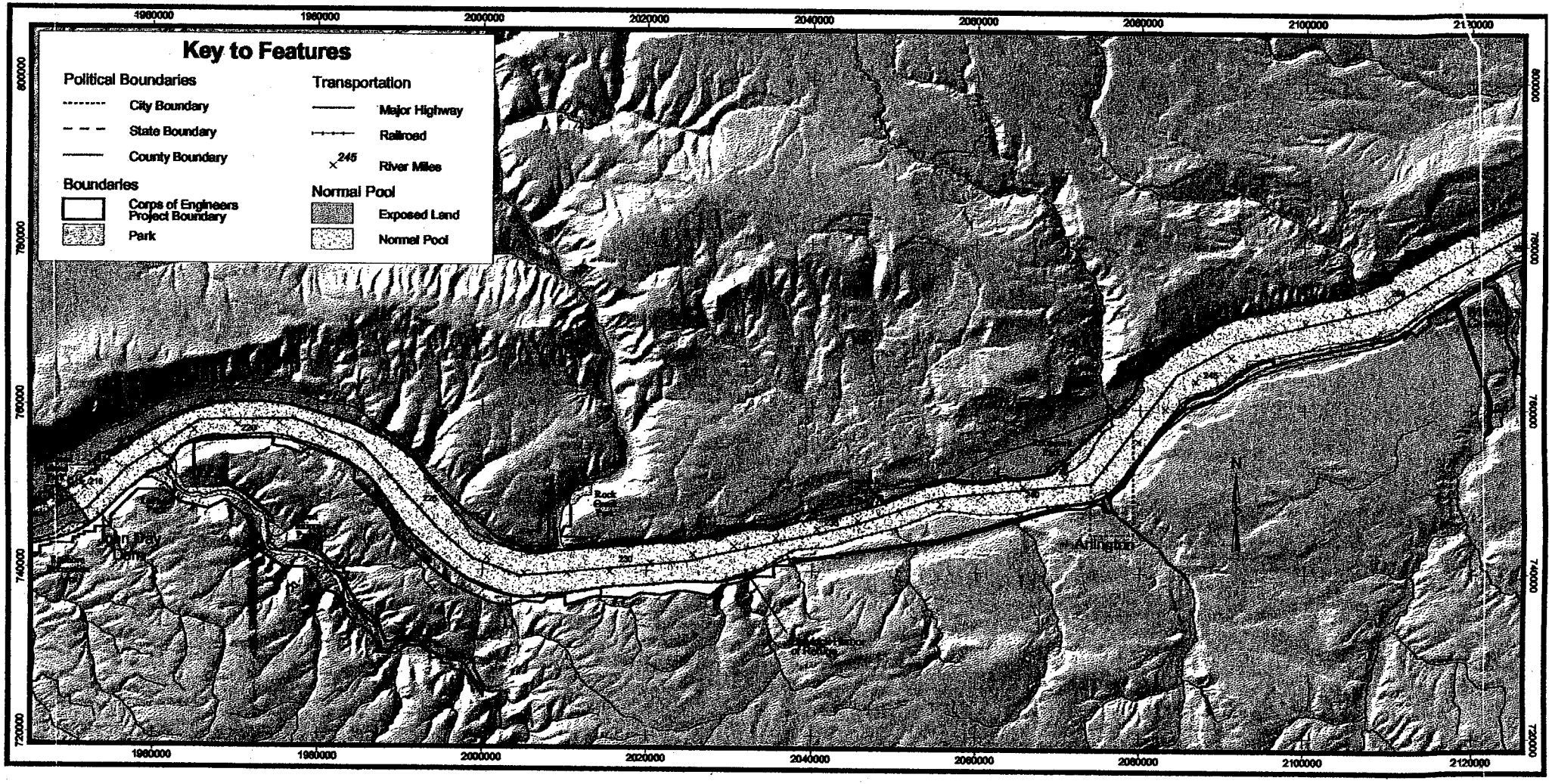
Reply To: 7365.002
File Name: John Day Drawdown-Phase 1

Colonel Randall J. Butler, District Engineer
Portland District, Corps of Engineers
P.O. Box 2946
Portland, Oregon 97208-2946

Dear Colonel Butler:

This is our Planning Aid Letter (PAL) describing the impacts to fish and wildlife resources from proposed drawdown of the Columbia River John Day Reservoir. Information in this letter is based upon existing information and general project data provided by the Portland District, Corps of Engineers (Corps) prior to October 1, 1999. The PAL is preliminary in nature, providing reconnaissance level information consistent with the Corps' Phase I study for the proposed project. This PAL does not indicate preferences for the drawdown alternatives described below and it provides only a preliminary outlook regarding mitigation for impacts to fish and wildlife. More detailed recommendations would be developed in a Coordination Act Report should the project proceed to Phase II.

This PAL has been prepared with input from the Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW), National Marine Fisheries Service (NMFS), Columbia River Inter-Tribal Fish Commission (CRITFC), and Confederated Tribes of the Umatilla Indian Reservation (CTUIR). These agencies also received a draft of this PAL and provided informal comments. The scope of this letter is general in nature and does not constitute the formal report on the project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401 as amended; 16 U.S.C. 661 et seq.).



Projection: State Plane, Oregon North Zone, NAD 27
Depths based on Corps of Engineers Hydrosurveys, 1994
Produced by GIS, Survey and Mapping Section
US Army Corps of Engineers, Portland District

2 0 2 4 8 Miles

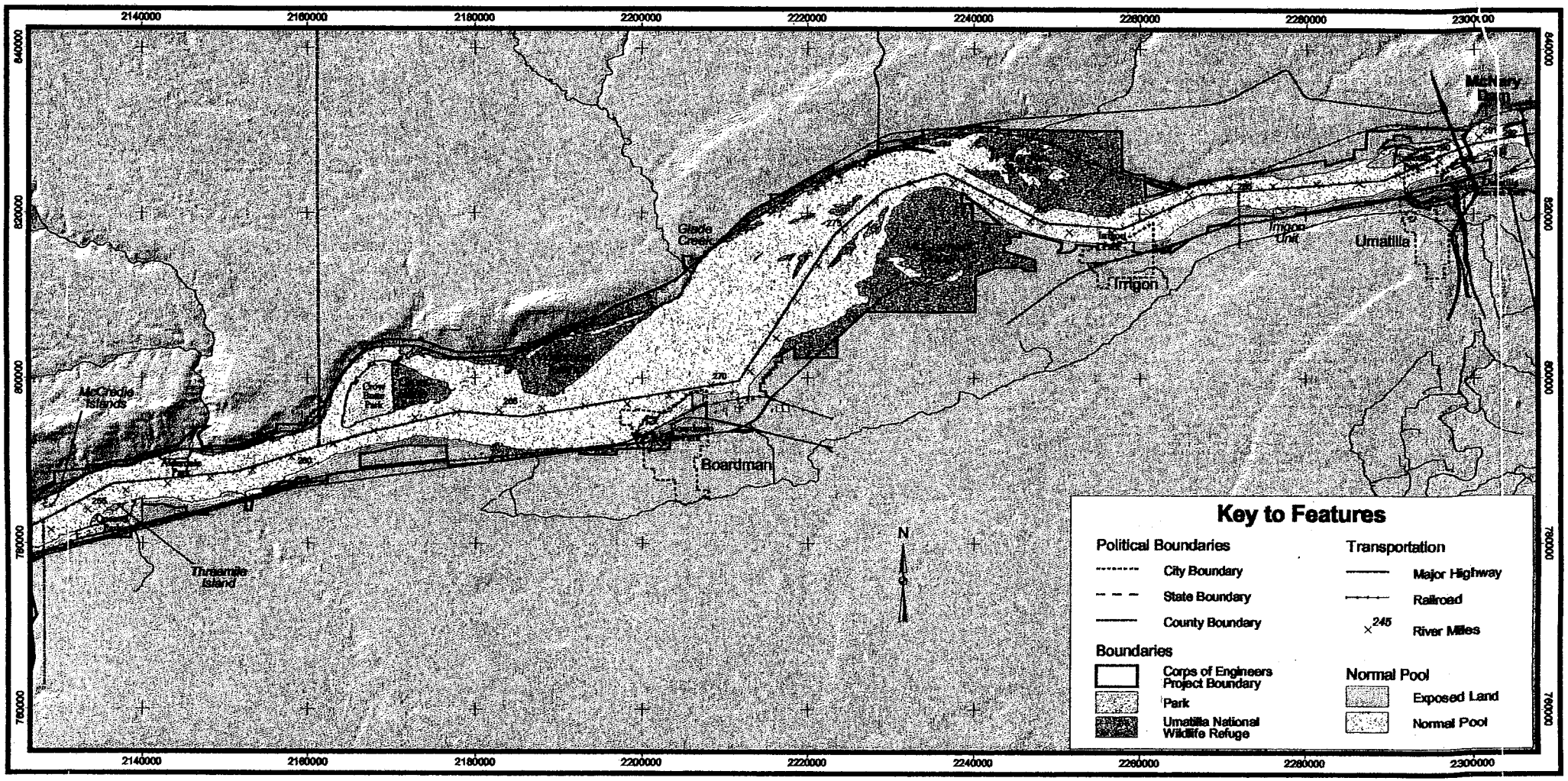
DRAFT
16 September 1999

US Army Corps of Engineers
Portland District

JOHN DAY DRAWDOWN PHASE I STUDY
Columbia River - Oregon / Washington

Study Area Overview Map

Figure 1 (a)



Projection: State Plane, Oregon North Zone, NAD 27
Depths based on Corps of Engineers Hydrosurveys, 1994
Produced by GIS, Survey and Mapping Section
US Army Corps of Engineers, Portland District

2 0 2 4 6 Miles

DRAFT
16 September 1999

US Army Corps of Engineers
Portland District

JOHN DAY DRAWDOWN PHASE I STUDY
Columbia River - Oregon / Washington

Study Area Overview Map

Figure 1 (b)

DESCRIPTION OF THE PROJECT

Under the existing operation, John Day Reservoir ranges from an average low elevation (measured at the dam) of 262 feet in May to a high of 267 feet* in August (West Consultants 1999).

The proposed project would involve a reduction in the current reservoir elevations in the John Day Reservoir. Two major scenarios are being evaluated: 1) drawdown to spillway crest and (2) drawdown to natural river level. Under each of these two scenarios, a flood control and a no flood control operation is being evaluated. This results in four alternatives for evaluation.

Alternative 1. Drawdown to spillway crest without flood control. In this alternative, the spillway gates would be opened and the river would flow uncontrolled over the existing spillway. The powerhouse would continue to operate. Reservoir elevations measured at the dam in a normal (average) year similar to 1982 would range from a low of about 218.0 in October to a high of 230.7 in June (West Consultants 1999). Although some flow would occur over the spillway year-round, most spill would occur from April 1 through July 31 (CH2MHill 1999). Table 1 provides a summary of reservoir elevation data, measured at several sites, for each alternative.

Alternative 2. Drawdown to spillway crest with flood control. In this alternative, the gates would normally be raised and the river would flow uncontrolled over the existing spillway. However, approximately once every two to five years, the gates would be lowered to control floods. This would provide up to 500,000 acre-feet of flood storage space. In an average year, reservoir elevations measured at the dam would range from a low of approximately 218.0 in October to a high of 235.7 in June (West Consultants 1999). Highest spillway flows would occur in April, May, June, and July (CH2MHill 1999). The powerhouse would continue to operate.

Alternative 3. Drawdown to natural river without flood control. This alternative would involve breaching the dam and allowing the reservoir to be drawn down to the level of the natural river bed. The natural river level at the dam would range in elevation from a low of about 160.9 in October to a high of 165.8 in June. The powerhouse would be abandoned.

Alternative 4. Drawdown to natural river with flood control. In this alternative, the dam would be breached; however, piers and gates would be constructed in the center of the dam to provide capability for 500,000 acre-feet of flood control space. During flood control operations, closing the gates would raise the river about 50 feet at the dam. Power production would be discontinued. River elevations measured at the dam would range from a low of about 160.9 in October to a high of 184.8 in June.

About 30 irrigation pumping stations along the Oregon and Washington shorelines would be adversely impacted by the lower reservoir elevations. Most of the pump intakes now submerged in the river would be dewatered as the reservoir level recedes. To provide water to irrigators, project plans include the construction of two irrigation distribution canals. One canal would be constructed on the Oregon side of the Columbia River and one would be on the Washington side (Figures 2 and 3). The canal in Washington would be designed to carry about 1,640 cubic feet per

* All reservoir elevations are in feet, Nataional Geodetic Vertical Datum at John Day Dam

Table 1. Reservoir elevations by alternative at three sites on the John Day Reservoir.

RM 215.63 John Day Forebay

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	221.62	221.62	161.63	161.63
February	224.00	224.00	162.61	162.61
March	228.53	228.53	164.49	164.49
April	226.78	226.78	163.64	163.64
May	229.39	229.50	165.03	166.15
June	230.67	235.67	165.78	184.80
July	226.86	231.40	163.78	178.54
August	220.73	220.73	161.45	161.45
September	218.31	218.31	160.91	160.92
October	217.96	217.96	160.87	160.87
November	220.14	220.14	161.22	161.22
December	220.38	220.38	161.31	161.31

RM 276.41 McCormack Slough/Paterson Slough

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	234.89	235.08	234.79	234.79
February	237.48	237.71	237.16	237.16
March	241.78	242.07	240.90	240.90
April	240.11	240.37	239.47	239.46
May	242.74	243.07	241.70	241.70
June	244.06	246.52	242.78	242.85
July	240.01	242.45	239.28	239.36
August	234.04	234.22	233.95	233.95
September	231.95	232.08	231.95	231.95
October	231.83	231.95	231.84	231.85
November	233.45	233.61	233.41	233.41
December	233.71	233.88	233.67	233.66

RM 289.21 Umatilla River

Month	1: Spillway	2: Spillway w/FC	3: Natural River	4: Natural River w/FC
January	254.53	254.53	254.53	254.53
February	256.78	256.78	256.78	256.78
March	260.23	260.24	260.21	260.21
April	258.93	258.93	258.91	258.91
May	261.03	261.04	261.00	261.00
June	262.12	262.38	262.06	262.07
July	258.78	259.04	258.76	258.76
August	253.76	253.76	253.76	253.76
September	251.88	251.88	251.88	251.88
October	251.81	251.81	251.81	251.81
November	253.21	253.21	253.21	253.21
December	253.46	253.46	253.46	253.46

FIGURE 2.
OREGON CANAL ROUTE

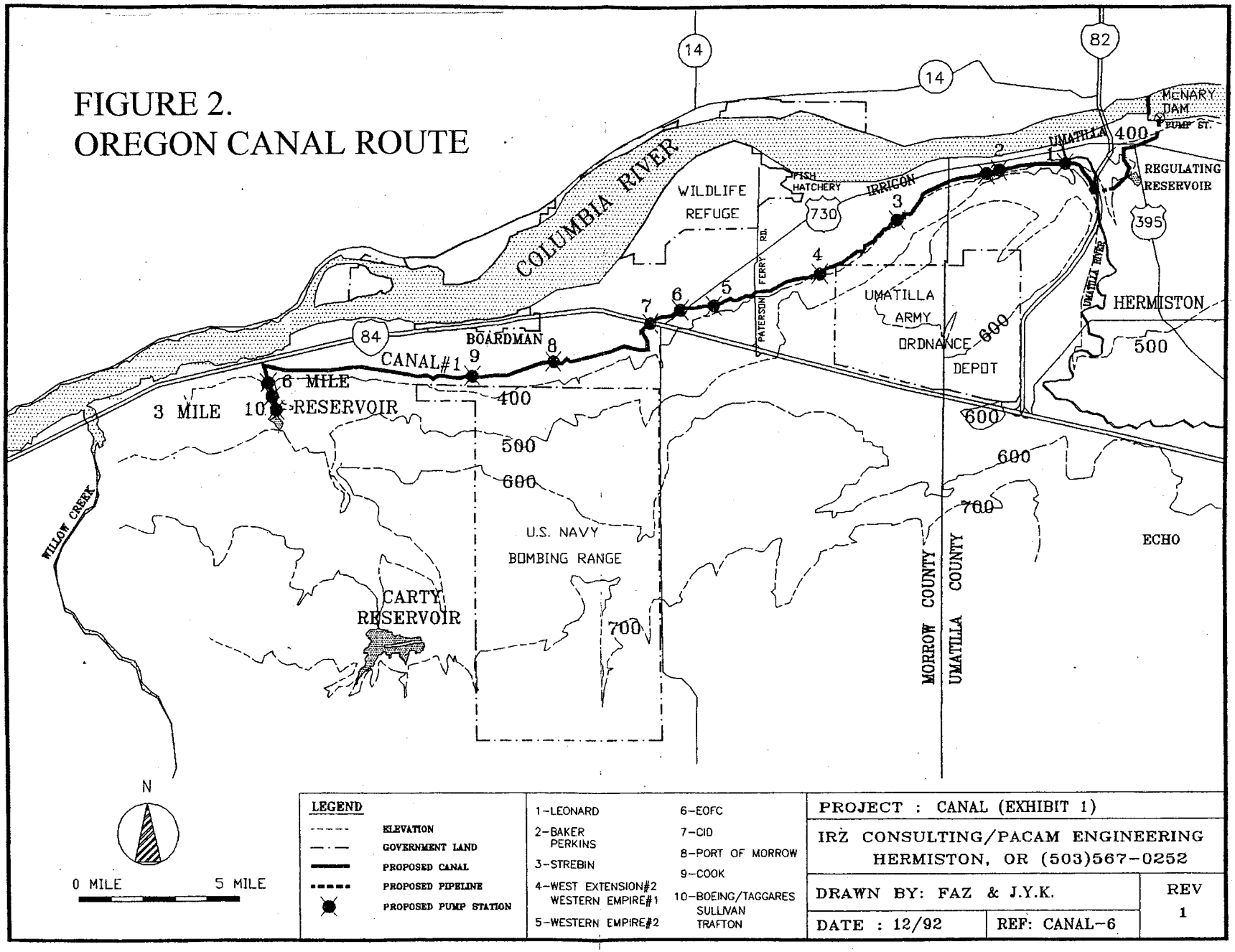
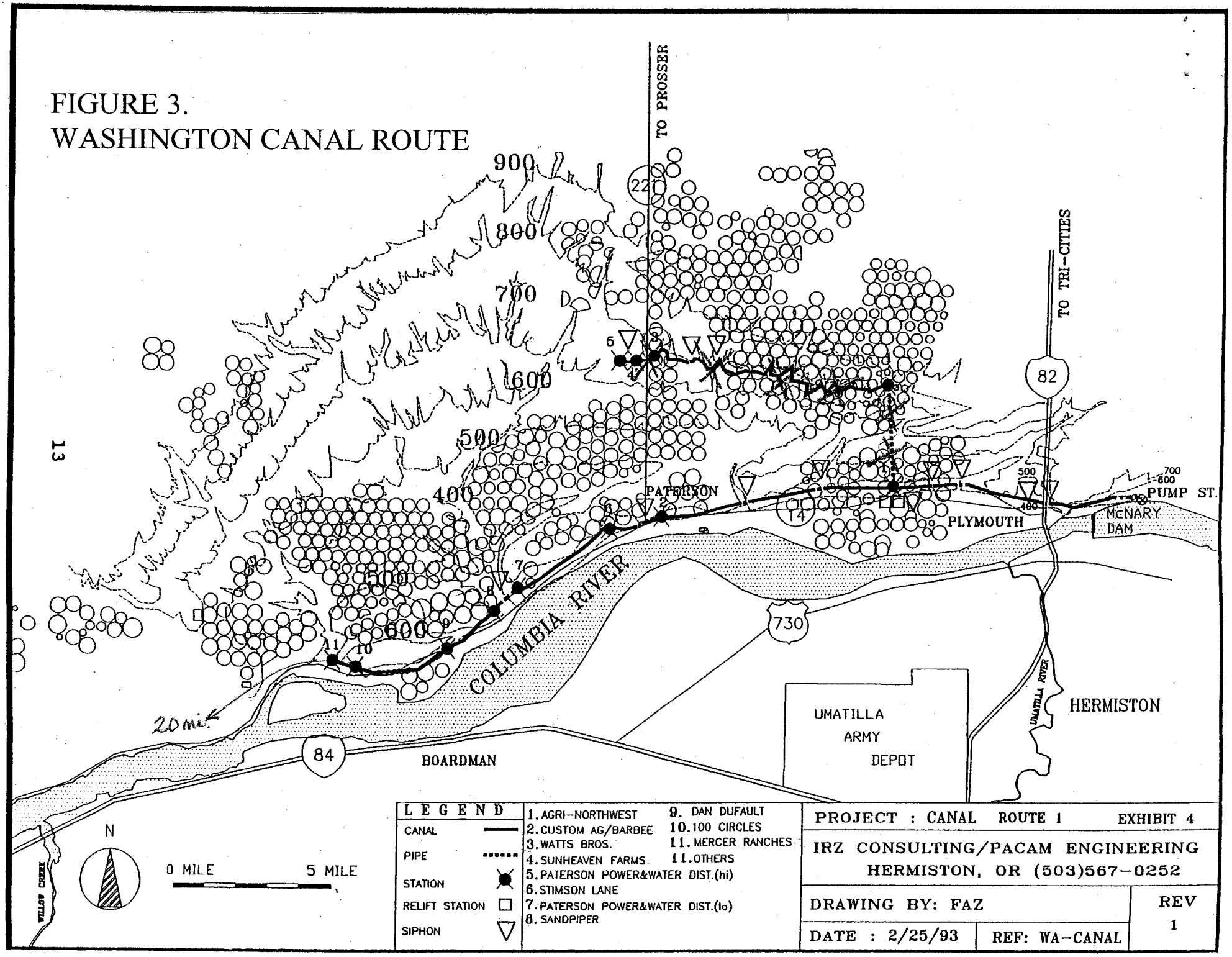


FIGURE 3.
WASHINGTON CANAL ROUTE



second (cfs). This canal would begin at a pump station in the Columbia River just upstream from McNary Dam and would terminate about 60 miles downstream. Another pump station would also be necessary on the Washington side of The Dalles pool to deliver water in a 1½ mile-long canal to Goldendale Aluminum. The canal in Oregon would be designed to carry about 1,990 cfs and would begin just upstream from McNary Dam and terminate about 5 miles west of Boardman. Total length of the canal would be about 37 miles.

Water for the canals would be provided by two pump stations located on the Columbia River, i.e., one approximately 1/2 mile upstream from McNary Dam and one immediately downstream from the Dalles Dam. The screens would be designed to meet NMFS fish screening criteria.

Corps project plans also include re-seeding the barren shoreline area of the drawdown zone. In addition, to protect existing railway lines, highways and other infrastructure from erosion and undermining, project plans include placing riprap on up to 48 miles of the new shoreline area.

FISH RESOURCES

WITHOUT THE PROJECT

The Columbia River System provides habitat for anadromous species such as chinook, coho, and sockeye salmon; steelhead trout; white sturgeon; American shad; and Pacific lamprey. While harvest yields have been drastically reduced from historic levels, some of these fish still contribute to commercial, sport, and Indian treaty fisheries. There are several treaty fishing access sites on the John Day Reservoir (Lake Umatilla) which have been developed or will be developed by the Corps of Engineers for tribal use. The treaty fishing access sites considered for development are North Shore, LePage Park, Goodnoe, Pasture Point, Rock Creek, Sundale, Roosevelt, Moonay, Pine Creek, Three Mile Canyon, Alderdale, Alder Creek, Crow Butte, and Faler Road near Boardman Park. Boat ramps, docks, and/or groins will be constructed at North Shore, LePage Park, Pasture Point, Sundale, Roosevelt, Pine Creek, Threemile Canyon (Quesnel), and Crow Butte.

The river in the project area is vital for passage of adult and juvenile salmonids. Adults migrate upstream to spawning and rearing waters in the upper Columbia and Snake River systems and each year, primarily from April through July, millions of juvenile salmonids migrate downstream through the project area to the ocean. Within the project vicinity the river and its backwater areas also provide habitat for salmonid rearing and, in the tailrace area, possibly spawning. For the 1988 to 1998 period, annual adult salmon runs passing over McNary Dam have averaged 123,000 chinook, 40,000 sockeye, and 2,300 coho. Steelhead counts for the same period have averaged 131,000. These numbers represent fish that have escaped sport, commercial, and Indian fisheries downstream.

Columbia River sockeye salmon runs have decreased dramatically. Sockeye runs past McNary Dam have decreased from over 100,000 fish in the mid-1950s to as few as 9,000 in 1998. The Snake River sockeye run has almost vanished; the number of adult sockeye returning to the Snake River (counted over Ice Harbor Dam) were one, fifteen, and three for 1996, 1997, and 1998 respectively. For this reason, the Snake River sockeye has been listed as an endangered species

and is protected under the Endangered Species Act (56FR 58611; Nov. 20, 1991). Snake River spring/summer and fall chinook salmon populations are also in a critical situation. Their runs have declined from about 123,000 in the 1950s to 26,000 in 1998. As a result of these diminishing returns, the Snake River spring/summer and fall chinook salmon have been listed as threatened species (57FR 14653; April 22, 1992).

The decline in salmon and steelhead runs can be attributed to many factors including habitat destruction, ocean conditions, harvest issues, and passage problems at dams and other man-made structures. Part of the passage problem occurs in the series of dams and pools on the Columbia and Snake Rivers that juvenile downstream migrants must negotiate on their journey to the ocean. Because of the slow moving water in these reservoirs, travel time for upper-Columbia River system smolts migrating in river to the ocean has increased significantly from historic conditions. One of the largest pools on the Columbia River that must be negotiated by downstream migrants is the 76-mile-long John Day Reservoir.

As travel time increases for smolts migrating down the Columbia River it reduces their chances for survival. There are several reasons that increased smolt travel time can be detrimental. The physiological condition of smolts changes as they migrate, preparing them for the transition to salt water. Increased travel time subjects the smolts to the possibility of missing their "biological window" for arriving in salt water. Additional migration time also increases the migrant's exposure to disease and predators within the Columbia River reservoirs. Predators such as the northern pikeminnow (formerly, squawfish) consume large numbers of juvenile salmon in the Columbia River each year. Some salmonid smolts, particularly steelhead trout, do not migrate but become "resident" fish. Extending their migration times may increase this rate of residualism.

The John Day and Umatilla Rivers, which enter the John Day Reservoir, both have runs of salmon and steelhead trout. The John Day River maintains runs of spring chinook salmon and summer steelhead. A popular troll fishery for steelhead begins each August in the John Day River arm. The Umatilla River supports runs of reintroduced spring and fall chinook and coho salmon as well as native summer steelhead. Spring chinook counts in the Umatilla River have ranged between 409 and 2,194 fish over the last three years. Fall chinook numbers have declined from 646 in 1996 to 286 in 1998. The coho run was 618, 670, and 3,081 fish for 1996, 1997, and 1998, respectively. Over the last four years, steelhead returns have averaged about 2,000 fish annually.

Both the Irrigon and Umatilla Fish Hatcheries are located in the project area adjacent to the Columbia River near Irrigon. The hatcheries, operated by the ODFW in cooperation with the Confederated Tribes of the Umatilla Indian Reservation (at the Irrigon Hatchery), produce a total of about 5 million salmon and steelhead smolts annually. The water supply for rearing these fish is provided by wells and the wells are extremely dependent upon the level of John Day Reservoir. Severe water supply problems now exist at the hatcheries when the reservoir drops to elevation 261.0

The run of Pacific lamprey over John Day Dam has decreased significantly in the past several decades (Jackson, personal communication). Presently, there is no longer a tribal fishery for lamprey in the Umatilla River and lamprey are now only caught incidentally as part of the spring chinook fishery in Granite Creek, a tributary to the John Day River. Both these rivers historically supported important commercial tribal fisheries.

The American shad run in the Columbia River continues to increase. Counting stations at McNary Dam noted 1,147 shad in 1968 while 393,000 were counted in 1998.

Principal resident game fish found in the vicinity of McNary Dam are rainbow trout and whitefish and channel catfish, bullhead, black and white crappie, largemouth and smallmouth bass, yellow perch, bluegill, pumpkinseed and walleye.

The Columbia River in the project area supports a significant sport fishery for warmwater game fish. A popular walleye fishery exists on the main river from McNary Dam down to the Boardman area. Numerous bass or walleye tournaments have taken place on the John Day Reservoir over the past several years. However, about 50 percent of the angling for resident game fish occurs in the many protected backwater areas of the reservoir. The John Day River backwater, for example, supports a popular smallmouth and channel catfish fishery.

These shallow backwater areas are of significant importance to warmwater game fish for spawning and rearing. Studies in the area have shown that bass migrate up to 40 miles in the Columbia River to spawn in the sloughs (Montgomery and Fickeisen 1975). Major backwater areas include Paterson Slough (494 acres) , Glade Creek (30 acres), Willow Creek, and the John Day River. Other areas important to resident fish include Plymouth Park, McCormack Slough, Whitcomb Island, and Crow Butte.

Nongame fish populations in the project area include northern pikeminnow, redside shiner, dace, peamouth, chiselmouth, sculpin, stickleback, sand roller, sucker, carp, and goldfish. Of special significance is the sand roller which is being considered for sensitive species status by ODFW. Large numbers of carp often occupy the shallow waters of the reservoir and eliminate much of the aquatic vegetation. This has resulted in lower game fish populations and reduced food for waterfowl.

WITH THE PROJECT

Drawdown to Spillway Crest

Under this alternative, the river would flow uncontrolled over the existing spillway, except under the flood control option where the spillway gates would be lowered about once every two to five years to provide 500,000 acre-feet of storage. Powerhouse operation would continue. During an average water year, reservoir elevations would range from 218.0 to 230.7 without flood control and from about 218.0 to 235.7 with flood control (Table 1).

Compared to existing conditions, water particle travel time through the reservoir would range from 1.7 to 4.8 days less with flows between 200,000 cfs and 500,000 cfs. For example, at a flow of 300,000 cfs (average May flow) water particle travel time under the existing operation would be 3.8 days compared to 1.9 days with the spillway crest alternative. This is a reduction of 1.9 days travel time. Average flows are usually 300,000 cfs in May, peak around 500,000 cfs in June, and drop off to 200,000 cfs in August. Table 2 shows water particle travel time for three reservoir operation scenarios at several flows.

Table 2. Water Particle Travel Time (in days) Through John Day Reservoir

Flow (1,000 cfs)	Existing Operation	Spillway Crest	Natural River
200	5.7	2.5	0.9
300	3.8	1.9	0.8
500	2.4	1.4	0.7

The decrease in water particle travel time is expected to result in potential decreased travel time for actively migrating yearling and sub-yearling anadromous fish moving downstream through John Day Reservoir. Decreased travel time through the reservoir means the smolts may suffer less mortality and arrive at the estuary sooner. This could result in increased numbers of returning adult salmon and steelhead in the Columbia Basin.

Adult salmon and steelhead trout would also realize long term benefits from the proposed drawdown. Over a period of several years, the upper one fourth of the reservoir (approximately 20 miles) would return to a free flowing river with a sand/gravel/cobble substrate. Historically, this part of the Columbia River provided significant mainstem spawning for anadromous fish. Drawdown to spillway crest should restore some of this habitat and provide suitable spawning areas for anadromous fish, particularly fall chinook. An estimated 31,000 fall chinook would be expected to spawn in this area (USGS 1999). New fish ladders would be constructed on both the north and south shores. If the ladders are properly designed, adult fish passage conditions should not change significantly.

Although there would be benefits to adult and juvenile salmonids, there are also a number of adverse impacts which are anticipated as a result of the reservoir drawdown. These impacts could cause direct losses to migrating juvenile salmonids and could reduce available rearing habitat. For example, the lower pool level will result in a smaller size reservoir which will concentrate both smolts and the population of fish which prey on smolts. Initially, this could result in increased predation on downstream migrants, primarily in the slower moving water. However, as predator populations reach equilibrium in the smaller, faster moving reservoir, the overall predation mortality should be lower than existing levels. A lower water level in the upper John Day Reservoir (tailwater of McNary Dam) will cause decreased submergence of the turbines at McNary Dam. This condition causes subatmospheric pressures which could increase mortalities to downstream migrants. This increased mortality could be in the range of one percent. When little or no water is going over the John Day spillway (during flood storage), all downstream migrants will be forced to negotiate the turbine screens and bypasses. This will result in continued losses and injuries to downstream migrants. New juvenile fish collection facilities will be built into the dam in an effort to keep these losses at a reduced level.

An almost total loss of fish habitat would occur in backwater areas such as Paterson Slough, McCormack Slough, Willow Creek, Glade Creek, the Plymouth Park area, the area between

Whitcomb Island and the mainland, the area behind Crow Butte, Mesner Pond, and in those areas between the railroad and highway fills along the Columbia River. The 50-foot drawdown at the mouth of the John Day River would also eliminate most of that backwater area. An estimated 8,836 acres of backwater fish habitat would be dewatered with this alternative.

The shallow water shoreline and backwater areas provide important foods and nutrients to the Columbia River ecosystem. Large numbers of aquatic invertebrates are produced in these areas. Juvenile salmonid smolts, including large numbers of fall chinook fry, utilize these areas for feeding during their downstream migration. Dewatering the sloughs and backwaters would eliminate this important food source for migrating juvenile salmonids. The loss of the backwater areas would also eliminate their contribution to the food chain and nutrient supply in the Columbia River. It is expected, however, that some shallow water zones would be reestablished along the new shoreline and would eventually contribute as food production areas.

Sediment deposition within the tributary channels due to backwater from the John Day Pool has significantly changed the geometry on several of the tributary streams. To insure the continuous passage of migrating adult fish in these tributaries following drawdown, modifications to the current channel geometry may be required. The modifications could include dredging in Willow Creek, Umatilla River, Rock Creek, and Wood Gulch to open the channel to adult fish passage under the proposed drawdown conditions. Dredging would not likely be required on the John Day River due to upstream bedrock control on the stream. For two of the four major tributaries to the John Day Pool, annual maintenance dredging may also be required to maintain fish passage. The dredged channels for Willow Creek and Rock Creek would be designed to transport the incoming sediment load. However, the dredged channels would be highly entrenched within the existing sediments. These sediments would be subject to erosion rates the first several years after drawdown occurs. Neither the John Day nor the Umatilla Rivers are expected to require maintenance dredging. The sediment transport capacity of the Umatilla River under spillway freeflow and natural drawdown conditions is in excess of the incoming sediment load. This would maintain the dredge channel or possibly cause additional degradation. Dredging at the mouths of these tributaries is expected to produce about 5,774,000 cubic yards of sediment. Potential passage problems could also occur upstream near Chinaman's Hole where channel modifications were recently made to facilitate fish passage.

Reservoir drawdown is expected to cause severe impacts to the Umatilla and Irrigon Hatcheries. The well water supply for both hatcheries is directly dependent upon the level of the Columbia River and hatchery operation is severely impacted when the John Day Reservoir drops as low as elevation 261.0. With the proposed drawdown, these hatcheries could no longer operate with the present water supply systems. This would mean an annual production loss of about 5 million salmon and steelhead smolts. If satisfactory replacement water sources were provided, these losses could be reduced.

Significant spawning and rearing habitat losses for warmwater game fish would occur with the reservoir drawdown. Dewatering shallow backwater areas would result in spawning habitat losses to species such as smallmouth bass, which travel many miles in the Columbia River to reach sloughs and backwaters to spawn. Beneficial effects would result if spawning areas of undesirable species (such as carp and northern pikeminnow) were dewatered or became unsuitable. Increased water velocities in the river could adversely affect walleye spawning success which is best when

the river is high and slow. As the reservoir level drops, all fish species will be subject to stranding in isolated pools that remain in the backwater areas. The loss of the aquatic invertebrate population associated with the shallow waters would cause additional losses to warmwater game fish which depend on invertebrates for a significant part of their food supply.

Depending on which alternative is selected, there would be varying impacts on the treaty fishing access sites in the John Day Reservoir. Several of the sites do not have inwater facilities associated with them and would probably not be affected by drawdowns. However, for those sites with existing or planned construction of boat ramps, docks, groins, and/or breakwater structures, there would be adverse impacts on the use and operation of these facilities. Treaty fishing access sites which would be impacted by drawdown include North Shore, LePage Park, Pasture Point, Sundale, Roosevelt, Pine Creek, Threemile Canyon, Alderdale, and Crow Butte. Under the spillway crest drawdown scenario, all of these sites would become unuseable for some period of time. The Corps plans to replace these access sites in-kind, but until reconstruction occurs, tribal fishing opportunities would remain limited.

Angling opportunities and success would be significantly reduced. Popular angling areas in the backwaters would be eliminated and fishermen would then have to fish along the new barren shoreline created as the river receded. Angling in areas such as the John Day River arm, which supports a significant smallmouth bass and channel catfish fishery, would be mostly eliminated.

Boat ramps now used by anglers will be unusable when the river level drops. Some of the more popular ramps which would be affected are at Sundale, Threemile Island, Paterson Ferry Road, Plymouth, and the Umatilla River. Other more primitive boat launch sites around the reservoir would also be affected. Boat marinas on the John Day River arm (LePage and Phillipi Parks) would be left dry as the reservoir would be from 35 to 50 feet lower than existing conditions. The drawdown would also eliminate marina operations at Boardman, Arlington, Crow Butte State Park, Irrigon, and Umatilla. As with the tribal fishing access sites, angling opportunities would remain limited or non-existent until in-kind replacement of these facilities is accomplished.

The pump stations to be installed for supplying irrigation water to the proposed canals would be designed in accordance with fish screening criteria acceptable to State and Federal fishery agencies. Therefore, impacts to juvenile fish from these facilities are not expected. Although the specific alignments of the canals are not yet known, they are not expected to significantly impact fish resources.

Drawdown to Natural River

With this alternative, John Day Dam would be breached. The powerhouse would be abandoned. Piers and gates would be constructed if the flood control option were implemented. In an average water year similar to 1982, reservoir elevations with this alternative would range from 160.9 to 165.8 without flood control and from 160.9 to 184.8 with flood control structures (Table 1).

Overall, the long-term effects of the natural river drawdown alternatives would be beneficial to anadromous fish stocks which migrate above John Day Dam. While the following beneficial effects on anadromous fish are anticipated, they have not been quantitatively assessed at this stage. Quantitative biological benefit estimates would be refined if a Phase II study was implemented.

Existing passage delays to juvenile salmonids caused by the dam and reservoir would be eliminated. Downstream migration rates of juvenile salmonids should be similar to that of passage through free flowing sections of river. Without the dam, water particle travel time through the reservoir would range from 1.7 to 4.8 days less than existing conditions (at flows between 200,000 cfs and 500,000 cfs). For example, at a flow of 300,000 cfs (average May flow), water particle travel time would be 3.8 days under existing conditions, compared to 0.8 days with the natural river drawdown. This a reduction of 3.0 days travel time. Average flows are usually 300,000 cfs in May, peak around 500,000 cfs in June, and drop off to 200,000 cfs in August. Table 2 shows water particle travel time for three reservoir operation scenarios at several flows.

The decrease in water particle travel time is expected to result in decreased travel time for smolts moving through John Day Reservoir. Decreased travel time through the reservoir means the smolts suffer less mortality and arrive at the estuary sooner. This could result in increased numbers of returning adult salmon and steelhead in the Columbia Basin.

Breaching the dam would also eliminate juvenile losses now caused by turbines, bypass systems, and spillways. Each of these factors contributes significantly to the mortality rate of downstream migrants. Juvenile losses now caused by supersaturated gas below John Day Dam would be reduced. The "without flood control" option would essentially eliminate the supersaturated gas now created by John Day Dam. The spillway constructed for the "with flood control" option would still add some supersaturated gas to the river.

Long term benefits are also anticipated for returning adult salmon and steelhead. Without the flood control option, this alternative would eventually change an existing 76-mile-long reservoir into a free flowing river environment more closely resembling historical river conditions. Historically, this reach of the Columbia River provided significant mainstem spawning for anadromous fish. Breaching the dam should restore many miles of this habitat and again provide extensive suitable spawning areas for anadromous fish, particularly fall chinook. This restored habitat would support an estimated spawner capacity of 55,000 fall chinook (USGS 1999). If salmon spawning is restored in this section of the river, it could reduce the current fish mitigation levels at Spring Creek, Ringold, Little White Salmon, and Bonneville Hatcheries. The potential for this effect exists because some of the production at these hatcheries is linked to mitigation of fish losses caused by John Day Dam.

The rate of upstream passage of adult fish is not expected to change significantly. Adult fish passage through the natural river channel would probably be slower than passage through the existing reservoir. However, migration delays that may now occur at the dam would be eliminated. Water velocities through the breach in the dam could reach 10 fps during a 10-year flood event. Therefore, some delay could occur when fish attempt to move upstream during such a flood event. Passage would also improve for adult and juvenile lamprey, i.e., adults would experience fewer passage delays in the ladders at the dam and juveniles would be subject to fewer bypass delays and reduced predation in the reservoir.

A number of adverse fishery impacts are anticipated as a result of the reservoir drawdown, including potential losses of rearing habitat and predation impacts on migrating juvenile salmonids. For example, the lower river level may concentrate both smolts and the population of Quantitative biological benefit estimates would be refined if a Phase II study was implemented.

migrants, primarily in isolated areas of slower moving water. As predator populations reach equilibrium in the faster moving river, however, the overall predation mortality should be lower than existing levels. Without the upper John Day Reservoir (tailwater of McNary Dam), there would be decreased submergence of the turbines at McNary Dam. This condition could cause increased exposure of fish to subatmospheric pressures resulting in increased mortalities to downstream migrants. This increased mortality could be in the range of one percent.

There would be a total loss of all existing backwater fish habitat including Paterson Slough, McCormack Slough, Willow Creek, the John Day River arm, Glade Creek, Plymouth Park area, the area between Whitcomb Island and the mainland, the area behind Crow Butte, Mesner Pond, and those areas between the railroad and highway fills along the Columbia River. An estimated 8,836 acres of backwater fish habitat would be dewatered with this alternative. Approximately 6,968 acres of shallow waters along the main river shoreline would also be dewatered. Associated with this loss would be a net increase of 81 linear miles of shoreline that would occur with the proposed project, primarily due to increased island habitat. These shallow water shoreline and backwater areas provide important foods and nutrients to the Columbia River ecosystem. Large numbers of aquatic invertebrates are produced in these areas. Juvenile salmonid smolts, including large numbers of fall chinook fry, utilize these areas for feeding during their downstream migration (Zimmerman and Rasmussen 1981). Dewatering the sloughs and backwaters would eliminate this important food source for migrating juvenile salmonids. The loss of the backwater areas would also eliminate their contribution to the food chain and nutrient supply in the Columbia River. It is estimated that 8,412 acres of new shallow water zones would be created along the shoreline of the river after removal of the dam and, once established, they could develop into valuable aquatic food production areas.

Breaching John Day Dam is expected to expose large mud flats at the mouths of the tributaries of the Columbia River such as the Umatilla River, John Day River, Willow Creek, Glade Creek, and Rock Creek. Some of these tributaries carry a heavy silt load into the Columbia River. This silt has been settling out where the tributaries meet the Columbia River backwater since John Day Dam was completed in 1968. The proposed natural river will be lower than the existing level of the river mouths where the sediments have accumulated. This will likely result in the tributary rivers cutting a channel into the sediment deposit down to the new river level. The removed sediment will be redeposited in the immediate river area and carried and distributed downstream. There is concern regarding the potential impact of this channel cutting realignment on tributary anadromous fish. If the river mouth should spread out into many small channels, fish passage could be restricted. Plans are in place to, if necessary, dredge Willow Creek, the Umatilla River, Rock Creek, and Wood Gulch to maintain a well defined channel in these streams and allow for upstream passage of anadromous fish. Additional passage problems are possible in the Umatilla River near Chinaman's Hole where channel modifications were recently made to facilitate fish passage. If passage problems should occur at any of the tributaries, additional channel modifications would be required to enable fish passage. Dredging at the tributary mouths could produce an estimated 9,346,000 cubic yards of sediment material.

Eliminating John Day Reservoir would cause severe impacts to the Umatilla and Irrigon Hatcheries. The well water supply for both hatcheries is directly dependent upon the level of the Columbia River. Hatchery operation is severely impacted when the John Day Reservoir drops as low as elevation 261. With the proposed breaching of the dam, these hatcheries could no longer

operate which would mean an annual production loss of about 5 million salmon and steelhead smolts. If a new water supply system were supplied that was not dependent on river water elevations, these losses could be mitigated.

Major losses of spawning and rearing habitat for warmwater game fish would occur with the dam breaching. Dewatering 8,836 acres of shallow backwater areas described above would result in spawning habitat losses to species such as smallmouth bass, which travel many miles in the Columbia River to reach sloughs and backwaters to spawn. Beneficial effects could result if spawning areas of undesirable species (such as carp and northern pikeminnow) were dewatered or became unsuitable. Increased water velocities in the riverine system could adversely affect walleye spawning success which is best when the river is high and slow. During the initial drawdown period, all fish species will be subject to stranding in isolated pools that remain in the backwater areas. The loss of shallow water habitat and associated aquatic invertebrates is expected to cause additional losses to warmwater game fish which depend on the invertebrates for a significant part of their food supply. Over a period of time, however, new populations of aquatic invertebrates would become established in the Columbia River.

Drawdown to natural river levels would permanently eliminate use of the inwater facilities at the tribal fishing access sites. This would have a severe negative impact on tribal fishing in the John Day Reservoir, amounting to an average loss to the commercial fishery of about 12,000 chinook salmon and steelhead (based on 1994 to 1998 figures).** Eventually, however, tribal fishing could resume in the river if access were provided along the new river shoreline.

Warmwater game fish angling opportunities and success would be drastically reduced. Popular angling areas in the existing large backwaters would be eliminated and fishermen would then have to seek out smaller isolated backwater locations along the new barren shoreline created as the river receded. Angling in areas such as the John Day River arm, which supports a significant smallmouth bass and channel catfish fishery, would be eliminated.

Boat ramps now used by anglers will be unusable when the river level drops. Some of the more popular ramps which would be affected are at Sundale, Threemile Island, Paterson Ferry Road, Plymouth Park, and the Umatilla River. Other more primitive boat launch sites around the reservoir would also be affected. Boat marinas on the John Day River arm (Lepage and Phillipi Parks) would be left dry as the reservoir would be over 100 feet lower than existing conditions. The drawdown would also eliminate marina operations at Boardman, Arlington, Crow Butte State Park, Irrigon, and Umatilla.

The pump stations to be installed upstream of McNary Dam and downstream of The Dalles Dam for supplying irrigation water to the proposed canals are to be designed in accordance with fish screening criteria acceptable to State and Federal fishery agencies. Therefore, impacts to juvenile fish from these facilities are not expected. Although the specific alignments of the canals are not yet known, they will be located upland and are not expected to significantly impact fish resources.

**From Treaty Indian Fall Gillnet Daily Landings (phone survey report), 1994 to 1998
screening criteria acceptable to State and Federal fishery agencies.

It would take several years for the new aquatic environment to stabilize. During that time some significant short-term adverse affects on anadromous fish would occur. These impacts would occur during the construction period and for a limited time thereafter. Dam breaching and construction activities would take from 4½ to 10½ years (depending on "with" or "without" flood control). Inwater work would be carried out from December 1 through February 28 to minimize adverse effects on anadromous fish. However, construction and removal activities would cause turbidity levels to increase during that time. In addition to construction turbidity, when the dam is breached, the accumulated bedload behind the dam would be carried downstream. This bedload movement would occur over a period of time (probably several years) during high flow periods. The material would move downstream as suspended sediment and heavier gravel and cobble. Much of the accumulated sediments at the mouths of tributaries such as the Umatilla River, Willow Creek, Glade Creek, and the John Day River would also be carried downstream.

All forms of aquatic life could be adversely affected by the suspended sediment released from John Day reservoir after the dam is breached. Lifeforms both in the reservoir and downstream of the dam would be affected. Short term exposure (less than 6 days) of very high sediment concentrations (excess of 3,000 to 20,000 mg/l) might cause some salmonid mortalities (Newcombe and Jensen 1996; Newcombe and MacDonald 1991, Alabaster and Lloyd 1982; Servizi Martens 1987). Long-term exposure (several weeks or months) to sediment concentrations over 200 mg/l might cause death to some fish (Alabaster and Lloyd 1982). Much lower concentrations (20 to 50 mg/l) can reduce the rate of feeding, increase stress, and adversely impact fish in the sac fry stage (Newcombe and Jensen 1996). Populations of invertebrates are also affected by increased sediment loads. Temporary reductions in aquatic insects and other benthic invertebrate populations would occur following dam breaching. Since these invertebrates are a primary food source for some species of fish, those populations would also be affected. Sediment deposits in the upper portions of the reservoir would likely remain because they would rarely be in water or have little current to move them. High turbidity levels would provide some short term benefits to juvenile salmonids by creating increased cover which would result in their predators being less effective.

WILDLIFE RESOURCES

WITHOUT THE PROJECT

Vegetation surrounding the project area consists primarily of the shrub/steppe/grassland type. Big sagebrush and rabbitbrush are the most common shrub species. Closer to the water, riparian herb, shrub, and tree habitats present a more varied vegetative cover. Common riparian shrubs include young trees, willows, and false indigo. The dominant riparian tree stands are black cottonwood, but Russian olive, large willow, and some alder are also present. Much of the reservoir shoreline is bordered by riprapped highway or railroad fill with no vegetation adjacent to the water. From John Day Dam upstream to the Whitcomb Island area almost all vegetation behind the riprap consists of shrub/steppe/grass. Riparian shrub and tree habitats generally occur from Whitcomb Island up to McNary Dam. Much of this riparian habitat is located on the Umatilla National Wildlife Refuge around Paterson and McCormack Sloughs. Approximately 350 acres of emergent wetland and riparian vegetation are present on Paterson Slough and 270 acres are found on McCormack Slough. Other significant riparian habitat includes 228 acres on the Irrigon Wildlife

Management Area (which is managed by the ODFW), Plymouth Park, Glade Creek, and Whitcomb Island. Important riparian and emergent wetlands are also found in the Willow Creek Wildlife Management area.

Some of the most valuable habitats in the reservoir are the islands. These are used extensively by a wide variety of wildlife species. Islands are used for nesting, almost to the exclusion of shoreline habitat, by the Great Basin Canada goose. The Great Basin Canada goose, a year-round resident, nests on islands free of mammalian predators and requires suitable brooding pastures nearby for rearing the young. Goose nest surveys on the Umatilla National Wildlife Refuge islands found up to 240 nests in 1991 but this figure has gradually declined to around 200 nests in recent years. River island habitat was once abundant in the John Day Pool. However, construction of John Day and McNary projects inundated thousands of acres of islands, which included most of the goose nesting islands. John Day reservoir alone inundated 6,700 acres of islands (Rasmussen and Wright 1990). Today, only about 1,900 acres remain. Historically, goose production was distributed on islands from John Day Dam to McNary Dam. Now, essentially all nesting is concentrated on the few remaining islands in the Paterson area. These remaining islands are rapidly being reduced in size by wind and wave erosion and flooding. This is readily apparent when looking at the acreages of five islands during the 1973 to 1989 period in the Paterson-Irrigon area of the John Day Reservoir (Table 3).

Table 3. Acreage Figures for Islands in John Day Reservoir

Island	1973	1979	1989
Straight Six	10.6	0	0
Blalock	92.8	86.8	82.6
Coyote	36.1	0	0
Long Walk	129.6	101.3	64.3
Sand	140.6	25.7	18.5
Total Acres	409.70	213.80	165.40

Colonial nesters such as California and ring-billed gulls, Caspian and Forster's terns, and great blue and black-crowned night herons also utilize the islands for nesting purposes. The black-crowned night heron populations are very low and are listed in Oregon's "Fish and Wildlife Habitats and Species of Special Concern." Threemile Island supports 7,000 to 10,000 nesting ring-billed and California gulls, some Forster's and Caspian terns, and about 35 nesting black-crowned night herons. Other species of waterfowl, shorebirds, and nongame birds also concentrate on island habitat.

Mule deer are the principal big game species found in the project area. These animals are partially dependent upon islands for fawning where mammalian predators are not present. Deer populations represent an important part of the island and riparian community. About 400 deer presently utilize this habitat on the Umatilla Refuge.

Common upland game along the shoreline areas include ring-necked pheasant, chukar, valley quail, and mourning dove. These species are found in the shrub-steppe vegetation bordering the

river.

The river and riparian areas support a variety of fur animals; common species include beaver, muskrat, mink, otter, skunk, raccoon, bobcat, and coyote. Some trapping occurs in the reservoir area.

Waterfowl are the most common and abundant wildlife species within the project area. This portion of the Columbia River attracts large numbers of mallard, American wigeon, pintail, green-winged teal, and three subspecies of Canada geese. Other species found in the area in lesser numbers include the white-fronted goose, snow goose, tundra swan, canvasback, lesser scaup, northern shoveler, cinnamon teal, redhead, and ruddy duck. Waterfowl numbers are highest during winter months but large numbers of waterfowl also use habitat in the project area for resting and feeding during spring and fall migration. Total wintering waterfowl on the Umatilla Refuge range from a high of 560,000 birds in 1985 to a low of 17,000 in 1996. A maximum of 131,000 wintering ducks have been documented (USFWS 1997) using the area of the John Day Pool upstream of RM 250. Wintering Canada geese populations have averaged 33,550 birds from 1987 to 1992 (USFWS 1997) in this same area. Concentrations are highest in the area around Umatilla Refuge. In 1992, there were 12 species of waterfowl nesting on McCormack Slough. Waterfowl production fluctuates, but good conditions in 1992 found 76 broods totaling over 600 ducklings on McCormack Slough. In addition to waterfowl, there were also rail, coot, killdeer, common snipe, spotted sandpiper, avocet, black-necked stilt, long-billed marsh wren, grebe, and blackbirds nesting around the slough.

During the spring months, geese and ducks nest along shorelines and on river islands where suitable nest sites and brooding areas for young are available. Considerable duck nesting also takes place in the subimpoundments constructed on the wildlife refuges.

Waterfowl hunting is a popular activity in the project area. Hunting occurs during the late fall and early winter and largely on the refuge and management areas.

Numerous species of songbirds, shorebirds, and raptors also inhabit the riparian zone. The northern bald eagle (classified as a threatened species) is among the raptors present in the project area. The white pelican and longbilled curlew are also found on the John Day Reservoir.

There are many species of small mammals found in the project area including mountain cottontail, blacktail jackrabbit, porcupine, short-tailed weasel, and a variety of rodents.

All of the aforementioned wildlife species provide environmental education, wildlife observation, and photographic opportunities. Most of these activities are concentrated within the managed wildlife areas.

WITH THE PROJECT

Spillway Crest and Natural River

The analysis of both spillway crest and natural river impacts on wildlife is combined into one section because the impacts are very similar. Essentially, all of the wetland and riparian habitat would have already been eliminated even with the spillway crest drawdown to elevation 218.0. The only additional impact from the more severe natural river drawdown to elevation 160.9 would be the loss of some additional open water areas in the lower portions of the John Day and Willow Creek arms and the main reservoir.

Major adverse impacts to wildlife and their associated habitats are expected with the proposed reservoir drawdowns. Approximately 8,836 acres of shallow water habitat (almost all of the available shallow water habitat in John Day Pool) would be dewatered with a reservoir drawdown to elevations 213.0 or 165.0. These aquatic areas and adjacent riparian zones represent a valuable and unique habitat for fish and wildlife in the desert areas of eastern Oregon and Washington.

The extensive backwater areas at McCormack Slough, Paterson Slough, Willow Creek, Glade Creek, Whitcomb Island Slough, and Crow Butte Slough would cease to exist. The large backwater areas in Willow Creek and the John Day River would also disappear as the water levels drop to 50 feet below existing elevations with a drawdown to spillway crest. A drawdown to natural river would lower the latter backwater areas by about 100 feet. Total losses of riparian, emergent, and submergent vegetation would occur in all of these backwater areas. This represents a loss of an estimated 2,854 acres of extremely valuable riparian and wetland habitats along with hundreds of thousands of animals dependent upon this habitat. Shallow water habitat losses would amount to 8,836 acres. Just within the Umatilla National Wildlife Refuge, about 4,960 acres of shallow water habitat would be lost. Loss of these backwater and shallow water habitats would mean the destruction of extensive areas of aquatic vegetation. Much of this vegetation, such as sago pondweed, provides an important food source for waterfowl. Emergent beds of bulrush and cattail would also be eliminated. An estimated 1,899 acres of established riparian communities and wetlands along the main reservoir area, including the Irrigon Wildlife Management Area, would also be desiccated. The benthic communities of the shallow water areas would also be destroyed. This biomass of aquatic invertebrates represents a major food source for fish and wildlife and is a vital part of the aquatic ecosystem.

Drawdown of John Day Pool would essentially eliminate the use of Umatilla Refuge as a source of wintering waterfowl habitat. From 1984 to 1988, the average number of waterfowl use days supported by Umatilla Refuge was 34,416,934 (ducks) and 2,672,838 (geese). The immediate effect of drawdown would be the short-term loss of habitat and use of the Refuge by waterfowl. The long-term outlook would also involve substantial reductions in waterfowl use of the area because of decreased carrying capacity.

Loss of aquatic plant and benthic communities would create severe food shortages in a critical period for hundreds of thousands of waterfowl during their migration stopover each fall. In the spring and summer, waterfowl nesting and rearing activity would be eliminated in most of the dewatered backwater areas. This is expected to result in a significant reduction in waterfowl production. At McCormack Slough alone, a production loss of 400 ducks could occur.

Production losses to rail, snipe, sandpiper, avocet, and stilt populations would also occur in these backwaters.

The loss of water and, subsequently, the riparian habitat in the many backwater areas would significantly impact aquatic furbearers such as beaver, muskrat, mink, and river otter. With very little alternative habitat available, most of the furbearers would not survive. Some may move down to the new shoreline, but most of the new water's edge would have inadequate cover. It would take a number of years to establish a new riparian zone with adequate habitat for furbearers.

Numerous wetland areas not directly connected to but near the John Day Reservoir would also be severely impacted. These wetlands and ponds, like those in the Irrigon Wildlife Management Area, go dry almost immediately when the reservoir level drops. It is anticipated that these ponds and wetlands will be gone with the proposed drawdown levels. Like the backwater areas described above, these wetlands are very important habitat for many species of wildlife. Waterfowl, shorebirds, nongame birds, and furbearers all utilize this habitat. A population of western painted turtles, listed as a sensitive species by the State of Oregon, would also be lost or severely impacted by the loss of these ponds.

Other impacts are expected along the main reservoir. The drawdown would create large exposed mud flats between the water's edge and the former shoreline. Canada goose goslings would have to traverse large, open, exposed areas to and from feeding sites located above the original shorelines. This increased vulnerability to predators would cause additional losses to juvenile geese. This would occur along the main Columbia River shoreline as well as backwater areas like the Willow Creek arm. Many of the grass areas adjacent to the shoreline that are now popular grazing sites for goslings would be lost because of the lack of subirrigation from the reservoir.

Some of the existing islands within the reservoir would become connected to the main shoreline as the water level drops. This land-bridging would allow mammalian predators easy access to the islands. Significant losses to island nesters such as waterfowl, gulls, terns, and shorebirds would result. Approximately 50 nests each of great blue herons and black-crowned night herons would be vulnerable at the low reservoir level. Islands of particular concern include Threemile, Longwalk, and McCredie. On Threemile Island alone, there is a potential impact for 7,000 to 10,000 nesting gulls, Caspian terns, and Forester's terns. An evaluation of other islands and water depths is necessary to determine all potential land-bridge sites.

This loss of island habitat would be offset by the restoration of from 77 to 84 new islands totaling about 5,000 to 6,200 acres. The new islands, however, would initially be barren, lacking adequate vegetative habitat to accommodate most nesting birds. Eventually, the island vegetation and cover would develop and provide some of the most important wildlife habitat in the reservoir area. It is expected that there would be significant use of the islands by Canada geese, other waterfowl, great blue and black-crowned night herons, gulls, terns, shorebirds and nongame birds. Mule deer would also be expected to use the new islands as fawning areas each spring.

The riparian herb, shrub, and tree habitat that is adjacent to the main reservoir shoreline would be severely impacted. As the water recedes away from the shorelines, much of the riparian vegetation would die. This would impact many species of wildlife dependent upon the riparian vegetation. Some of the impacted wildlife includes beaver, muskrat, mink, river otter, mule deer, California

quail, songbirds, cottontail rabbit, heron, raptors (including bald eagles), and woodpeckers.

Some wildlife habitat losses may be reduced by the re-seeding effort planned by the Corps. However, the extent of the habitat recovery from re-seeding, and how long it would take to become usable habitat, are unknown at this time.

The Umatilla National Wildlife Refuge operates five wells along the Columbia River. Operation of these wells, which are utilized for irrigation and domestic purposes, would be eliminated by the proposed drawdown. As a result, refuge operations would be adversely affected.

Construction of the irrigation canals in Oregon and Washington is expected to cause some adverse impacts to wildlife resources. A primary concern is that mammals, especially deer, will become trapped and die in the canals. Impacts along the canal in Oregon would primarily be to shrub steppe habitat within the right of way of the existing WEID canal which is not a major concern. Potential impacts associated with the Washington canal would be to shrub-steppe habitat except where the canal would cross riparian or wetland areas such as Glade Creek. These crossings are of special concern since these habitats are very limited in the project vicinity.

A possible beneficial effect, although probably short-term, would be increased shorebird habitat. As the reservoir shoreline recedes, new mudflats would appear that would attract many feeding shorebirds. However, since the water level would remain low, the flats would dry out, no longer providing good shorebird habitat. Increased nesting habitat may be available for killdeer and spotted sandpiper, and, where water remains nearby, avocets and stilts.

DISCUSSION

Each of the four alternative drawdown levels would be expected to cause both beneficial and adverse impacts to fish and wildlife in the John Day Reservoir area. The lower reservoir levels and the natural river option may significantly benefit anadromous fish. Decreased travel time for downstream migrants and the restoration of spawning habitat could result in an overall increase in run sizes. The restoration of valuable island habitat would also benefit Canada geese and other species of wildlife which utilize island habitat. However, in conjunction with these benefits, there would also be adverse impacts to aquatic habitat, anadromous fish, wildlife habitat, and wildlife species. A total of 8,836 acres of backwater areas, which are important food production zones for fish and wildlife, would be eliminated. These shallow waters are a significant food source and rearing area for both resident and anadromous fish species as well as wildlife, particularly waterfowl. A significant number of acres (2,854) of emergent marsh and riparian habitat would also be eliminated by the drawdown. Loss of this habitat would impact anadromous and resident fish, shorebirds, waterfowl, passerine birds, aquatic and terrestrial furbearers, raptors, big game, reptiles and amphibians. These overall benefits and losses need to be carefully considered before a decision is made to do a Phase II study.

Mitigation

Major losses to backwaters, wetlands, riparian zones, and island habitat would result without

measures to reduce drawdown impacts. Therefore, efforts to reduce these losses must be considered in the project plans. Providing water to diked off portions of Paterson Slough, McCormack Slough, Willow Creek, Glade Creek (and possibly other areas) would reduce impacts to existing slough and backwater habitats and should be evaluated. Water could also be provided to the numerous ponds and wetlands in the Irrigon Wildlife Management Area. One potential source for this water would be the new irrigation canals. Studies are necessary to determine how much water would be needed to maintain existing backwater levels, other sources of water, and the best way to distribute the water. Plans should also be developed to irrigate key riparian habitats that would be dewatered by the drawdown.

Some of the wildlife habitat losses caused by the reservoir drawdown will be offset by the reestablishment of vegetation, including riparian habitat, along the new reservoir shoreline. However, the new vegetative community is not likely to be the same as that present during pre-project conditions. Sedimentation, land use, seeding sources, and other influences would probably result in a different vegetative matrix. Further, the composition and location of reestablished vegetation along the perimeter of the new shoreline would be different for each alternative. The re-seeding effort planned by the Corps would be in conjunction with natural vegetative development. The re-seeding should include both shoreline and island areas.

The new habitat would require many years to reach maturity and significant reductions in wildlife populations would occur in the interim. Mitigation measures would need to be developed and implemented to maintain existing wildlife habitat and values as the replacement habitat becomes established. The goal of this effort would be to allow no net loss of wildlife values between the time of impact and actual compensation. Mitigation plans and levels could be different depending on the project alternative selected. Post project monitoring and evaluation in an adaptive management approach would be necessary to assess the changes in conditions and the success of mitigation features. This would require followup studies to determine the quantity and quality of the new habitat. If mitigation efforts are not successful, contingency funds should be provided by the project to develop alternative mitigation features. All mitigation actions should be coordinated with and approved by the ODFW, WDFW, Tribal interests, and the FWS. It would also be necessary to develop detailed estimates of all wildlife losses and measures to compensate these losses with little or no loss between impact time and actual compensation. Project funds should provide for this mitigation effort.

If dredging is performed to maintain anadromous fish access to tributary streams of the reservoir, up to 9,346,000 cubic yards of sediment could be removed. This could cover an area up to 519 acres. It is important that all dredge spoils be placed in upland sites away from waterways and wetlands.

Potential wildlife losses from habitat changes and drowning or injury associated with the proposed canals is a concern. Canals can be designed so that losses are significantly reduced. It is important, therefore, that the appropriate State and Federal wildlife agencies are involved in the decisions regarding canal location and design.

Implementation of any of the alternatives would require years of construction activities to complete. During that time, safe fish passage conditions must be provided. This would involve many modifications and/or new construction of fish ladders, screens, and bypass facilities. Close

coordination with the NMFS, ODFW, WDFW, Tribal interests, and FWS would be required to assure that the best procedures to protect fish are incorporated into construction plans. Proper design of the water intake facilities in The Dalles and McNary Reservoirs also requires coordination with the fisheries agencies. These agencies should also be consulted to make certain adequate passage for anadromous fish continues at the mouths of tributary streams.

Substantial losses to the hatchery system are expected with the drawdown. The Irrigon and Umatilla Fish Hatcheries would be inoperable. A production loss of about 5 million salmon and steelhead is expected with the proposed project if a new water supply is not provided. Finding an alternative water supply for the hatcheries would be difficult because of the stringent water quality and temperature requirements for rearing salmonids. Studies would be necessary to determine if an alternative water supply for the hatcheries is available. If water is not available, a search must be made to determine if there are any satisfactory sites for constructing new facilities to replace the Irrigon and Umatilla Hatcheries.

RECOMMENDATIONS

To protect and restore fish and wildlife resources in conjunction with the John Day Reservoir Drawdown, we recommend that:

1. Should a Phase II study be conducted, the Corps complete a detailed assessment to document and quantify specific net impacts to fish and wildlife resources, including potential anadromous fish benefits in terms of increases in smolt survival numbers, increases in adult returns, and the economic value of these increases. Reduced mitigation needs at Federal and state hatcheries because of increased salmon spawning habitat and capacity in the mainstem Columbia River should also be investigated.

2. There be development of appropriate detailed and specific mitigation and enhancement recommendations under the Fish and Wildlife Coordination Act that includes:

    a) Project plans to maintain water levels in portions of McCormack Slough, Paterson Slough, the Willow Creek backwater area, Glade Creek, Mesner Pond, and Irrigon Wildlife area ponds;

    b) Identification of key areas of riparian vegetation that would be dewatered by the drawdown and plans to retain those habitats through irrigation;

    c) Water from irrigation sources to ponds being made available to sustain turtle populations;

    d) Close coordination with the WDFW, ODFW, NMFS, Tribal interests, and the Service in locating and designing the proposed irrigation canals and the water intake structures (in McNary and The Dalles Reservoirs) for the canals (and any other changes to the irrigation infrastructure) to minimize adverse impacts to wildlife;

e) Development of an acceptable alternative water supply for the Irrigon and Umatilla hatcheries or locating sites for constructing new hatchery facilities;

f) Coordination with fisheries agencies and Tribal interests in: 1) development of plans and schedules for drawing down the level of the reservoir, 2) the design and location of new fish ladders, screens, and bypasses, and 3) the evaluation of anadromous fish passage at the mouths of the tributary streams;

g) Development of post-project monitoring and evaluation of mitigation actions to determine their success. This work would be coordinated through interagency meetings of the Corps, WDFW, ODFW, NMFS, and Tribal representatives. Contingency funds would be provided by the project for alternative measures if the mitigation goals are not being achieved; and

h) Provisions to assure that drawdown areas are seeded, initial drawdown rates are ramped to reduce stranding losses, and other drawdown issues related to sediment transport and fish passage are identified and plans are developed for mitigation.

Sincerely yours,

Ronald L Hirsch

for State Supervisor
Oregon State Office

LR/lr,kl/jondaydd

cc: ODFW, Pendleton
ODFW, Portland
WDFW, Vancouver
WDFW, Spokane
NMFS
Umatilla NWR
Columbia River Inter-Tribal Fish Commission
Confederated Tribes of the Umatilla Indian Reservation
Irrigon and Umatilla Hatcheries

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Attachment D. Public Meeting Transcripts

- **Juneau AK** **February 4, 1999**
- **Lewiston ID** **February 11, 1999**
- **Portland OR** **February 17, 1999**
- **Umatilla OR** **February 23, 1999**
- **Pasco WA** **February 25, 1999**
- **Goldendale WA** **April 21, 1999**

JUNEAU, ALASKA
PUBLIC MEETING

February 4, 1999

Meeting Transcripts

John Day Drawdown Phase I Study Public Meeting Record
Juneau, Alaska
February 4, 1999

Lt. Col. Kevin Brice: First, let's take a minute to introduce the folks that we have here tonight so you know who has come with us with the Corps and also with NMFS. First of all, sitting on the right is Stuart Stanger. Stuart is with the Corps of Engineers and he is our project manager for the John Day drawdown study, phase I. To his left is Eric Ostrovsky. Eric is with the National Marine Fisheries Service, or NMFS, and Eric is going to, in a few minutes, talk a little bit about the NMFS role, the big picture as far as fish and what NMFS is doing as far as supporting us in the study. Now, coming up here, one of the things I was reading, and I know that the fishing in this part of the country is extremely important, and I read some number where last year or every year something like 75,000 chinook salmon that you all fish up here, and I can understand the importance to the economy and the importance to the region of that -- well, as you might guess down in the Pacific Northwest, down in Oregon, Washington and Idaho, the other parts of the drawdown study, you know, as far as navigation, irrigation, hydropower, also will affect peoples' lives, and it is very important for us to look, as the Corps of Engineers, is to look at everything that is involved with the possible drawdown of John Day, and that's why we are here tonight. We appreciate the fact that you took the time to come out to meet with us.

Shoot, I forgot to finish my introductions. I'm sorry. With Eric and Stuart, let me, if I could, also introduce Chris Ferguson, who is sitting up in the front row here. Chris is our technical lead for the project. Bob Willis is our fish and wildlife expert. Dawn Edwards is with our Public Affairs office and then Brian Shenk, to my right here, is one of our economists for the study . So, those are the key folks who are here tonight and what I'd like to do is ----I have talked a little bit about the importance of going and looking at all the views, but one of the things, since we operate the dams on the Columbia River ---it is very important for us to look at the dams and how we operate, and the effect that they have on the salmon, despite the fact that it has a lot of impact on peoples' lives. There are a lot of people who feel very strongly one way or the other, and I can understand that, because it's how people live and the affect that it has on their lives. So, therefore, it is very serious and very important for us to come out and visit with you and visit with the folks in Oregon, Idaho, Washington, and Montana, to hear all the different sides for the study.

One of the things that I would like to point out is that at this time all we are doing is studying drawdown options. At this time we are not actually drawing down the John Day pool. Before that could happen we would have to finish the study, look at the options, and take it back to Congress and Congress would have to make the decision and appropriate monies and give us directions to take on such an action. So, sometimes, it is very important to realize at this point that something of this magnitude the Corps doesn't do on its own. It is done at the direction of Congress. Tonight, what we would like to do is talk about the first phase of the draw down study that we are doing this year. We are looking at potential benefits to drawing down the John Day reservoir and we are also looking at the impacts, and we need to hear about the impacts that could change peoples' lives. So far, we have gathered lots of information and some of that we have been sharing with you tonight, but what we need is any additional information that you may have, especially from the Alaskan perspective, and that's why we are here; it's very important. As I said, the tables will be here after the meeting and we will be glad to answer questions individually. But, it is important that we appreciate the fact that you are out here, because your involvement is important, not only involvement by being here tonight, and getting your input, but there are other ways that you can be involved. First of all, if you have not ---please, on the tables we have sign-in rosters where you can sign in and get on our mailing list, for when we go through and actually do the study -- that way we can mail to you and include you on our mail list.

Also, when Stuart talks in a little while we are going to be establishing a Planning Aid Team, and we would invite you, and I realize this is a long way from Portland, and it would be very difficult attending the meetings, however, (1) you are invited, and (2) you are invited to get the minutes that we will have from those planning team meetings, and by getting the minutes and providing written comments, we would love to hear those in addition to hearing from you directly.

As we go through, and we are going to do what was said, take a little bit of time to let Stuart and Eric talk about the program, and then turn it over for any comments or questions that you may have. I would ask and state that we are willing to stay here as late as you would like to, to talk about whatever you would like to talk about, and to hear from you, however, please realize that I would ask you to consider others as we go through that part of the evening.

At this point, are there any questions or comments of me? If not, what I would like to do is turn the floor over to Eric who is with the National Marine Fisheries Service, to give you an overview from the NMFS perspective. Eric---

Eric Ostrovsky: I think I have talked to most of you. As I'm talking and you might want to ask questions, fire away. I just want to begin for … with just a reflection for some of the social aspect, and I have talked to many of you about it before, and I think this is especially true in

Southeast Alaska. Most of you probably are not here to get rich, and you came up here because you like Southeast Alaska. There is something special about it and it's different, something special maybe, if you are in the fishing industry, about why you are a fisher, and that it's different, and I think that really holds true, too, in the Pacific Northwest. People there loved … a lot, too, and there is something very special about it and they don't want to leave. I think probably in both regions, if you ask people what it is, what makes it different, why you stick around in the rain and everything else, probably salmon plays a large part of it, and because of that, I mean --I think the social part of it is very important, and I don't know how you even begin to put that together with some of the economics and the biological aspects of it, but I'm going to take some slides here and I'm going to show you why our agency, the National Marine Fisheries Service is involved in the issue, some of the things that we have been doing. A lot of the people know that we have spent a lot of money on fish, and by "We" I mean all the federal agencies, and they say that nothing has occurred, and you might think that we have only been studying it, but we have been doing a lot more. We've got some overheads, and this is the first time I've really ever operated this. Basically, okay, well, we're getting there. I am going to try to get these so that the rest will work right. As I was saying before, I'm in the Portland office and in the hydro division of the Portland office. Everyone here realizes that there is an impact of suspicion of the Columbia basin and it impacts all of you. What I mentioned before (as soon as I get this one right) there is a Columbia basin salmon legacy, and that's what I want to call it. You have heard stories, and I think it is true. At one point 16 million salmon and steelhead returned to the Columbia basin and it means a lot to the people in that region, and especially a lot to the native tribes there. There has been a major decline throughout the basin. I will show you a map in a second, just limited to the basin, but it will show you --- I could have done it of the whole West Coast, that there has been a decline. This has been determined that one of the major reasons for the decline in the Columbia basin has been due to the loss of habitat, due to dam construction, several of the dams that were built in the basin during the … Grand Coulee totally stopped passage for salmon in Oregon and Washington, and through the Canadian part of the Columbia basin, and now a federal dam in Idaho, the Hell's Canyon complex, and when that was built it stopped any passage for salmon into the upper Snake, which was the other major arm of the Columbia River. Besides that, a lot of the dam construction itself. When the dams went up, as I was telling some of you, construction timing wasn't perfect. There was a lot of destruction of a lot of the dams, and a lot of the … during the actual construction. Unfortunately, even when things went according to clockwork, there still was an impact on the fish. Beyond that, as you well know, the Northwest, a very large urban, larger population, and major areas and that growth has had major impacts on the fish, especially the habitat. There was a lot of timber harvest in the area, a lot of the agriculture has had an impact. Hatchery issues, harvest issues. All impact the fish. We call it the four H's, and we are looking at all of them.

NMFS became heavily involved in river operations through the Endangered Species Act. In 1991 we listed Snake River Sockeye Salmon and basically at that point, the possibility of them becoming extinct was very real. Soon thereafter, the listings for the Snake River were spring salmon and fall Chinook. Really, there are only currently six species of salmon or steelhead that go beyond John Day Dam that are either listed or proposed for listing. What I thought I would do for full disclosure is to show you - this is just the Columbia basin - showing you the different species that are either listed or calls for listing, whether also threatened or endangered. There are 13 of them. I couldn't show you the whole Columbia basis because it stretches beyond the three states of Washington, Oregon and Idaho. I could have done the whole West Coast but there are problems with fish along the whole coastal area but the Columbia basin really is sort of a major system within itself.

Okay, so we listed these fish under the Endangered Species Act; so what? Well, one of the things under the Act is that after the species is listed and any federal agency takes any action that may affect, they have to consult, or if adversely affect they have to consult, or if a biological opinion, in the case of the Columbia River Power System and that is really the whole dam system, itself a federal unit, there are four in the Snake, four in the Columbia, four in the (cannot transcribe because of the audio ... speaker not up to microphone) Hungry Horse.---It is also the operation of the whole thing. Basically, when we say continue operation as it is going, it would lead to the jeopardy of the species.

Question from the audience. Not audible.

Eric Ostrovsky: That's a good question.

Answer not audible. Eric Ostrovsky not talking into microphone.

Under such and such consultation we don't consult directly with private entities. We are at this time having discussions with … over re-licensing, coming up fairly soon, and because of the federal answer there will be a consultation. The other thing that you have a private non-federal entity attaching a species under such … and you would be (not audible)
When this case is heard there will be a way, hopefully, to bring … and that's how they would do it. The biological … going on and that's how they would do it.

Question from audience. (Not audible)

Answer from Eric Ostrovsky: Yes, and here again … not audible)

Discussion regarding microphone.
Someone says: I'd give you my microphone to get rid of …
'I'd give you that one over there.

A woman's voice - - Did I miss the point. It sounds as though there are some hydros that - you said something about finding a way to bring them into consultation. I find that ironic that some of the dams don't have to go under consultation but the Southeast fisheries do.

Eric Ostrovsky: Well, let me explain a little, and then probably it wasn't that good a thing - the explanation. The federal dams came in under their operations and their continued operation. The non-federally owned dams - one of the ways to do it, and then one of the ways we are looking at it is through their FERC (Federal Energy Regulatory Commission) licensing, and then there is part of their re-licensing and FERC doing it - that is a federal activity, and we will consult with FERC as a federal activity. Just as, if there is a fisheries which is a federal activity, the management, and if there is, in fact, they would have to consult too. So, that's how we are doing it. It is not in the same consultation as the FERC, the Federal Columbia River Power System. It's a little different.

Woman's Voice: So, there's only consultations with federal activities?

Eric Ostrovsky: Yes, a Section 7 consultation.

Woman's Voice So, the Southeast fisheries, if it wasn't for U.S./Canada, we wouldn't have fallen under Section 7? Is that...

Eric Ostrovsky: In some extent I am assuming because of … in the Act and the way the fisheries--

Woman's Voice: Are fisheries under the North Pacific Council. So, that if we didn't have. That's why, so, if we weren't, then like the Kodiak … isn't going to worry, cause there's no federal body governing their fishery.

Eric Ostrovsky: I don't want to answer that. I would go out on a limb. You would have to look at the activity, see what it is, and what the actions are, and not only that, there are many ways to look at different activities. As I say, FERC licensing on the private dams happens to be not only a very active way of doing it, but it brings FERC into the process which did the original licensing anyway, so it's more than convenient. It's a good way to get all the parties together on it, but so, in a sense there is some, there is quite a bit of cooperation in it, so one of the things that happens is that the jeopardy decision is there; it is usually - if you could have it - a reasonable and prudent

alternative, and in this case, there was a reasonable and prudent alternative, and what they came up with was a series of measures, and in going around the lot of acronyms the RPA, the reasonable and prudent alternative, what it basically said, its objective is to implement all the reasonable and prudent measures, and this was begun back in '95. There were some things that we thought in order to operate the power system, needed to be done immediately, to start saving salmon, just to keep them from blinking out. There were other things that needed to be done, and to look at, at the system. The long term configuration decision had to be made, and the idea became known as the 1999 decision, and I realize it's 1999, and what to do, as far as the configuration goes; to make some of those major decisions. I put down adaptive there, when I really mean there is adaptive management. One of the things that occurs in the operations as we go along, and I say We GO ALONG through the operations of it, the different agencies, the Fish and Wildlife managers, federal agencies, state agencies, tribal, depending upon the year and what's going on, they can do sometimes different things to check out some of the uncertainties in the system or just because it was a wet year or a dry year. You can find out certain things. So, rather back in 1995 to say this is the way it's going to be, through management structure it was decided a lot of the uncertainties they would look at, as we went along. I wanted to put down some of the immediate survival measures that we asked for: proved bypass. What that really means is when you have juvenile fish migrating, the worst place they could go through would be the turbines. Basically the bypass systems will take those fish, depending upon what you want. they could either be turned back into the river without going through the turbines, or they could be put on barges, and depending upon the time of year, the flows in the river, the type of migrants, and how you think they are going to do, and the biological opinion goes into that quite a bit. The biological opinion also had spring and summer flow objectives and basically there were some hard controls and what it was really doing is trying to put as much water as possible on juveniles when they were migrating to do as much good as they could do, and as I'll show you in a minute, that's both trying to increase flows and also trying to reduce temperatures which is especially important in the Snake River, as it does get very hot up there in the summer. One of the other things we have done is increase spills, and this is one of the first times that you really have spill that was being done voluntarily to help salmon, and to get them through the river. It is another way of getting greater percentage through without going through the turbines, also reducing the handling of the fish, better transportation, because we do not know whether we can get better recovery results through barging or having fish go through what is now an artificial system, so we are doing some of both until we decide on a longer term alternative, but by better transportation, less trucking, more barging, better operations in the barging, and the Corps has really done a good job with that, operating turbines at peak efficiency within 1% of efficiency, and you get better survival of smolts when you go through that way. I don't want to say fish friendly, but fish friendlier turbines. There is one being put in now at Bonneville and the idea is that to reduce mortalities there. I just wanted to show a couple of them now, but the results are now

showing that between projects with smolt that the number that stay alive between 1995 and today, it has been quite an improvement. So, there has been some good work at that. One of the other things we have done in the biological opinion and in the federal agencies that actually operate the projects, they have made a lot of structural modifications. These are some of the expensive things that have gone into the system. You heard a moment ago about gas abatement and what we are doing to limit the amount of gas in the river. I wanted to add that it's not just federal and private dams in the United States that are producing gas. Coming into the Grand Coulee there is a lot of gas that is coming out of Canada, and I have been told that it is sort of a natural gas maker up there and there is not that much that can be done about it. So, we have done that, extended length screens or again, that is sort of the mechanisms for keeping juveniles out of turbines, the fish sampling stations. I think those are really important. The one at John Day dam is actually quite impressive. What that is helping to tell us is that a lot of what's going on in between projects; what's going on with the fish; how they are doing; how different species are doing, and under different conditions, spring, summer, wet, dry years. There can be a lot of changes and as we change the river we have to look at it too. Sampling lets us do that. Relocation of the juvenile outfall at Bonneville. That is the second powerplant on the north side. There was some discussion there. We get these juveniles; we put them into a bypass system so they can become lunch for northern pike minnow. It wasn't a good situation and yet bypass system is very expensive but it's going to put the fish back into the river where there is a lot of flow and hopefully that will help quite a bit on predation. I just show those as illustrative. There are quite a few modifications that have gone into the river.

QUESTION: On the gas situation, what you are saying I guess is that the gas has always been present in the river. But the problem has been, is that when you either spill or drop it through a turbine the head that you get off of that is what is causing supersaturation and that is where the real problem is?

Eric Ostrovsky's answer: The supersaturation - a lot of it is being caused by the spill, not the turbine, and you know, I mean, the good part of spill is that you are getting a lot of fish beyond the dams, keeping them out of the turbines, keeping them out of the bypass. I mean, spill is probably better than bypass for the juveniles, but with spill you do produce gas and, you know, we work up to a certain operating limit as we try to do it. The problem is that in the spring you are going to have some uncontrolled involuntary spill, too. So, these are some of the important things about trying to put ways in to limit it. Spill is something that, a lot of times, we really can't control. Some of it is a natural product in the river, too. Does that answer that question?

Okay, well, probably some of the really most important parts of the biological opinion was that - it's hard to say this - you know, I mean it's like we know so little bit about the fish, once they get

into the estuary in the ocean, there are really a lot of things we don't understand when they are on the terrestrial side, either. One of the things we have been looking at is just survival, survival of different species, or what we are calling inriver migrants. Let's take the Snake River. They were the first listed. If you were one of those juvenile migrants you're going to go through, if you stay inriver, and by that I mean, you are not picked up by a collector dam, like say, Lower Granite, you are going to stay all the way, going through, and you could go through some of those dams, through spillways, some of the dams through turbines. We look at survival all the way through, under the different conditions for different species. Then we compare it with barging. Barging, the survival is much higher for fish that are collected, taking them through the system itself, but there is a lot of controversy about whether there is a delayed mortality on those fish then once they enter the estuary or the ocean, and it's still a controversial issue. There is a lot of work being done, looking at it. Then we look at absolute return rates, and one of the things NMFS has done in the biological opinion, since it didn't know which was really better - Barge - do you keep fish inriver; it has been some of both. The feeling was, at least that way, if one is better than the other, it is like not putting all your eggs in one basket, although at this point we are trying to have more fish -as many as possible- go inriver, but there are limits. At least, sub-yearlings we do collect more. We have been looking at the new technology we are putting in to see surface collectors, etc. Are they effective? How can they be more effective? One of the other things we did in the biological opinion, we wanted to look at drawdown - the idea of it. What could be done? The feasibility of it? It was mentioned here about the study of the four lower Snake dams. What are some of the benefits for drawing down? I've got a chart for that one, too. Basically, what we said in 1995 was - this is going to be sort of intuitive - I think, to most of you, but, you know, drawdown allows for faster water velocity for a given flow, and with the change of tide when you are going through tight areas here, you know how fast that flow can be, faster water velocity relates to fish travel time and faster travel time, and tends to promote small fish survival. In the 1998's sub-steelhead supplemental opinion on operations we asked the Corps of Engineers to look at spillway crest and natural river drawdown, which is the basis, and with Congressional approval or direction, that's the basis of phase I and basically what Congress said was, take an initial study, come back to us, and we will see where we are from there. We have to present to Congress justification of why we would even consider drawdown such a major project. But, you know, you're right, I think it was mentioned here before, when you think about drawdown, there is more to it than just main stem passage, and if you took a project like John Day and you drew it down, one of the other things you're looking at is rearing habitat especially for sub-yearling fall Chinooks. Independent science … return to the river. They are also called the Independent Scientific Advisory Board. Basically, they advise the Northwest Power Planning Council and NMFS. They are made up of salmon experts from all over the country. They are highly regarded, and in their report they said restoring historical but presently inundated production areas in the main stem should be evaluated. They also said that smolts of Hanford Reach, small Chinook

which are healthy, spend most of their days where there is food rich, riparian vegetation and flooded cobble beaches. Anyway, Snake River fall Chinook spend most of their days in the reservoir and its shoreline, which is different. And they felt it definitely needed to be studied, so therefore, things we are looking at obviously along the riparian areas is if there is rich and aquatic insect life. It works. It works for Hanford Reach fish which are really the only healthy population in that area, so it would increase rearing habitat. It would also increase, or could increase spawning habitat, and within John Day itself, drawdown will expose some of what was historic habitat for up-river bright fall Chinook, which most of you know something about. Fall Chinook are not listed. They are the healthy stock but this could increase that spawning habitat quite a bit. It was estimated there were 30,000 adult fish spawning there before the area was inundated and the Hanford Reach fish which aren't listed are above that area, so it could be a colonizing area for them. This isn't an ESA concern really, but I wanted to put it in there because it definitely is though one of the potential advantages that at least needs to be studied or considered. I just wanted to finally put in one last one, as we are looking at drawdown and why John Day drawdown and this is sort of the dam itself, and you know, we have said there has been a lot of improvement on each of the dams and there is still an impact, and there is a cumulative impact of the dams. One of the things that it would be to keep in mind is that, as you look at each dam, and what drawdown might mean, in itself, it might not be the silver bullet as to what are going to bring back certain fish, but it, along with other things you are looking at, could be significant. To announce what significant means is, basically, the probability of reaching survival and recovery standards. That is basically what I wanted to say from a biological perspective, why NMFS has asked for this study, and with that there is a lot of other implications. I was going to turn the microphone over to Stuart now.

Stuart Stanger: Thank you, Eric.

Lt. Col. Kevin Brice: We've been talking the big picture in this directive, and then the directive from Congress has told the Corps to go to work on a study. What I could do now is ask Stuart Stanger, who is our project manager for the Portland District to give you an update on where we are with the study and a little bit of the background to the study itself. So, Stuart ---

Stuart Stanger: Good evening, everyone. As the Colonel indicated, I am Stuart Stanger. I am the project manager for the study, and what I'm going to do is basically describe to you what the project provides, and when I get done we can have some questions, since we may not want to pass the microphone around. I am going to describe to you as I indicated, what is the John Day Project? What does it provide to the region? I am going to describe to you what we are doing in this study; what's the purpose of this study? We will talk about the schedule for this Phase I

study, and finally, we will talk about how you can be heard, and how you can be involved in the process.

First of all, for those of you who do not know John Day Dam, here's Portland, Oregon. It is about 215 miles up river to the John Day Dam, the Snake River, up to the Lower Granite, through the entire system there is about 450 miles of navigation. This is an aerial view of the John Day Dam. This is the navigation lock, about 9 million tons of cargo go through the lock each year. The spillway, 20 spill bays, and the powerhouse has 16 turbines with a capability of adding four additional turbines. The dam's construction began in 1958 and was completed in 1968. So, what does the John Day Dam give us? Unlike the other dams on the river, John Day provides flood control. A 500,000 acre feet of storage is authorized for flood control at John Day Dam. That is a foot of water over 500,000 acres. Hydropower, a big benefit of the John Day Dam, about 2200 megawatts of power produced. As I indicated, 9 million tons of cargo are shipped through the navigation lock. There are about 14 recreation sites varying from marinas to boat launches, to swimming areas, campgrounds. With the John Day Dam in place, irrigation became a big part of the use of that dam. There are 25 pump stations that farmers use to irrigate about 150,000 acres of land. In addition, there are four pump stations that are used for industrial commercial uses, and water supply. Homeowners get their drinking water out of the aquifers and those aquifers would dry up.

Wildlife refuge. There are about 35,000 acres of land that are managed for wildlife as a result of the construction of John Day Dam. The Umatilla Wildlife Refuge is a big refuge. It is both on Washington shore and Oregon, and fish passage facilities. The bypass systems that Eric mentioned, the juvenile fish monitoring facilities. Those are used to get together data and those facilities would have to be modified.

You have heard some discussion, and I'm going to tell you about the study that we are in the middle of right now. You heard Phase I mentioned. This is a two-phased study. A year ago, Congress told the Corps of Engineers to prepare a scope of work, a plan of study, tell us how you would study a drawdown of John Day Dam, and we spent about 90 days, I believe they gave us to put together a proposed plan of study. What we proposed was a two-phased approach. We felt that because we had already done studies to look at drawing down to what was called minimum operating pool in the early mid-90's, we felt that there was enough technical information that may already be available, that we could compile that, that we could go out to the public, we could come to you folks, we could go to the ports -- a lot of economic studies have been done by various organizations, a lot of biological studies have been done by different organizations. We wanted to take that information, put it together in what we called Phase I, and then simply make a decision, or will make a recommendation to Congress, should additional studies be done

regarding drawdown. Phase II - we don't know what the scope of Phase II would be, but we do know that it would be much more detailed, include many more alternatives, including options other than a drawdown. For example, some of you may be aware of surface bypass that we are looking at. Eric mentioned fish friendly turbines. Those would be options that we would compare to drawdown in a Phase II study. In addition, we would be looking at different levels. Right now, in phase I, Congress has told us to look at just spillway crest and natural river. There could be some intermediate level where you still get your biological benefits and don't have quite as much impact to navigation, hydropower, or those other users of the system. Phase II would have to include an environmental impact statement, and for those of you who don't know that, that would include for us to have what we commonly call public scoping meetings. We will probably be back up here again talking about what should that study include? What do we need to look at as far as wildlife and fish impacts? Phase I alternatives, Congress said, spillway crest and natural river. We expanded that a little bit and we said, we need to talk about this flood control, because that's a big benefit of the John Day project right now and I'm going to -- if you will flip one more, Dawn -- I am going to try to explain to you how the flood control works and why that's so different. There was a handout up here of this if you guys want to pick this up at the end, if you do not have it. Right now, we normally operate the pool at elevation 265. Okay. Spillway crest would lower that to 215. Natural river - 165. We basically take out the spillway and the navigation lock and probably part of the embankment, and water would go around the powerhouse. If we provide flood control -- the way flood control would work in natural river, when a flood is coming down, I need to be able to stop it from getting down to Vancouver and Portland, so I close some sort of a spillway or flood control system. I close it and now water would pond up, probably 30 feet, if I wanted to maintain my 500,000 acre feet of flood control storage. And the same thing of spillway crest. Right now, on a normal day, the river would run here, but when a flood is coming down river, when there have been storms in the Snake River and storms down in Portland, and you don't want any more water in Portland, we store water, so the pool level goes up. Okay. That's very simple. What it causes us to have to do, though, particularly in natural river. Right now, fish would be able to swim through the dam, if I just took the spillway out and the navigation lock and they could swim right through. Okay. But now I have to put a structure back in there to control the flood. Somehow I need to be able to store that water so it would mean I would have to reconstruct the spillway and I would have to provide a way for fish to get up and down through that spillway. So, we are looking at those four alternatives, really; spillway crest, with and without flood control; natural river, with and without flood control. Okay. What we told Congress and what we felt was the purpose of the study, and they agreed, was that we needed to evaluate the potential fisheries and wildlife impacts, positives and negatives. We would evaluate the social and economical impacts to the region and here, and we would provide a recommendation to Congress as to whether or not we think additional studies should be done. You need to understand, the Corps of Engineers - we will not decide whether

the study will or will not be done. That will be decided by Congress. So, how are we addressing the fish and wildlife impacts? I mentioned that we have done a lot of studies early on in the early 90's and mid 90's with regard to the fisheries habitat, fish passage through the John Day pool, travel time. We are going to expand on those studies a little bit and complete some of them that Congress stopped, when they told us to stop looking at minimum operating pools. So we have re-initiated those and we will be completing those, and adding to them.

There is a - it's a group really - this Plan for Analyzing and Testing Hypothesis has been commonly known now as the PATH process, and it's a group of experts - scientists - who are modeling - right now they are modeling primarily the Snake River drawdown, the biological benefits, and what they do is that they put a whole bunch of variables into this computer model, and they are kicking out probability of sustaining the run. What's the probability of maintaining the run under various alternatives. We are going to use that same process. They are going to take the data that they have already done with the Snake, adding the John Day - the data that we provide to them out of these studies, and they will be making a prediction of what the probability of sustaining the run would be under different alternatives. Okay.

Planning Aid Team. One of the things we said we would do in this study, and the colonel mentioned this is we said we will form a Planning Aid Team. In addition to using just these expert scientists, we said we want to include the states of Washington, Oregon and the public. Anyone who wants to participate can sign up and be a member of this Planning Aid Team. They will take all of this biological information and tell us what they think it tells them. If you want to participate in that Planning Aid Team, there is a sign-up sheet for that team here, and we will put you on the mailing list.

In addition, there is a Planning Aid Letter. The Planning Aid Letter is something that U.S. Fish and Wildlife Service prepares. They do this on all of the Corps' studies, and they look at fish and wildlife impacts, positive and negative, and make recommendations to the Corps of what type of mitigation would have to be done, or what the impacts might be. They send us that letter, and they coordinate that with National Marine Fisheries Service and with us, to talk about what could be done when you dry up a wildlife refuge, how you would replace that? We will have those discussions with them, and then they will send us this Planning Aid Letter, and that will become a part of this Phase I study. Okay.

How do we look at the social and economic effects? We are looking at all of these things that you saw around the room before the meeting and those that I just discussed, and now let's pick one - navigation. We will look at what it would cost to replace that navigation. Now, the way to replace navigation is to dredge a navigation channel that you can still use. If you take the John

Day Dam out, tugs and barges can't navigate with their current equipment. They cannot navigate from The Dalles to McNary, but we may be able to navigate that distance if we dredged a different channel. That would be a way to eliminate the impact, but there is a cost associated with it. Okay. The same thing with hydropower. We can look at other sources for providing the power, but there is cost associated with providing those, and we will be developing those costs.

Let's pick another one - irrigation pumps. We are looking at dredging a canal on each side of the river, and we would let the farmers pull water out of those canals. We would screen the fish out of the canal, keep them in the main channel, but there would still be water for the irrigators. We would also look at - maybe we can just rebuild a bigger pump station for that farmer and extend the pipe down to the river. We will do trade-off analyses between those two and figure out which one would be the most cost effective and that would become part of the recommended plan, if you would. We will look at employment effects. What happens if I take out irrigation; what happens if there is less navigation; what does it do to the quality of life?

Other things that we would need to consider, and I am just going to go briefly through these, and you can ask me questions about any of them. But, the adult and juvenile fish passage facilities that would have to be provided at natural river, spillway crest, if facilities we currently have would not work at either operation. There are currently about 37 utilities in the John Day pool area, sewer outfalls. Some of them would be impacted and we have yet to identify which ones exactly would be identified, but we will be looking at them. There are about 360 sites that we know contain cultural resources, and they are currently under water. When we expose those we know that we will have to do something to protect them.

Water quality - a big problem is the sediment that has been deposited behind the dam and at the confluence of several of the rivers since 1968. We also know that there are some sites that have potential of hazardous and toxic waste that were covered with the pool and now we would be exposing them, so we will look at what would have to be done to clean those up.

Our schedule -- we plan to have a draft available in September, 1999. If you get on this mailing list, you will get a copy of it, and we will provide you 30 days to review and comment on it, and then we would submit our final recommendation to Congress in December, 1999. And, keep in mind, that is just a recommendation to Congress.

We are going to have additional public meetings - there are actually six of them. Two of them are being held in Oregon. You guys were first on the list. Okay, in summary, what did I talk about. What did I tell you. Okay. We will be making a recommendation regarding further study. We are not making a recommendation about drawdown - not at this point. We are trying to decide,

should we study it? Congress will make the final decision. If you want to get involved, you can sign up, be in the Planning Aid Team. You can review and comment on the Phase I report, or you can send to the Colonel, and the address is on the bottom of all those information papers. You can send letters to the Corps of Engineers, or if you want to, you can send them to National Marine Fisheries Service, State of Washington, or any of the involved agencies. You are welcome to do that. Okay. I think that is the last one, Dawn. With that, Colonel, I will turn it back to you.

Thank you.

Lt. Col. Kevin Brice: Folks, what I would like to do now is to turn the floor over to all of you. What I would ask is, as we have the microphones as we said earlier, and we will go ahead and pass the microphone around. I would ask, if you would, please, to state your name, and if you are representing a particular interest or particular organization - because what we are going to be doing with the record from this, is that it will be an appendix to the report. The record from all these public meetings, so I would ask that you do that. I will turn the floor back to Stuart and let him lead answering the questions as we go through. If you have questions that we cannot answer - you know, we will try to turn them over to our experts here, and if we cannot answer, we will get your name, address, and get back to you with the answer. So with that, are there any questions of me as far as a process? And if not, let me turn it back to Stuart, and we will turn it over to you for any questions or comments that you may have.

Questions, anybody.

Paul Suchanek: I was just wondering - I really didn't hear exactly how you came to decide on the John Day Dam, where you are doing your studies, versus all the other dams around the river.

Stuart Stanger: That's a good question. The Corps of Engineers didn't make that decision. That came out in the Biological Opinion, and the way the process is working there are a number of organizations; one is called the System Configuration Team; one is called the Implementation Team; you have heard of the one called the Independent Scientific Advisory Board. Everybody starts talking about an option and years ago they started talking about John Day drawdown to minimum operating pool. With the thought that we already have the authority to operate that project as a minimum operating pool, that is what that means. Congress authorized us to operate it - at minimum operating pool. They say, Corps, if you take it down to there, you have that authority, just take it down to there, and we can get some fisheries benefits. Congress stopped us from doing that after they had told us to begin doing the design, - there was some change of opinions, if you will, from these different organizations, and they came to the conclusion that

minimum operating pool would have impacts of all these things we have scattered around the room and not provide as much benefit as they initially thought, so they said we need to go further, and it came out in the Biological Opinion that you need to look at John Day to spillway crest and natural river. Why they have not said look at The Dalles or Bonneville, I can't answer that question except, keep in mind John Day pool is 76 miles long. It is as long as all of the Snake River dams, backing water up, and it also did provide some good spawning habitat, and by drawing down John Day Dam we may be able to recover that. Below John Day Dam is Celilo Falls and that, in itself, could be an impediment to fish passage, so if you drew down The Dalles Dam you would have a natural barrier there. I don't know if that gets to your question, or not. The Corps of Engineers did not pick John Day Dam.

John Eggers: I am retired from the Coast Guard currently. I used to work for the Corps of Engineers in 1960. Hydroelectric dams, working with hydroelectric design branch there. I also was in the Coast Guard when we did navigation work on the upper Columbia River, and from The Dalles up as far as Lewiston, Idaho. So, I have seen the river in its full flow and I have some feeling about what is going in. I have also been working with IBM for a few years. People in Canada look at the basic oxygen demand very differently, I think, than some of us do. You get one thing where you don't have enough oxygen and the next time you have too much plant life growing from the oxygen, and it is hard to balance out, but the stretch of river from John Day on up to Umatilla is a long stretch of river but it also is a stretch of river which has no aeration coming into it in the form of significant rivers from the sides. The river is below The Dalles Dam and also the Deschutes River brings oxygen in with it. The Snake River used to bring oxygen with it, but I believe Brownlee and Idaho Power's dams starved out a lot of the oxygen that goes into the Snake River. I was also involved at the time of 1960 to 1964 of working on preliminary design on the lower Snake River, the lower ground at Little … I forget a couple of the names; Ice Harbor was the first one. I don't know whether you ever got up to Asotin or not, but all of these dams were sort of a stoppage of aeration coming over the fast water. The navigational aspects of the river was with barges. The Corps of Engineers had built locks and dams from The Dalles up past Celilo way early in the century and they could bring up oil one way and bring back wheat the other way, before the 1950 era. The first dam on the Columbia that I know of that was a problem was noticed in 1953 as a member of the Corps -- not the Corps of Engineers, but in Coast Guard navigation, we would go up there and work on the lights, and there was a significant study provided by the University of Washington at this time where they released many many smolt down through the turbines at McNary Dam and that was the first dam that was over 95 foot in head on the Columbia River there, and they had a higher killing of the fish as they went through those turbines - I'm an electrical engineer by trade, so to speak I'm retired now, but the cavitation on electrical turbines … is enough to probably explode a lot of the fish. The back-up waters - I am not certain that it is so much a function of the length that they have to travel,

because while working in Canada for a while, the higher lake bands and some of that beautiful country up there had long dams - not dams - but higher lakes had long passages which the fish had to come down through, and prior to the huge dam there at Spokane - help me just a minute. Anyway, it's the one that blocked off the river in 1934, and the folks who used to live up in Canada, who remember the 1934 period, it was just about before my time. They spoke of the salmon runs that used to go up through there, and all of those were intact until the big dam was put in, which was Grand Coulee, which closed off the complete upper river. I suspect that the Mica Dam and the Revelstoke Dam in Canada have also cut off some of your oxygen into the water. As opposed to this, there is also a nitrification problem which biologists here probably know all about and being an electrical engineer, we don't use much nitrogen, and that nitrogen within the fish can kill the smolt just as well as anything, and it was classified as one of the things that knocked them off on the way downstream. The Corps of Engineers had done very many studies at that time in order to try to figure out how to get fish around these dams, elevators at McNary and trucking them around and over Green Peter on the Willamette system. They had a very extensive system of trying to figure out how to get the fish through the dam and pressure relief valves and everything. All of the studies probably are still available to you, but the answer to it as far as I'm concerned from the fisherman's viewpoint is those fish have to eat the same as you and I have to eat, and some combination of oxygen and nitrification, and I suspect that with the long flow behind the John Day Dam you have no aeration at all and you have no speed. You no longer have Indian Rapids and Priest Rapids, and all the rest of them that go up through there. So, that you don't have the addition of oxygen which your bodies and the fish' bodies have to have in order to live. I suspect that some of the studies with the aquaculture people at Weyerhauser which I had a little bit of involvement with, where they always aerate their ponds where they are growing their fish and I worked at CH2M Hill at that time, and that would be a benefit, I feel, in the John Day forebay if it's 92 miles long to provide several significant spots where you can oxygenate that water. Now, I'm not a biologist. There are good biologists here in town that can tell you these things but I do know that the river is now run at full power output as far as electrical is concerned and that was doubled when you had the water flow controlled at the time you put in Revelstoke and Mica in Canada and got the mutual benefit across both borders. So, I feel that if you are going to save the fish you are probably going to have to do something for aeration along the lines of between John Day Dam and up to McNary Dam. I don't know how much you are going to do on the lower Snake; I'm not sure what the fish flow is down through there at the present time, 'cause I think that the Idaho Power Company dams have probably knocked a lot of that out. With all that, I will leave you my name later.

Stuart Stanger: Thank you for your comment. I don't know if there is an answer to that question, but a lot of good comments. What I can tell you is that I'm not the project manager for it, but the Corps is conducting now very extensive gas abatement studies for the entire system,

Bob, do you know how much money we have appropriated for that this year? Do you know the schedule for that being completed; do you know?

Bob Willis: Yes, etc. …

Stuart Stanger: So it's being done; it has been underway for several years. When we get money we work on it, and when they don't give us money, we don't. But - so 60% …

John Eggers: On the aeration side of the house, the City of Portland's Bull Run projects have had needle valves on the bottom of their dams. There are two dams up there, and they squirt this needle valve out into the air and aerate that water this way. They aerate it for the taste of the water for the people to use. They don't aerate it for the fish, per se, but it is a very significant way of providing aeration, and if you go up the Payette River in Idaho you will find there is a dam up there that has a terrific plume that comes squirting out into the air for about 500 feet and picks up its aeration that way and Celilo Falls used to be a very good aeration source, as well, which is just below the Deschutes River, and it was fortuitous of myself at one time to be up there when the natives were fishing and a little kid about three years old falls in, and it's just a froth, and here comes the next guy with his dip net and he has the kid in it.

Stuart Stanger: Thank you. Questions and comments?

Dave Gaudet: I am with the Alaska Department of Fish and Game but I don't believe at this point that I am speaking for them. I am doing this out of a lot of my own interest. I guess I have a couple of questions, and there are probably a lot of questions that I have that I can probably ask later on, maybe off the record, but first of all you made a comment about Celilo Falls. The fish did get past there earlier on and so I don't understand why you would think that would be an impediment now if you went down below that, and perhaps you can answer that later on, but I would question that. What I'm more concerned about is that I am not quite sure that I understand all of the choices at this point. At first, when I first heard about this I thought you were saying that the choice was whether we should continue the study or not? Originally, I thought that meant, well, shall we continue studying the drawdown or do we just say that we don't even want to look at that. Apparently, that's not the way it is. What you are describing is - we would look at - under Phase I we look at drawdown to either river level or spill crest, and then Phase II, actually goes way beyond that and starts - and says, okay, we looked at that, but now we've got to start looking at all the alternatives. So, I'm not quite sure - if I told you that I don't want to continue with Phase II, what does that mean?

Stuart Stanger: Let me try and explain that better then - if you didn't understand that, probably others didn't either.

Phase I -- at the end of Phase I, the Corps of Engineers could say, "Congress, we don't think John Day drawdown has - shows enough benefit to outweigh all the impacts, and we don't think we should consider it any further." That could be the Corps of Engineers recommendation to Congress. And they could say, "Yep, we agree Corps. We aren't going to study John Day drawdown. It's not an option anymore." And, we wouldn't study it anymore. The Corps of Engineers would not go to Congress and say, "We believe John Day drawdown should occur." We haven't done enough studies to do that. We could go forward and say, "Congress, we think there might be some benefit here that does outweigh these impacts, and we think we should study it, and if they say "Yeah, that's the way to go; keep studying it. Along with that we study the other options besides drawdown. You don't want to do drawdown if there are other things that are less, that impact the fish less than a drawdown will, recognizing that there will be negative impacts to the fish with a drawdown, particularly in the short term. So, there may be other options such as surface bypass which is a technology which we are all studying at different dams right now, and is being looked at John Day, so there might be something better than a drawdown, and you would include all of those options in a feasibility study, Phase II John Day drawdown. Okay? Phase II doesn't mean that we are going to draw down, you've gotta look at all the things that you might do with John Day Dam and decide, "Is drawdown the best compared to something else."

Comment: I think and so that you would be looking for at this time would be … after hearing what you have to say and reviewing these things, whether we would be in favor that you will go ahead with Phase II. Right?

Stuart Stanger: Right. That's right.

Yes, that's correct.

Is there enough evidence there now to say it doesn't show enough promise. The cost isn't worth the benefit …

In a word, it should be the other way.

Well, the other way you get into - and I don't want to get into a big discussion but there are other laws, the National Environmental Policy Act that we need to comply with where you do an EIS, and you have to look at all reasonable alternatives, so what are you trying to achieve at John Day?

You are trying to get the fish upstream and downstream, past John Day. Drawdown is not the only way. You would have to look at other options, and that would include surface bypass.

Does that answer your question?

Answer: For right now. Yes.

Stuart Stanger: You look puzzled.

Answer: No.

Woman's Voice: So Phase I was to get out from under doing NEPA.

Participant: It's to see whether it was worth going into Phase …

Stuart Stanger: No. We already had a lot of information, studies that had been partially done; biological studies. They had been done when we were looking at lowering to minimum operating pool, so we recommended to Congress -- let us pull all this existing information together and see what it tells us before we start a $20 million feasibility study, which would begin with public scoping process.

Participant: Well, that's what I …

Stuart Stanger: Once you embark on a feasibility study you are looking at a very long study. I think the Snake River is upwards of $16 million now, and it has been going on for about four years, and you are looking at the same thing at John Day, so we said, before we do that let's pull all the information together that already exists and let's see what it tells us.

Lt. Col. Kevin Brice: Ladies and gentlemen, are there any other comments? Or questions? Sir.

Joseph Emerson: I am a salmon troller here in Alaska, and I am totally dependent on fishing for my livelihood. I don't do anything else, but fish, and I would just hope that in your cost analysis and benefits analysis that the social and economic impacts of fishermen in Alaska be considered in that equation and that is basically the comment that I wanted to make because the operation of these dams and John Day in particular, has a significant impact on fishing families here and in Southeast Alaska, and it is important to us how these dams operate and how the restoration of these salmon runs is coming along. I don't think that a lot of people in the lower 48 (states)

understand that for us in Alaska we have been sort of in a conservation mode of operation as salmon fishermen since and before the implementation of the Salmon Treaty. It has been 15 years plus and I think every fisherman is looking for some bright spot on the horizon and it's kind of disheartening when we think of just studies and more studies, and more studies, and not any results, and because our fishery is severely limited and we are actually taking action now, at least from the fishermen's perspective, and we do need relief and it's hard to stomach when it looks like relief might be another decade away, because it is almost as though an entire career is affected by all of this. Anyway, I just would hope that fishermen in Alaska would be considered in the whole picture.

Stuart Stanger: The economist over here has assured me tonight that you are.

Brian is the economist and I would invite you to talk with him afterwards, in particular, because that is why we are here, and in fact, including things like that is Brian's job, so thank you for the comment.

John Sisk: I got here a little late but I have a question, which is just, have you discussed earlier on how this study fits in with the lower Snake study and the '99 decisions, and the Framework process for the Columbia Basin Salmon Recovery, and the coastwide EIS and whether or not to restrict ocean fishing, and the ESA listings, and the Chinook that are coming down next month, and how all that package fits together and affects Alaska?

Stuart Stanger: I don't know if anybody could do that.

John Sisk: I mean, have people talked about all of that. It's kind of a big and convoluted picture, and this is woven in there somehow, and I have never been real clear on where this particular study fits.

Stuart Stanger: Let me talk to how the Snake and John Day might relate. The Snake River study, as you know, may or may not know, was scheduled to be completed and the decision was going to be made, a different decision than we are making, but they were going to decide about drawdown versus transportation versus some other things. They were going to decide that in December of '99. We were on the same schedule to be completed with Phase I in December of '99. They've just recently had to slip that schedule because of the PATH process that I mentioned is behind schedule, and so they have just announced that they are going to slip that schedule. What they are doing in the Snake River study with their looking at the biology, the

PATH process, is - they are including John Day Dam, and they will include John Day Dam with it full or John Day Dam with it drawn down, so we will know if, when they finish their study, we will know if there is some relationship between what the decision would be at John Day if they drew down the Snake River dams, but the decisions are different. We are on different schedules. They could make decisions to draw down or to continue transportation long before we ever started our feasibility study. So, although they may seem related, they are not on the same schedule. That is the way Congress has appropriated the funds, and whether or not that will ultimately determine what happens with the Snake, or if they are drawn down, if someone in Congress says don't drawdown until we know what you are going to do with John Day, that will take …

Now, the other things you are talking about, the treaties, those kinds of things, I don't know anything about those. Does anybody in here? I know probably none of the Corps folks do.
Joe Emerson: I think a lot of the folks I know are concerned about how it fits together because if there are additional listings and recovery plan efforts, additional ones on top of this sort of in-limbo Snake River recovery plan, actions have to be taken but these hydro studies are kind of going on and it's a while before any conclusions are reached, one way or another but there are shorter term actions that are deemed necessary to - you know - do something for fish. People naturally look to fishermen. You know, so I think that's a common Alaska concern and that's probably one reason that folks in Alaska are discouraged about how long these take.

Stuart Stanger: Let me try. There are some big studies going on. The Snake drawdown, John Day drawdown, and McNary, and they would involve looking at big expensive things, like surface bypass technology. There are a lot of other things that we are still continuing, and we are implementing today. Eric mentioned -- you came in a little bit late -- but the outfall at Bonneville is under construction right now, extended length screens to keep fish out of the turbines. We are building a prototype right now that will be tested this year at John Day, and assuming the results are good on that, the plan would be to implement that. So we are not holding back on those things that we know are already improvements at the projects. We are continuing those, but at the same time we are doing these big studies to see if a drawdown should happen. Obviously, if a drawdown occurred, a lot of the things that we are …

New tape here – slight break in recording … in April of last year the installation of what we refer to as flow deflectors to reduce the gas supersaturation at John Day Dam, another $20 million project, that is useless if you draw down. So, we are going forward with those individual - we call them implementation items; things that the decisions on those can be made independent of these bigger studies. We are not holding everything up, if that is an answer to your question. The things that we know about and we know are providing some biological benefits and Congress

funds, we are moving forward with those at all of the projects, and these other bigger studies are going on separate from that.

Eric Ostrovsky: I just wanted to add a few things. I am not sure if you were here on …

John Sisk: No. I got here a little bit later. I caught the last part of your …

Eric Ostrovsky: Okay. There are a number of processes going on within the region. I think you mentioned the Framework as one which is really more or less a number of groups getting together and sort of looking at a menu of regionwide fish and wildlife issues. Now you would go forward in fish and wildlife management that is something probably broader than just hydro. You'd be looking at the other H's, too, and the federal agencies have always supported an effort -- now it's called the Columbia River Basin Forum, but for the states and the tribes and the government to come together in some kind of collaborative process too, and if that gets going, and I believe now there has been, I think Washington and Oregon have indicated they are going to do it. Most of the tribes have signed on. I'm not sure, well I think it might have been Idaho that was hesitant at this point, but that would be another way to start looking at the process. Well, you would have happening here as a hydro matter is NMFS and the other federal agencies have an obligation under laws, including the saying that they would go forward. Obviously, if you had some type of broader management plan in the Basin there would be a lot of focus in trying to see -- you would want to coordinate them, so, my guess is, you have a number of processes moving at the same time. The more any of those could actually come to fruition, it would be better, but, you know, would you have the federal agencies wait on the responsibility for regional collaborative process. You know, it's a question - that the problem is - they are not all necessarily on the same time schedule and those schedules do have a tendency to slip, and so, it's confusing. It is not all exactly working at the same time, but they are going on. I mean - I just wanted to say, they are not all going in different directions, and usually, in Portland, when you see the process happening you see most of the same faces at any one of the processses. So, there tends to be a lot of coordination going on. I am not sure if that helps at all.

Stuart Stanger: Thank you folks - are there additional questions or comments?

Dave Gaudet: At this point I guess that as far as any input that one should be looking for, I would like to see continued studies of some of the drawdowns go on. I don't think that there is anything that would persuade me at this point, at least as far as the study goes, and I realize that is all it is at this point, that it shouldn't go ahead.

Stuart Stanger: Okay. Thank you, sir, for that comment.

Dale Kelley: I am the executive director of the Alaska Trollers' Association and I guess, in terms of what we would have to offer here, I'd have to mirror what Dave is saying, that, of course we would like to see any studies that would make this river more like a natural river, whether it's drawdown or anything else, and I think that some of the frustration that you may be hearing when you are talking about the four H's you see a lot of folks out here probably roll their eyes because the H that gets concentrated on the most seems to be Harvest, and we study the dams and we study the dams, and thence gives them no jeopardy rulings, which is almost a no brainer, and Judge Marsh has issued opinions on the hydros that … has been out of line in giving them no jeopardies, but all it does is result in study after study where people are being employed and no offense to folks in the room, but it is a chronic thing, where a bunch of money is dumped into studies and studies and studies and we don't see any results except families like Joe's and the thousands of fishermen that we represent are sitting on the beach, whether it's in our state or anywhere in the Pacific Northwest, because the problem is the dams, and it is -- I recognize it's a really frustrating and confounding problem for everybody because nobody in this room made the initial policy decisions that brought us to where we are, but we've got folks who are living this every single day and know that their livelihood is at risk. I tell you, come March, when the next release of the new listings comes down, fishermen beyond just Southeast Alaska, even up here are going to be impacted by new listings, and it is of incredible concern to hear that there actually sounds like a loop-hole that some of the dams down there don't even get full evaluation, yet fishermen 1500 miles away are sitting on the beach and losing money, and it's business as usual, and I appreciate that the hydros put a lot of money into alternative strategies, and they are looking at things, but the fact is, the river needs to act more like a river for fish to get to the ocean and it needs to act more like a river for fish to get back up to the spawning grounds, and we need to get to that place and we know that there is a problem, and we know there is economic impacts, so why don't we just go there, and start studying what those impacts are, and what we need to do to address them. Or, if we are not going to address them, if the economics in the Columbia River Basin at this point are so dependent on the river as it is right now, then we need to find some way that fishermen can quit paying the price for it. You know, fishermen know, whether it is the Pacific Northwest or Alaska, none of the fishermen would have made the choices that were made to bring us to this point, and so, you know, if we need to study draw down, that's great, but we need to quit studying and get to the business of either protecting fish or decide we can't and let's move on.

Stuart Stanger: Well, thank you for your comment. Part of the study is, though, you have to recognize, there is a mixed debate over whether drawdown is good for the fish or not, and part of the study is to determine that. You'd be screaming at me if I said, okay, we're going to pull the

plug tomorrow, and the dam is going to be dry, and it killed all the fish, so you don't want to do the wrong thing, and that is part of the study.

Stuart Stanger: Thank you for the comment. Are there other comments or questions?

John Eggers: I have a minor one, a fellow by the name of Lester Dembeste in 1960 worked for the Corps and said the way to solve the fish problem was to build hatcheries along the coast. To that I say that's a poor place to put all your fish hatcheries. We have tried it here as well. I don't think it's quite as successful when all the dog salmon came back a couple of years ago, but Weaver Creek in Canada, up around Harrison Hot Springs or Harrison Lake has a very unique form of salmon bed for spawning. It has its trees; it has its habitat, and it has its filtered water throughout, and it does not go through 150 miles or 200 miles of lake behind a dam. There are places on the Columbia where this could be accomplished. I have also seen places on the Feather River in California, where you go along the rocks and they are black, and it's just plain pollution, and that pollution was probably caused there by both dams and paper plants, and if you have this growth in the Columbia River where you are doing a lot of irrigation, you can also look at the California Basin for the amount of pollutants but they put on land in the form of growth potential for plants which go into the rivers and the streams and kill the ducks and the geese, and all the rest of the habitat down there, but again the dollar is the supreme being, so to speak, but I am sure from what you said that the Columbia River is now pumping a lot of water up into evidently the wheatland or growing land, which is coming back into the river system as a nutrient for some of these plants that you don't want in the river, that either take away your basic oxygen or provide too much of one form or another. I think that the fish have to live and we should be looking at some of the dead fish that must be out there somewhere, but then I'm not a biologist.

Stuart Stanger: Thank you, sir. Are there any other questions or comments?

Andy McGregor: I think that the decisions that need to be made on the Columbia and Snake rivers are primarily economic ones, and there are ways to solve problems and it costs money and they dislocate user groups no matter what you do. So, under study on the John Day drawdown, how much do economic factors come into play with regard to whether you continue further study?

Stuart Stanger: I wish I knew the answer to that. Fortunately, I don't have to make that decision, but I don't have the answer to that. What you're asking is what is more important; saving the fish or for the economic impact, and I don't know that, but let me throw out a hypothetical. If I told you that it was going to cost a billion dollars to replace what's impacted, for a billion dollars I could fix all these things that are impacted, and I'd have a 30% probability

that the run would be sustained, would you buy it? That's what the decision-makers are going to be faced with, is a decision like that. I am going to say, here's how much it is going to cost to replace all of this, and here's the probability that the run would be sustained. Now, they have to decide - - which do they want to do? Because there is no science in the world where we can say here's how many fish will be saved if I draw down. It's this PATH process that they have been working on for years to try to come up with the probability and that's about the best thing we are going to be able to give the decision-makers, Congress. That's a tough one. Yeah, but there might be obviously apparent, if it's $10 billion and you have a 10% probability, that to me is kind of a no brainer, but if, on the other hand, if it's a billion dollars, and it's a 90% probability, that's a no brainer the other way. So, we have to wait and see what the results come out to be. Does that help at all? We don't have the answer for that, and Congress will debate that, and different Congressmen will have different opinions. It becomes a value decision, and how much value do you place on fish? Or how much value do you place on navigation. Yeah.

Participant: Since the John Day Dam was the last dam constructed on the Columbia, the last major dam especially, coming after the lower Snake dams, it seems to me you would have some data on fish population, runs going through, all the way up from Bonneville, The Dalles, McNary, to see what the kill-off was from when John Day went in, and you can almost do a reverse study of what you have with the free flowing river over that section. I may be wrong on that, but I would be willing to bet that it would give you some pretty good figures.

Stuart Stanger: I don't know. Bob, do we have any kind of data like that; do you know?

Bob Willis: We do have that sort of information. You know, but the problem is that you stop one simple thing in operating John Day dam in … Eric mentioned that 10 to 16 million salmon that were in the Columbia River … when the first dam went in at Bonneville, the run was down to about 3 million, and it has been very similar to that since then. You know, a lot of that was due to harvest but you don't want to hear about the four H's, but there are all these other confounding factors, you know, that influence it.

Stuart Stanger: Thank you. Are there any other questions or comments? As I think we all agree and as I know that you know, the problem is not an easy one and in coming up with the correct recommendation does take a lot of study, and therefore, we do appreciate the fact that you took the time out, because we do have to consider all of the impacts and all of the possible benefits, in doing this study, and coming here and speaking with you, and hearing from you is very important to us as we look at the big picture. Again, I would invite, please, if you have not signed up already, we do have a sign-up sheet so you can be on our mailing list for the draft study as it comes out, and then, therefore, having a change to comment on it. Likewise, if you want to

participate or can participate in our Planning Aid Team, we would please encourage you to do that, and likewise, if at any time, as tonight we do have some comment sheets, if you would like to provide us written comments that we can take back with us, we would be happy to do that. Our address is also on these comment sheets you can take back with you, fill out at a later date, and mail them to us, so that way we can also include that information as we put together this study.

Sir?

Participant: What's your deadline for the comments on this?

Stuart Stanger: We will take your comments at any time. If you have some scientific studies or something like that, we would like to get that, probably within the next 60 to 90 days, but if it is just a comment that you have about what you think should be done, that will go into the report right up until September, even the 30 days after September, and you will have another opportunity to provide some comments on the report. Sure. Yeah. Just get on the mailing list.

One thing I failed to mention, too, John, when you asked your question about the Snake and how all this ties together. We do have a sign-up sheet here that you can get on the mailing list for the Snake River study. That's being done by a different Corps office, but if you want to get on that mailing list, I do have that here, so you can sign up for that.

Lt. Col. Kevin Brice: And lastly, folks, our folks will still be here, and we will stay around and be glad to talk to you, one on one, and answer any other questions or comments that you have before you leave, and we will be glad to stay as long as you would like to, to talk about this, or any of the other things that we are doing up and down the Columbia River, but once again, I say thank you for coming out tonight. It is very important for us to hear from you and I really appreciate your taking the time this evening to spend time with us. So with that, let me close the meeting and I wish you a very pleasant evening.

LEWISTON, IDAHO
PUBLIC MEETING

February 11, 1999

Meeting Transcripts

LEWISTON

John Day Drawdown Phase I Study
Public Information Meeting
Lewiston, Idaho
February 11, 1999

Col. Bob Slusar: I'd like to -- I'd like to welcome everybody here tonight. Thank you for taking time out of your busy schedule to be here. I'm the District Commander for Portland District, U.S. Army Corps of Engineers. I represent only one of the districts within the Northwestern Division. There are basically five districts that are out there. There are Portland District, Seattle District, Walla Walla District, Kansas City District, and Omaha District, and all of us -- all those districts are commanded by colonels and we all report to a General Officer who commands the Northwestern Division. The reason why I'm here tonight is because, under Portland District I have the geographic responsibility of pretty much the State of Oregon and Southwest Washington, and John Day Lock and Dam is in my district, and so that's where we fit into this puzzle here. The reason why we're here collectively as a group is three-fold: (1) it is to explain the process that we have been asked to do in terms of looking at the drawdown of John Day; (2) is to hear what you have to say about the study that we're gonna conduct, or we are conducting, and to answer your questions, and (3) and most importantly is to gain some additional facts from you folks here that may have some studies or some information or some nuggets out there that we may not be familiar with. And I've heard some studies going on that I wasn't aware of. So, that's the kind of things we're looking for. We are looking for them for basically two reasons: (1) we want to know what those benefits are and the impacts of drawing down --if we drawdown John Day, and so that's kinda where we're going. Now tonight, how we are going to get --- how we're going to go through the process, I have two individuals sitting over here on my left, to your right. The first individual I want to talk about is on the far left, and his name is Eric Ostrovsky. Eric represents the National Marine Fisheries Service and he also represents the federal biologists as part of this study. And he's gonna take a few minutes to outline what the National Marine Fisheries is looking at in terms of salmon restoration in the Pacific Northwest -- kind of a big picture approach on where our federal biologists are coming from. On my immediate left, your right, is Stuart Stanger. Stuart works for me within Portland District U.S. Army Corps of Engineers and he is the Project Manager for the drawdown study. He is gonna talk a little bit about the specifics about the drawdown study and then he'll tell you where we're at now and where we're going in the process. So, what I'd like to do at this point is turn it over to Stuart, let him cover a couple of admin pieces here, introduce his team that's working for him, that's putting together this study, and hopefully you've had the opportunity to talk with them and look at some of the material that we've had here and pick up some of those hand-outs. He'll go through that process, and we will then go through a couple of briefings; one by the National Marine Fisheries Service, one from the Corps to talk you through the process, and then we'll go into some questions and answers after they complete their briefing. So with that, I'd like to turn it over to Stuart.

Stuart Stanger: Good evening everybody. One of the reasons we are using the microphone is that this is being recorded tonight, so as you comment when we get later on in the program, we'll ask you to use the microphone. But, I want to thank all of you for coming out. It's very important that we hear your comments. As I get further into my presentation I'll explain to you that this is not a traditional Corps study that we're embarking on right now. It is a little bit different approach and I'll explain that to you

so it's very important that we get your comments tonight. We really appreciate your coming out and hope you'll be willing to share your comments with us. Before we get started I want to introduce the team that's helping me tonight. They're deeply involved in this study, doing an excellent job, and I want to introduce them briefly. If, after the meeting you have some specific questions, then maybe perhaps you'll know which one of these guys to grab.

First is Chris Ferguson. She's the technical lead on this study. Next, I have John Todd. He's primarily dealing with the utilities and the irrigation that would be impacted. Bob Willis from our Fish and Wildlife Branch. Ken Soderlind's looking at navigation, flood control, water quality. Brian Shenk is the economist for the study, and Ed Woodruff is looking at hydropower impacts. So, that's the team, and if you have some specific questions that I can't answer later on in the program, I may call on them to help me out.

We know that a lot of you in the room are against drawdowns, whether it be the Snake River drawdowns or John Day drawdown, and there are probably some of you in the room who are for drawdowns. At this point the Corps of Engineers ---we do not have an opinion on John Day drawdown. We're going to collect the facts; we will weigh those facts, and we'll make a recommendation to Congress. Part of our consideration, of course, is the comments we hear tonight, and the input that you provide to us. We also know that not only would a drawdown of John Day affect your lives, we also know that just the fact that we're doing a study has impact on your lives. We've heard already from communities that, simply because we're doing the study, banks have changed their lending policies. So, we know it has impacts, and if it were not for the endangered species, we would not be doing these kinds of studies, but we all feel that it's very necessary that we look at the facts to see whether or not a drawdown could, in fact, improve the chances of a salmon recovery.

What we're doing right now is only a study, and I know, I believe it was 1992 they did a drawdown test and you guys were impacted by that test. We are not doing that at John Day. We are doing a study and it is a study of a permanent drawdown. It is not a drawdown to a level for a period of time, maybe three or four months out of the year. It is a permanent drawdown. You draw down and the water never comes back up. It's essentially a breach, although we've not determined exactly how we would lower that pool and whether the dam would be removed or whether we would bypass it, but we are not talking about fluctuating the pool level seasonally, and there's been some question about that, and that's why I want to mention that. In order for the Corps of Engineers to make any decision to drawdown John Day, it requires authorization from Congress. The Corps of Engineers does not make that decision. We would do the studies. We would make a recommendation to Congress, but they ultimately make the decision. Tonight we're gonna talk about the first phase of the study, and I'll briefly tell you what might happen in the Phase II, but we are primarily talking about this first phase, and I'll explain that a little bit more. One thing I do want to mention is we have a sign up sheet over there to get on our mailing list. If

you want to be on that mailing list make sure you get on that list before you leave here tonight. With that, I'm going to --what we're going to do is have Eric do his briefing, and I'll run through and describe to you a little bit about what John Day provides right now, and a little bit about what the study does, and we want to quickly get to questions and comments from you guys, and we can discuss this. We have several hours, and we can discuss any area that you have interest in. With that, Eric, I want to turn it over to you.

Eric Ostrovsky: Ever since I gave my presentation in Juneau, and I used overheads, they've changed the format so I can't show the overheads any more. Real new, and they want to keep me away from using slides. I was putting them in backwards and upside down, and it made it a little difficult on the audience. As this says, I'm from the National Marine Fisheries Service in the Portland office. I think the first question is an important question. Why are we doing this? Why would we even go through a study itself, and the reason is as all of you probably know that the salmon and steelhead in the Basin have been in a major decline, and I know, whether you're from Portland or from Lewiston, or wherever here, most people in the Northwest probably at least agree that the Northwest is special. We've all moved here; we live here; we were brought up here, and for whatever reasons we want to stay here when we think of this area as unique, and many of us hold salmon as being special and that, you know, there has to be a way to make sure that the species doesn't go into extinction. Part of that decline and dramatic decline has been through habitat loss. Some of it has been through dam construction where the fish have not been able to pass beyond the dam. Hell's Canyon Complex is a good example of where we have lost passage. There has also been mortality to fish as they've been going by it, passage through the reservoir. Well, I wanted to mention particularly, too -- it's not only a main stem issue that we have involved in the region; hatchery impacts, harvest impacts, and other habitat impacts, and what I mean by that is that there has been a dynamic growth of population in the region and urban areas, such as Portland have had impacts on some of the stock. Timber and agriculture. Everything plays an impact. We, a lot of the time, call that the four H's. The next slide, really, this shows six species of salmon or steelhead have been listed since 1991, and we began with the Snake River stocks, the upper Columbia spring grown Chinook, and the middle Columbia River steelhead are proposed listing and, in fact, the next diagram -- there are actually 13 listings within the whole Basin. The other six I showed went beyond John Day. This sorta shows the widespread problem, and there is also, and I was talking to some people here -- there are fish and wildlife service species… and other species in the region. You look at a picture of the whole West Coast and you would see that salmon and steelhead are in trouble up and down the whole coast. If you could show the next ---before I show that, a number of the stocks have been listed, beginning with the Snake stocks in 1995, once they're listed the National Marine Fisheries Service, which has responsibility for these stocks, gets together with federal agencies in a cooperative action for any activities they have, and we did have a Biological Opinion on the operation of the power system; it was a jeopardy opinion. Because of that we came up with a reasonable and prudent alternative how operation could continue, and in the next one (slide) we came up with a number of measures, and many of you may be familiar

with it, but basically what we said the objective of it was to make sure that -- to implement all the measures. There are some immediate measures, and we do that - operations on the system --it happens every year through TMT and some other organizations. It would be … operations. There are studies that are going on at any time. One of the aspects is a decision on long-term configuration. That's been called the 1999 decision. Another thing I put down is adaptive management. In 1995 there were a lot of issues that were not known. The way we operate the system or ways we can manipulate it. There are ways that you can resolve some of the scientific uncertainty. We have been doing that as we've been going on. Now, this next -- this slide really shows you some of what we've been doing to improve the system as it's been going on. A lot of people feel like there's been a lot of money that has been going on in studying but there are many things we are doing just beyond that. One of the things that Biological Opinion said was that we needed to look at flows. Flows provide some benefit, and we set objectives for that. We've improved bypass for juvenile migrants around the dams and ways to keep them out of the turbines. Another way to keep juvenile fish out of the turbines is through spill, and spill regimes, and the Biological Opinion talks about that. Transportation - improved transportation has been one of the things and NMFS and other federal agencies have been working with the Corps on, especially more barging, less trucking, and these are only a few that I wanted to mention, but there are actually quite a bit of improvements that we've been putting in. This next chart shows you some of the major structural modifications that have been ongoing, and have been making the system more fish friendly, dissolved gas within the system, due to many reasons, but spilling water has been a problem. There has been a gas abatement program that's been ongoing. Extended length screens have been a way to get juvenile fish through the dams, through bypass systems, whether it takes them back into the river or into barges to transport them. You have new juvenile sampling facilities, and you know, when you look at the system there are many dams on the system, and this gives us a better idea of what's happening at each project between the projects to the fish, so we have a better idea of … One of the new things that just went on was to relocate the downstream juvenile fish outfall at Bonneville Dam and it was an expensive project. It was needed because we were bypassing fish and we were putting them in an area where there was a lot of northern pikeminnows we found to be .. which are also known as squawfish to some of you, and I heard the name might be changed again. But anyway, it was a place where it was just giving basically a free lunch and we relocated the outfall to a place in the river where there is a much stronger current and the juvenile fish have a chance to survive. As I said, that's just a few of many of the things we've been doing. But the biological opinion also called for a lot of information to be developed. It's a long process, it is being developed, we know a lot more now than we did. There is a lot more we can know and will know. One of the things we're looking at is inriver survival, and depending on the species, the type of year you have, a lot of different conditions, what will happen to fish as they are inriver, the survival could be different. Transport compared to inriver survival again under all of these conditions -- you will have different rates -- and the absolute return rate when you look at all of them -- you have to really look at that to see what's happening to different species, both for survival and if you ever want to get back to recovery. We've been looking closely at the potential effects of new technology. Surface

collectors are a good example of that. We have put in some of those systems. We want to see how they're operating, and the operating expectations, and if not, why not? Finally, one of the things that was in the Biological Opinion was the cost feasibility and the potential benefits of drawdown to fish.

The next diagram -- the reason why drawdown is an option we've been looking at, is that it does allow faster water velocities, and faster water velocity relates to travel time, and travel time helps promote smolt survival for juveniles.

The next slide shows ---what are the other reasons that we're looking at it. One of the questions that was asked to me was sort of a discussion in the group was on rearing habits --the Independent Scientific Group which now is known as the Independent Scientific Advisory Board, and they also advise the Northwest Power Planning Council. They have told us that we should be evaluating inundated production areas. They used the Hanford Reach as an example of a successful population. What they said is that there you have fall Chinook smolts ---spend their days in food rich riparian where there are food rich areas of flooded cobbled beach, and reservoirs are a totally different type of environment. They said that had to be looked at. Another benefit that fish has is for spawning areas and that's in the next slide --but John Day in particular had some very historic habitat for up-river bright fall Chinook. I wanted to mention that, you know, these are not listed fish but a drawdown would probably benefit them, and what happens is, usually it's in the alluvial sections of mainstem rivers that seem to be the best spawning habitat. It has been estimated that before John Day pool had been formed, there were about 30,000 adult fish that spawned there every year. So, it's just an example of what one of the benefits would be.

Finally, I just wanted to mention that John Day not only has individual impacts as it does as a dam, but it has a cumulative impact, too, and it's not that necessarily even a drawdown at John Day, it's supposed to be a silver bullet, but if you were a salmon and you were going through the system, from the Snake River you would probably have to clear eight dams. If you were going up the Columbia River, up to nine dams, not all of those federal dams, and by reducing one dam on it, it would have an impact, too. All those things would be factored in, and its because of all those things that NMFS' is asking in its Biological Opinions that we have this study. Stuart---

Stuart Stanger: You can go to the next one, Dawn. I failed to mention Dawn Edwards over here. She is the one who organizes all of these meetings. She is our Public Affairs representative, and I can tell you it's a big job to put one of these together, and to travel around to as many locations as we're going, so thank you, Dawn.

Okay, what I'm going to talk to you tonight about is I am going to describe to you what John Day provides now, and then I'm going to briefly describe what this study is looking at, what the purpose of the study is, our schedule, and finally, how you can become involved.

John Day Dam, as you probably all know here is located between McNary and The Dalles, about 250 miles upstream from the mouth of the Columbia River. The powerhouse includes 16 units, spillway, navigation lock, and of course, Lake Umatilla. What we have looked at thus far, if we were to drawdown John Day is you would basically remove this section of the dam and allow the water to flow through there. John Day Dam is a little bit unique for the Columbia River projects in that it provides 500,000 acre feet of flood control storage. That's one foot of water on 500,000 acres of land, if you will. It provides 2.2 megawatts of power. We ship about 9 million tons of cargo through the navigational lock annually, and there are 14 recreation sites that you probably saw on the board back here that have been developed along the John Day pool. Irrigation is provided for about 150,000 acres of croplands. Municipal and industrial water is supplied. There are 35,000 acres of land and water managed for wildlife, and the project includes adult and juvenile fish passage facilities, both for upstream and downstream.

A little bit about the study. We are in the middle of the Phase I study. We began in October. Congress directed us to do, or they approved, if you will, the scope of study that we did almost a year ago. They told us to do Phase I and they gave us about a year to do that, and what Phase I is supposed to do is answer this question. Is it appropriate for us to consider drawing down any further? At the end of Phase I the Corps of Engineers will make a recommendation to Congress whether or not we think John Day drawdown should be considered any further. If the decision made by Congress is that additional studies do need to be done, we would move into Phase II. The Phase II is similar to what a lot of you may be familiar with and is being done on the Snake River studies. It's much more detailed and not only does it look at drawdown, it would look at other methods for recovery of the salmon runs, such as surface bypass or perhaps even barging, like they're doing on the Snake, but it would look at other alternatives besides just drawdown. Phase I is looking at just drawdown alternatives.

It's looking at really two primary alternatives, I would call natural river and spillway crest.
Dawn, if you will go to the next one, I'm going to try to explain this.

If you picked up a copy of this cross-section you might want to look at it. Right now, John Day operates at elevation 265, normal operation. We fluctuate it for flood control but under normal operation we're at elevation 265. What we're looking at now is lowering the pool to elevation 215 spillway crest, and you do that by basically just opening the spillway gates and letting the water run out until it lowers down to this elevation. Okay. The other alternative is, go to natural river and in order to get to natural river you've got to remove something to let the water flow through the dam, and that's

what I mentioned we would be looking at -- removing the spillway and the navigation lock. Okay, that's what you do if you're not going to provide flood control. If you want to provide flood control, you have to have some way to back some water up behind here, 500,000 acre feet of water. That means you've gotta be able to hold about 30 feet of water, so if I wanted to get down to natural river and I removed the spillway to do that, I now have to build something back in there that I can hold 30 feet of water behind the dam, and I would have to provide upstream and downstream fish passage through whatever that structure is. So, there are really four alternatives we're looking at. Spillway crest with flood control and without, and that -- it's fairly easy to provide the flood control if I have the spillway. I just close the gates and hold the water, and natural river, I don't have any way to hold the water unless I first remove the spillway and then put something back in to back that water up. I told you I would talk a little bit about the study purpose. What we told Congress the purpose of the Phase I study would be is to evaluate the potential fishery and wildlife impacts, evaluate the social and economic effects, and provide a recommendation to Congress. So, how are we going to address the fisheries and wildlife impacts? Several years ago we were looking at lowering John Day to minimum operating pool. That is essentially the level we could go down; we could lower that pool down to minimum operating pool and everything would still work. We could still produce power; we could still have navigation. There are some things that would be impacted -- the recreation sites, for example, irrigation would not be possible with the pump stations that are there now. But, we were looking at that. In the '95 Biological Opinion NMFS had told us drawdown to minimum operating pool. Congress stopped us from doing that and when they told us to stop, we had some studies that had already begun, but we stopped them, and what we're doing in this study is re-initiating some of those studies and we are going to complete them. They are studies such as transportation through the John Day pool. We are going to tag some fish and find out really how long does it take them to get through John Day pool. You know, there has been speculation that they are staying in the John Day pool longer than they should, and that predators are getting them, so we're going to tag some fish and find out how long they are staying in there, and what the mortality is through the John Day pool. That's just one example. You may have also heard of this Plan for Analyzing and Testing Hypothesis, commonly known as PATH. That is the same -- we are using the same process that they are using on the Snake River to determine some probability of salmon recovery with a drawdown. Fortunately, they are doing a lot of the work for us on the Snake River study. They've worked out a lot of the bugs on the model they are still working at, and they have included different scenarios that have included John Day --drawing down at John Day and full pool. Another thing we told Congress we would do on this study is that we would form a Planning Aid Team consisting of state agencies, federal agencies, and the general public, and we have a sign-up sheet here tonight and if you want to participate you're welcome to sign up on that sheet and you will get all the biological test results. We will make you aware of meetings that are being held. This group will analyze the data and make determinations, if you will, of what they believe the benefits or impacts will be for fisheries. And, we do have that sheet here tonight and before you leave you can sign up on that if you want to participate. Additionally, there is what is known as a Planning Aid Letter. The Corps of

Engineers in any study of this magnitude would get a Planning Aid Letter; it comes from the U.S. Fish and Wildlife Service. Congress authorizes them to provide this to the Corps on our studies, and basically what that does is tells the Corps what they believe the impacts to wildlife would be, to fisheries, and they prepare that letter in cooperation with National Marine Fisheries Service with the states and with the Corps and they send us that letter saying here's what we think the impacts would be. That will be provided to us by U.S. Fish and Wildlife Service. How do we look at the social and economic impacts? For each one of those items I identified that John Day has now; the hydropower, the navigation, the recreation, we will look at what it would cost to replace that if John Day Dam were removed, or a portion of it was removed, or if it was drawn down to spillway crest. As an example, I am going to pick on navigation tonight. If we took out the navigation lock, what would it cost to dredge a channel from John Day to McNary so that barging could continue up the river? And we will figure out what that cost is. Another option would be, of course, to change the size of the barges. There was navigation before John Day was built but not with the same equipment that they use today. So, what would it cost to go back to that equipment. We will do a trade-off analysis between those two alternatives, and come up with which one would be the most economical, and we will do that in each one of the areas; recreation, hydropower, and we will -- whatever the least cost in each option, we will add all those up and say, here's what the minimum cost would be of a drawdown, if you wanted to replace everything you have today. We will look at the employment effects. There would be effects here. We know that and we are sympathetic to that, and we will take that into consideration, and if you have any information that would help us in that regard, we would sure appreciate having that, and we will look at quality of life. Obviously, quality of life in a lot of the areas, particularly along the John Day pool would be dramatically impacted There are some other considerations that I won't get into a lot of detail, but there are adult and juvenile fish passages, not only at John Day, that would need to be modified but the facilities at McNary would also need to be modified if I were to draw John Day Dam down. We back water up to McNary, so the ladder entrances at McNary would need to be deepened. Utilities: There are utility lines that cross through the water. There are outfalls into the river. Those will be looked at. There are approximately 360 known cultural resource sites that could be exposed if we draw John Day Dam down, that would need to be protected or preserved in some way. Water Quality: There has been an enormous amount of sediment deposited in the John Day pool at the mouths of the rivers such as John Day, the sediments deposited, and that would have to be dredged before fish could even get up the river. If you draw John Day down 100 feet, there would essentially be a 100-foot waterfall at the mouth of that river. We also know that --we don't know -- but we will look to identify potential hazardous toxic waste sites that may have been covered with water when John Day Dam was filled, and 20 years ago we didn't have the same sensitivity, if you will, to the environment that we do today, so we will look and see if there are some potential sites that we may have covered with water that would now be exposed and would need to be cleaned up.

Our schedule - - We will have a draft complete in September of this year. We expect to send that out for a 30-day review and comment period, and if you get on the mailing list you will get a copy of that, and we will submit our final recommendation to Congress in December of this year. The scheduled public meetings that we have -- we have had a meeting in Alaska; we had one in Montana on Tuesday; we're here tonight. We have two scheduled in Oregon; one will be in Portland next Wednesday. I believe the next one is the following Tuesday, and then we have one in Pasco which would be the final meeting on two weeks from tonight.

Okay, in summary, the Corps will be making a recommendation for further study, not a recommendation of whether or not to draw John Day down. That would take a feasibility study, an environmental impact statement, and about four to five years to complete, so at the completion of this study we are simply making a recommendation to Congress of whether or not we think additional studies of drawdown at John Day need to be done. Congress will take our recommendation and add that to whatever other information they use to make a decision and if they fund us and tell us to do Phase II, we will do that.

How do you get involved? One thing you can do tonight is sign up for that Planning Aid Team, review and comment on the Phase I report, send letters to Col. Slusar or other interested agencies, and I will let you determine who you might send letters to. Okay. With that, what we're gonna do is we are gonna move into some questions and answers and input from you and we want any comments that you have. We've got several microphones around here. We are going to ask you to use a microphone because this is being recorded and a transcript of it will be included in the report, so any comments you make, we would like to capture on tape. This is not a formal hearing. We're not going to limit the time that you can speak, but I would ask that each one of you use some courtesy for the rest of the folks that -- you know -- if we each stand up and talk for 15 minutes, we will be here in the morning, or you'll be here in the morning; I won't be here. (Laughter) -- but it could go on for a long time, so just be considerate of others, and again, I'll try and answer all the questions if I can. I may call on the technical staff. These folks are in a very tough position. You know, we may all have some personal views, but we have to put those aside and look at the facts, so we try to keep our personal opinions out of this, and sometimes that's not easy to do, but I can assure you that these folks are doing a real good job, and with that I'm going to open it up to questions and/or if you just want to make a comment, you are more than welcome to do that. This is your chance. We are going to have the mikes, and we'll move this thing out of the way, and as soon as it cools down we can shut it off so that we get rid of the noise.

Gus Hernandez: From Lewiston. The first question is - you say that there will be a 100-foot waterfall at the mouth of the river made out of mud. I've seen tons and tons of mud washed out in about a four-hour period. Next, if you change that to the water dropping over the spillway to the gates, how much dissolved nitrogen are you going to have in the water? I assume that everybody knows that they've changed that to about 130% above what it used to be, so it used to be they wanted to put the flip lips in

the dams so that the fish wouldn't die. Now they've changed the studies to run that up. It's kinda like the spotted owl thing. Change the numbers to fit the situation. I don't think that's quite right either. So, on the first one, do you have an answer to that?

Stuart Stanger: Yeah, I agree. As soon as -- if you drew down right now, there's a lot of sediment there and the sediment will erode, and it would erode for a long time. You could do that and it would create very turbid conditions for a long time and that sediment is gonna go somewhere, and if you left things the way they are today, that would go down to The Dalles, so we will do surveys and make some estimates of how much we might dredge out of there before you did a drawdown and a cost would be associated with dredging that and then you need to find a disposal site for that, and we will look at the impacts of that. With regards to John Day flow deflectors, as we call them, flip lips I think you referred to them. They have been installed at John Day. They were completed and in operation for the fish passage season last year, working very well. I don't know the exact numbers -- how much that reduced the gas, but they seem to be working very well. We're continuing to do studies on those, and in fact, we're looking at changing the spill at John Day. This year we will have some studies and we're trying to improve the spill pattern, if you will, now that we have those flow deflectors in.

Bill Chetwood: I'm from Lewiston. I have a question I'd like to direct to the buy-out gentleman, I missed your name.

Bill Chetwood: Okay, excuse me, have you seen the latest report that was published the 1st of May in '98 by the Idaho Fish and Game Department, the consortium of biologists that they put together?

Eric Ostrovsky: I believe so -- I'm not sure.

Bill Chetwood: It's called Volume I and II - Idaho's Anadromous Fish Stocks: Their Status and Recovery Options, and I think reading that through it says -- it addresses a lot of things, including sedimentation in passing the John Day… problem or solution, and a very complete… from the biological standpoint that I think would be really well to include in your study, because they have done a lot of your work for you. They have a very extensive bibliography; they have tried to adapt and adopt some kind of a central opinion from the biological opinions that they have been able to bring together, and I think it would be very valuable to your study.

Eric Ostrovsky: What I probably should have mentioned in more detail. One of the things that I believe the federal agencies and NMFS have been doing very well with the rest of the region has been working together in the collaborative basis, and NMFS does work with Idaho on that, but you know, we will make sure -- I'm sure that the report and everything in it is factored in, but that is a good suggestion.

Bill Chetwood: I'm not sure that those are in wide circulation, and I was just hoping to make sure. It is very difficult for me to get a copy, and I was hoping that you had contacted the Idaho Fish and Game Department for their volume I and II.

Eric Ostrovsky: Okay; I'll make sure that this is done.

Bill Chetwood: Thank you.

Stuart Stanger: Yeah, thank you. Bob, we need to make sure we get that.

Frank Carroll: With the Potlatch Corporation. I've been following the DREW study for quite a number of months now, for over a year, and it appears to me that that study is derailed at this point. They are really suffering. There is not enough resources to go around. Most of the individual reports are off track, off timeline, and not expected to be finished. There is a lot of analysis by inference, and at that process, and other processes, and I guess I'm disturbed as I think many of us here are tonight, that you're launching on -- you've launched into another study. It looks like sort of a desperate study in the midst of, I guess the expenditure of resources is the question I have. The DREW desperately needs resources to do its study; it's off track, and yet we are in the middle of this one. And it seems like criticism of the federal government for analysis paralysis and desperation science, you know, might be true in this case, and I guess I am hopeful, because I would urge everyone here and I'll work very hard myself to try to stop this in Phase I and end this before it goes on. I think, you know, I guess when the fate of the four lower Snake dams is decided, then whatever happens to John Day is problematic where Lewiston is concerned, so I am disturbed with this kind of planning coming on top of planning and analysis on top of analysis, is making it difficult for people to be involved in the process, to follow the process or to really care about the process.

Stuart Stanger: Yeah, those are very good comments, and I can understand your concern. Let me see if I can explain a little bit better what this Phase I study of John Day does. First of all, let me talk to the resource -- I am not really aware -- you are talking about financial resources, the technical manpower? Yeah, and we're hearing that on the PATH analysis that we want on John Day, too. As you know, we want the same people to do the same thing for us that they're doing on the Snake. John Day is a little bit different. We don't need the same level of detail that they do on the Snake. What we proposed to Congress, and they agreed to let us do this Phase I, provides a means of getting to an answer without spending $20 million and four or five years of resources. If, after the Phase I study is completed, it is determined that John Day drawdown does not appear to have enough benefits to outweigh the costs, then you don't spend all the money and all the resources doing a four or five-year feasibility study. We have estimated over $20 million that would be required to do a feasibility study at John Day. We're trying to avoid that by looking at existing information that may be out there, adding a little bit of the

biology that we began and we are trying to complete those studies, trying to get PATH to do a little bit more analysis for us and see if we can make a decision before we invest $20 million or four to five years in studies. If, on the other hand it says at the completion of Phase I it tells us that John Day drawdown does appear to be a viable option, then we need to get the details before we make a final decision, and we will have to look at the other alternatives, barging, surface bypass, screens. We would have to look at that. I don't know, does that---your comment is good. It is a drain on all the resources. The funding that Congress provides to us -- the Corps does not on its own decide how that money gets spent. When Congress appropriates money to us for the Columbia River Fish Mitigation Program, it's called, the region, in a collaborative effort includes Idaho, Oregon, Washington, Power Planning Council, U.S. Fish and Wildlife Service, NMFS -- they work through what is called the System Configuration Team, and they prioritize what we will fund and what we won't. John Day Phase I is unique in that Congress said -- here's your money for the year, Corps of Engineers, for the fish program, but $3.3 million of that is for Phase I John Day drawdown study. So, Congress is the one who said, you can do what you want with the rest of the money, region, but $3 million of it goes to John Day drawdown study, and that is why we are working on Phase I.

Mack Funk: Port of Clarkston. I had a chance to address the project manager earlier and so I'd like to address the commanding officer, and I'd like to ask you not to use the National Economic Development Model, because it allows economists to sacrifice our local economy. If your rules require the use of the National Economic Development Model, please educate the people in the affected communities that local job losses may not count because job gains could result in other parts of the country. The other comment I'd like to make is that you need to publicize that economic mitigation is only optional; it's not a legal requirement.

Stuart Stanger: Good comment. We talked about that earlier. He is absolutely right. We would traditionally look at what we refer to as NED and that's what the economists would use, but what I promised him was that in Phase I we would consider the regional impacts. We will be looking at the job impacts, the quality of life impacts in this area, but he's absolutely right and you need to understand that, that a regional impact may be made up for with jobs somewhere else, and so on the national scale, that may not be an impact that would get considered in an NED analysis. That's a very good comment.

Rick Davis: I'm with the Port of Clarkston. One of the things I have that I would like to bring up is that the studies up here at the lower four Snake river dams, there is between 100 to 150 million cubic yards of siltation behind this. If these things are breached and it drifts down into the John Day pool, I think what you need to study is what we know or what NMFS has told us, is that if you breach those dams down there or if you drop that below spillway crest, the water or the siltation that goes below a dam, how many fish is that going to kill? I think you need to take a look at that and study that, because we've the same thing up here, as we have asked NMFS to study that up in this area. Is it going to be

50%? Is it going to be 10%? Will it be 25%? We have talked of that a number of different occasions. The other thing I'd like to ask you about is, if you drop the pool down to below spillway crest, are you going to have to change the turbines down there. Has that been studied yet or will that be studied, and will your power rates increase from that project, or will your power go down.

Stuart Stanger: Yeah, let me talk about the sediment comment first. A good comment. On the Snake River study I hope they are looking at that. In Phase I we're gonna do some estimates of what the sediments of John Day are now. We will not, during this Phase I study, be looking at what the impacts to the fish would be. We will speculate but hopefully, on the Snake River with the studies that they're doing they are looking at more detailed analysis of that. Because you're absolutely right, there will be a lot of sediment behind the dams that has to go somewhere, and we can do a lot of dredging but we can't get it all, and in addition, once you expose those shorelines, every time it rains sediment will run into the pool, into the river, and so we know that, we know it would have impacts on the fish but in this Phase I, I won't be able to answer the question of how great that impact is. Is it a great enough impact to me that I would change my recommendation of whether or not Phase II would go forward. I don't know that yet either, but I'm going to be looking to the biologists to tell me when this is all done. Is that a significant thing that we need additional information on? Before we make a recommendation or not? And let me move on to your comment about the hydropower. At spillway crest, and correct me if I'm wrong, but at spillway crest we estimate that we would be able to produce about half the power that we produce right now. Is that right, Ed? And if you go down below that, pretty soon you get to a point where it's not efficient to run that turbine any more, but we could run them at spillway crest, but only -- you'd only be able to produce about half the power. Does that answer your question? We are looking at that. Obviously, below -- when you go down to natural river you produce no hydropower, and so Ed would be looking at what would it cost to replace the power using other methods, and Ed, what are you specifically ----? Natural gas...so he would do an estimate of what would it cost to build a new plant to produce 2.2 megawatts of power? That's the question. I think you had it back here in the first place.

Marvin Dugger: I am with the Pulp and Paper Workers' Resource Council, and I've seen the figures for smolt survival for this year from the Army Corps and if I remember right , barged, it was like 99%, and inriver survival was almost 60%. I saw 58. some percent, and I know it's somewhere between 40 and 60, but, you know, anyway… the 99%, that's almost perfect. The 60%, from what I've read, that's real close to the survival rate before the dams, you know, a regular river. Now, why do we continually see studies of drawing down the dams, and drawing this dam down, tearing this dam out? Why don't we see some more studies on predation, the seals and the sea lions, what they're doing to the returning salmon, the Caspian terns, like the pikeminnows, if we drawdown the river? That's going to concentrate all the pike minnows in those big reservoirs, and in a small river. Things like this. Why don't we see some studies ---why do we see the concentration, just tear off the dams, tear off the dams? Why don't we see some harvest, maybe some study of ocean conditions? I don't see those.

Stuart Stanger: Yeah, I can address some of your comment. Good questions. We are looking at predation as part of the John Day, even in Phase I, and in Phase II we would do much more of that, but when we tag a fish and release it down through the John Day pool, and we release it at McNary and it doesn't make it to John Day, something happened to it, whether a predator got it, or it died of some natural or other unnatural cause, but we can do that and we are doing that as part of this Phase I, so there are some of those studies. We, too, have the same concern about -- you've got a lot of predators in a large pool right now, and when you make that pool small those predators are still there, and they may have a feeding frenzy for several years. Eventually, the thought is that they would die out, but the biologists will have to make some assumptions about what that impact would be, but that's a very real concern. Those predators will be concentrated in a smaller area and the smolts will have a much smaller area to hide from them. So, that is a big concern. I'm sorry -- there was something else. I guess bottom line is - the studies that you mentioned, you do those to decide what sort of action -- what sort of physical action can we do at the dams. I can't imagine what we would do at the dams to get rid of seals, or sea lions, and NMFS needs to maybe address what they're doing with regards to harvest, and seals and other predators. What they task the Corps with doing is looking at the physical changes that we make to the dams, and that's what impacts you guys, is the physical changes at the dams are easier to see, but I know they are doing things in areas of harvest. I am just not aware of them, and Eric, I don't know whether you want to try and address some of those to answer that question.

Eric Ostrovsky: Yeah, if I just could for a moment. I am not an expert and I really don't want to get onto the floor, but I could discuss some of it, and I do have some information, some papers on it. The PATH analysis to do some sensitivities on avian predation, on harvest strikes, so there is work and there has been work done on it. The sensitivities did not go into the same amount of detail as some of the analyses about impacts when you look at the different alternatives, such as drawdown. That brings up the other problem that was mentioned here. Somebody else was discussing paralysis by analysis, and the problem right now in the region is that there is almost, there is sort of a limited gene pool, so to speak, of people who have the knowledge and the time and the where-with-all who can do the studies, and people, you know, action needs to be done. One of the issues that does come up, and it's done in a collaborative method, is that there are a lot of important studies, and I think what you mentioned are important issues. There is a limited amount of time, and how to get everything done and fully about the information, so priorities have to be put in certain places. So, I guess that's a long way of saying that some of this information has been studied; there will be more details and more information this year. PATH is going on; it's doing more work. There have been discussions of what should be the priorities this year, but those were considered important issues, and important enough to have time to have been taken, and there has been some research done on it. And, as I say, I have information back there that will go into a little more detail of what the sensitivities said, if you want.

David Beuke: I kinda represent the Lewiston and Clarkston Natural Resource Task Force, which is a chamber joint committee of both Lewiston and Clarkston. One of the things that we would like to see come out of this, like Frank says, we've got these studies that just keep going on and on forever, and what they're doing is they are creating what I call a rural ghetto situation here. We are being forced back in our rural areas into situations that we can't handle because we don't have the money or the population to out-vote the big Eastern cities and things like that that are attempting to make a park out of the Northwest, in my opinion. Whether or not the science out there tells us that that is true or not. What I'm really afraid of is that if the Corps becomes a pawn in this, and it looks like it's more and more a political situation rather than a scientific situation that we are relying on here, we need to have citizens involved in this thing like you said in this program, to advise the Corps -- not only the Corps but the National Marine Fisheries needs that same citizen input as well as the Forest Service and several other government agencies. The Department of Commerce needs those people to advise them on local issues. You can't trade off what's happening in our local areas for a national economic study, and we know that's what is going to happen to us. We don't have any way to fight that. Even the best industries that we have here do not have the power, the economic power, to facilitate the legal battles that it would take, so if we are gonna do this, and the Corps wants to be really a truly bipartisan player in this, we need to be invited to every meeting that we can possibly make; we need to have representatives there. Our little group right here has put together a group of business, industry, labor people, entities from the ports, and counties and cities that make some sense, and I think we have started to make some sense out of where this thing is going. Just today, or yesterday, I read that the Audobon Society and the Sierra Club and some of the Kennedy's and their different organizations are putting together a national campaign to wipe out the dams in the Northwest, and they feel that they have the right to do this. Well, I don't feel they have the right to do this, and I think that our people here that represent us need to have our support. You need to have our support, so that you know where we're coming from, and I think the best science will have to find a solution that is not natural, because we don't have a natural river system anymore, and we probably would not have that situation for 200 years, if these dams were pulled out. In the meantime, the fish would probably meet their demise because they've been so pressured that they're not going to make it unless we come up with some solutions fast, to help save them, and one of the biggest solutions is gonna be -- we have to limit harvest. I don't care what you say about that. I think that that needs to be considered first and foremost. We would be more than willing to meet any of you in your studies that we possibly can meet with, and give you some of the information that we have gathered over the years, and we have gathered a lot of it, and I think a lot of it makes sense. With that I'll --- I don't expect an answer, I just wanted to make that ---

Stuart Stanger: We had a chance to talk before the meeting, and I appreciate your making your comments again, and Brian would be happy to meet with you. Right, Brian?

No seriously, we would like to, and we will if you want to. We will meet with you and explain our economic analysis in more detail, what we are doing in Phase I and see what information you have. Again, Phase I is not a traditional study that we would normally submit to Congress. There's no reason that we can't put in that report what you believe the regional economic impacts are. We will be doing the NED analysis but in this study there is no reason why we can't include what you folks believe are the regional impacts, economics or whatever. Very good comments. Yeah, and we had a chance to talk about those before, and I'm glad you made them for everybody.

Anyone else?

Jerry Myers: I am a little confused. In the paper it talked about 2.2 megawatts of generation. You said 2.2 megawatts of generation. I am of the understanding that the cell capacity of the dam is 2.4 thousand megawatts of generation. That's a factor of 1000. Please be a little more precise in that.

Stuart Stanger: Actually, the number I have is 2.167, but that's not megawatts. That's gigawatts.

Jerry Myers: Yes

Stuart Stanger: That's a lot more than a megawatt.

Jerry Myers: Yeah. The other issue for me, I'm a generation guy, so that's what I want to talk about, and I hope I won't put the rest of you to sleep, but considerations: The Northwest Power Planning Council has a study group going on right now to study how we're going to meet the energy needs of the Northwest in coming years, because they're starting to run out now based on water predictions and load growth, and they're looking for that … in February when the temperature drops and Seattle starts browning. We are talking about potentially … our generation on the lower Snake …, we're talking about 2.2 gigawatts, not only generation at capacity, but also of generation support, spending reserve, and of intertie capacity, so the dream of saying we can do without the generation because in a deregulated market, the market will provide generation; we'll just ship it in, and maybe not. Without the service that the hydro generation provides at McNary, in particular, you tend to lose capacity on your interties, so please keep that in mind. Additionally, we're also talking about another gigawatt of thermal generation that takes suction from the McNary pool. The coal plant, Coyote Springs, and U.S. generating at the Hermiston plant. So, there's a lot more generation here than 2.2 megawatts.

Stuart Stanger: Yeah, as I indicated, we're looking at what it would cost to replace that power, not to take it away. Those are all very good points. We have the same team that's working on the Snake River study which includes the Northwest Power Planning Council and BPA as the major players, and one of the things we are just now completing on the Snake River study are these transmission related

impacts. If you take out the dams on the Snake and at John Day, you have significant impacts on the intertie system, so we will have to either improve the intertie system or when we put replacement energy sources in, like natural gas plants, we might have to site them in certain areas that will minimize that impact. Your points are all very well taken, and we hope to include all the costs in the analysis.

Jerry Myers: One additional point on natural gas plants, there is very little natural occurring natural gas in the area we're talking about. I don't know if you are aware of it or not, but there was a gas plant explosion in B.C. two weeks ago; there was a generator compressor station curtailment last week; there was a pipeline explosion in Walla Walla a month ago. The water is generally there and you can see it, but when something goes wrong on the pipeline, they shoot first and ask questions later. It's curtailment time right now, and we suffer through it as do other large users of gas. Homeowners, hospitals - - they get the gas, but there is no magic to a gas turbine. Distributed generation is a good thing. It cuts down on the need for infrastructure, but a lightweight gas turbine plant cannot provide the voltage support that a spinning hydroplane can.

Stuart Stanger: That's right, water and gas are not the same thing, and we hope to capture all the differences between those two types of generating resources, and another thing that we've looked at on the Snake study and we will have the same information here is -- what is the pollution change? We're putting thermal resources in to replace clean resources, so that will be examined, also. Actually, the power portion of this Phase I study, because they're doing so much work on the Snake River, we will probably have more detail on the power portion of this study than any other area.

Brent Thomson: From Lewiston. I'd like to ask a question in clarification of the replacement analysis study you talk about in the event that you have to take out the turbines or replace power generation facilities with natural gas. The point has been made that the cost of replacing the facilities will be tabulated. Is the cost of providing the service also going to be tabulated and included in the analysis? That is to say that we are not necessarily going to have hydropower at the same rate that we're going to get the power from a gas generator, and we're not necessarily gonna have transportation costs at the same rate that we would with the current barging system. Are those differences in costs gonna be considered in the economic analysis?

Stuart Stanger: Yeah, they'd be considered in the economic analysis. You're absolutely right. The costs would not be the same.

Brent Thomson: And then, the other question is who will pay those additional costs? Will those be borne by the local people here or will Congress in its wisdom decide that later?

Stuart Stanger: I don't have an answer for that. And each area is a little bit different, but generally speaking, the Corps does not have the authority today that if we took something away such as an irrigation pump station -- if I took away an irrigation pump station today, the Corps of Engineers would not have the authority to go replace that. When the Corps does a feasibility study, however, if the NED, the National Economic Development's recommended plan said, we need to have that pump station, that's good for the national economics, and we would recommend that that pump station be installed. Congress could give us the authority to do that at that time, and they could give the authority to replace hydropower; they could give us the authority to do anything, but today, I do not have that authority.

Brent Thomson: To get to the point after the preamble here, let's assume that the transportation costs go up markedly because we will no longer be able to barge economically, then as the economic impact is that change in transportation costs gonna be calculated for the region, and if so, what part of the region are we gonna consider? Are we going back to the grain in Minnesota, or are we gonna look just at the local effects here, logs downriver, that sort of thing? What's the definition of the area we are talking about?

Stuart Stanger: Brian, do you know yet?

Brian Shenk: Hopefully we'll catch everything that's coming on the river, so it should be Montana and North Dakota would also be included in that analysis.

Brent Thomson: So if there's a price difference then, you will go back and figure out what the net price difference will do to the distribution of grain shipments out of Minnesota, etc. Huh?

Brian Shenk: Yeah, we're doing that with the Snake right now, and we're still working on that and the navigation analysis.

Brent Thomson: Very good. Thank you.

Roger Koller: I'm with the Washington Association of Wheat Growers and Brian said that they're doing that analysis now with the Snake River team, and in meeting with the DREW team two weeks ago in Portland on the economic analysis, I find that much of their economic analysis is woefully inadequate, and I would hope that when you do your economic analysis that you pick figures, or that you look at things and that your figures are coming in much more accurate than the figures that I'm seeing coming out of the Snake River study.

Stuart Stanger: Yeah, I'm not familiar with the Snake -- I can almost assure you that their numbers will be more accurate than ours in Phase I. We, in fact, will probably use a lot of their assumptions

Roger Koller: Then I would say that your assumptions are going to be wrong, because in the assumption -- I have looked at many of their assumptions, and I don't mind assumptions as long as they're realistic, but many of their figures that I've looked at looks like they've been pulled out of up here, and I have some figures to back it up, but I won't go into that now, but they are just woefully inadequate.

Stuart Stanger: If you've got information to show that they're wrong, well that's the kind of stuff we need.

Roger Koller: Well, we've already given them that information, and we get a lot of blank looks.

Stuart Stanger: Yeah, we would appreciate having that information.

Roger Koller: The other question I have is that if you do breach John Day, doesn't that make McNary moot as far as -- why do we need McNary if you breach John Day?

Stuart Stanger: Well, it produces hydropower for one reason.

Roger Koller: That's all. Is that correct?

Stuart Stanger: And it provides recreation and it provides irrigation.

Roger Koller: Okay.

Stuart Stanger: There are a number of things that it provides.

Roger Koller: Don't those same issues apply to John Day, and to the four lower Snake River dams? The same issues. It provides power, irrigation, transportation?

Stuart Stanger: Absolutely. That's exactly --

Roger Koller: Okay, my point is then if you breach John Day, then why is McNary there? If you breach John Day, and basically the reason you're looking at breaching John Day is supposedly to save

fish runs. Then why leave McNary in place? Why leave another reservoir in place when that's the only reservoir between there and Lewiston, Idaho?

Stuart Stanger: Well, the reservoir, again, the reservoir would provide some benefits, whether John Day is there or not.

Roger Koller: Well, I guess my point is that John Day and the four lower Snake reservoirs also provide benefits.

Stuart Stanger: They do. I agree.

David Doeringsfeld: I'm with the port of Lewiston and on behalf of the port of Lewiston I guess we would recommend that you not proceed with Phase II of this study. I guess one of the kind of frustrations in this thing is again tonight we are talking about one H in the salmon's life cycle again, and you know, the one reason we are all in this room is to ensure the survival of our anadromous fish runs yet you know, we all are concentrating on one H, and I think we have heard that earlier tonight from other people speaking, as if, you know, if we really want to do something about salmon survival, let's take the resources and the funds that we're gonna put into this study and put it into studies that deal with the other three H's and let's study predation, and instead of predation and some of these studies being ancillary studies to a study of tearing out dams, let's make a study of predation or ocean mortality or commercial harvest, or improved habitat -- make that the focus of the main study, and put out resources in the other three H's and do something that is actually gonna bring about some salmon survival and something that this region can get behind. Thank you.

Stuart Stanger: Yeah. Good comments. Appreciate that.

Gerald Druffel: From Port of Whitman County. I do not wish to rise because my foot hurts a little bit, but I would like to make an observation too. If you take John Day pool and put it into a minimum operating pool, it's the same as taking the rung out of the ladder for us. We have no transportation or no economic use of the river or transportation to get to the coast. There is one rung taken out of the ladder and we're stopped, dead in the water here. You have the other uses of the dams but our transportation is gone. I also want to make the conjecture -- on the past study for the lower Snake dams your first publication zero'd in only on breaching the dams. You countered that with the second publication coming -- you're going to do Phase II of that. If you wanted to be democratic, or you're going to be fair, why don't you do the second portion of that on the second phase of part II or modification of the system? Why do you zero in on breaching the dams only? You are paramount in that attitude. Your second letter, I wish would come to us giving us the pros and cons of modification of the existing system.

Stuart Stanger: I am not sure I understand your question. Are you talking about just the Snake River study?

Gerald Druffel: Yeah, I'm talking about the John Day pool being -- if that's drawn down below minimum operating pool, it eliminates all our transportation. The second is your letter on the Corps letter to us telling of the PATH study for the Snake River dams.

Stuart Stanger: Yeah, and that's what I'm not familiar with.

Gerald Druffel: You zero'd in only on breaching.

Stuart Stanger: Yeah, see Portland District, unfortunately, I wish I could answer your questions, but I can't. We do have a sign-up sheet to get on the mailing list for the Snake River study, but I don't have folks here now who are involved with that study. Some of them are a little bit, but we're not the right people to talk to about the Snake River study. That would be Walla Walla District. With regards to your comment on navigation, you are absolutely right. John Day provides slack water all the way from John Day pool to McNary, and if you don't have that slack water, navigation would be much more difficult. There was navigation before John Day Dam but not with the same fleet that we have today. What we are looking at to capture a cost is what would it cost to dredge a channel from John Day to McNary so that navigation could continue. That's not to say that it would be cost effective to do that, but we're gonna assess what it would cost to replace that navigation, but you are absolutely right, if you don't replace that navigation you have no way to get to the ---

Gerald Druffel: You already have an existing channel there. I'll ask you the second question, then. What criteria will trigger the second phase of this study. Whose going to determine that and how?

Stuart Stanger: Congress will make the decision. The Corps will make a recommendation to Congress, and if somebody read the article in the paper today, it had me quoted, and I don't even remember the exact numbers I used, but if -- if at the end of Phase I the Corps determined that the cost is going to be $3 billion, that would be the cost to replace everything, $3 billion, and PATH tells me that there is a 10% probability that I can recover the salmon, I would say that's foolish, but if, on the other hand, it says we can draw down and replace all these impacts for $300 million and there is a 99% chance that the fish run would be sustained, we would recommend doing Phase II. Now, where's the break point? Does it have to be a billion dollars and 60% - I don't know. Fortunately, I don't have to make that decision, but that's the kind of analysis the Corps will go through. It's what is the probability that the fish run could be sustained and what's the cost associated with that probability? That's what we're trying to get to at the end of Phase I.

Gerald Druffel: And then based on that answer we would make a recommendation. Whether or not that's gonna make it possible for more fish to come back up the river?

Stuart Stanger: Not unless Congress tells us to do that. If Congress tells us to move into Phase II, we would do Phase II at that time, but not until they give us the authority to do that and give us the funding to do that.

Gerald Druffel: Is there any talk about moving the limit out to, say 1500 miles off the coast to keep foreign fleets from taking our fish and taking the gillnetters out of the river, and there's a couple of other things that need to be done, too, but I think that's really political now.

Stuart Stanger: I can't answer that. I don't have any knowledge of that. I work on John Day and I can just barely keep up with that, but I know that there's that concern and the four H's - - we need to look at all the areas, but I'm just not involved with that.

Kenneth Meyer: I live at Colton, Wash., up on the hill, and I'd just like to go on record as saying that I'm very much opposed to any drawdown on the river and I guess mainly .. I guess why I'm so opposed to this is the transportation that we will lose, and I would .. I think there should be a thorough study done of -- when we lose this transportation what it is going to cost to -- as an alternate to get our grain to Portland, and plus the roads that are going to have to be built, the lives that will be lost of people in accidents with all those trucks on the road, and I've been farming for a few years -- I got two sons that are farming with us, and I just -- you know, it isn't too good right now, and I just hope that we don't get another whammy thrown at us and cost us more to get our grain to Portland.
Thank you.

Stuart Stanger: Yeah, I appreciate your comments and Brian is looking at those additional costs. There's a good graphic around the corner that shows how many additional trucks that would be required to make up for one barge. It's on a poster around the corner there. I appreciate your comment.

Anything else? If not, sir, I'll give it back to you.

Col. Bob Slusar: Again, I'd like to thank everybody for coming tonight. Your comments are very important to us and we do appreciate that. I think, in listening to you and your comments, it has given us some additional information. I understand that there are some nuggets out there that we need to take a look at, some processes that we're going to work through. Again, I think we've got a pretty good team established here in Portland District. We've got a mandate again to take a look at Phase I portion of this. I think Stuart has been able to hopefully answer your questions. If again, you come up with

something or you find something in terms of analysis that will help us in this process, please don't hesitate to let us know. Again, we have -- a website is on the information packets that are out there. We want to hear from you as this process moves forward. I ask you to be actively involved and join our team as we move through this process, and hopefully we can just work this process for this first year, and report back to Congress and we will see what happens from that point. The better our information is and the more accurate our information is, it is better for the whole process, and again I've heard that from a couple of gentlemen here, saying that some of our information may be flawed. If we have analysis out there that indicates that it is flawed, and shows us how to correct that, that is the type of information we are looking for, 'cause I want to be able to put the best foot forward, get the most accurate information on all spectrums as we put this report together and send it forward.

Question: In the United States Congress.

Col. Bob Slusar: Right. Okay. So again, thank you all for coming. If you want to meet with any of these individuals, they'll be here after I hang up the mike, and if you have any further questions, you can deal with those individuals, one on one. Again, thank you very much.

PORTLAND, OREGON
PUBLIC MEETING

February 17, 1999

Meeting Transcripts

PORTLAND John Day Drawdown Phase 1 Study
Public Information Meeting
Portland, Oregon
February 17, 1999

Col. Bob Slusar: It looks like we have everybody here tonight that are coming. I'd like to welcome everybody here tonight, taking time out of your busy schedule to be with us. Can you hear this o.k.? I'm getting some feed-back. Maybe...we're moving into phase two of tonight's activities. Hopefully, if you've had an opportunity to meet with our folks out there on the displays and get what information you needed. If not, after tonight's, as we go through this portion of it, there will be some time later to talk with a few folks afterwards. I'm Col. Bob Slusar, the Commander of Portland District, U.S. Army Corps of Engineers, and just a little background about the Corps here out in the Pacific Northwest: you also have the division headquarters out here, commanded by General Officer to whom I report, and there are five districts under his control, Portland District being one, Seattle District, Walla Walla District, which is doing the lower Snake Drawdown Study, and then Kansas City and Omaha Districts. The reason why I'm here tonight is because John Day is a project under Portland District. The reason why the district folks are here collectively is to--is for three reasons: The first reason is to provide you with the information on how we're conducting the John Day Drawdown Study. The second reason is to hear your concerns and your input, and third is that we are trying to glean information on different studies that may have been conducted that we are not aware of, and I think the third portion is the most important. There is a lot of information out there from a lot of different sources and we may not have collected all the information that we need to try and capture for our report, so if you have information as you hear the study, the briefings and the presentations, if there is something that you are aware of that we may not be, we would like to get that type of input so we can add that to our drawdown study.

Basically, we're looking at two factors in the drawdown study, and that's the benefits and the impacts, so if you can kinda remember that as we go through this presentation tonight, we are kinda looking for benefits and impacts as related to any number of things; it can be commerce; it can be fish passage, or whatever -- but benefits and impacts. How we're gonna do things tonight -- I am going to give you kind of an introduction of what I've done. I'll introduce my two key folks out here. They'll go through some briefings after which we will go through questions and answers and hear any concerns from the audience. So, thats kinda the format we're going through tonight.

On my far right over here is Eric Ostrovsky. Eric is an employee of the National Marine Fisheries Service and he represents the federal biologists' interest in this study. He is going to be talking a little bit about the big picture of where we are with the fish program and the drawdown study, so he will be talking pretty much on the fisheries side. To my right, your left, is Stuart Stanger. He is a Corps employee. He works for me. He is also the project manager for the drawdown study, so he is in charge of the study. He will be talking again in broad terms of what we're doing in terms of our fish program and specifically, on the drawdown study itself and how we're moving it through the phases, what our timelines are and how we have to report this back out to Congress.

For tonight's activities, I'm going to turn the mike over to Stuart, let him walk through some introductory pieces of it, and then turn it over to Eric for his briefing, and then Stuart will follow with a briefing on the drawdown study itself. So, Stuart---

Stuart Stanger: I'm going to stand down here. Everybody hear me? Again, I want to echo the Colonel's comments. Thanks for coming out and taking an evening out of your lives to share with us some of your concerns and to let us explain to you what we're doing. We know that probably some of you in the audience are for drawdown, and we know that some of you are probably against the drawdowns. Some of you are even for or against our studying the drawdown. We know that just the study itself, let alone the drawdown, impacts lives, and we apologize for that. We're sorry for that, but we also recognize that the dams are one part of the big picture of what's impacting the salmon, and we need to look at the dams. We don't know that the answer is in modifying the dams or the operation of the dams. We do believe that we need to look at that as one element of the fish program. Right now, for John Day, all we are doing is what we refer to as a Phase I study, and I'll explain to you a little bit what that means. We are not looking at a drawdown in the immediate future, and drawdown -- what drawdown means to us, and when I use that term what I mean is a permanent lowering of that John Day pool. Okay. This is not a test that we're looking at, similar to what was done in '92, '93, up on the Snake River. This is a permanent drawdown that we're looking at. There has been some confusion about that. It's also a year-round drawdown. There were some early discussions several years ago about drawing down during the downstream fish passage time of the year and then raising the pool back up. That is not what we're looking at. We are looking at a permanent drawdown year-round. As the Colonel mentioned tonight, we are looking for information. We've already obtained some information from the public meetings we've had. If studies have been done by your organizations that you represent, we would be very happy if you would provide us that information and let us look through that information and glean what information we can out of that to include in our report. I know that many of you came early, had a chance to meet with the team. What I want to do is introduce you to the team, and if, when we're done here tonight you still have questions, get with the right person and if they can't answer your question they will at least write it down and get an answer for you. First of all, I want to thank Dawn Edwards. Dawn Edwards is out of our Public Affairs Office. She's the one who has coordinated these public meetings for us and if you look at the bottoms of these information papers you picked up, when you call, you're going to get Dawn Edwards' office.

On my left here is the technical team. Chris Ferguson is the senior technical lead. She is the person I look to to get me the answers and make sure these folks are all looking at the same plan. We have John Todd. He is primarily focused on the irrigation and utilities. Brian Shenk is our economist. Ed Woodruff is looking at hydropower. Matt Hanson is looking at the structural modifications that would need to be made to the structure itself, and also to bridges that could be impacted, so Matt is our structural representative. Ken Soderlind is looking at sedimentation, flood control. Ken is also looking at the navigation, a big important part here. Bob Willis is fish and wildlife; he is the guy from the Corps that I look to to give us the answer – what are the benefits here for fish? We will be looking at costs of replacing the things I'm going to talk about

and we will also be looking at the benefits. Okay, with that -- what I'm gonna do is turn the mike over to Eric Ostrovsky who is gonna kinda give a little bit of background of how we got to -- why we're doing the John Day study. What we're gonna ask is that you hold all questions until after my briefing. When Eric gets done I'll go through a quick briefing. Each one only takes about ten minutes, and then we're gonna open it up to questions, but we would prefer that you hold your questions because we will be recording comments and questions, and we will hand you a microphone and we don't have microphones to hand you during his briefing, so if you'll just hold your questions you will get plenty of opportunity to ask questions. Okay?

With that. I'm going to turn this over to you, Eric.

Eric Ostrovsky: Thank you, Stuart. I just want to again introduce myself. My name is Eric Ostrovsky. I'm with the National Marine Fisheries Service in the Portland office and, I know I've met a number of you before. It's a pleasure to be here tonight. Then, we can probably skip the first screen which is sorta the introduction I just gave you. You know, while I have this moment I guess I can mention -- when we were in Lewiston, we talked to one of the local papers there. They were telling us generally, in meeting like this you really do have two factions. A lot of the community feels very strongly about the impacts of drawdown, what it could be, what could happen, and they don't want to see anything really being done and other factions--they call them steelheaders, who think the quicker you can do it the better, but they also say there is a broad middle out there of people who really are undecided. They know it's a complex issue. There are a lot of questions and they haven't made up their mind, and I think that's one of the important reasons for having this study. As probably all of you are aware, and I think all the people, those factions they mentioned -- one thing they could all agree on is they live in the Northwest, they love it, this area is unique. I think one the reasons everyone really feels that one of the uniqueness' out here is the salmon and salmon runs, and I title this "the legacy." You know, as all of you are aware, the salmon runs on the Columbia Basin were huge. They are down quite a bit and there has been a dramatic decline in runs throughout the Pacific Northwest, not just in the Columbia Basin. A lot of the losses were due to dam construction. Some of the dams had stopped passage beyond them and that's had a large impact. The actual construction has had an impact. There is also mortality that's due to passage of the fish going beyond the dams themselves, but in the discussions here, obviously, this is not just a mainstem issue. There is a lot of other major issues. We call it the four H's. There is harvest issues and hatchery issues, other habitat impacts being right here in Portland, obviously with the growth of population in the Pacific Northwest, different industries, whether agricultural or timber. Everything has had an impact on these runs, and we realize it. If you could go on to the next one (slides).

What's actually happened -- the reason NMFS is involved is that some of the -- the runs have been listed since 1991. What I had shown were, -- right now there are seven species that were listed -- what happened -- did that go beyond John Day dam? And this map shows you in the Basin 13 stocks that either are listed or there is a determination to be proposed for listing, but, you know, I just want to mention -- if I showed you the whole West Coast, especially along the coast that's spotted -- there are runs up and down the coast where there is listings. If you could go on (slides). NMFS is involved because of the Endangered Species Act. Once a species is listed we look at federal activities that could have an impact upon the species. The operation of the federal Columbia power system is one of the things that NMFS consulted with the affected

federal agencies. It was a jeopardy decision saying that if the system continued in operation as it was it could jeopardize the continued existence of Snake River salmon. And because of that we came up with a reasonable and prudent alternative. That had reasonable and prudent measures in it and the objective was to implement all those measures, and a lot of the people don't really understand it. It's been called in other meetings. They've called it analysis to paralysis, and other things, saying, well you just study fish but you are not really doing anything, but actually the biological opinion has had a lot of things involved in it. It's had immediate improvements to the system. There is a lot of operational impacts that occur through collaborative teams that work on the issues on an almost day-to-day basis, especially during the migratory seasons. There have been some major structural modifications. What we call the 1999 decision, we're looking at a long-term configuration decision. A lot of this is done finally. I put through adaptive management, and what that really means then -- in 1995 especially, but even today, there is still a lot of factors where the answers are not in what's happening in the system. It can depend, you know, on the type of season, water conditions, with different species, and when there is a chance, either through the system or through our operation, we try to find answers to that. I just put down some of the things that happen with some of the immediate survival improvement. We have been looking at flows, and flows especially for juvenile salmon, have an impact, and I have said the teams through operation -- what they are really trying to do is get water for fish as they're migrating through the system, water temperatures are very important, too. There has been a lot of work on improving fish bypass at the dams, probably while passage through dam turbines is probably the most harmful way to go through, so there is a lot of work on bypass, whether to barge the juvenile fish, or to put them back in the river again. Increase spill would be another way to keep fish out of the turbines and inriver. Better fish transportation; whether more barging, less trucking, and better ways of doing it have been occurring, and operating the turbines at peak efficiency; also fish friendlier turbines are being designed, and they are actually being installed right now at Bonneville. I could probably go on. I just wanted to mention a few there. Some of the modifications -- the major ones going on are flip lips and other structural changes for gas abatement. A lot of you probably know that, depending upon how the system is operated, and especially with spill, you can increase the total dissolved gas within the system which can be very harmful for juvenile fish. Extended length screens, a way to collect more fish. We have been putting in a lot of juvenile sampling facilities at the different projects, so we have a better idea knowing what is actually occurring, and the affects that are going on. Relocation of the downstream juvenile fish outflow at Bonneville Dam was a major modification. There are some people here in the audience who have worked on it and that's helped keep predators away from the juvenile fishes as they go on through. I wanted to mention some of these because a lot of the people have asked, you know, well, aren't there things that could be done now, and this is to mention just some of those things that could happen right now. Some of the information that we're looking at is inriver survival for fish and also survival of fish that are transported, and comparing those survival rates, and it's gonna obviously depend on conditions on a year-to-year basis. If you have -- there'll be uncontrolled spill and so forth, so it's to look at those rates and what's gonna happen under different conditions, the effectiveness, new technology, surface collectors is a good example, and how well that's working, but one of the other things that the 1995 decision and the 1998 steelhead supplement decision wanted us to look at was the cost and feasibility and potential benefits from drawdown, and that's more than just John Day. Most of you are probably aware of the study that's going on with the lower Snake projects right now, but

John Day Dam was another one. You could go on. The benefits that drawdown has, and was felt to have in the Biological Opinion is -- was for faster water velocities for a given flow, and faster water velocity relates to faster travel time for fish which means that there is going to be less time for predators, and you can also allow fish to get through the system, especially in the summer as it heats up quicker, and at least for fall Chinook, faster travel time tends to promote smolt survival. But, you know, it's not all just the mainstem issue as far as travel time. A lowering of the reservoir would also have changed the rearing habitat, especially for fall Chinook. Independent Science Group which is now called the Independent Scientific Advisory Board, which is used by both the Northwest Power Planning Council and NMFS, said that in "Return to the River" that drawdown should be looked at to evaluate restoring some of the rearing habitat that has been inundated. We do know that Snake River fall Chinook primarily do now spend most of their rearing days in reservoirs which is far different than the habitat was like at the time before the projects went in on the Hanford Reach where you have up-river bright fall Chinook that aren't in the reservoir. They're doing quite well. So, we would want to look at the rearing habitat to see what kind of benefits that would do. Another benefit, or possible benefit to lowering projects would be to look at the spawning habitat, and I wanted to make sure that, in John Day, if you did lower that reservoir, that would be historic habitat for up-river bright fall Chinook, and those are not listed, and I just wanted to make that clear, and this would be more --this was fish more similar to what you had in the Hanford Reach. One time it was estimated that 30,000 fish spawned in the area that is now inundated. So that, but that would be another advantage of it. I just finally wanted to say, I think this is sort of an important concept, that when you're looking at the whole thing, is you're looking at John Day as the project itself, and the impact, and as I was saying before, of juveniles and adults getting through the project --if you changed it, it's gonna change how those fish going through it, and we're looking at not only the individual project and what it means to those fish, but you have to look at it as the cumulative impact, and at least for the listed fish on the Snake River, most of those species have to go through eight dams and on the Columbia River and some of the new listings on the steelhead, it would be nine dams and I just want to mention those are just not all federal dams, especially on the Columbia River side. So, it's not like anyone is necessarily saying that the change in John Day itself would be a silver bullet, but you would want to look at it as a whole systemwide basis, and that's part of what this study was about. With that, I want to turn it over to Stuart.

Stuart Stanger: Thanks, Eric. That is an aerial picture of John Day Dam.

Stuart Stanger: I am going to very quickly describe to you what John Day Dam provides now. And what you need to realize is that all the things I describe could be impacted by a drawdown. Then I'm going to describe to you a little bit about what we are doing in the Phase I study; what the purpose we identified for the study is. Talk to you a little bit about the schedule, and then finally public participation -- how you can get involved in the study. For those of you who don't know, John Day Dam is located here on the Columbia River. The total project is about 5900 feet long, a little over a mile. It consists of a navigation lock, a spillway which is spilling in this photograph, the powerhouse, and it backs up Lake Umatilla 76 miles up to McNary Dam. Unlike other projects on the Columbia, John Day does provide flood control. It provides for 500,000 acre feet of flood control storage. That's a foot of water-- an acre foot would be one foot of water on one acre. Hydropower (correct me if I'm wrong), 2500 megawatts of power provided. Navigation - through the navigation lock we can raise about 113 feet and we have about 9 million

tons of cargo go through John Day annually. Recreation -- there are 14 recreation sites developed along the John Day pool providing about 3 million recreation days per year. There are 29 pump stations used for irrigation that are along the John Day pool. Additionally, municipal and industrial water is taken from the John Day pool. Some cities obtain their drinking water out of the aquifer that is filled, if you will, from the John Day reservoir. the city of Boardman, for example. There are two fish hatcheries, at least two fish hatcheries, Irrigon and Umatilla fish hatcheries, take their water out of the John Day pool, or out of the aquifer. There is a wildlife refuge, the Umatilla Wildlife Refuge, if you drew down, the wildlife refuge would be dry. There is about 35,000 acres of both wet and dry land managed for wildlife. At John Day Dam there are fish passage facilities, the ladders and downstream facilities provided.

Stuart Stanger: Okay. Phase I study, which is what we're doing right now. It needs to answer one question for Congress. Is it appropriate to continue studies? Phase II would be a very detailed feasibility study similar to what they're doing on the Snake River projects right now. We estimate that it would take five years to complete a feasibility study and somewhere in the neighborhood of $20 million. So, we suggested let us do Phase I first and the cost estimate for that is $3.3 million. We said we can do it in about a year, let us collect all this existing information from the studies that people have done, add to that a little bit of information that we will develop ourselves, and see if we can make a recommendation to Congress whether or not additional studies need to be done. Phase I study is looking at four alternatives; natural river with and without flood control and drawdown to spillway crest with and without flood control, and I'm gonna explain that to you a little bit. If you picked up a cross-section like this off one of the tables, currently John Day is operated at elevation 265; normal operation. If we know there is going to be a flood, and there's a lot of water coming down out of the Snake or the upper Columbia, we draw that pool down to elevation 257, minimum operating pool, and then when the flood water gets there we fill it back up to 265, or actually we can go up to 268. That's how you provide flood control, is you draw down to here, and now you can store this much water and prevent it from going downstream. So, what we're looking at in Phase I is lowering to approximately elevation 215 and then we would be able to pool pond water behind the dam to provide that flood control storage if that were the alternative selected, and at natural river - at natural river we're talking about removing the entire spillway from John Day Dam, so we would have to construct some other type of structure that we could use to pond water, and we would pond about 30 feet of water to provide the same amount of flood control. So, we are looking at four alternatives in Phase I; natural river, with and without flood control, spillway crest, with and without flood control. Okay, what we told Congress what the purpose of Phase I would be, it would be to evaluate potential fisheries and wildlife impacts, benefits or negative impacts, and that we would evaluate the social and economic effects, and finally, we would provide Congress with a recommendation of whether or not to do Phase II. So, how do we do that? To get at the fisheries and wildlife impacts, we are going to complete some biological studies that were started three or four years ago when we were looking at drawing down to minimum operating pool. In the 1995 Biological Opinion that National Marine Fisheries Service issued, it directed us to operate at minimum operating pool, and so we began a lot of studies to find out what the impacts were going to be. Congress stopped that study and that action, but the -- some of the biological studies were never completed, so we are going to finish those and we're going to add a few studies to that. We are going to release some pit tagged fish, for example, at McNary, and we'll

track them and see how long it takes them to get through the John Day pool and what the mortality is through the John Day pool, to see if we really have a problem. We'll look at habitat. Eric mentioned that one of the benefits of drawdown -- the theory is that you may be able to recover those spawning habitats that were inundated when we filled the pool. So, we are going to look and see how much habitat is there really that we think would be recovered for spawning. We told Congress that on this study we would form a Planning Aid Team. Not something that we would normally do, but this Planning Aid Team, and you can participate on this team if you want. We have a sign-up list and you just need to, after the meeting, sign up on that list, and you will get the opportunity to review all the science, all the biology, and tell us what you think about that science. Right now, we would use this PATH process that you may have heard about on the Snake study. That group of folks will look at the science. Our biologists will be looking at it, and if you want to participate in the review of that -- those studies -- you can do that. Also, there is what is called a Planning Aid Letter that comes from the U.S. Fish and Wildlife Service. When the Corps does a study, the U.S. Fish and Wildlife Service looks at the impacts and makes recommendations for mitigating for impacts to wildlife and resident fish -- warmwater fish. They will be providing us that letter in the Phase I study. How we look at the social and economic effects. We are going to look at all the things that I just described that John Day provides; irrigation, hydropower, navigation -- we are going to look at those things and find out what it would cost to replace in-kind, if you will, or similar to, what is impacted by taking the dam out, and I will use navigation as an example. If I take out the John Day Dam and no longer have a navigation lock, then I need to have a channel dredged all the way from John Day to McNary, that barges could move up and down the river. What would it cost to do that? I don't know that today, but we will have a cost estimate for what that would be. Now, does that mean it would be cost effective to do that? No. But it does give us a cost of what it would be to replace what we have today, and we will do the same thing with irrigation. We will look at what would it cost to replace a pump station that a farmer uses to irrigate his land? How would I get him water? And then we'll do a trade-off analysis. We will figure out what is the best alternative to get that farmer water, or is it better not to give him water and to buy him out? We will look at employment effects in the region. We were in Lewiston last week and we will be looking at the impacts in Lewiston; we will be looking at the impacts in Rufus. We will look at the impacts to employment and to the quality of life. Okay. Some of the other things that we will consider, probably not in as much detail, but information is out there -- how can I provide adult and juvenile fish passage facilities when I put in a new spillway at a lower level? We will look at those costs. Utilities -- there is about 23 utility companies that we've identified; telephones, power, sewer outfalls, that we need to look at to see if they would be impacted by the drawdown. We know, for example, that private wells -- there are some 2000 wells that take water out of the aquifer along the John Day pool that could be dried up with a drawdown. Cultural resources -- there is some 360 sites that have been identified that were covered when we filled the John Day Dam, and those cultural resource sites would have to be looked at for protection when we draw down. Water quality -- huge amounts of sediment are deposited behind dams. John Day Dam was completed in 1968, so it has been in operation over 20 years. We expect tremendous amounts of sediment to be there and when you draw down you've either gotta dredge that sediment out of there or it's going to go down - it's going to move downstream with the faster water, and create turbid conditions. Hazardous toxic and radioactive waste. Some of that sediment that has been deposited is contaminated. We know that. We don't know how much. We also inundated sites 20 years ago

that were more sensitive to now, with regards to the hazardous and toxic waste. Twenty years ago we weren't as sensitive to that kind of thing as we are today. What's our schedule? We are going to complete a draft report in September of this year. We began in October, this past October, and we are going to complete it in September. We are going to send it out, and if you signed up on the list you will get a copy of it. We will give you 30 days to review and comment on that report; tell us whether or not you think enough information is contained in that report, that a recommendation could be made to Congress. We know that report will not contain all the information necessary to make a decision to draw down, but we are not trying to make that decision in Phase I. All we're trying to do in Phase I is decide, should Phase II be done? We will submit the final with a recommendation to the U.S. Congress in December of this year. We have already had public meetings in Alaska, Montana, Idaho; this is the first one in Oregon. Next Tuesday we are in Umatilla, and next Thursday we are in Pasco, (Wash.) so other communities will get the same opportunity you have here to provide us with information. Okay. In summary, the Corps will make the recommendation; we will not make the decision. Congress will make that decision about whether Phase II needs to be done. If you want to get involved, sign up on that Planning Aid Team, and review and comment on the Phase I report, or you can write letters to Col. Slusar, and he brings them right to my desk. Okay. And then, just quickly, I want to show you some of the concepts that we have looked at for drawing the John Day Dam down, if I can find my pointer. Thus far, and we're real early in this study, we believe we would be removing this section of John Day Dam. We may remove over to here and excavate a channel but in some fashion we will pass water through this section, and the powerhouse would be left standing. It would not be functional. We would not generate any power, but it would be there. Okay. With that, we're going to open this to questions now. Again, I just want to mention, we know that some folks are for, some folks are against. This technical team is charged with …..

We do have a couple of microphones that we are going to ask you to use so that we can record this. The comments will be written up and included in the appendix to the Phase I report, so that will go to Congress along with, I guess, my answers, and with that I'm going to open it up for questions and comments. If you just want to make a comment, that's more than -- you are more than welcome to do that.

Before you start, Bruce, just let me mention one thing. If you wouldn't mind, at least give us your name and the organization that you are representing so that we can include that in the Minutes.

Bruce Lovelin: I am with the Columbia River Alliance in Portland. Stuart, I just have a question on spillway crest drawdown, or actually, let's ask the question, with and without flood control. You talked about removal of a large section of that dam. Are you gonna look at, or what would be the configuration of the project with flood control, and is that even feasible. I mean …..

Stuart Stanger: At spillway crest, Bruce at spillway crest we use the spillway that is there now to provide the flood control. Okay. We open up the gate, water would flow out to about elevation 215 and we could back water up using the existing spillway. There are some other things we would still have to look at - fish passage at elevation 215, both upstream and downstream fish passage, but yeah, flood control could be provided with that spillway. It's more

when you go down to natural river, we've gotta take the existing spillway out. Now, you have to put something back in to control the water. Does that answer your question?

Bruce Lovelin: Yeah.

Stuart Stanger: You're an easy crowd. (Laugh)

Bob Bernert: With Burnett Barge Lines. President Clinton just recently signed an international agreement that curbed global warming and here you're proposing removing an engine that produces, what, 3 million horsepower, 24 hours a day, no pollution. This doesn't quite jibe with curbing global warming. Is that a consideration?

Stuart Stanger: I don't want to argue with you, but we are not proposing anything. We are looking at whether or not Phase II should be done. Let me explain a little bit further. Phase I is just looking at drawdown. Okay. Is John Day drawdown something that should be considered? If the answer is yes, John Day drawdown is a viable option for salmon recovery, then Phase II would be comparing drawdown with perhaps surface collection, transportation, fish friendlier turbines. It would compare drawdown with a number of other measures that could also provide salmon recovery. Okay. We are not considering all of those other options along with drawdown in Phase I, so does that make sense, that in Phase II it's not drawdown or nothing; it's drawdown versus surface bypass, versus transportation, fish friendly turbines, flow deflectors, and a number of other things, extended length screens. We would look at all those in Phase II.

Bob Bernert: In hydropower analysis?

Stuart Stanger: In doing the hydropower analysis, once we take out the dam, then, we, of course, won't generate hydropower, and it will need to be replaced by thermal generation, and as part of our study we can evaluate the air pollution impacts associated with that; CO2 and sulphur and everything else that gets into the environment. And we are doing that on the Snake River study, so we have the tools available to do that also for this study, and it was a comment we also got in Lewiston, so it's something I think we will add to the study -- take a look at the pollution increases.

Bob Bernert: One other question is - what are we after? How many fish do we---what fish counts are we after, to be satisfied? We seem to be after some goal that we don't know what the goal is, as far as fish survival. What do we call fish survival? What number are we after?

Stuart Stanger: I know there is nobody in this room that knows the answer to that question,

Bob Bernert: But then, we don't know our goal. I mean, we have to know what we're after. We can't go running off in some direction and not know what we're chasing.

Stuart Stanger: Well, let me try and answer . In a way we have been asked similar questions in other places. And the way I've answered that is -- the way we're gonna make a decision regarding our recommendation to Congress. If we go through this PATH process and the Planning Aid Team comes out with a probability that -- let's say we have a probability of recovery of 30%. If they tell me that the probability of recovery is 30%, and it will cost you $3 billion in

impacts to replace these things you impact, I would say that's not a very good buy. But if they come out and tell me that it's a 90% probability of salmon recovery and you can do it for $200 million, we would probably recommend further studies. Now, what percentage, or what probability do I have to get to and what cost before the answer is yes versus no, I don't know. That's what Congress has to decide. If they tell me 50% probability and it's a billion dollar cost, the Corps would probably recommend further study, but what is the break point, I don't know the answer to that, and I'm sure no one in this room does.

Bob Bernert: It will be debated.

Stuart Stanger: What we're looking for is when we finish Phase I, is there a clear black and white answer? If there is not, I'm afraid additional studies would have to be done to better define what the probability is and what the impacts would be. You would have to look at those. Does that help at all.

Bob Bernert: Yeah; it all helps. I have a zillion concerns. Another one would be turbidity. We've experienced the Toutle River and Mt. St. Helens eruption. Every time we get a rain the Toutle River turns into a mud stream and annihilates the fish. They don't like muddy water. I would think that we would have a similar experience with the turbidity in the John Day from the sediment you mentioned, and Mt. St. Helens, what erupted 10 to 12 years ago, and we still have the problem. Are we going to annihilate the fish for 10, 12, 15, 20 -- how many years before that mud is washed out of there? Or do you propose dredging it out? It looks to me like it is a very serious situation.

Stuart Stanger: It could be a serious situation. We're looking at that. We don't know what the magnitude of the turbidity will be. We are looking at options for dredging that material out, but you're absolutely right. It's a good comment, even when you draw down, you now have the shorelines that are mud for a number of years, and every time it rains they will run into the river.

Bob Bernert: Right. And if you dredge it, if you dredge a million tons a year, you know, you're lookin' at 150 years of dredging to complete the program. It's a very serious, almost an insurmountable problem.

Stuart Stanger: Yeah. Good comment.

Bob Bernert: I could go on but I'll pass this on to somebody else.

Stuart Stanger: Just for information, it was 1980 when Mt. St. Helens erupted. I was the project manager on that project.

Chris Fowler: With HJR Engineering. I had one quick technical question. You mentioned that the John Day Dam is the only Columbia, or you said, unlike other dams on the Columbia that has flood control?

Stuart Stanger: The lower Columbia.

Chris Fowler: Okay. So none of the other - the Bonneville, The Dalles, McNary, don't?

Stuart Stanger: No.

Chris Fowler: The second question was sort of building on what Mr. Lovelin spoke of earlier. It's a little hard for me to imagine the natural level structure that provides flood control, and I was wondering if it's too early in your study at this point to tell us a little more what that structure might be conceived of, or if that might be something that is dropped in this phase of the study as a potential option? What kinds of alternatives are you proposing, or what level of alternative analysis do you need to propose to Congress at the end of this study?

Stuart Stanger: Well, if you look at the spillway the way it is today, that's designed to provide flood control, and to release water in a controlled manner. You would have a very similar structure to a spillway, but the bottom of it would be at the natural river, so basically, if you could do it you would take the spillway you have today and lower it down to natural river, and you would have a structure similar to that for flood control. Do you understand?

Chris Fowler: Yeah.

Stuart Stanger: You rebuild a spillway at a lower level, and then add fish passage facilities to it.

Chris Fowler: So it would be a lot like a dam?

Stuart Stanger: That's exactly what it would be. Exactly what it would be. It would be a lower dam. Questions, comments?

Chuck Carlson: Mid-Columbia Producers, Moro, Oregon. I was wondering now, after 30 some years of pooling behind that dam, of course, you have dramatically changed that eco-system above where it was before. What is the chance of any success of restoring that to a pre-dam eco-system?

Stuart Stanger: I don't have the answer to that. We will speculate on how long that would take, but it will take years to return that to what it was before the dam was built; it will take a number of years.

Chuck Carlson: Or is possible even at all?

Stuart Stanger: Is it possible in my lifetime? I don't know the answer.

Mindi Sheer: With U.S. G.S. I just had kinda a question that maybe Eric could answer. When talking about the options as far as, you know, in the past we've been doing dam operation modification and that kind of thing to improve passage, uh - how many years have they been doing that kind of thing? You know, changing operations of the dams to try to improve passage. How many years have they been doing that, to try to get the numbers up? Do you have any idea about that?

Eric Ostrovsky: Well, I'm not as familiar with the program under the Council, but under the Biological Opinion in 1995 it really created a technical management team where you have fish and wildlife folks who get together and make suggestions to the operator. They get together and try

to manage the system, so that's been in since about 1996 or so, as far as operational, and you know, as I was saying, you have some of the other improvements that have been going on at the dams since then, so at least, beyond '95 from '96 on you have had some major changes under the Endangered Species Act, and NMFS biological opinion.

Mindi Sheer: What about the rest of the lower Columbia dams -- I mean, have they been doing things like that?

Eric Ostrovsky: This has been going on with all the federal projects under the Biological Opinion.

Mindi Sheer: And that started about '95.

Eric Ostrovsky: Yeah, but there was a program before that with the Council, so it's not as if the system had been solely operated even before that, just say for power and flood. There had been fish and wildlife concerns.

Mindi Sheer: I have one more question. About the aluminum plant that is located at John Day Dam -- what's gonna happen with -- they're not going to be getting the power that they usually get from the dam?

Eric Ostrovsky: Well, I'm going to turn that over to the floor.

Stuart Stanger: That's one company that will be looked at again. We're looking at replacing power. As Ed mentioned, we're looking at different sources of power. If you lose the hydropower, what would it cost to replace power? So, if you replaced it, that aluminum plant would still have power. The same thing for water. They need water. So, we'll look at what would it cost to provide them that water that they use now?

Mindi Sheer: So they would still be getting pretty cheap power, too, right?

Stuart Stanger: I didn't say that.

Mindi Sheer: All right.

Jerry Grossnickle: With Burnett Barge Lines. The question is kinda a philosophical question. We have a government agency who is charged with determining whether it should do some studies to do a study, actually. It seems like a no-no brainer. We're gonna do the next study. What sorts of conclusions would you have to come in Phase I to actually say, no, we're not going to do another study.

Stuart Stanger: First, our first task as a technical team is to get enough technical information so that we think we can convince folks that we can make a decision, and then it's gonna have to be a black and white answer. Is the probability of the benefits low and the cost very high and how high and how low does the probability have to be? I don't have that answer, but I know we will have a whole lot of discussion about it when we start getting the numbers in. It's not an easy thing to answer, and you know, the higher the probability gets and the lower the cost is, the more difficult

the decision. It could turn out to be a clearly black and white decision. That's about the only case I think that you are going to see the Corps recommend no further studies.

Bruce Lovelin: Can I follow up on that? Maybe Eric could jump into this. What is the basis of your decision in terms of - you have the ESA which doesn't look clearly at benefit cost as much and you have your basic Corps standards which do look more at benefit cost. What's the driver here?

Stuart Stanger: I wish I could answer that for you, Bruce. It is more than just benefit costs, like the Corps traditionally would use. For one thing, we normally would put a benefit, a dollar value on the benefit. We're not going to be able to do that with fish. We are gonna present those as the probability of recovery, and it's just like betting -- what's the probability that you're gonna win when you put down a dollar on the craps table. There's a probability for each spot you put it on the crap table. That's all we're gonna have. We're not going to be able to know the numbers of fish or the dollar value of those fish. Okay. We will present a recommendation based on probability versus cost. The decision makers, Congress, along with the federal biologists, National Marine Fisheries Service, will have to balance out the ESA.

Eric Ostrovsky: I just wanted to say - you are correct. The ESA, I think, in this part of it doesn't really look at it as much as an economic decision and the Biological Opinion did say to do this study. It was one of the reasonable and prudent measures. It was through Congressional action that they said, don't continue on with it and they've said, let's go to Phase I of the study, so, I mean, I think it makes it from NMFS' perspective and what the Corps looked at, it was that, let's get a full airing of the issue, so….

Stuart Stanger: Yeah. This Phase I is an example of that, Bruce, is that we proposed to Congress that we do this Phase I. The Biological Opinion tells us to do a full study, but we can't do anything unless Congress agrees and gives us money to do it. They control the purse-strings and we do what they tell us.

Bob Heineth: With the Columbia River Intertribal Fish Commission. I've got a couple of questions for the Corps. Is it possible for the Corps to engage in a NEPA type analysis on the John Day drawdown issue? That's the first question. The second question is -- is the Corps going to do some sort of independent assessment on the economic liabilities in terms of power production, but also try to balance that out with both treaty harvest and non-treaty harvest benefits from drawing down the John Day reservoir? Some sort of DREW type analysis, or something like that? And I guess I have a last question that has to do with water quality. We know that the John Day pool basically exceeds water quality standards by a whole lot, probably 8 or 10 degrees Fahrenheit over the summer period, and is that issue going to be looked at under these scenarios?

Stuart Stanger: Let me start with NEPA first. The Corps has authority to do Phase I only. Congress has not given us the authority to do anything further. We would anticipate if we move into Phase II we will move into an environmental impact statement in compliance with NEPA. Okay. The second question was harvest. We will look at harvest, the benefits of harvest. We will be meeting with the tribes. Actually, we are planning to do that during the month of March,

to begin government consultation with the tribes to identify not only impacts to harvest but all tribal impacts. Your question about the economics and DREW. Bob, I'm not sure I understand, but we are not using Drew for this Phase I study. DREW, for those of you who do not know, is the Drawdown Regional Economic Work Group. They were formed to assist with completion of the Snake River study and we discussed that during the scoping of Phase I, when we discussed that in the region, it was decided not to do that in Phase I. Phase II, it is very likely we would have a similar process. What am I missing, Bob? I missed another question here.

Bob Heineth: Is there going to be any follow-up? Is there going to be any sort of independent economic assessment in terms of what the Corps is going to produce on the pros and cons of the economics in this issue?

Stuart Stanger: We are going to have that 30-day public comment and review period, and the economics will be a part of that review, so you will have an opportunity to review that.

Bob Heineth: But how is the Corps going to go ahead with the economic review? Are they going to hire their own consultants to do that review, or what's going to be the process?

Stuart Stanger: It will be a public review. We're not hiring anyone to review it. We are hiring some folks to do the analysis.

Bob Heineth: You are hiring your own consultants to do some of it, but there will be no Corps funds spent on independent assessment of that economic review?

Stuart Stanger: That's correct.

Bob Heineth: The last question has to do with water quality and looking at - given again that the John Day pool ranges from 8 to 10 degrees Fahrenheit over the top of the water quality standards as it is configured right now, what's the Corps going to do in terms of taking a look at these two drawdown alternatives in terms of meeting the water quality standards?

Stuart Stanger: Water quality is something we will look at. There is an information paper out there on the water quality. Again, one of the benefits of a drawdown could be improvements to the water quality, temperature, turbidity, the speed of the water particle travel time. Those could be the benefits.

Bob Heineth: That's basically a statutory requirement that the Corps has to deal with as well as ESA. Correct? In terms of meeting the Clean Water Act standard?

Stuart Stanger: I don't have enough information on that, Bob, to comment on it. Somebody else does.

Bob Heineth: Thanks, Stuart.

Stuart Stanger: Well, if there are no further comments, or questions, I just want to thank all of you for coming again, and again, our technical folks will be around if you want to specifically talk to any of them. We will be taking down displays and cleaning up for the evening, and again, the

UMATILLA, OREGON
PUBLIC MEETING

February 23, 1999

Meeting Transcripts

John Day Drawdown Phase I Study
Public Meeting Record
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Col. Robert Slusar: Lots of people still signing up. There are still a number of people that are signing in back there. We will let those people get signed in and then we will go ahead and get started, so in about the next couple of minutes here …

While we're waiting for these last couple of people to come in, I'd like to thank IRZ Consulting for providing our refreshments here tonight, so if you have an opportunity I think Fred is sitting over here, so if you have an opportunity, thank him for providing our drinks and our food here tonight. Thank you.

It looks like we have pretty much everybody … there's a couple of people coming in but I'll go ahead and get started because I know you've got … taken time out of your busy schedule to be here tonight to hear us, so I want to go ahead and move on.

I'm Colonel Bob Slusar. I am the Commander of Portland District, U.S. Army Corps of Engineers. My office is located in Portland, Oregon. If you are not familiar in how we break out the Corps districts, they're broken down by watershed. I have responsibility for the State of Oregon and Southern Washington, based upon watersheds. There are five districts in the Northwestern Division and we all report to a General Officer who is a Division Commander. He is also located in Portland, Oregon. The five districts under his control are Portland District, Seattle District, Walla Walla District, Kansas City and Omaha. The reason why I'm here tonight is because the operational control of John Day project is in Portland District. I have operational control for John Day, The Dalles, and Bonneville on the Columbia River. Walla Walla District, Lt. Col. Bulen, has responsibility and operational control of McNary and the lower Snake projects and Col. Rigsby has the responsibility for Chief Joe up in the Seattle District. So, it's kinda where we break boundary lines on projects.

I have a team here; the team leader is Stuart Stanger. He is the individual that's putting together the study so we can report back to Congress. They're here for three reasons: The first reason is to provide you the information on where we're at with this study, how we're going about this study, what information we're looking for, for this study, and Stuart will take a few minutes and talk about that project and that process when I turn the mike over to him. The second reason is to hear your comments. Again, this is a one-year study that we're doing, and we must report back to Congress to see if we go to Phase II. Phase II would be similar to what they're doing in

the Lower Snake Study, a feasibility study. The third reason is because there's a lot of information out there that we may not know about, and so we need your help. We need your help to join our study. We need help to find what nuggets are out there that we may have not found in terms of two items: costs, or benefits and impacts. We need to know what the impacts are and what the benefits are to complete this process and report back. So, those are two things we are trying to get from this process in meeting with you folks out here today. To do that we have two people here at the table that will walk us through the process. The first one is on my far right, your left, and that is Eric Ostrovsky. Eric is with the National Marine Fisheries Service. He'll talk about the fisheries issues as a result of the drawdown, where we're at and how we're getting to that portion of it on the fisheries side. He represents the federal biologist in the study. The federal engineer in the study and the project manager for the study is Stuart Stanger. He works for me, the Corps of Engineers, Portland District, and his team is over here. Again, we're looking at what the operational impacts are and some of the fishery impacts as we put together this study. So, what I'd like to do is turn the mike over to Stuart, let him walk you through where we're at in the process, and then we'll open it up after Eric's and Stuart's comments to questions and answers, and then any comments that we may have from you folks out here tonight.

Stuart Stanger: Good evening. I want to thank everyone myself -- thank you for coming out tonight. I know a lot of you came early and by the time we get out of here tonight you will have spent several hours here, talking about a very important issue. I want to tell you that the Corps of Engineers and National Marine Fisheries Service believes that the studies to look at John Day drawdown are necessary to expose, if you will, all the opportunities to recover salmon. The Corps of Engineers is not proposing to drawdown the John Day Dam, and you will hear more about what this study is, but it is not a proposal to draw down John Day Dam, but we do believe it's important to get all the information out so that all the decision makers can choose which approach we want to take to help recover the salmon.

We have met with several people in the past few months. Some of you are in the audience tonight. And we have heard that just the fact that we're doing a study has impacts on this region, that companies don't want to move into the area, that the lending policies are different, and we're sympathetic to that. We're sorry that happens but we're all here, as you know, to come up with a method for salmon recovery and again, we believe drawdown is one option that needs to be considered.

We are only doing a Phase I study, as the Colonel mentioned. We only have authority from Congress to do Phase I, and I'm going to explain to you what Phase I is in a few minutes, but we are not drawing down John Day Dam; we're not doing a test similar to what they did at Granite a few years ago. There have been some people who believe that is what we're talking about doing.

That is not what we're doing. We are going to talk about drawdown, a permanent drawdown. It would be year around and it would be indefinite. It would not be a test. We are going to look at the potential benefits and the costs, and I'll talk a little bit more about how we're going to do that, and as the Colonel mentioned, one of the reasons we're holding these public meetings is we're looking for information. I have been given some information already tonight. Some studies that have been done in the past. That's the kind of information we're looking for. We are trying to gather all existing information and the Corps of Engineers will evaluate that information, and we will make some judgment as to what we think is correct and what's not correct, and we will make a recommendation to Congress. Again, many of you came early and you met some of the team members. This is a part of the team that is helping me with this study. We will be around for a little while after this meeting, and if during this meeting you think of some specific questions you want to ask these individuals, please do so. I am going to introduce them. I'm going to start with Dawn Edwards. She is out of our Public Affairs Office. She is sitting here and is going to run the projector for us. She's responsible for setting these meetings up, and let me tell you, it's a big job. Then we have Brian Shenk. He's the economist for the study. We have Ed Woodruff. He's looking specifically at the hydropower impacts. Ken Soderlind is looking at navigation. Art Fong is looking at water supply. John Todd is looking at irrigation and utilities. Our geologist is Chris Budai. Bob Willis is the Corps' fishery and wildlife biologist. Also, in the audience we have Dave Linehan. He's the Umatilla Wildlife Refuge Manager for the U.S. Fish and Wildlife Service, and out of Portland with the U.S. Fish and Wildlife Service, we have Larry Rasmussen. Those individuals will be involved with the study as well, so at the end of this meeting, if you have any specific questions, certainly grab those people.

What we're gonna do now is we're gonna move into some quick presentations. I am going to ask that you hold your questions until I'm back up here again, and after I do my presentation. First, we're gonna have Eric Ostrovsky -- and what we're doing tonight -- this is not a formal testimony but we are recording the comments that are made, so we're gonna have some microphones passed around and we will ask you to speak into the microphone, because it is being recorded, and then those comments will be transcribed and will be included in the report that we submit to Congress, so it will just make things flow much smoother if you can wait until Eric and I are done, and we will open it up for questions, and we have some people available to pass the microphones around. With that, I'm gonna turn it over to Eric ---If somebody could catch the lights.

Eric Ostrovsky: Sure, well thank you. I'm not sure if -- I assume it was mentioned. We have been to a number of meetings throughout the Pacific Northwest. Again, my name is Eric Ostrovsky. I'm from the Portland office of the National Marine Fisheries Service. One of the things, you know, we've been to all these meetings. We've met with some fishers up in Alaska, people in Montana and Idaho, but outside of Alaska, basically, the main feeling about people is

that they're living here and there's something unique about the Pacific Northwest. Most people want to live here, and I think what most people would agree to, is one of the things that makes the Northwest unique is salmon and steelhead - - what's in our rivers. Unfortunately, one of the major problems is there has been a dramatic decrease in salmon runs throughout the Pacific Northwest, actually throughout the whole West Coast. Some estimates have historic runs in the Columbia Basin between anywhere from 10 to 16 million salmon and steelhead a year. There has just been a dramatic decline in that. A lot of that loss, especially here in the Columbia Basin, has been due to habitat loss from dam construction; Grand Coulee Dam and Hell's Canyon Complex are good examples of dams that were built where they just block passage behind them, and while the significant habitat has been lost by that, but building dams have also caused issues as far as passage, and especially talking to all of you tonight, as you all know, there are other reasons for the decline in salmon. People here have mentioned problems with the fisheries, hatchery policies, and how that's affected it, and also other habitat impacts. Whether that's through timber or just population growth in the region, in areas like Portland. It has all had an impact on salmon, as we have been going.

Basically, in 1991, the first salmon up in the Columbia Basin were listed. It was the Columbia River Sockeye salmon. Soon thereafter, in 1992, Snake River spring, summer and fall Chinook were listed. In 1998 steelhead were listed, both in the Columbia River and in the Snake River. I didn't mention it here because it is not behind John Day, but also in the Willamette, and there are two more proposed listings which will be determinations very soon. These are fish that would migrate beyond John Day Dam.

What I want to show, when you look at the whole Columbia River Basin, since 1991 there's actually, I believe it's 13 stocks, that have either been listed or proposed to listing, and as I mentioned, there are a lot of things that are impacting the fish and what's going on. As a matter of fact, I could have done just a slide that would have shown the whole West Coast, and you would see that unfortunately, a checkerboard going all the way down to California with fish that are either listed, proposed for listing, but I thought I would show this as it would at least show what is going on in the Columbia Basin, and what I'd like to show is that the issue went beyond just the Snake River salmon. In 1995, after the salmon were listed, NMF consults on federal activities, in this case with the Corps and the other action agencies on the Federal Columbia River Power System, to make sure that their operations were not likely to jeopardize the continued existence of those salmon, but remember, since then there have been --there's been some other listings, too. What NMFS came up at that time was a reasonable, prudent alternative to make sure that the operations would not jeopardize the species. In that, there were a number of measures, and the objective was to implement all the reasonable and prudent alternative measures. Some people think that all we do is study, and it's been called at other meetings,

Analysis to Paralysis, or some other things, but it's actually more complicated than that. We have put in a lot of immediate improvements to the systems to help salmon right now. We've made a lot of -- there's a lot of studying going on because of the uncertainties and there are a lot of uncertainties as to what's affecting the fish. We've made major structural modifications within the current system, but there are -- it was felt that status quo or the base case and the Corps determined that there was not enough -- that there would have to be some major decisions made in the longterm configuration of the system, and what we use as what's called the phrase of adaptive management, because in any given year, because of the conditions or changes we might make, where there's a chance to tickle out some of those uncertainties as what's affecting the different stocks as they're going through, we try to identify and change that as we go.

In the next chart, I just tried to show some of the examples of the immediate improvements we have made within the system. These are primarily since 1995. We put in spring and summer flow objectives. Basically what that is, we are trying to operate the river during the migration season to get as much water as possible on juvenile migrants, especially in the summer to try to cool that water whenever possible to help. We have made a lot of improvements in the bypass system. This is primarily that they want to keep the juvenile migrants off of the turbines, the most destructive way for the fish to pass through the system, and through the bypasses, the migrants can go back in the river, or they can go into transportation systems. Another way to keep juvenile fish out of the turbines is just to have spill through the river and keep the fish going inriver, and that may -- and we have different spill regimes, and actually this year I know there's a lot of discussion about the spill regimes going on, and would be going on this year at John Day Dam, and at The Dalles. Another way we can help is -- a lot of fish are transported and the Biological Opinion calls for transportation of much of the fish, better means of transporting fish. Lately, we've been trying to transport more fish through barges, less through truck transportation, and we're doing that especially because the Independent Scientific Advisory Board said that is a better means of doing it. Trying to operate the turbines if you do have juvenile migrants going through that system, the least impact on them is if the turbines are working as efficiently as possible. Biological Opinion says that to operate those turbines up to 1% peak efficiency. I also want to mention that we're putting in fish -- the Corps is putting in fish friendlier turbines. There's one going in right now at Bonneville. There are several more on the way. I just wanted to mention those real quickly, especially. I probably don't have to to this audience, but tell the audiences what -- to let them know that there are things that we are doing immediately. We are making major modifications within the system. I mention the gas abatement program here and we're putting in lips that -- for spill at many of the dams. We put in spill deflectors at John Day. The idea is to limit as much as possible the total dissolved gas. I've put down extended length screens; that's a way in which you can get fish to go either through the bypass system so they can go into either transportation or back inriver. We have new monitoring facilities at many of the

projects, to help identify what's occurring at the project, for the different species that are listed, or through some of the experimentation that's going on. It gives us a better idea of what's happening under different conditions. A major modification was relocating the juvenile bypass system at Bonneville Dam. The idea there is when the fish do come out of the bypass system, to make sure they're not in an area where there's not much of a flow, and would have a lot of predators like northern pikeminnow, also called squawfish. Instead, the bypass system is putting them into the area where there is a much higher flow and less of a chance of predation. But again, all these are just illustrative of some of the major modifications that have been put into it. Information that we have been and we continue to look at is the inriver survival of fish as they're going through the system. We also compare that to transporting fish between the different stocks. You know, every year is different, depending on flow regimen, involuntary spill, and what we're doing, you're gonna have different numbers of fish that are gonna go inriver and be transported, and you know, what's occurring when you look at all of that together? Also, you can add some of the effects that are going on with the new technologies, some of them that I mentioned before, and it will give us an idea of what's the survival under the current system, and under changes within the system. One of the other things that the Biological Opinion asked us to look at is drawdown of the dams -- to do a study on that. You are all probably aware of the study that's going on on the Lower Snake River, and especially in the 1998 Steelhead Supplemental Opinion, we ask for a look at the drawdown of John Day Dam, what Stuart was saying under those methods. Why drawdown? Well, one of the reasons is drawdown does well -- faster water velocities in a given flow and that does relate to fish travel time, and at least for fall Chinook, faster travel time tends to promote juvenile survival. There are some other benefits, not just mainstem travel time. A drawdown of the pool would provide for rearing habitat, and the Independent Scientific Group, which is now called the Independent Scientific Advisory Board, and that advises both NMFS and the Northwest Power Planning Council, said in their report, "Return to the River," it's one of the things that you should look at. In the areas for upriver Brights which you have fish that are doing quite well, rearing primarily in more normative conditions that you could get through drawing down pools, such as John Day Dam. So, they said that's one of the things that we should take a look at ... It also could provide other benefits, and one of them would be more rearing habitat, and some of the studies have said that one time -- it has been estimated that 30,000 fish have reared in the pool at John Day Dam, so that's another benefit. I do want to mention, on the rearing habitat that that would be for upriver Bright fish and not listed fish, so it would be a benefit for salmon, but not those listed under the Endangered Species Act. Excuse me, that was for the spawning habitat, if we could -- no, that's okay. Finally, I just wanted to mention one thing beyond here. Some people are saying, well, so if you drew down John Day Dam, would that bring back the salmon? And I think that's a good question. Actually, when you look at it, you can't look at it from just the project basis. Many of the fish, the Snake River fish have eight dams to go through in this system. Some of the steelhead

on the Columbia River have nine dams, not all of them federal, so, you know, you would really be looking at a number of things going on at any one time. You probably would be looking at 4 H's and a group of things, of what you could do for fish. In this case, if you're looking at primarily mainstem passage, you're really looking at a cumulative impact of doing a lot of this together, but, you know, as I want to say, if basically that's all -- all of that would be involved in basically what this study was intended to do. Stuart ---

Stuart Stanger: It takes just a minute to change files here. I don't need to tell any of you that that is John Day Lock and Dam. What I'm going to talk about here real quickly, and it takes me about 10 minutes to get through this. I'll move through a lot of it much quicker for this audience because you folks live very near the project and know probably a lot more about it than I do. We're going to describe what the project provides. What does John Day Dam do now, and then you just need to realize that all of that is at risk. I'm going to describe to you what we are doing in the study, what the purpose of the study is, and talk to you real quickly about the schedule, and then how you can best become involved. Again, I don't think I need to tell you folks where John Day Dam is, so you can move on, Dawn --

Again, this is John Day Dam. Currently, the way that we would draw John Day Dam down is to remove that spillway, navigation lock, and probably a portion of the north embankment there in order to pass the flows. John Day Dam is one of two dams on the Columbia that provide flood control. John Day Dam provides 500,000 acre feet of flood control storage. That's one foot of water on 500,000 acres. It provides 2200 megawatts of power, about 9 million tons of cargo go through the navigation lock annually, and there are 14 recreation sites along the John Day pool. Our, I should say, my senior technical lead person, Chris Ferguson, was unable to be here tonight. She would normally be back there to answer questions on recreation. She did say, if any of you have specific questions, we have a sign-up sheet back there and I would ask you to just leave your name and number, and she'll contact you as soon as she is able, and will either meet with you or answer your questions over the phone.

There are 29 irrigation pump stations along the John Day Pool. Several people use water out of the John Day pool for municipal and industrial uses. Both Irrigon and Umatilla hatcheries use water out of the aquifer; so does the city of Boardman. That is all at risk. The Umatilla Wildlife Refuge is at risk. There are approximately 35,000 acres of land and water managed for wildlife along the John Day pool. The fish passage facilities that currently exist at John Day -- that's the ladders for the adults and the downstream passage facilities -- they would all need to be modified. Okay - so Phase I is all we're doing. What is Phase I going to do for us? It's gonna answer this question, I hope. Is it appropriate to continue further studies of John Day Dam? That's the big question that Phase I is intended to answer. Phase I is not intended to answer, should we draw

down? It's a question of whether or not we even need to do feasibility studies similar to what they're doing on the Snake River. We know that that study, if we do Phase II, would take four to five years to complete and would cost approximately $20 million, so the Corps of Engineers proposed that we do this in two phases because, as you know, several years ago we were looking at a drawdown to minimum operating pool, commonly called MOP. We looked at that and developed a lot of information as part of that study. We felt like that information, added with a little bit more that we are going to obtain through this study, we could maybe make a recommendation to Congress about whether further studies are necessary. If Phase II is authorized by Congress we will develop a scope and that will be a public developed scope. We would need to comply with NEPA. That requires public scoping meetings, so you can all come back and we will have another meeting and talk about what Phase II should look at. But, Phase I -- this is very important, Phase I is only trying to decide whether drawdown is something that needs to be considered further. If a Phase II study were done, it would look at drawdown, versus transportation, versus surface bypass, versus some of the other things that Eric mentioned that are being done on the river. It's drawdown versus other things, if you will. Phase I is just trying to look at whether drawdown is a viable option that's even worth considering. Okay, in Phase I the alternatives we're looking at are natural river and spillway crest, and I'm going to explain that. Dawn, if you'll go to the next slide. We're looking at both of those levels with and without flood control. If I can find my pointer. Maybe some of you picked up this diagram. We normally operate at elevation 265 right now, and we can draw down to elevation 257 in preparation for a flood to come down river, so we can store water from elevation 257; we can actually go up to 268 and we can store water, and then release it slowly to downstream so that we prevent flooding downstream. Spillway crest is one elevation we're looking at. The actual spillway crest is at elevation 210, and we anticipate we would have approximately 5 feet of head over the top of that under normal operation. If we were to provide flood control we would lower the spillway gates, store water about 30 to 40 feet, and that would provide flood control. Without flood control we just open the gates and let the water go, and whatever comes into the John Day pool goes downstream. And natural river normally would operate at 165 and without flood control, whatever came down would flow through the dam, through that removed spillway section. If we are to provide flood control at natural river we would basically have to reconstruct the spillway that is now at elevation 215; we would have to reconstruct it down here so that we could stop the flood water as it came down. So, there are really four alternatives that are being looked at in this Phase I study; the spillway crest with and without flood control, or natural river, with and without flood control, and we will develop four cost estimates.

The purpose of the study that we proposed to Congress was to evaluate the impacts to fish and wildlife. We said we would evaluate social and economic impacts and finally, we would provide a recommendation to Congress, and Congress agreed with us, that that's what we should do. So,

how are we going to look at the fisheries and wildlife impacts? When we were looking at drawdown to minimum operating pool, we began several biological studies, and then Congress stopped that study, and stopped all action to draw down to MOP, and so we stopped all the biological studies. We are going to re-initiate those; in fact, a number of them have already been re-initiated. We're going to finish those and we will have that data available. I'm sure a lot of you have heard about PATH, a Plan for Analyzing and Testing Hypotheses. We will be using that same process they're using on the Snake River. We will have some runs made for the John Day drawdown. A new item that we proposed in this study, that we proposed to Congress, is the formation of a Planning Aid Team. You can join that Planning Aid Team and if you sign up, and there's a sign-up list back here. If you want to sign up and participate as a team member you will be provided all of the biological information that's gathered; you will be invited to attend meetings that are held, and you will be able to put your two cents worth, if you will, as to what you think that biological data tells us. You will be joined by the PATH members. Also, there's a Planning Aid Letter that's a normal part of a Corps study. It is provided to us by U.S. Fish and Wildlife Service. That's why we have representatives here. They put together this letter and send it to the Corps of Engineers, and they will tell us what they believe the fish and wildlife impacts are and what we might be able to mitigate for those impacts, so that will be provided for this Phase I study. How do we look at the social and economic impacts? We are going to look at the cost to replace all of those things that would be impacted, and in this community I'm going to pick the irrigation as an example. If I drawdown John Day pool to spillway crest, there are 29 irrigation pump stations that will not work. They won't have any water at their intakes, so what would it cost to make them work? We will look at alternatives of what we could do to replace that, and that would be the cost for replacing irrigation. We will do that for hydropower, for navigation, for flood control, for the 2000 private wells that could go dry. We will develop a cost estimate, so as indicated before, we will have four different cost estimates, one for each of the alternatives, so we will know of those four what the minimum cost would be to have a drawdown. We will do trade-off analysis. Continuing on with the irrigation example, if I picked an irrigation pump station, it may be a simple matter of constructing a new pump station down by the new river, and maybe that's how I replace the water for that farmer. Another option that we're considering is canals down each side of the John Day pool, so you basically have three rivers running down from McNary to John Day. You would have a canal on the Washington side, a canal on the Oregon side, and then you'd have the mainstem river which contained the fish flowing down the middle. So, we will look at what will it cost to dredge a canal down each side of the channel so that irrigation could be taken out of that canal. So, we'll compare that to what it will cost to replace the pump stations with new pump stations. Whichever one is the least cost, that would be the recommendation if that option were selected. We will consider employment effects, and quality of life. We have an unique opportunity in this study -- one of the comments we have received at several meetings is that the Corps of Engineers normally only looks at national impacts and that

we ignore regional impacts, and that's a true statement, that's normally what we do. We have an opportunity in this study that we can consider the regional impacts and that is some of the information that we have collected in a couple of the communities already. If you have done economic studies and you are willing to share those with us, that would be greatly appreciated. Just some other things that we will be considering -- I mentioned earlier the adult and juvenile fish passage facilities at John Day would need to be modified. At least the adult facilities at McNary would also need to be modified if I draw down John Day. The ladders would not be deep enough in the pool. There are approximately 37 utilities adjacent to or in the John Day pool that we would need to look at. There are some 360 cultural resource sites that were covered with the pool that will need to be examined and protected, recovered. Some measure will have to be taken. Water quality is a major concern, both temperature, turbidity, and contaminants. Hazardous and toxic waste sites, potential sites -- we will identify sites that we inundated with the pool where we maybe were not as sensitive to hazardous and toxic waste. Now we're more sensitive to that. We also know that the sediments that have been deposited behind the John Day pool contain contaminants and exposing those contaminants may not be a good thing to do.

Our schedule: We will have a draft complete in September of this year. We began last October - October '98. We will have a draft completed in September '99. We will send that out to anyone who signs up on this list tonight. You will get a copy of it. You will be able to review and comment on that report, and then we will look at your comments, make whatever changes are necessary to the report, and we will make a recommendation to Congress in December. We have had public meetings already in Alaska, in Helena, Montana, in Lewiston, Idaho, in Portland. We're here tonight and we will be in Pasco on Thursday. We've also received requests to hold a couple more and we probably will hold more. So, we are interested in what you have to say.

In summary, the Corps will only be making a recommendation to Congress regarding further study in December. We will not be recommending whether or not John Day be drawn down. Congress will make the final decision whether or not to do a Phase II study. Without additional authority and money, I won't do anything on John Day. Now, how do you get involved, again, the Planning Aid Team sign-up list should be at the table when you leave, if you want to participate, sign up on that. When you get the copy of the report in September, please provide your review comments to Col. Slusar. You can, at any time, send Col. Slusar letters and he brings them right over to my desk, and if you want to write letters to other agencies or congressionals, you should do that.

Again, what we're gonna do now is we are gonna open this up to public comments and questions, but before I do that I just want to make clear that we understand this is a very sensitive issue. These meetings can become very controversial. I am not here to convince you of anything. We

don't know what our recommendation will be. Hopefully, I will know more in September, but tonight I don't know what the recommendation will be; we're going to gather the facts. We're not timing any of your comments. You can get up and talk as long as you want, theoretically … everyone may go home. But we would just ask that you be courteous to your neighbors. You know, there's a room full of people here, and if everybody takes a couple of minutes to talk, we will be here a long time, and that's okay. We're prepared to stay here and answer your questions, but we just ask that you be courteous. I also want to point out -- this team -- we have asked them to keep their personal opinions out of the study, to look at the facts. They're doing a very good job at that. They'll answer your questions as best they can. If I can't answer them, I'll call on one of them, but we just ask everybody to be courteous of one another and with that we'll turn the lights on and open this up to questions. If when you get the mike, you would tell us who you are, and if you represent an organization, that would be greatly appreciated, then we can have that for the record. Let me see if there's anything else I need to mention. I think that's it. With that …

George Hash: I'm George Hash, Mayor, here at Umatilla, and I do want to welcome you and all of the rest of … I'm glad to see such a good turnout here, but I would like to ask a few questions and I've given these questions to Dawn Edwards and she has assured me that she will get me the answers back to them. The question that I would like to know is what studies have been made between the declining -- the decline of salmon in the Columbia River and in the other coastal streams in Oregon. Let me make just a brief comment on this. When I was a kid, and this was in the late 30's when we used to hunt up the Kilchis River and where we camped we had to wade the river to get over there, and the salmon would knock us down if you weren't very careful, wading across that swift stream. They're not there now, and there's not a dam on that river, never has been. Another question I would like to ask is what is the salmon catch in the ocean during the last 75 years, and what I'm talking about there is, what was the salmon catch, the total amount of salmon that was caught 75 years ago, and as far as I know it, at that time, when I was a kid, there was only one other country fishing it and that was Japan, and now, I don't know how many there are, probably a dozen or more, and what I'd like to know is the amount of fish that is taken out of that ocean that never get a chance to come back here. We send our smolt down but they don't come back, and so we blame the dams; I don't know. Another question, what studies have been made on the effect of the warming temperatures in the ocean, and I know we have been reading recently about some biological studies that have been made on that, and where the ocean waters warm up, it does not produce the food that is necessary for salmon to produce. Last question on my questions is what studies have been made on the salmon kill by sea lions, and seals, and predatory fish and birds. When I was a kid no fisherman ever left Waldport or Tillamook Bay or Coos Bay or any of those without a rifle on board. You know what that rifle was for? It was to kill seals and sea lions, and they kept them in check, and now, if you've seen

recently over television they are running over the docks down there in California. I believe that we're missing many of the relevant factors in the study of our salmon decline, and I think these ought to be taken into account before we destroy our economic … our economy up here in this part of the world. As far as Umatilla is concerned we've got a new well, a new Rainey well system. We've just got it down. It's being tested right now. We might as well plug it if they drop that dam because we won't get any water out of it. Our marina will be dry. All of you -- I think you saw a picture of our marina; I'm not just sure, but anyhow, it will be dry and along with that our recreation facilities for your fishing, and for your hunting, and all of the other things, in addition to the nesting sites that will be destroyed for our ducks and geese that come here in the summertime to nest. Waste water affluent that goes out into that river, if they drop that river, I'm not sure what it would do, but it may cost us a complete new system and we are just now putting in a $10 million system, it not -- that is being constructed starting this spring, for that project, and we will have been wasting that amount of money. Add to this the entire economy that is dependent upon irrigation in our area, and I think that most of you are here tonight because of that problem that you will face, along with our port transport system and this has been mentioned already, and there is already mention of the fact that many industries are not interested in locating here at the present time until after this is settled, and as a result of that we're going to have to live on the low price jobs that our farm economy gives us and if they take that dam away we won't even have that. And I sure want to thank you for my time.

Stuart Stanger: Thank you for the comment. Those questions are in my book and we will get answers to you. I know none of my team can answer those questions tonight, and neither can I. but all of your points are good and you are absolutely right about your Rainey well, your outfall and your port. They would all be impacted with a drawdown.

Kim Puzey: My name is Kim Puzey; I'm with the Port of Umatilla, and I've got a statement that I'd like to put into the record. It's long and uses big words, but what it says is this study is a waste of time and money and the second study would be even worse. Thank you.

(Clapping from audience).

Stuart Stanger: Yeah. Make sure I could -- I knew I could get an applause if I waited long enough.

(Laughter). Anyway, make sure we have a copy of that. I see he has given it to Dawn, thank you. Anyone else? Come on, I know there's lots of questions out there. It's just a microphone -- --

Gary Neal: My name is Gary Neal and I'm the General Manager of the Port of Morrow, and I appreciate the opportunity to make some comments tonight. The Port of Morrow along with the Port of Umatilla, the Port of Arlington, and the Oregon Economic Development Department did an economic impact study in this region in October of 1998, and it's tied primarily to the use of the river system and focusing substantially on the John Day reservoir because of the discussion about the potential drawdown considerations. There are some components in here I'd just like to touch on, but I've also -- I think I submitted this to your economic people to take a look at, but just for your information: economic contribution for farm production, food processing, irrigated agriculture and transportation components on the river system here, and this three-county area equals about $1.62 billion in value a year and creates about 16,850 jobs, 52% of the total employment of the tri-county area here, so we're talking about a big issue and this economy -- this is the lifeblood of this economy. I wanted to touch base on some of the transportation components. For example, we're talking about 1.8 million tons of commodities, which go up and down within the John Day pool, besides the transportation that comes through the system. As you know, if you eliminate the transportation on the John Day, you'll eliminate transportation on the total river system, but this is just the local component. We're talking about 54,000 plus loaded trucks going down the Interstate system, and that's just the one-way component, and equals an equivalent to a reduction of 9,621,000 truck miles and 256,329,000 ton miles of truck traffic. We're talking about the tri-port water-borne transportation activity saved an estimated $12.8 million in that year alone in Interstate highway maintenance costs, and so on. You talk about the environmental impacts for moving to different motor transportation: you're talking about 25,171,000 pounds of nitrous oxide, 1,509,000 pounds of hydrocarbons and 4,506,000 pounds of carbon monoxide that would be emitted if you moved that product by truck. That's just on the local part, not the total river system itself. Some of the other things that the study didn't do that is important is that it didn't address the recreational component of our economy, and it didn't address some of the hydropower components that the total system, as well as the local power supply requirements if you take another 1400 plus megawatts of power generation in the local area through the gas-fired turbines in the … reservoir, the coal fired plant -- all are dependent upon the Columbia River for their cooling water as well, and in the economic conditions that go along with those businesses. So, I guess, in a nutshell, I agree with my counterpart that just spoke prior to me, except for I took a little longer to say it. We oppose any further studies. We believe this would just be -- would just devastate the economy of this area. Thank you.

Stuart Stanger: Thanks, Gary -- we do have your study. We got that a couple of weeks ago and I appreciate that.

Gary Neal: Okay.

Frank Harkgnridon: Thank you very much. I'm Frank Harkgnridon, the Mayor of Hermiston. Last night at the City Council meeting the City Council passed resolution #1542. A resolution opposing the drawdown of the John Day pool and opposing breaching of the John Day Dam; whereas, the social and economic disruption posed by a drawdown of the John Day pool, or breaching the John Day Dam is totally unacceptable to local communities and the region as the impacts to power, navigation, flood control, and recreation are significant and unacceptable, and whereas, neither the drawdown study nor the proposed drawdown action is supported by local residents or elected officials living in the area; and whereas, the Northwest Congressional Delegation should stop all further funding for any drawdown or dam breaching studies as it is wrong and poor public policy for the John Day pool drawdown study to be funded; and whereas, the Oregon and Washington governors should aggressively oppose any further drawdown studies or proposed actions, and whereas, the credibility of the Corps of Engineers as resource managers is rapidly diminishing by bringing forward these totally impractical drawdown studies, and the Corps must stop further work on any drawdowns, and whereas, the Corps of Engineers is wasting salmon recovery money by conducting the John Day pool drawdown study and is simply becoming a part of the salmon recovery industry. It appears their interest lies in operation money, not sound resource management, and whereas, the John Day pool drawdown study is a major distraction away from pursuing real salmon recovery. Now, therefore, be it resolved that the Hermiston City Council unequivocally opposes any drawdown of the John Day Dam pool below current operating levels and oppose breaching of the John Day Dam; passed last night by the Hermiston City Council and approved by the Mayor.

One other comment -- I went back today in the Hermiston Herald office and in September 28, 1933, take a little road down the history of all this. Congress gave a study to build Bonneville Dam. You know the reasons why they built Bonneville Dam. All 66 years of these dams for navigation, recreation, power, and everything else, the economy, for the farms, and irrigation facilities are going to be flushed down the toilet if you don't quit talking about drawing down all these dams and breaching the dams. Thank you.

(Clapping from the audience)

Stuart Stanger: Let me just say, thank you, Mayor; hopefully we can get a copy of that resolution. Got it.

Steve Eldrige: My name is Steve Eldrige from Umatilla Electric. We've always welcomed the Corps into our community. In fact, a lot of the things that are here are due to the Corps and I hope it's as painful for the Corps to consider undoing the things that we've built, as it is to us. I

think that this study is not warranted for quite a number of reasons. The first question I have is -- is there anywhere in the world that naturally spawning salmon stocks haven't declined dramatically over historical levels, or at least had tremendous cycles? Is-- has there been anything recovered by the Endangered Species Act? And if so, what's the total number and the percent of listing … that the system itself that's being followed has not had enough success to warrant following it again? Talking about flushing things down the toilet is really appropriate because Portland dumps 2 to 5 billion gallons of raw sewage into the Willamette. I wouldn't think that would be too good for salmon. When we talk about faster travel time tends to improve survival rates, how much faster does this velocity carry the fish? We don't know. What's the present survival rate through the reservoir? We don't know that. In fact, Oregon Fish and Wildlife has fought for about 10 or 15 years any pit tag detectors at John Day Dam so that we would know what the survival rate is. If you look at returning adults over Bonneville Dam, it's basically the same number as was when the dam was built in 1938. Now, we hear the argument that, well at that time, 85% of the returning adults were wild, and now 85% are hatchery. The fact still remains that the numbers are about the same at Bonneville. What happens to them? Nobody either knows or says. The PATH process. The way it's used now it looks only at hydro impacts. Anybody that looks at this system can't believe that a river system that's supported millions of salmon when there were 50,000 human beings in the Northwest, is the same system as it is now with over 10 million souls in the Northwest, and all the urbanization, the change in habitat, and on and on and on, the dams can't be the limiting factor. So, the biggest problem with proceeding is that we don't know any of the base information to measure a benefit. We don't know what fish are doing now and we don't know what they will do as a result of that. I think a more -- a broader problem is we don't know what we want in the region. We don't know if we want hatchery fish or if we want wild fish. We don't know if we want sustainable runs or we want harvestable runs. We don't know if ocean harvest is a problem or if inriver harvest is a problem, and we're not willing to make the hard decisions and until a unified plan for the region is available, this is a total waste of effort, and will be done many times over until an overall plan is available, and one last comment -- if you do this silliness, and you put a pump in the floodplain, do you think it will work?

(Clapping from audience).

Stuart Stanger: Bob, do you want to talk to any of the studies that are going on now? Concerning survival?

Bob Willis: Sure. I did want to mention that we do have pit tag detectors now at John Day Dam so one of the things that we will be able to answer is what survival is through that river reach.

You made some very good comments. There are some things that we are going to be including in the study.

Steve Eldrige: One thing that puzzles me is that we will take this pit tag information on a year-to-year basis and accept it as valid. Yet, the pit tag detectors and the count of returning smolt for Snake River fish have determined over the last five-year period that returns are as good as they were before the development of the Snake River. Why isn't that put in our assumptions to drive these kinds of studies?

Stuart Stanger: Yeah. All I can comment on is that I've read probably the same stuff you have about the numbers that were reported a month or so ago about the returns, and that will be considered. One thing that I'm hearing -- I think the mayor mentioned and I've kinda picked it up out of what you're saying. There are more things impacting the fish than the dams. We know that, but the dams are one thing that does, and we won't have any of the answers to anything, including the dams if we don't do some of these studies. I would personally agree; we need to look at harvest and hatcheries and other things and you need to have a plan, but one of those elements is the hydropower that we have to look at. It's the dams, and the Corps of Engineers -- let me make sure -- I'm going to protect the Corps of Engineers here a little bit, if I can, is -- the Corps of Engineers doesn't do anything, nothing, unless Congress tells us to, and gives us the money to do it. The Corps of Engineers does not dream up any study, and say we want to do this study. That's coming out of the region. Congress decides whether or not we can do that study. Congress told us to scope a study. We did that a year ago, and then in October they told us to implement that study, so we kinda do what we're told, whether we personally agree with it or not, but that's just a little bit of defense of the Corps. The Corps is not proposing to take away your irrigation pumps or to draw down John Day Dam. Congress looks to the Corps to be the fact-finder, and to tell us the honest truth, as best we can. I could come to this meeting tonight and it's clear already that just as I would have suspected, most people here would be opposed to the drawdown, but when we went to Juneau we had just the opposite audience. So, there are facts to defend each argument, and the Corps -- these folks are tasked with sorting through all that information and using their best engineering judgment as to what the options tell them should be done. With that -- comments, questions.

Barry Beyeler: My name is Barry Beyeler and I'm with the City of Boardman, utilities and natural resources manager, and I'm here at the request of the Mayor of Boardman, Thomas Myers, and the Council to read this into the record. "The City of Boardman appreciates the opportunity to provide these comments to the Corps of Engineers, concerning the impacts of alterations to John Day operation. The City of Boardman made a rather courageous decision in 1974 to develop a water system that is dependent upon the Columbia River as source water, to

provide for the residents of the community, past, current and future. This decision was based upon the promise of the federal government, U.S. Army Corps of Engineers, and the United States Congress that the John Day Dam pool elevation would not be lower than 257 feet above mean sea level. The system was designed to effectively work within the operational limitations set forth and has been the city's sole source of water for over 20 years now. The system has met or exceeded water quality criteria set forth by the United States Environmental Protection Agency to meet public health protection standards. This system now stands in a position of jeopardy that may threaten the long history of public health protection. This would be done by either creating difficulties in meeting the standards or preclusion of meeting those standards by eliminating the aquifer characteristics that are so vital to the quality of the water served to the citizens of this community. Through the discussions, debates, disagreements, and deliberations on how to save some salmonid stocks in the Columbia and Snake river basins, it has become apparent that environmental laws enacted to protect the very environment in duress have been willingly and knowingly violated. These violations have become routine at the request of fisheries' managers that have continued to set harvest rates for the intentional killing of the salmon that are struggling to survive. Each year since 1994, spill waivers have been obtained that allow for violation of the Clean Water Act, the nation's principal water quality law. Waivers for gas supersaturation levels of 120% have been granted annually by the states of Washington and Oregon since 1994. The Clean Water Act standard of 110% is known to cause problems for the fish that we are attempting to save. Additionally, the U.S. EPA dioxin TMDL is violated during the fall and winter months when the mean flows cannot be met to prevent dioxin concentrations from exceeding the TMDL set as a public health standard. Dioxins are known to cause mutations in the fish populations and are known bio-accumulators. In 1993 and 1994 the city performed microscopic particulate analysis samples of the city's water supply as directed, under the Safe Drinking Water Act, and found disturbing results concerning non-chlorophyll possessing micro-organisms, mostly associated with benthos (benthic) organisms which are lower food chain organisms. This data was brought forward and to date, still appears to be the only data of this type in the John Day pool. Why should the City of Boardman have the only credible data of this type although obtained for an entirely different purpose, the protection of public health, when these are basic food chain organisms that the salmonid populations are dependent upon? Proposals to remove dams on the lower Snake River present a scenario that should be of concern to all citizens and fisheries' managers. There are known deposits of radionucleides in the sediment column behind McNary Dam. Additionally, a strong case could be made that other contaminants are also entrapped in the sediment column. However, the projected 150 million cubic yards of sediment that will be transported into the McNary pool should the lower Snake River dams be removed, will require dredging and re-suspension of those sediments in that sediment column. Again, there are known, and more importantly, there are unknown public health risks and contaminants known to cause mutations in the very listed species we are attempting to recover. However, study of

these particular elements and the effects on the fish population and human population have either been disregarded or ignored. The city is also privileged to have the Umatilla National Wildlife Refuge as a neighbor and a land-owner of the community. This brings with it a rather diverse wildlife community that the residents of this community cherish. However, in the attempt to recover listed salmonid species, other similarly treasured species will be put at risk. It would seem somewhat irresponsible to put all other species at risk for the ostensible benefit of a single species. These include the vibrant migratory water fowl populations, shore birds, including herons and egrets, upland game birds, and mammals such as deer, and others. These wildlife resources appear to be expendable in the continued push from those set on the removal of dams and the resulting destruction of current wildlife habitat which includes wetlands. When the negative impacts on economics, navigation, flood control, power generation, and recreational aspects with the removal of the John Day Dam are added to the negative and questionable ecological benefits, the removal of the John Day Dam would seem totally unthinkable from any rational viewpoint. To continue with the charade that has prevailed when there is so little understanding of the impacts of the majority of the salmon's life cycle, it would seem that any decision made is questionable at best and disastrous at worst. Issues such as ocean conditions, predation, harvest methods, and total take, adult return migration and others are barely understood if understood at all. Can improvements be made to aid in salmonid recovery? The answer is yes. Should those improvements be made? Again, the answer is yes. Is dam removal a viable option. The answer is an unequivocal no. Thank you for the opportunity to comment on this very important issue."

(Clapping from audience).

Stuart Stanger: Thank you, I have a copy of that letter and your test results, so - yeah, thank you.

Judy Rea: My name is Judy Rea and I'm president of the Oregon Wheat Growers League. I would like to address the gentleman that is studying the transportation portion of the DREW. Is that right? Our recommendation is to be very careful of the cost as to replacing barge travel. A Terry Whiteside report rebuts the railroad claim of cost per unit train. The Wheat League contends that it will not be the cost, it will be what traffic will bear, and with wheat being at $3.10 a bushel, our cost of transportation to Portland today at 40 cents a bushel, that would more than double and at $3.10 there just won't be any wheat raised in the area or grains. Umatilla being the top wheat producer in the state and Morrow County being second wheat producer, those commodities will just no longer exist. Also, in Tennessee this month the National Association of Wheat Growers League voted resolution to stop the harvest of any endangered species.

Stuart stanger: Yeah -- thank you for your comment. No one on this team is involved with that Snake River study and the DREW team, but I'll make sure that comment gets to them. That's being done out of the Walla Walla District. The DREW that she mentioned is the Draw Down Regional Economic Work Group and they are heavily involved in the Snake River study. We do not have such a group, but we'll make sure that comment gets passed on to the Walla Walla District, so thank you. Other comments, questions?

Fred Ziari: Colonel, welcome to Umatilla County. Ladies and gentleman of the Corps and the NMFS, I welcome you to Umatilla County. My name is Fred Ziari. I'm here on behalf of Eastern Oregon Irrigation Association which has irrigated about 200,000 acres of irrigated agriculture in Eastern Oregon, mainly in Umatilla and Morrow County. I'm also an irrigation engineer involved in design of larger scale pumping stations, river stations, so I know those things very much in depth and detail. I just want to say something. As the old saying goes, that this is not your father's Oldsmobile. John Day Dam is not your Snake River dam or like any others. Tremendous as -- Gary Neal talked about $1.6 billion of the food product goes out of this area. The majority of it goes as an export to the rest of the world. It's a huge, huge food production machine in this area, and we -- I won't even ask a raise of hands how many people here think dam removal is a dumb idea. Maybe I should. (Laughter) But, our population of the world is going to double in 20 years, somewhere around 10 to 12 billion people, and we need to balance our fish restoration effort with food production effort. There's no question those things are in conflict. Especially Eric with NMFS, with the fish people, that are more involved in the fishery aspect of it, and we appreciate that. We appreciate their effort, but we need to have a good understanding what we do is very very worthwhile. We have 50,000 people a day die of starvation -- a day -- die of starvation, and we are putting $1.62 billion worth of food product in jeopardy. We had this discussion with Stuart and his team in detail this past month or so, and we raised the issue, and I'm glad they mentioned, even the discussion of these things put our community in risk. We also are a community, probably the only community that have had meaningful fish recovery. Our farming community got together with the tribe and the federal agencies and we worked together and we brought salmon back, and those kinds of programs are what you and us need to do together rather than doing all this wild ass ideas that are not going to produce any result. You know it and we know it. And, now I get back to the question and I hope Colonel, you make, you and the General, and maybe some people sit down with our farming communities in Oregon and Washington, and have a meaningful dialogue about fish and salmon recovery and I hope you have the invitation of NMFS. We have proposed, and I hope my friend, Darryll Olsen here mentioned it. We have proposed meaningful salmon recovery in the John Day pool, and we have presented that to the National Marine Fisheries Service, and we are not getting anywhere, but those are meaningful salmon recovery in the John Day pool, and in other areas, and we are capable of doing that. Let me encourage you to take that aspect of our request seriously. Now, I have several

technical questions. Stuart mentioned about the two canals or three rivers. The two-canal concept was our company -- my company -- did this study and we came up with the concept of recovering, of helping in recovery by proposing putting the canal on the Oregon and Washington side. That, however, should not be part of your consideration on the John Day provided that only is valid if you do not touch McNary pool. But, since McNary pool is also under consideration of studies and further drawdown scenarios as was proposed about a month ago we read, I propose that that should not --that canal system on both sides should be scrapped because that's not a very reliable source of water if McNary pool is going to be in any kind of further consideration for drawdown. That would not work. The second thing is, we propose that the study as part of our effort -- the farming community in Oregon and Washington, the utility companies, and we funded it ourselves, and we have done it in a so-called farmers' budget, not the federal government's' budget, so I would put a multiplier of three or four because that's what needs to be involved, and I'm serious about that. I have mentioned to Stuart that we have done, in 1994, I believe, we have hired a team of biologists to do a biological impact of draw down on the Umatilla Wildlife Refuge. I believe we provided that study to the Corps but neither they or I have a copy of it, but I look over -- I don't know if Darryll has a copy of it, and we will try to give that to you as part of your consideration. You have mentioned about 2000 wells. As far as I know there has never been any studies of the impact of -- because they are hydraulically connected to the Columbia River they are -- they need to be -- I don't think you're gonna have a time to study, because it has never been studied before, so I don't know how you're gonna handle it. That's lots and lots of wells. For the last 10 years everybody talked about John Day pool; let's bring it to minimum pool; that's what NMFS wanted; that's what the fish managers wanted; minimum pool, which is lowering of only 7 feet instead of over 100 feet of drawdown that they're talking about. And under 7 feet drawdown -- you know -- we have done this study which showed that over 95% of all of the pumping stations in Oregon would be totally disabled. Now, that being said, and I'm very familiar with it, I have no idea how you guys gonna come up with a solution putting a pumping station there, because if the canal is out, you need to buy the farms and basically what you have -- came to the same conclusion in the Snake River -- that the best pie out is the buy-out of the farm -- that's probably sad to say -- that's the conclusion you're gonna come up with, because I don't know how you're gonna handle the sedimentation problem in the John Day pool, because that's very very serious. And also, I was gonna mention that for the last 10 years everybody talks about John Day pool lowering 7 feet to minimum pool. As far as I know -- I was gonna ask the gentleman from NMFS, that is still in your Biological Opinion, isn't that true? The minimum pool.

Eric Ostrovsky: Within '95 (not audible).

Fred Ziari: Correct. And that is your Biological Opinion that you base your recovery plan. Correct?

Eric Ostrovsky: Yes -- Biological Opinion, but it has been superseded. The Corps and NMFS have looked at that. We no longer agree that should be done. One of the things in the Biological Opinion, that's the '95 opinion ... it was realized that when that Opinion occurred there were a lot of things going on in a very complex system, and that things could change, and that's one of the reasons why there has been a lot of collaborative work between agencies, fish and wildlife managers, etc., so, you know, that it has changed over time is not that surprising, that they no longer would be looking at it.

Fred Ziari: But, it's still in the plan?

Eric Ostrovsky: NMFS -- there has been an agreement; they're not looking at----

Fred Ziari: Have you let the public hear -- know that you're not looking at that? As far as I know, I never got a letter that says you are not looking at that. But, that's not part of the plan. Well then, trying to get at whatever it is in the Biological Opinion, we are really -- that doesn't mean that's the right thing to do, because for the last 10 years we have fought endlessly to say that bringing it to minimum operating pool doesn't mean anything, and I'm glad you agree with us. The other aspect that is really bothersome to us, causing us grave concern, is the attitude of National Marine Fisheries Service toward irrigated agriculture. As I said, this is the most important thing that a human being can have, availability of food, and here's what NMFS says in the Biological Opinion that the title of it is -- this is in Chapter 5 of Many Stream Passage. The Corps -- you are directing it to the Corps of Engineers -- the Corps and the state water resource agencies -- now we are getting into the state water policies -- the Corps and the state water resource agencies should not allow new water withdrawal permits that result in a net loss of flows and should review existing water withdrawals that reduce systems' ability to meet flow objectives. That is what is concerning our community, Colonel. That not only deny everything; it doesn't matter if the city -- of my friend George Hash -- they have a prison being put here. They need water for prisoners and you are denying water to the prisoners which may not be a bad idea (laughter), but I didn't know … (omission here when starting new tape) … really, really difficult in our communities and I hope you heard our communities' voice and you take that into consideration. I don't think, Stuart, with all due respect to you, in Juneau, Alaska, I believe there were 10 people attended.

Stuart Stanger: Yeah, about 10 or 12.

Fred Ziari: You did not have five mayors, four or five city managers, a county judge, and whole communities attending and saying, "Hell, no." This is not the same thing, and I hope you have considered that seriously. Thank you very much.

(Clapping)

Stuart Stanger: Yeah, thank you, Fred. We have worked with Fred on a lot of things, and all I can say is, I don't think I heard Fred say anything that was incorrect, so, he's absolutely right, there are huge impacts to this area with a drawdown, so thanks, Fred.

Darryll Olsen: My name is Darryll Olsen, a resource economist with the Pacific Northwest Project, located in the Tri-Cities. I am here tonight representing the Eastern Oregon Irrigators' Association and the Columbia-Snake River Irrigators Association. I have two questions and a couple of statements I would like to make. I think the questions can be answered tonight. The first question is directed to you, Stuart, and that is -- I would like to hear what is the criteria that the Corps is gonna use to move from Phase I to Phase II. What criteria are you going to use to make a recommendation to Congress about whether or not you should proceed to Phase II, which would be more extensive studies of the John Day pool drawdown?

Stuart Stanger: Let me try to answer that. I get asked that every meeting we have, and I don't have the exact answer. We're hoping that either a black or white answer will become apparent as we proceed through Phase I, and let me give you an example of what a black and white answer might be. Through the PATH process and through this Planning Aid Team that we're forming, they may tell me that there is a 25% probability that salmon recovery would occur if we draw down John Day Dam, 25% probability, and we may say that there is a $3 billion cost associated with that, and I personally would say that's not very good odds. I would not recommend further study. On the other hand, they may say there's a 90% probability that we could have salmon recovery and the cost might be $500 million, then I'd be more inclined to buy that. What I'm afraid of is that we will come out in the middle somewhere, and then fortunately these guys wearing uniforms in Washington, D.C. will have to make that decision. I can see a gray answer, if you will, a recommendation where the Corps says we think this is what the cost will be and we're real comfortable with these cost estimates, but there is still uncertainty about what the biological benefit would be, and therefore, to Congress we may recommend that we do some more biological studies, but nothing else at this time. That would kinda be a gray response. We're hopeful that a black or white answer will come out, but I don't know that at this time. Does that help answer?

Darryll Olsen: So, at this time you don't have any criteria to make that decision.

Stuart Stanger: No, I can't say that we've gotta have 50% probability and a billion dollar cost; we haven't established any criteria like that. No.

Darryll Olsen: A second question is directed to Eric, National Marine Fisheries Service. You have indicated that you're gonna rely heavily on the PATH process for biological benefits and much of the criteria, much of the decision-making on this, is gonna depend on biological benefits. The PATH process has not led to a smooth even consensus of scientific opinion. It has led to a very contentious situation and there are major groups from the University of Washington and from others, I think even including some of your Mon … people that are disagreeing with the PATH results or are unsatisfied with those results. How are you gonna be able to provide viable credible information on biological benefits if you are relying on a highly contentious process that is losing credibility rapidly in the region?

Eric Ostrovsky: Well, first of all, the PATH process was provided through the Corps on how they're going to conduct this study and go through the stages, and Bob, I think, could give you a better idea of the information that we're gonna be looking at, the biological information that the Corps is going to be looking at in Phase I of the study, but it's more than just the PATH process and it's a number of studies that have already been going on. There is some new information that they're gonna look at out there, too, so, you know, I would feel more comfortable if the Corps sort of gives you a list of everything in the Phase I study because they're the ones who will actually be conducting that.

Stuart Stanger: Yeah, the Corps is the one actually doing the biological studies, and we are going to use this PATH team. If there is one area of concern about my schedule, it is the PATH process. That's one of the reasons we are implementing this Planning Aid Team, and we are using other modeling techniques, and Bob could get into those if you want those details, maybe after the meeting. When we break up you can get the specifics on that, but we're going to use more than PATH. We are hoping that PATH comes through, and when I say PATH, there is a group. We're hoping they come through and comply with our schedule. If they don't, I will have to deal with that in September, whether or not we end up slipping the decision, or a recommendation to Congress, I guess it would depend on how long they told us they were going to take, but right now, we think we have them on board. I agree with you, it's still very contentious; we're hoping that some of that is resolved before we have to use the information, but I can't guarantee that. We may have to deal with that in September.

Darryll Olsen: Okay. So you're well aware of the problems with PATH.

Stuart Stanger: Yeah, while I'm not personally that involved with it. I count on this guy. There's too much to keep track of. I know you guys can't keep track of it, cause I can't and I work with it every day, so there is a lot of information -- I don't know the specifics but I know there's problems.

Darryll Olsen: Your study is going to depend heavily on the assurance and the credibility of your biological benefits, otherwise, it's gonna fall apart very quickly.

Stuart Stanger: Yeah, absolutely, recognized. Let me just add one more thing -- we know this study is not going to have all the information. We know that in the … studies we know that habitat studies … we know that more detailed economic studies … a lot of studies would have to be done before you would ever make a decision to draw down. That's what this Phase II and $20 million would be all about. All we're trying to do is get enough information to see if there is this black and white answer; whether or not drawdown should be considered any further, so I guess, in response I would say that if PATH tells me that there is a 40% probability, but there might be a 5% error, I might be able to live with that for the decision I'm making at this time. I might want better information before I decided to draw down, but it might be good enough for what we're trying to do in Phase I. Okay?

Darryll Olsen: A couple of statement observations. The Eastern Oregon Irrigators' Association and the Columbia/Snake River Irrigators Association did not support this Phase I activity, and they did that because they felt that there was ample technical information available. They did not spend $3 million, but they spent $3,000 to have one of your former Corps employees put together a technical study that showed the costs of the drawdown of John Day would be about $400 million a year, annually. I suspect you're gonna end up with a number that looks very similar to that, $3 million later. The Associations do not support Phase II activity, either. I would like to ask the question of Ed Woodruff, who is a veteran in this -- Ed, how many drawdown studies have we done, major configuration studies in this region? Since 1991? Even 1990; I'll give you a year. That's okay. How many have we done?

Ed Woodruff: How many studies?

Darryll Olsen: How many studies?

Ed Woodruff: Well, I think you would probably go back to the System Operation Review which started looking at this issue in -- and we'd go on to the Snake River studies -- there is a Phase I and then the feasibility study, and now this one.

Darryll Olsen: In case you're counting, this study makes it the sixth major study, either drawdown EIS configuration study -- this has been conducted by the Corps in roughly the last 10 years. The Corps cannot maintain credibility -- National Marine Fisheries Service cannot maintain credibility by coming out repeatedly with these major studies, and redoing them, and redoing them, and asking these major impact questions. These are highly disruptive alternatives that you're bringing forward. This is not resource management. Coming forward with these major drawdown studies with major disruptions, $400 million of your impact for benefits that may be $10 to $20 million if you were extremely lucky. These are not resource management actions. I don't know what they are, but these are no longer resource management studies. With the fear that the Corps might be contemplating a 7th or an 8th study on drawdowns, the water resource users from three of the states -- Washington, Oregon and Idaho -- are formally requesting tonight, and Colonel, you will receive a written request later in the week in Pasco -- are formally requesting that the National Marine Fisheries Service and the Corps of Engineers evaluate a new water resource management alternative that was brought forward by work that was conducted by Pacific Northwest Project, University of Washington and Harza Engineering. This is not a drawdown study. This is a study that would restructure the use of the water that is being used now, and it would turn to the tributaries and ask questions about what can we do with new water storage projects; what can we do with water marketing and transfers; what can we do with water efficiency to provide measurable fish benefits -- something we're very skeptical we will see come out of this John Day pool study. That ends my comments.
Thank you for the opportunity to speak.

(Clapping)

Ron Baker: I'm Ron Baker of C&B Livestock. We had the opportunity in 1973 to put a project on the John Day pool just west of Umatilla and at that time I had a chance to work very closely with the Corps of Engineers and came to believe they were a very objective and very cooperative group and did an outstanding job of managing the dams on the river. And over the years we've had certain little problems on levels of the John Day pool and we have found the Corps of Engineers very responsive to our needs and very helpful. I guess the thing that disturbs me most tonight is to come and say -- is this the same Corps of Engineers that I have been working with over the years? And I realize you do nothing except what Congress mandates you to do, but I'm hopeful that you will remain and maintain the same objectivity in these studies that you have maintained in operating the dams on the river very very well. As you notice, you find that everybody here is very much in one opinion. They do not want a drawdown of the John Day pool, because to us that have been involved here, as I have been involved since 1973 in making the desert bloom, of bringing the water resource from the John Day pool onto our lands and the number of acres that have been stated, and the amount of food that is produced is astronomical,

but the thing that perhaps is very important in your study is to realize that you have the biological aspects of the salmon recovery, and we're very much supportive of doing everything we can within reason to recover the salmon. The thing that is very important for you to realize that I have a banker to set down to and I do not determine agricultural prices and, therefore, when you talk about that you're going to change the pumping plants on the John Day pool to accommodate the drawdown, you'd just as well save your time in designing those plants, because I can tell you from an operational standpoint that I cannot afford to pay at least the other $50 an acre that it will cost to pay the additional electricity to pump that water that additional distance, and I say that because I designed -- when I put in my system in 1973 -- we designed a system to go clear to the edge of the original river channel, and we had to abandon it in 1973 because it was not cost effective. How can you imagine -- at that time electricity only cost $30 an acre. Today it costs an average of $100 an acre. The margins that we operate on are very very narrow; in fact, illusive this last year in agriculture. Most of us actually went behind this last year because of depressed agricultural prices, and yet the thing that makes us get in there, and get up every morning, and keep producing this food is not only the sense of fulfillment, but we know that this population is going to continue to grow and we do not like to see that there are starving people throughout the world that we are helping to provide a food supply. Nobody talks about that. Everybody is talking about surviving the salmon. They are very important, but how important are they when we compare also the food that we are supplying to a hungry world, and so to us that are sitting here and realizing the very serious nature of the very narrow margins that we're working on, and then you come and propose a major change in our economy that we know, in operating day to day, we cannot sustain, and it is so obvious to us, that's why we can say, hey, you're wasting your time if you believe human life is important. It is so obvious because if you want to do this, then don't worry about designing the pumping plants, just start buying out all the farmland, start buying out the plants, the food processing plants that are dependent on that farmland, and find someplace else for the workers to be employed. Because, that's what you're talking about. It is very very obvious to us. We hope that in your coming here that you can get some sense of that's why people are so opposed, because it seems ludicrous to us, so hopefully, in your study, you will maintain, as I say, the objectivity to what is really important, and #1 is the saving and the furnishing of human life; #2 is to recover the salmon, in that order. So please, we hope that you will remain the objective good managers of the Columbia River system that we have always found you to be, and you will remain very objective in your study. Thank you.

(Clapping)

Stuart Stanger: Let me just thank you for your comments and I can assure you that at least this team will be objective, and you are absolutely right -- we know that the pumping costs would increase tremendously, the cost to put new pump stations in would be very high, the cost to

dredge canals would be extremely high, and as Fred mentioned, if McNary's not there, they won't work. So, we understand all that. Buyout is one option that will be considered along with that, and we will look at the cost of those, but again, a buyout doesn't produce any food, and we agree. So, thank you for your comments.

Dick Farley: Hello, my name is Dick Farley and I'm a retired Navy man and I have listened to a lot of complaints when I was in the service, and all that, and everybody that has got up and talked here, still hasn't hit the basic problem to this situation, and that is, in 1920 there were 16 million fish come up, and in 1920 to 1928 there were 55 canneries on the river, and from that 16 million fish, in 1928, they were depleted by 90%, and that was before Bonneville Dam was even built, and they built that in 1936. In 1928 there were 7 million fish coming up. The Indians and the other people, commercials, was netting 4 million out of the 7 million, and today, I think it's about 3 million coming up and they are still netting 2 million of them. They've never had a chance to recover. Nobody has got enough gumption in the government to say no to the netting out in the ocean, the netting by the Indians in the river -- you've got to have a leader and I haven't seen one yet. (Clapping) and the definition of a leader, when I was in the service, was a person that made a quick, snappy decision and took the full responsibilities for his actions. Now, I've made that situation a lot of times, and I've gotten in hot water over it also, but I'm still here. Now, a few years ago I was getting some pamphlets from Northwest Power Planning Council. A few years back they had a five-year study on Walleye, because they were depleting the salmon and the steelhead. Well, they found out it wasn't the Walleye, so then I met a gentleman from DEQ above the dam here about five years ago, and I asked, what are they going to blame it on now. He says, well, they're thinking about blaming it on the Shad, and I looked at him and thought you've got to be kidding me. Shad eat microscopic things, and then they found out that it was a squawfish. Okay, from there, on the Snake River, years ago, I heard that the people that own the three dams, Hell's Canyon, Oxbow, and Brownlee -- they were told by the government to put a fish bypass on it, or get fined. Well, they took the lesser; they got fined. One time payment and that was it, and we still don't have any fish going up past them -- they stop at Hell's Canyon. And then, another thing, the Indians were complaining about us barging and truckin' all the fish down below Bonneville. All kinds of articles in the papers, so what do they do -- they build a deal there on the Umatilla River, and I called up there about three months ago one time and asked the gal -- I says how do they get em to where they're going. Oh, we truck 'em, but yet they were complaining about us truckin' them down below Bonneville, and if we are talkin' stopping the harvesting in the ocean and in the river, there would be no cost to the government, no cost to us. If you just had a leader, and that's all you need, somebody with enough guts. That's it.

(Clapping).

Ty Hansell: My name is Ty Hansell. I have just a couple of questions that I don't know the answers to -- one of them is, how come our state agencies aren't involved in this process and if they are, where are they?
Stuart Stanger: They are involved. They are part of that Planning Aid Team, both Oregon and Washington.

Ty Hansell: Well, what I'm curious about -- why aren't they at the public hearings. Why isn't the Department of Agriculture, the Water Resource Department, Fish and Game. I mean, to me the State of Oregon is responsible for the waters in the State of Oregon and we should have some responsibility. The federal government, I didn't know, could have water. They build impoundment facilities and stuff, but I didn't know that the federal government actually had water rights and owned water that the states would control.

Stuart Stanger: Yeah, I have no idea why they don't show up. They are invited.

Ty Hansell: The other question -- I've got a couple of them -- but another one that has been really bothering me, and I have sat through -- not as much as you guys, obviously, have, but we've heard many many -- I'm on the water resource commission for the state and we've heard many many reports. I still question, how do you harvest an endangered species? An incidental take still bothers me. I mean, I really struggle with it. We don't shoot Bengal tigers and we don't do this, and if something is really endangered and we really want a recovery, how do we harvest? On any level. I mean, that to me is a problem that I've never been able to #1 - find an answer, and #2 - I don't think there is one. Another one that is a real problem to me in this state is the impact without barging on our road systems. The carbon monoxide and all the gases that were related to earlier, but our roads, I don't know how many of you had to come up from Portland all the way up the gorge there; they're in terrible shape, and we're gonna put -- I'm just gonna draw a figure -- somebody said 580,000 more trucks. We think Portland is a nightmare, Rufus is going to be an absolute disaster. Another one that I really struggle with, and this is a personal opinion, is that basically we're kinda the laughing stock of the world. We take a clean, renewable cheap resource to create electricity and we're gonna replace it by fossil fuel, wind or nuclear -- I mean -- anyplace in the world would be looking at us like, god, we got this, and all of our development, like Ron Baker said, was all done on the cheap electricity -- to go out in the desert and our ranch does it -- we don't take out of the Columbia, we take out of wells, but I'm sure they're gonna be considered hydraulically connected before we're done, but anyway, it bothers me that we're gonna raise those prices and we won't be here, and even if you enlarge those to the stream flow, they won't be here, and Fred Ziari, my good friend, I have to disagree with him on one thing. I feel that we are very rich in our way of life. It may not be monetary but our way of life here is very rich, and I take it as a personal affront that our chosen way of life -- my chosen profession --

how I want to raise my children will drastically be impacted by a group of people, or people sitting in Washington, D.C. I think we have a guilt trip of what happened to the Indian tribes. I think, 100 years from now we're gonna have a guilt trip of what happened to the people in this Columbia Basin, if we really don't start paying attention. You built the dams, you flooded the towns, you moved the towns, and now you're gonna draw it back down. It just -- to me its ludicrous. but I guess we gotta look at it. Thank you.

(Clapping)

Stuart Stanger: Comments?

Craig Reeder: Yeah. I work for Ron Offitt down in Boardman. Ron runs companies that -- we made a large commitment here-- the last year in the hopes that common sense would prevail in this issue and that we would be able to make a longterm play here, and continue to farm. I've debated on whether or not I should get up and say anything to be redundant. I mean there are a lot of issues here that are emotional, but I think -- I think the one things we have to focus in on here is tangibility, and in Eric's presentation he has noted several survival improvements that have been implemented over the last few years or months, or whatever, and have you seen any tangible benefits from those?

Eric Ostrovsky: Yeah -- the science for one -- for spring and summer Chinook salmon has -- for the smolts between the project, the survival rate has gone up. There have been what we call smolt adult returns, which hasn't necessarily recovered. It shows for that species, at least, in the main stem, some of those efforts have been helpful. It is also fall Chinook salmon in general have been returning at a higher rate, and I have a white paperback back there on it, from very low numbers, I think below 100 fish were back to about 1000 fish returning this year. Now, that's through a number of issues. Actually, harvest rates have reduced and, you know, there's also been what we're doing on the main stem, and perhaps ocean conditions. There are a lot of variables but at least some of those results have been somewhat successful.

Audience member: I trust the tangible numbers we put into the study because I heard a lot tonight in the presentation -- I heard a lot of "tends to," a lot of "could provide" and even when we analyze what our threshold is going to be for how we analyze this thing. You know, 45% chance -- you know, when you analyze a 45%, or even a 95% chance that we can increase the salmon. You know, I can tell you, part of my job responsibilities are to complete the budget, and it's not a chance that if we do not have water there that my budget will drastically change, and it's not a chance, or probably the people will lose jobs, and that this area and the world that we supply food to will be affected. It's not a chance. It's there, and it's real, and you know, if you go to

make your recommendation I strongly urge you that when you are weighing on one side, we've got an 80% chance, and here's the tangible cost, your chance versus cost, no matter what the percentage is, it is still as chance, and we know what's gonna happen here, and I don't mean to be redundant but, you know, I'm carrying on what five generations of family have carried on by being born and raised in this area, and being a productive member of the agricultural community, and, you know, if I can find a woman who will stay with me long enough to have some kids, you know. Me not having that chance to provide that legacy on -- I mean, words just can't describe how robbed I would feel with that, and again, chance versus what's real.

Eric Ostrovsky: I understand what you're saying. Economics is something that a study might show.

Audience member: My legacy is not economics, Eric. It's got nothing to do with economics.

Eric Ostrovsky: Well, with what's happening, you know, in the area --now on the biological point, the level of the bar, that's something that policy makers are gonna have to make a decision on, but when they see the impact to the community, and so forth, it's gonna start, you know, making people, I think, stop and consider -- say, you're saying, the chance you don't want, then how much biological certainty are you gonna need for any action. While Fred is here I just wanted to say one other thing, because he asked about John Day, and what happened to MOP and I do want to correct what I said before, that there were a lot of things going on, and I was thinking about what was happening with the studies that originally went on on the Snake dams. Well, I would say with MOP and John Day that that's really an operational decision; it's not a study that would have to go back to Congress for re-authorization, so that's something that the agencies would determine in a collaborative basis. What I said to you was wrong; I just wanted to correct that right now.

Rollin Engbretson: My name is Rollin. I'm a local farmer. You've fringed upon the fact that there will be a percentage of possible influence upon the salmon recovery that will help you make your decision upon, whether or not to forward this study you've got to the Congress. Has it ever entered your mind that there may be a percentage of disadvantage to report to the Congress on the adverse affect to the ecosystem that has been created over a 50-year period in the Columbia Basin, and also to the adverse affect? What percentage of adverse affect will it take for you to tell the Congress that this is ludicrous, that we go on with this study? What percentage is that gonna be? Is that gonna be a 90%; is that gonna be a 50%? I would like an answer if I could.

Stuart Stanger: I don't know what the percentage will be, but what I can tell you is that there will be negative impacts to fish and wildlife. We will take all of that into account. There will be a

huge impact to the Umatilla Wildlife Refuge. We know that even drawing the pool down to minimum operating pool, we couldn't keep water in the Umatilla Wildlife Refuge. Those are huge impacts. U.S. Fish and Wildlife Service will help us evaluate those in this Planning Aid Letter that I mentioned. They will tell us what those impacts will be. Those are all negatives to a drawdown. We also know that drawing down may not be good for the fish for a number of years. The sediment and the conditions for fish passage and the predators that are in there are now in a much more condensed pool. That all could have negative impacts on the fish species, for a number of years. That will all be taken into account.

Rollin Engbretson: The second question would be is -- who is willing to open this Pandora's Box to all the adverse effects that maybe will not be able to change once they have been exposed? And what -- who will be the responsible parties that are the ones responsible for making those decisions? Will they be our Congressmen -- I think we have 12 or 14 that are representative of our state that are not representative of the area, the remaining of those Senators and Congressmen. They are making decisions for a small area of this nation and elements of what is pertinent to what we do, and they have no influence nor maybe even knowledge of how that affects the ecosystem, and something that I revere as beautiful and very essential to our area, and why would we want to change something that we've already experienced a lot of that adversity and try to take it back to something that we have no answer to what it may reveal? Thank you.

Stuart Stanger: Yeah, good comments. It will be your U.S. Congressmen that will make that decision of what risk they are willing to buy.

(Audience Member) Why can't we make the recommendation not to go further with it so that we can keep this at a level where people that are involved and people that have pertinent knowledge of the area and the system that we're talking about, and keep it from those people that have no idea of what they're talking about?

Stuart Stanger: Well, that just not the way the process works. The way the process works is -- we are in Phase I, and that ..

Audience member: is a recommendation you will make as to whether or not?

Stuart Stanger: Yes, and that's why we are here. We know that you know more about the impacts than we do.

Audience member: Then it can be addressed here.

Stuart Stanger: It can be addressed here. We're here to listen to your comments. That's what we're here for, and your comments impact the recommendation that we will make to my Colonel, and then he will make to his General, and he will make to his General, and the Assistant Secretary of the Army, and ultimately it will end up in Congress.

Audience member: Providing it gets there. Then I won't be here.

Stuart Stanger: But this is the process that the federal government has for us involving the local communities. We come out and listen to you, and we do make recommendations and consider your input, but it will ultimately be the U.S. Congress. They do not have to agree with the recommendation that the Corps of Engineers sends forward.

Question not audible.

Stuart Stanger: Yeah, he made the comment he would get hold of one of the Senators; I won't mention the name, but that's a very wise thing to do

Carol Michael: I'm Carol Michael from Boardman and I would like to read a letter written by my husband who is a member of both the Boardman City Council and a Director of the Boardman Park and Recreation District. Some of this has been shared previously, but I would like to read it in its entirety. "I wish to share some serious concerns regarding your proposed study of drawdown options for the John Day pool. Of utmost importance for the City of Boardman is the possible impact on our municipal water supply. We draw our water supply from the Columbia River and any drastic change in water levels will severely impact our water quality and supply. Our city Public Works Department has on file the effects of our water quality and supply from your previous minor drawdowns. The results were not favorable: increased Coliform and pathogen counts and reduced supply volume in our municipal water system. Also, of great importance is the financial peril the City of Boardman will face if severe drawdowns are allowed to happen. The City is right in the middle of expanding our water supply and exercising our water permit. As a member of the City Council, I consider the possible waste of approximately $2 million expended on our water system expansion to be of grave consequence. Sixty-three percent of Boardman residents are low to moderate income, and we cannot recoup a $2 million loss by increasing water rates and/or taxes. I am sure you are very familiar with the Marina Park in Boardman. As a Park and Recreation District Director, I am really concerned on the impacts of drawdowns on basic park functions. Will our marina dock facilities be usable with a major drawdown? I think not. Also, the swimming area, which is the only recreational swimming area for our community will be a dry lake bed. I am at a loss as to why the Corps would help build the Fowler Road Native American access fishing site in the Boardman Marina Park at a cost of

millions of dollars, then lose the access to the river by drawing down the John Day pool. In the event of a drawdown, neither Native Americans or anyone else will be able to get a boat in or out of the Columbia River at the Boardman Marina. This is certainly not an example of good fiscal planning if you opt to lower the water level behind the John Day Dam. To put it succinctly, drawdowns, as suggested in your study options, would have such a major affect on this area that the cost of mitigation will be staggering. The concerns I have voiced here relate primarily to economics of the Columbia Basin area. Something else that has been lost in the media coverage of the Columbia River is the basic idea of flood control, which the dams provide for downstream cities. Please look back to the high water flooding problems during the winters of 1998 and 1997, and imagine the consequences without the dams' ability to manage water levels. I would hope in your decision-making process that you utilize competent scientific information and input from impacted area residents. Do not allow rhetoric from entities outside the region to drive the decision-making process as to continued further studies. Sincerely, Raymond D. Michael." Thank you.

Stuart Stanger: You're absolutely right. The City of Boardman's water supply would be significantly affected -- your Rainey well may not work at all. Your marina would be dry as all marinas on the existing John Day pool would be. New types of recreation may be provided. They would be fast-water recreation as opposed to slack-water recreation, but your comments are all very valid.

Terry Tallman: I am past mayor of the City of Boardman and now I am a Morrow County judge. I would just like to add a couple of things. I think that what Craig Reeder was trying to tell us tonight with some of the things that he was saying, of being a fifth generation person in the area. I think with the opening statement that the gentleman made from National Marine Fisheries says is that what makes the Northwest unique is the fish. I think that I would disagree with him. I think what makes the uniqueness of the Northwest is the people, and I think that's part of what Craig was trying to say -- that the people are what need to be considered before we consider the fish. I think also in looking at the drawdowns and the studies that were done on the Snake River, I went to some of the meetings when they considered those. I saw all of the different graphs and pictures and the representations and the information that was drawn from those studies, and what the scientists were trying to explain to us what those meant and I think the only logical conclusion that could have come from those studies was no one really knew. They spent all that money and they spent all that time and it wasn't that they were doing bad work, but there was no way that they could really tell what those things really meant, and if PATH and all this other stuff that you're gonna go through is what you're gonna try to use the same way to get to the conclusion, I don't see how you can come to any conclusion from what everybody else has said tonight is -- what we think and we can tell you right now -- it's just a bad idea, and it needs to be stopped, and

we will go to our Congressmen, and we already have, and we will go to our Senators, you know, and they've already made the statement -- our Senators have already said that they're gonna be there on those dams and they're gonna try to stop it, and we're gonna support that.

Stuart Stanger: Thank you. Other comments, questions?

Lou Lyons: I'm with Elmer's Irrigation. Here a couple of weeks ago you sent in a group of people from the College of Idaho to do a study, University of Idaho, and you would select little communities like Umatilla, Stanfield, and Adams, Oregon, and you had them do in four hours what would happen to Umatilla or the area if they breach the dams on the Snake, and you are paying these people to go out and do these things. We spent our time there going through their process and saying, okay to do this, "don't do anything to dams." If we do Phase II or Phase III, and it was just like -- here we are again, you know, you come down here and say, oh yeah, if we do this you're going to bring economic development to this community, you're going to do this and that, and now you're coming in the back door a couple of weeks later, saying, hey, we're going to take down the John Day pool, you know, -- so what is the deal? When is the money wheel going to stop? That you're putting out for all these studies, you know, our tax money is paying for all this, you know, and our community, so on one hand you're over here sending these people down here, saying yeah, we're going to do this, if this happens up there on the Snake, but yet you come in here today and you're presenting taking the pool down. What is the real story? What is the real story about what's going on here?

Stuart Stanger: We're not proposing to do anything to the John Day Dam. I hope no one left here -- leaves here tonight with the impression that we're proposing to do anything to the John Day Dam. We are trying to determine whether or not there are enough benefits to consider drawdown. There are an entire mix of things we could do at John Day Dam to improve salmon recovery, but we are not proposing to do anything at John Day Dam. With the Snake River study, I'm not involved with that at all, or the University of Idaho's studies, but they are in an entirely different phase. They are much further along. They are years ahead of where we are at John Day. They've already made the decision on the Snake River projects that drawdown is something that should be considered. They have not made a decision that drawdown should occur, but they've already made the decision years ago that we're trying to make, and that is drawdown should be an alternative they consider on the Snake. We don't know that at John Day, so we're in two entirely different phases. I don't know if that helps answer your pro ---

Lou Lyons: No, because it's the whole program. It's a regional -- like we try to talk regional, but no, they only let the Umatilla people talk. We talk in regional as far as how Hermiston is going to be affected; how Boardman is going to be affected; how everything -- this thing from the

Snake River, from -- you start way up the Snake, all the way down to Portland. It's going to affect somebody. It's not just pieces; it's not a puzzle, of how you put it together. It's the whole program.

Stuart Stanger: Well, I agree.

Lou Lyons: If you -- we'll do this here, we'll do this here -- it's just like when they came down. Says, well, if you do that up here, you guys are going to have a little barge traffic, and have all this, gonna have all this, we're going to do this here, and now you come in here. We won't have that. So, you say, I really don't know about that part up there, because I wasn't part of it, but the Corps of Engineers is part of the whole program, so do we buy that?

Stuart Stanger: I'm not trying to convince you of anything.

Lou Lyons: I know that, but the question is -- is what are you trying to sell us?

Stuart Stanger: I'm not trying to sell you anything. I'm telling you that we are studying ---

Lou Lyons: But the fact is, you're still going down that road.

Stuart Stanger: I'm not going down any road. What I told you tonight is that I was not here to convince you of anything. We're here to hear your comments, and I've heard your comments.

Lou Lyons: Right.

Stuart Stanger: But I'm not trying to convince you of anything, nor am I proposing to do anything to the John Day Dam.

Lou Lyons: Well, the John Day Dam where you say you would lower the level or removal of it, that issue is lowering the level.

Stuart Stanger: I'm not proposing to lower the level or change the operation of John Day Dam at all. I have no authority to do that.

Lou Lyons: No, I never said you did, but my point was -- is everybody sliding through the door and we were shown here a couple of weeks ago. Fred was there and a few other people were there, and now you're sliding in the door again, with another program. So, you know, do we all just sit here and go uh huh, uh huh, you know. What is the real story?

Berle Cooley: My name is Berle Cooley. I recently retired from the federal government. I spent about 25 years with the Corps of Engineers working at McNary Dam. I had the opportunity to become quite familiar with some of the barging operations. I noticed that hasn't been discussed much here tonight. From what I could observe over the development of the barging system, it is quite successful in downstream fingerling passage. Also, I know that there are many new developments in upstream adult passage that have not been done on any of the Columbia River dams. Some of the public power dams in Washington have incorporated newer designs of adult fish passage. None of the dams on the Columbia system have changed their fish ladders since all of the dams were installed years ago. I feel that our money is better spent -- rather than doing studies on how to change the system that would affect all of our region so drastically, our money would be much better spent to do more studies on successful barging to get the fingerlings down the river and also on more successful methods of adult travel back up the river. We need to look into new methods and new designs to accomplish that. Many of these are already in and as some of the gentlemen talked about, there are fish friendly turbines coming. There are many tests that have been done on fish passage. They probably will be able to travel through the turbines some day, but our money needs to be spent on developing the fish passage, developing the habitat, the spawning habitat, getting -- cutting the harvest down, all the methods that we can do that will not damage the economy or the lifestyle that we are used to here in the Northwest. Thank you.

Stuart Stanger: Thank you.

Art Kegler: Howdy. My name is Art Kegler. I'm just a small business man in the area and I have a couple of comments. I'd like to, first of all, state that I certainly respect all of the statistics presented by the learned officials that have presented them, and I hope you will take them in dire consideration. Secondly, I'd like to compliment the gentleman from C&D Livestock when he said he has to sit down with his banker. He's very fortunate -- I have to sit down with my bankers, so I'd just like to make a couple of comments, and I'd like to enter into the conversation logic. That's a strange word in this scenario, but from two newspaper articles that ran in January and early February here in this area, one in the East Oregonian and one in the Tri-Cities Herald. The first headline said, "Columbia Smelt Runs Down to a Trickle." Columbia River runs of smelt, a small fish, once caught by the millions are down to a trickle after seven years of declines. And could you believe it -- smelt do not cross any dams. Maybe, just maybe, there is something else involved. An additional article -- got to flip a page here -- put on the glasses -- additional article, "Predators Taking Toll on Endangered Salmon." "Flocks of predatory birds including two colonies of Caspian terns near Boardman are devouring as much as a third of the endangered juvenile salmon smolts that migrate through the Columbia River" I'm skipping through this article "rising populations of seals, sea lions and predatory birds are also taking a toll on Oregon's coastal salmon and may be undermining recovery efforts under the Oregon Plan for salmon and

watersheds. When combined with predation by seals and sea lions, the total loss attributed to predation may exceed 45% of the migratory salmon in the Columbia according to a joint study by the Oregon State University and the Columbia River Inter-tribal Fish Commission." I ask you, with your study do you feel that you can affect 45% of the salmon recovery program? Do you think you can actually, by affecting the removal, drawdown or studying the dams, that you can improve the salmon program by 45%? Addressing the predators, and I ask you these questions -- ever thought of removing artificial man-made dredging islands instead of dams? That's where the terns and the -- the Caspian terns and others reside. Ever thought of doing a controlled harvest of excess seals and sea lions. They affect 45% of the salmon. Can you do that?

Stuart Stanger: No.

Art Kegler: Maybe you should redirect your efforts.

Stuart Stanger: I don't have that option, but I don't believe drawing down the dams would produce that kind of an effect, and if you look at the maps that we have back here, and you could get somebody to explain them -- there would actually be additional islands created with the drawdown, so you need to be aware of that, as well.

Art Kegler: That would only add to the predators availability to survive by providing additional islands for the terns, etc?

Stuart Stanger: I can't say that for sure but that's the potential. There is land instead of water -- yes.

Art Kegler: I refer to my statement logic.

Bob Willis: I just want to answer, or address a question that you talked about regarding the Caspian tern colony. We paid for the study that was done by Oregon State and Columbia River Inter-tribal Fish Commission, to take a look at the tern issue. That was in response to a Biological Opinion requirement, but what we have done is been able to pull together the facts to make a decision on whether some action should occur. We are doing an action right now, hopefully that will reduce predation on juvenile salmon out there. The purpose of what we're doing right here is also in response to a Biological Opinion recommendation. What we're trying to do is pull together the facts, the science, to say is there a benefit, and then compare that against the cost. So, you know, that's how we are proceeding ahead in terms of trying to figure out the right things to do. Thanks.

Stuart Stanger: Thanks, Bob. Well, are we all exhausted? I appreciate your comments. Again, my technical staff here -- they'll be available afterwards if you want to capture any of them. With that I'm going to turn the meeting back over to the Colonel.

Col. Robert Slusar: Again, I want to thank you for spending this time with us out of your busy schedules. As you know, this issue is very contentious; it's very confusing to me. As an Army officer I normally get a mission and it's not contradictory. Hopefully, it's not. Unfortunately, the missions I have are contradictory. I'm moving forward in all my projects on the Columbia River to increase the smolts moving down faster and the adults coming up quicker, as well, so we're spending those dollars that you talked about before to ensure that the passage at our projects are the best that they can be, by putting in improved turbine blades, outfalls, flow deflectors --those things, and those are ongoing, but I'm also getting a mission that says, study drawdown, and so, as a good Army officer I salute and I'm going to do the best job I can with the group that I have to ensure that I provide Congress with the information that they're looking for, and that's what we're here for tonight, and I do appreciate your comments. They will be heard. I hear them loud and clear, every place I go, and we will take all that into consideration, and I will provide a fair, equitable answer back to Congress as they have asked me to do, and those comments that you have provided today will be in that report, so if you want to join the team that's going to review that and help put that together so that we can review that and make that recommendation, please join our team, and again, thank you very much for being here tonight.

(Clapping).

PASCO, WASHINGTON
PUBLIC MEETING

February 25, 1999

Meeting Transcripts

John Day Drawdown Phase I Study
Public Information Meeting
Pasco, Washington
February 25, 1999

Col. Robert Slusar: I'd like to again welcome everybody here and for taking time out of your busy schedule to be with us.

I'm Col. Bob Slusar, the District Commander for Portland District, U. S. Army Corps of Engineers. As I was explaining a little bit earlier, I report to a general officer who is the Commander of the Northwestern Division and there's five districts in the Northwestern Division: Portland District, Seattle District, Walla Walla District, Omaha District and Kansas City District.

The reason why I'm here tonight is because John Day project is part of and under the operation and control of Portland District. I'm headquartered out of Portland, Oregon. There's John Day, The Dalles, and Bonneville are the three projects that we maintain on the Columbia River. Walla Walla District maintains operation control of McNary, and the lower Snake projects, and Seattle District has responsibility for Chief Joe. So that's kind of the way we're broken out here in terms of some of the hydropower and the dams that are under the Corps control.

The reason why I have a team here tonight is that is we're going to cover three areas with you and those areas are first to talk about the project that we're looking at and the process that we're looking at this Phase I initiative at John Day. And we'll go through that process. I'll have Stuart in just a few minutes walk you through that process.

The second reason is to hear your comments. This is the sixth, public forum we've done in the last three weeks on this subject, and we're trying to get again your comments and your concerns so we can pass that on.

And the third and probably the most important reason is to try and get to two different basic issues. One, the benefits and the impacts if we look at a drawdown of John Day. And so if there's studies, resolutions, something that you know about that we haven't included in our study since we only have a one-year timeframe to put this study together and report back to Congress, we're looking for a lot of information that may have already been done and as we've gone through these public meetings, we've received a lot of good input.

Tonight I have two individuals on my left, your right, that'll be walking us through the process. On my far left is Eric Ostrovsky. Eric is a member of the National Marine Fisheries Service, and he represents the federal biologist in the study, and he'll be talking about kind of the big picture, what National Marine Fisheries is looking at here in the Pacific Northwest and the salmon issues.

On my immediate left is Stuart Stanger. He is my project manager. He represents the federal engineers, as we are the operational managers of these projects. He'll be talking about the study, the timelines for the study, the inputs that we need for the study and how you can help us develop and review this study so that we can report it back to Congress. And he'll introduce his team over here that he has working for him. So again, I want to thank you for being here tonight.

I'm going to turn the mike over to Stuart, let him do some introductory comments and we'll get on with the meeting.

Stuart Stanger: Good evening. I want to also thank you for coming. We are looking for information and would like you to comment tonight. Before we get started, I just want to tell you that we know that there are people in this room who are all for drawdown and you're ready to take the dam out. We also know that there are a lot of you here who are opposed to the dams being taken out. We have not made a decision one way or another. We're not trying to decide whether to take John Day Dam out. We are looking at whether or not detailed studies need to be done to consider taking John Day Dam down.

We know this is a very, very sensitive issue. We hope that none of you are intimidated by others in the room and that you will speak freely, and we want to hear all of those comments.

We are only doing Phase I, as the Colonel has indicated, and I'll explain to you what Phase I involves, but we do not have the authority, the Corps of Engineers does not have the authority, to move into a feasibility study, Phase II, at this time. We're going to look at benefits and costs, as the Colonel indicated, and we will make a recommendation to Congress about Phase II but they will make the ultimate decision.

The people that I'm going to have working on this study to help me come up with a recommendation for the Colonel are on my left here. I have Bob Willis out of the Fish and Wildlife branch, Ed Woodruff is looking at hydropower, Ken Soderlind looking at navigation, Brian Shenk is our economist, John Todd is looking at irrigation and utilities. This is part of my team. We don't have my entire team here, but at the end of this meeting, these guys will be around and if you have additional questions specific to their area, grab them and have a discussion with them. Get some more information. Finally, I want to thank Dawn Edwards; she's out of our public affairs office. She's the one who has set up all these public meetings. This is the last one in a series of six. We've been on the road for about 30 days now, and very stressful for Dawn so we should thank her for this, and I get used to it I guess.

With that, I'm going to turn the mike over to Eric, but before I do that, I want to tell you that tonight you will be given plenty of opportunity for questions and answers and we will ask you to use a microphone because your comments are going to be recorded. Because of that, I'm going to ask that you hold all your questions until Eric is done with his briefing and then I have a very short briefing about 10 to 15 minutes that'll tell you what John Day Dam does provide in the way of benefits today, and we'll also discuss

what this Phase 1 study is going to include, but it's very important that we capture your comments, so I'm going to ask that you hold all your questions and comments until Eric and I are done with our briefings, and then you'll have plenty of opportunity and I'll try and answer all your questions.

With that, I'll turn it over to Eric.

Eric Ostrovsky: Thanks, Stuart. When we came into Pasco the other day, it became very obvious real quickly; I've seen some of the signs, "Save Our Dams." On public access TV you know I saw the parade, and I know that the issue has you know very major, especially, if there was a drawdown, it would have impacts on many of you personally. It would have it on the community as a whole, and there is a good question: why would we even suggest studying an action that is this dramatic and if, you know basically everyone realizes that there's a major problem that salmon, a legacy in the Northwest actually on the West Coast, are in major decline.

In the Columbia Basin, it's been estimated that at one time there were somewhere between 10 to 18 million salmon and steelhead that were turned every year and there's been a major decrease in those runs. One of the reasons, and many of you know it well and we've been discussing it, is certain dams like Grand Coulee on the Columbia, in the Snake the Brownlee Complex, became barriers to salmon and the habitat behind it. Major areas were closed off. Other dams where there's still passage around them, the whole issue of the passage itself and the issues with habitat are an issue, but when those dams were being built, there were runs that were lost and you know I know a concern here everyone is saying, "Well, why are you just looking at the dams? Aren't there other issues?"

And there are major issues. There's major issues in the way over the years the hatcheries have been run. Hatchery practices. Harvesting. I know people here have been talking about long nets in the ocean and I know over the years what's happened with drift nets leads and with other fisheries that still go on the incidental take, it's a concern. It has to be looked at. There's habitat impacts from cities, such as Portland and other cities that have grown up in the region and the type of materials and impact they have had too.

I want to say when you look at the overall recovery strategy for salmon, people talk about it is 4 H's and it's true all 4 H's are going to have to be in it if we really recover these wrongs, and I want to also add many people here have been saying there's these major impacts occurring in the ocean and there's always been cyclical impacts but there a lot of processes they're not fully understood and that's having impacts too.

And then what I want to show here is many times when we think of salmon and the Endangered Species Act and what NMFS has asked to be done, we think about Snake River stock in the Columbia Basin. In 1991, Snake River sockeye were the first salmon that were listed, but then soon thereafter fall and spring/summer Chinook were also listed. Recently in 1998, steelhead both in the Columbia Basin and in the Snake Basin were also listed. There's several other listings that are occurring, and I just put those up

here to show that at one time the focus was in one area of the Basin. It's become a much broader look in it and if you can see here, what's really at stake now is there's 13 stocks that are either listed or proposed to be listed in the Basin. When you look at it, most stocks have not done well at all. There are a few exceptions but not many. And if I had made a chart of the whole West Coast, you'd see there's other problems too.

Some gentleman just asked if the Corps is doing any of this work anywhere else. I'm not sure about the Corps, but I know NMFS even at an earlier date has been working on the winter run Chinook in the Sacramento River where there's been a big problem. There's been a lot of work being done with irrigation districts down there, and recently there's been a lot of effort being put into runs in Maine, so there is activity going on out of the region, and I just wanted to let people know that this is not an issue that just affects this one area. It's over a broad area and these salmon range over a broad area.

Well, once the fish were listed under the Endangered Species Act, NMFS gets involved, in this case with the Corps of Engineers, and the other action agencies over the operation of the federal Columbia River power system. In 1995, we consulted on a Biological Opinion basically to make sure that the operations of that system do not jeopardize the continued existence of these species or the habitat upon which they depend. And as other fish are being listed, we have to look at that too.

What we, in that case, it was decided that there would be a reasonable and prudent alternative was considered to be a jeopardy opinion in order to allow the system to continue to operate. In that RPA, or the reasonable and prudent alternative, there were reasonable and prudent measures, and the objective is to make sure that they're all implemented. Some of those and strategically what's really been going on here is some people say all you do and the federal agents do is study this stuff. You study it to death, and you're allowing the fish to go into extinction as it's being done. Well back in 1995, one of the problems that people realized, at least with the migration of the juvenile salmon, is there are basically two ways that they could go down the river, inriver or being transported by barge, and so the Biological Opinion looked at some of the immediate measures that could be done to help those fish both ways, put in some major structural modifications, some of them have been very expensive.

As we learn more things about the salmon, I've got a few slides I'll show you some of the ways that we've been trying to do that, try to come together with people in the region, different agencies and the collaborative method on a long-term decision, on the configuration of the system.

And finally I put down a bullet for adaptive management. There are a lot of things that we didn't know in '95; there's a lot of things that NMFS and the other agencies still don't know, but as operations change, as conditions change, we know more. Some people tonight said you're never going to know enough. And that's true. And we'll never have complete certainty, but as we go on, hopefully, we can make, have enough to make some reasoned decisions about all these impacts that I know are very important.

What I wanted to show was some of the immediate improvements that are going on. We have flow targets that we're trying to meet in the river right now. What we really try to do there is during the migration season on the smolts, basically, we try to get water to the fish as they're migrating downstream. Also to make sure in certain areas to cool down the river and through operations we can do a little of that to help improve the transport for smolts. And this can be beneficial both for fish that are going to travel inriver all the way down or even if we barge them.

Improved bypass. It's very difficult and probably the least successful way for migrating smolts to go down river is going to be through the turbines and through the bypass systems. These fish can either be taken around the turbines back into the rivers or they can be put on, into a transportation system and then be barged or trucked. You want to keep smolts out of the turbines. Another way to do it is have more spill at the dams and in our Biological Opinion, we have spill regimes and they go on every year and we change them in certain projects all the time. But that's a way also to try to increase the success of fish that are going to travel in the river. We've been improving the transportation system. Very recently, the Independent Scientific Advisory Board said we should be doing more barging than trucking and they thought for certain reasons like implanting and so forth it's a better way to do it. It's more costly but we look at it and under both methods, we're trying to get better operations to help get the fish down the system. Also, trying to increase peak turbine efficiency in our Biological Opinion, we're saying, during the migration season, we want the turbines running at one percent of peak efficiency. It helps juveniles as they're going through the turbines. We've also asked and the Corps is putting in fish friendlier turbines. One's going in right now in Bonneville Dam. There's more on the way.

There are many other immediate improvements, but I just wanted to mention some to let you know that not everything we're doing is studying because we do need to save fish so when we get into a more long-term configuration, there's still fish around that can benefit from it.

Some of the structural changes, the first one I mentioned is the gas abatement program. We've been putting in what's called flip lips, or spill deflectors so when water does get spilled and that could be voluntary or involuntary spills, it won't be as much total dissolved gas in the system, which can be very harmful to juvenile fish, so by limiting it, we can have more spills. We want to regulate the system that way, and if there's involuntary spill, which happens during, most spring thaws, it's a way of keeping gas down.

Extended screens are one of the ways in which the juvenile migrants can be put into a bypass system. Again, they could go then into; they can be transported through the system or taken around by barge. There's been sampling facilities put in many of the projects. There's one in by John Day now. These have been very helpful. As I said in '95, there wasn't a lot of information and more needs to be done about what's happening at any of the projects and in all the projects, as you go down them. And by putting in

more monitoring facilities, it's giving us a better idea of how the migrants are actually doing.

I also wanted to mention relocating the outfall at Bonneville Dam. What was happening there was when we were sending smolts through the system, they were coming out in an area where there was very low flow. And there was very heavy predation. I mean, it's sort of what is going on. I mean why were we trying to save fish and then bringing them up as a meal to northern pikeminnow or they're sometimes known as squawfish, so what we've done is we've relocated that outfall so it's now in an area of the river where the current is much quicker and hopefully they'll be a lot less predation there.

Again, I just wanted to mention those are just some of the modifications. There are a lot going on at any time. As I mentioned, some of the fish go down the system inriver. Under the Biological Opinion, depending on the stock but on all stock it was felt that you know the fish, there's already a system in there. It's not in the natural river, and it's difficult to tell and there's been a lot of debate over how fish are going to do. Whether they should go inriver or they should be transported. And basically, as I say, they go both ways and the idea is what kind of survivals can we get inriver. It's going to change every year. It's going to change which stock you're looking at and the conditions those years. If there's a lot of water, generally the fish are going to do better. We transport quite a few fish, too. Subyearling fall Chinook later in the year under the Biological Opinion, we try to transport every fish that we're able to collect because currently transport is the best way for those fish to get down the system. And you would want to look at both of them together and see, if you look at both systems, I mean what is your rate of return. How successful can you be with those fish under conditions that are always changing?

And then beyond that, we have as I mentioned before, we've been putting new systems in the river all the time. How are those changing what's currently going on? And finally when we did the Biological Opinion, we knew a lot of the information was not there. And whether you call for a drawdown, and a lot of people felt that drawing down some of the dams would be important, it's a system. There's still other dams that would still be in the system. Is that the best way to go?

Well, nobody knew at the time but you know it's been felt that it's worth looking at, looking at the feasibility both to see from a scientific standpoint what would be the benefits of it and also importantly what the economic impacts of that would be. Most of you are aware of the study that's going on in the lower Snake, and that was in the 1995 Biological Opinion. In the 1998 supplemental opinion after steelhead were listed, the National Marine Fisheries Service said that we should take a look at John Day, both the natural river and spillway crest and that's actually what has been the genesis of the study or the Phase 1 part of the study today.

Some of the potential benefits of drawdown is that it allows for faster water velocity for a given flow and faster water velocity generally tends to relate to fish travel time, at least for fall Chinook, it tends to promote smolt survival. And that's why we would look at drawdown as an option. The Independent Science Group, it's now known as the

Independent Scientific Advisory Board, but it is a group of scientists that advise both NMFS and the Northwest Power Planning Council said in their report "Return to the River," that we should evaluate restoring some of the areas that have been inundated by the dams. They thought that it could make a more normative area for especially fish like fall Chinook but other migrating fish for a rearing area for them. Right now Snake River fall Chinook primarily spend most of their days in reservoirs, which is different than the natural condition.

One of the other benefits to a drawdown, especially for John Day, that we would want to look at in potential benefits, let me say, would be that it would expose historic area where upriver bright fall Chinook salmon used to be. I just wanted to emphasize that these are not listed fish, it's not Snake River salmon. This would not be a mandate of the Endangered Species Act, but at least it's been estimated that 30,000, in fact, I heard recently that it was probably more likely 34,000, fish spawned in that area that is now inundated by John Day pool. If there were a drawdown, you know, maybe at least you would want to consider what impacts would that have. Would there be any chance of bringing those spawning areas back, and it would be looked at.

Finally, I just wanted to mention that I don't want you to have the idea that John Day Dam is the problem. You know what I wanted to say before is the problem is a whole series of things. There's 4 H's but also when you're just looking at mainstem, you have a whole series of dams. If it's Snake River fish, it's likely going to have to go through eight dams if it migrates inriver. If it's steelhead that is currently listed in the upper Columbia, it could be going through nine dams, and many of those dams are not federal dams. And the idea here is and what you would want to look at with John Day is you're instituting other changes. Are changes going to be needed? Is drawdown going to be needed to achieve the likelihood of recovery and survival standards? And so saying there are cumulative impacts, so I just wanted sort of as a final word to say from a biological standpoint, you don't want to look at the project and the impacts as that project alone. You have to look at it in a much broader system with a lot of things happening to it.

Stuart Stanger: Thanks, Eric. It just takes a minute for this new file to come up. What I'm going to talk to you tonight about and it's just going to take me about 10 maybe 15 minutes, probably 10, is I'm going to describe to you briefly what John Day project provides right now, and what you need to realize is the things I describe are all at risk of being impacted to varying degrees if we draw down, and we can talk in detail about whichever area you want. I'm going to describe to you what the study is and what it is not. I'm going to describe the study purpose. I'm going to talk about the schedule, and finally, I'm going to tell you how you can get involved in the study.

I think all of you know where John Day Dam is. John Day Dam was completed in 1968, so it's been in operation just over 30 years. It's about 59 hundred feet long, just over a mile. John Day Dam is one of two dams on the Columbia that has authorized flood control. Five hundred thousand-acre feet of flood control storage are provided at John Day. It provides 2200 megawatts of power. About 9 million tons a year of cargo are shipped through the navigation lock. There are 14 recreation sites developed along the

John Day pool, and if any of you have any specific questions about recreation tonight, we're missing our senior technical lead tonight who is also the recreation expert, Chris Ferguson, but if you have any specific questions for recreation, there's a sign-up sheet back here. We also have Mark Eddings out of The Dalles that can try and answer some questions. If he can't answer them adequately, please leave your name and a phone number, and we'll have Chris call you and get you your answers.

Irrigation. There are 29 irrigation pump stations on the John Day pool. There are municipal and industrial users of the water out of John Day. Irrigon, Umatilla fish hatcheries use water out of John Day pool. The Umatilla Wildlife Refuge would be impacted significantly by a drawdown. Both upstream and downstream fish passage facilities at John Day would be impacted as well as the adult ladders at McNary Dam. John Day Dam does back water up to McNary Dam so if you draw John Day down, the pool level below McNary drops.

The study. Phase I, and that is all we are authorized to do as we've indicated a couple of times already. We want to answer the question, is it appropriate to continue further studies? Is drawdown of John Day even an alternative that is worth further consideration? Phase I will not provide enough information that anyone could make a decision to draw down. That's not its purpose. It's to take a quick look using basically existing information, and we will make a recommendation to Congress -- whether or not we think a feasibility study, a more detailed study should be done.

If Congress authorizes us to do Phase II, we would begin scoping. We do not have a scope of Phase II, and we would not develop that without Congressional authority, and then it would be a public scoping process and we would be back here talking to you about what we should include, what is important to include in that study. It would include an environmental impact statement.

Phase I is going to look at four alternatives, natural river with flood control, natural river without flood control, spillway crest with and without flood control, and I'll explain those as best I can.

Some of you may have picked up a cross-section; it's an 8-1/2 by 11 sheet looks similar to this. Right now, normal operating pool for John Day is at elevation 265. When we have our forecast that there's going to be high runoff, which generally happens in spring time, we can draw the pool down to what is called minimum operating pool, elevation 257, so that when the floodwaters get to John Day, we can stop them from going downstream and we pond water and release it slowly in a controlled fashion. So when we're talking with and without flood control, spillway crest is at elevation 215. That would be the normal operating pool level. If a flood event were coming, we would pond water 30 to 40 feet deep to control that flood using the existing spillway. And natural river, to get to natural river, elevation 165, we're talking about total removal of the spillway, and the navigation lock and probably a portion of the north bank. So in order to provide flood control now, I have to provide a new way to stop that water, and the way to do that is reconstruct a new spillway, not at this level but at this level. So I would

remove the existing spillway, put a new spillway back in so that when a flood event came I could close the gates, pond the water, and then release it gradually.

So those are four alternatives we're looking at, and we'll develop some cost estimates for those four.

For study purposes, we laid it out for Congress. We said we will evaluate the potential fishery and wildlife impacts. We'll evaluate the social and economic impacts, and we will provide Congress a recommendation.

So, how are we going to look at the fisheries and wildlife impacts? We, a few years ago, were looking at lowering the John Day pool to minimum operating pool level, that's elevation 257, that's, normal operation is at 265. We were looking at going to 257. We had initiated several biological studies when Congress stopped the study of minimum operating pool. We also stopped the biological studies. We will re-initiate and complete some of those studies that were begun. Some of the data was already collected, and it just wasn't analyzed and we will be doing that.

In addition, we're going to be doing some additional studies. We'll be releasing some pit-tagged fish and determining how long fish do stay in the John Day pool, whether predation is a problem. We will be using a process that some of you have probably heard about called the PATH process, Plan for Analyzing and Testing Hypotheses. We will be using that similar process to what they're using on the Snake River study.

And in addition, we're forming a Planning Aid Team. The Planning Aid Team is something we proposed to Congress in our scope and they agreed to it, and if the public wants to participate on that team, there is a sign-up sheet. It'll be at the back of the room after the meeting. You can sign up and participate as a planning team member. The Planning Aid Team will look at the biological study results and make assessments as to whether they think the impacts are positive or negative to fish and wildlife.

In addition, the Planning Aid Letter, something that we would normally under any study get from U. S. Fish and Wildlife Service, will be prepared for this study. U. S. Fish and Wildlife Service, in conjunction with both or all of the states and National Marine Fisheries Service and the Corps, will assess what they believe the impacts to both fish and wildlife are, both warmwater fish and anadromous fish and it'll be included in a Planning Aid Letter and provided to the Corps of Engineers with recommendations for what would be potential requirements for mitigation.

Social and economic effects. How will we analyze that? All of these things that I hope you had a chance to look at before the meeting and all the things I talked about that John Day Dam provides will be impacted in some way if we draw down. We will evaluate and estimate what the cost would be to replace those things that would be lost. An example I'll use tonight, let's pick irrigation pumps. If I lower the John Day pool and an irrigation pump station will no longer work, I will figure out, or this team will figure out and tell me, what it would cost to replace that pump station to provide the same service at a lower

level down by the new pool or some other way to get water for irrigation, whether it be through canals down each side of the John Day pool. They will look at some method of providing water. They will also consider whether or not it would be worth providing that pump station or would it be cheaper to not farm that land, okay? We'll do tradeoff analyses amongst those options, buy-out, new pump station, canals down the north side and south side of the pool, and we would evaluate which one is the least cost and that would be all these impacted areas. The least cost alternative to each one would be added up, and you could say that would be the least cost to replace all the things that would be impacted, okay?

Employment effects. Obviously, if the alternative for that pump station scenario was to buy that farmer out, that farmer no longer has a job. That's an employment effect. Okay? We will evaluate those. And also, that's a huge impact on quality of life for that farmer, okay? So that example for the farmer, you know that applies to navigation, that applies to a number of these things you see around the room.

Other things that need to be considered at John Day, not quite as big of an impact if you will, financial impact, are the adult and juvenile fish passage facilities. There's a cost associated with replacing those. There are, we have identified 37 utilities, sewer outfalls, intakes, telephone, power lines, that could be impacted by a drawdown, and we will look at what it would cost to protect or replace those.

There are approximately 360 known cultural resource sites under the water at John Day right now. And when we lower the pool, something would have to be done to those cultural resource sites to protect them or recover them. Water quality is a big issue. There's been a lot of sediment deposited at the mouths of the rivers running into the John Day pool at the dam itself and all of that sediment once it is exposed could have impacts on the water quality. Hazardous and toxic waste. A lot of the sediment could be contaminated. There may also be sites that were potential radioactive toxic waste sites, HTRW we refer to it as, that were covered with water when we backed water up behind John Day. Thirty years ago, this country was not as sensitive to HTRW as we are today, so we will identify any potential sites that may be uncovered, and those would need to be addressed if you exposed them.

Our schedule. Right now we are on schedule to have a draft report completed in September of this year. We began this study in October of '98 and we will have a draft, we'll go out for public comment and review, and if you signed up on the sheet back there as you came in the door, we will send you a copy of the report and you can review and comment on it. We will look at your comments, make whatever changes we need to the report. We will include your comments in the report, and we will submit a recommendation to Congress in December '99. That's our current schedule.

This is the final public meeting. We've had one in Juneau, Alaska. One in Helena, Montana. Lewiston. One in Portland. We were in Umatilla on Tuesday and the final meeting is here tonight.

Okay, in summary. The Corps of Engineers will be making a recommendation regarding further study. We will not be making a recommendation or decision regarding drawdown. That could only come out of a Phase II feasibility study which would evaluate other alternatives for salmon recovery as opposed to simply looking at draw down. Congress will make the final decision about whether Phase II is done and if you want to get involved, sign up on the Planning Aid Team sign-up sheet in the back of the room and review and comment on our Phase I report. Or Col. Slusar over here would be happy to receive a letter from you with your comments if you don't feel comfortable making them tonight. or after reviewing the report, and he will make sure I see that letter. Okay? I think that's all.

Let me just real quickly point out, if I can find my pointer again, that what we know now is that in order to draw down to natural river, we would be removing this section of the spillway, the entire spillway, and probably excavating a large channel around the navigation lock. We may leave the navigation lock simply because it would be very expensive to remove all that concrete but it would be of no value.

Okay, with that, we're going to open this up to questions.

This is not a formal hearing, but we will ask you to use a mike so that we can get your comments recorded and transcribed and they will be included in the report. With that, if we have microphones ready, we will start.

Pat Tucker: Is this live? My name is Pat Tucker and I'm a farmer on the John Day pool. We have a pump station you've been talking about tonight. I'm here tonight representing the Columbia/Snake River Irrigators. I have one quick question and then I have comments. You're going to have a draft report out in September? Will that draft report have your recommendation in it or does the recommendation to Congress come in the final report?

Stuart Stanger: Pat, if it's up to me, it will include a recommendation. That's a hard question to answer because if we don't have all the information available in September, we won't be able to make an assessment. If we're still working on the report in September and we expect to get information in that could impact our decision, the report could go out in September without a recommendation, but my intention at this time is it would include a recommendation of what our recommendation would be.

Pat Tucker: I would certainly hope it would have a recommendation and then we can comment on the recommendation also along with the report.

In response to the federal agency requests for comments, the Columbia/Snake River Irrigators Association Board of Directors is providing comments and recommendations to the National Marine Fisheries Service and the Army Corps of Engineers on two issues. Number one, the John Day pool drawdown study and proposal and number two, a formal request for the Corps to initiate a technical and economic study on the implementation of a new water management alternative for the Columbia River Basin. First, I'll address the

John Day pool Phase I drawdown study and proposal. The Columbia/Snake Irrigators Board of Directors have serious concerns surrounding the Corps' John Day pool Phase I study and proposals to draw down the John Day pool. Neither drawdown proposals nor the study of drawdowns are supported by the Columbia/Snake Irrigators. The Columbia/Snake Irrigators are adamantly opposed to Phase I study and any attempt to proceed with a Phase II process. The Columbia/Snake Irrigators further state for the record:

Number One: The Northwest Congressional delegation should stop all further funding for any drawdown or dam breaching studies on the Snake/Columbia River system.

Number Two: It was wrong and incredibly poor public policy for the John Day pool Phase I drawdown study to be funded by Congress. Funding this study represents failed political leadership on the part of the Northwest Congressional leaders.

Number Three: Neither the drawdown study nor the proposed drawdown action is supported by the local residents or state and county elected officials representing the area.

Number Four: The Corp study creates perceived economic risk impacts where financial institutions and lenders are hesitant to proceed with economic development projects within the area. The study itself creates economic impacts to the local area, perceived risk impacts effecting financial investment and economic development. The study is creating negative economic impacts to the local area.

Number Five: The social and economic disruption posed by a drawdown is unacceptable to the local communities and to the Pacific Northwest Region. The impacts to power, navigation, flood control and recreation are significant and unacceptable.

Number Six: The Oregon and Washington governors should aggressively oppose any further drawdown studies or proposed actions. The governors must display explicit political leadership on the drawdown proposals.

Number Seven: The credibility of the Corps is rapidly diminishing by bringing forward these totally impractical drawdown studies. The Corps is beginning to lack credibility as competent resource managers. The Corps must stop further work on any drawdown proposals.

Number Eight: The Corps of Engineers is wasting salmon recovery money by conducting the John Day pool drawdown study. The Corps is simply becoming a part of the salmon recovery industry, interested in operations money and not sound resource management.

Number Nine: The John Day pool drawdown study is a major distraction away from pursuing real salmon recovery actions.

Number Ten: The Corps has spent almost ten years on six major studies for salmon recovery. During this same period of time, what has been done by the Corps to engage in studies and programs to benefit the future economic vitality of the region?

Now I want to address the request for the Corps to review a new water management alternative. The Corps should refocus its technical analysis away from drawdown proposals and place attention on pragmatic and workable measures for salmon recovery and for the benefit of the Pacific Northwest economy. We specifically request that the Corps initiate actions to proceed with the technical and economics review of the attached

proposal which I'll be giving the Colonel, for a new water management alternative for the Columbia River Basin. This new water management alternative would call for:

Number One: Restructuring the existing fish flow targets and augmentation program, based on water policy, hydrology, biological and economic justifications contained within the attached technical information.

Two: Re-regulating the hydro system, producing additional hydroelectric power and revenues.

Three: Identifying within the tributaries new water resources projects including new water storage projects, opportunities for water marketing and transfers and selected water efficiency measures.

Four: Applying the new water resource projects to bring about fish, economic and recreational benefits.

Five: Encouraging tribal participation in the development of new water storage projects by allowing them to become equity partners.

Now, very specifically, the Corps should initiate an internal preliminary scoping review to assess water management review tasks and prepare a detailed budget for the study. Two, they should prioritize its funding request to Congress to give preference for the water management review study and, three, formally submit the review study request and budget to Congress for immediate funding.

It is further recommended to the Corps that they provide the Columbia/Snake Irrigators and the Eastern Oregon Irrigators Boards of Directors with a formal reply to this study request so that the associations may inform Congress of the Corps' progress in complying with this important constituency request. Thank you.

Stuart Stanger: Thank you. Yeah. If you have a copy of that, pass it to the Colonel. We'll look at that, and we will respond.

Charles Dawsey: Yes, my name is Charles Dawsey and I'm the General Manager of Benton REA. We're an electric cooperative serving a large part of Benton and Yakima County. Certainly, we're concerned about the impacts that the study could have with the John Day, but by now, all in attendance certainly know that Benton REA and its governing board is adamantly opposed to drawdown or the breaching of dams on the Columbia River or its tributaries. Therefore, I'm not going to repeat comments which you've already heard and that we have made before. It's interesting to note that at many of these hearings, the comments are provided by individuals from this generation. Unfortunately we hear few comments from those individuals from the next generation. Ladies and gentlemen, tonight we have a unique opportunity to hear from these individuals representing the next generation of leaders who must live with the consequences of any decisions that will be made on these most important issues. These individuals will be speaking in behalf of Benton REA tonight. As such, I would like to surrender any of my remaining time to the 1999 Benton REA scholarship recipients who as part of that process were required to investigate and report on how breaching of John Day Dam would affect our own local communities. With that, I'd like to introduce Peter

Kennberg, who is a senior from Hanford High School; Lori Miller, a senior at Sunnyside High School, and Lindsay Graff, a senior at Sunnyside High School who will present our comments in behalf of Benton REA.

Peter Kennberg: There's no longer any barge transport on the Columbia River. There's no longer any hydroelectric power being produced. There are annual floods in the Columbia Basin. There's no longer irrigation water for the farming. Is this the result of some natural disaster? No. This could be the result of what some people are proposing. The breaching of the John Day Dam. This is a catastrophic idea.

What exactly does the breaching of a dam involve, you might ask. The breaching of a dam involves digging channels around the dam so that the river can flow more freely. Portions of the dam are removed and the concrete structures retired along the river's path to bypass the concrete. Why would citizens want to breach the dam? The breaching of dams would be to help save the salmon and to restore the Columbia River to its free flowing state. It is true that we need to do everything in our power to save the salmon from extinction, but the wholesale destruction of dams is an extreme solution. Even if John Day Dam, four dams on the Snake River, were breached as the current proposal suggests, the salmon would still have to contend with two dams downstream and up to eleven dams upstream.

There have been many proposals as to how to save the salmon without breaching the dams. One proposal that has been enacted at some dams is the juvenile bypass system. This is where a screen prevents the salmon from entering the turbines and directs them to a bypass channel. From there the fish are either released at the base of the dam or they are shipped by truck or barge downstream of all the dams.

The purpose of dams is to provide a renewable source of energy, to provide a method for barges to get upstream and to provide the farmers with adequate irrigation and to prevent annual flooding. Any one of these would greatly influence the citizens affected by changes in the manner in which the river was controlled. Due to the fact that dams would no longer be producing hydroelectric power, the citizen's electric rates would increase by about ten percent. Shipping would cease and goods would have to be moved by either rail or truck, making it more expensive to get goods in the Columbia Basin. Also, the water needed to irrigate land would have to be pumped in from other regions, costing the farmer more. These costs would be passed on to the consumers.

A few years ago, the Mississippi had one of its worst floods ever. If the Mississippi could have been dammed, the flooding could have been controlled. The same scenario could happen to the Columbia River, causing millions of dollars worth of damage. The breaching of the dams is a drastic measure that could very easily harm the citizens of the region. The protection of endangered salmon needs to be a top priority, but we also have to realize the price that we pay for these actions. Further studies on this subject would do nothing to help the decisions as to whether or not to breach the John Day Dam. Thank you.

Lori Miller: Environmentalists have been pushing the idea of breaching some of the dams on the Columbia and Snake rivers. The breaching of the John Day Dam would have an enormous impact on the Benton Rural Delivery Association and its users. The most drastic effects would be the cost of power to REA and its customers. The John Day Dam is a major contributor of Bonneville Power Administration's power supply. One of the district's powered by John Day Dam is Benton REA. Breaching the dam would result in permanent disruption of power. The people within its service territory would definitely feel its effects, especially during peak demand periods. This power shortage would eventually need to be replaced by other sources, most likely coal fire generating facilities, which would be more expensive and produce air pollutants. The cost of power would increase for REA and its customers.

The economy, in general, would be damaged by the breaching of the John Day Dam. Irrigators who pump from the river might lose their ability to do so due to lower water level. If the farmers lose their water, they will be forced to abandon much of the land that they now farm. The jobs that were supplied by those farmers would be discontinued, and the products that they sold would disappear from the market. Hydroelectric facilities on the Columbia should share some of the responsibility for the decline of fish runs on the river. However, hydro is but one of the factors affecting the decline. Harvest, hatchery and habitat are other factors. The habitat issue deals with the declining quality of river water. The hatchery releases many fish that are not properly conditioned to withstand the rigors of migration.

Harvest is the last factor. Many Japanese and Russian trollers fish off the U.S. and Canadian waters. Canadian and Alaskan fishing fleets may be intercepting our runs. The Washington fleet is a sizable contributor to the coastal economy. The tribal communities hold treaty rights, which guarantee them the right to fish. Finally, sport fishing is a major form of recreation in the Northwest, and fees from license sales are the funding source for the state game department. It's clear that the breaching of the John Day Dam will not cure our environmental problems concerning the salmon. There is very little evidence to support this deceptive notion. In fact, breaching the John Day Dam will create many more problems than it would solve. I believe that there are better alternatives in making the rivers more fish-friendly without destroying our dams.

Lindsay Graff: If the John Day Dam was breached, there would be an immense impact on the entire Northwest. The John Day Dam is located at the head of Lake Celilo, 216 miles upstream from the mouth of the Columbia River. Construction of the dam by the U.S. Army Corps of Engineers began in 1958 and was completed in 1971. At the time of completion, John Day Dam powerhouse was the second largest in the world. Of the twelve hydroelectric powerhouses in the Portland District of the U. S. Army Corps of Engineers, John Day produces enough energy for two cities the size of Seattle. Based on information from the Corps of Engineers, John Day produces nearly half of all the electricity of the twelve hydroelectric projects in the Portland District. Losing this dam would greatly affect the cheap electricity in the Northwest. Nearly 40% of all electrical energy requirements are produced at the 21 hydroelectric projects in the Pacific Northwest. John Day is a major part of that project. Benton REA, who currently

purchases 75% of its energy from Powerex, a Canadian power supplier, would have heavier competition for power. Other providers of energy who rely on BPA energy would be hunting alternative sources, one of which would be Canadian electricity. Rates would go up for the Benton REA customers. Besides the obvious impact to electric consumers would be the impact on nearly every segment of Benton REA customers' lives.

The 15 recreational areas developed above the dam may be effected by its loss. Many people who rely on these recreational areas for their quick accessibility and ease of use could find that gone. A certain part of Benton REA's customer quality of life would be lost. Flood control systems that are a part of the system of dams of the Columbia River might be threatened if the critical link in the system, such as the John Day Dam, were removed. It was reported that without the current flood control system that the 1964, 1965 flood would have surged over Portland's seawall if the floodwaters had been unregulated by storage.

The power and irrigation needs in many acres of land would be in jeopardy. With agriculture being a major employer in the area, we would see layoffs and higher unemployment. An editorial in the Portland *Oregonian* listed wide-ranging benefits of the Columbia River and the hydropower it produces. Irrigated land makes up 37% of Northwest farmland and produces nearly 75% of Northwest agricultural products. For every two agriculture-related jobs inside the Northwest, one additional job is created outside the region. So you see, not only would the Benton REA's customers see a big change in the price of electricity, quality of life and financial and economics of their area, but also a domino effect would be created that would affect the people across the nation. Breaching the John Day Dam would be a tragic loss to Benton REA customers and the whole Northwest. Thank you.

Stuart Stanger: I think all three of them deserve a hand, don't you? Yeah. Those are some pretty factual papers. Go ahead.

Daren Coppock: Thank you. My name is Daren Coppock. I represent the Oregon Wheatgrowers League, and while I don't have the authority to represent the Washington Association of Wheatgrowers, I know that their feelings are very much in line with what I will say tonight.

First, let me say thank you to all of the guests that came. I appreciate you coming here where the people are that are going to be impacted by these decisions to have hearings and collect our comments. You asked one of the questions early on was whether this process should proceed to Phase II. The answer is no, and let me give you four reasons why.

Drawdowns are economically ruinous. We've heard a lot of talk tonight about what the power impacts will be. There is ten million tons of cargo in the Columbia/Snake River system each year. Sixty percent of its grain. If you move those commodities to truck and rail, rail shipments are twice as expensive per ton as barge are; truck shipments are four

times as expensive, and so that money, I hate to contradict an earlier speaker, but that will not be passed on to customers, at least in the case of wheat. Wheat prices are established on an international market and that money will come out of the farmer's pocket, not the customer's pocket. The cost of replacement power, the cost of damage to roadways, to industrial and municipal water supplies; the list goes on and on and on about the negative economic impacts drawdowns will cause.

Secondly, drawdowns are biologically hypothetical. The data that supports them comes from models based on assumptions and formulas. There is no empirical evidence to prove that drawdowns will save fish, and the models that are used to make these conclusions are based on the FLUSH model, at least in the PATH process. And in 1998, FLUSH flunked the reality test. Actual fish passage through the system was somewhere around 58%. CRISP estimated it at 52%; FLUSH was at 20%. Not even close. And so until we get better models in place for estimating passage and effects on fish, they're biologically hypothetical.

Thirdly, NMFS own data indicates that they're probably biologically unnecessary. Passage through the system according to NMFS data presented recently in Portland shows that passage through the system for juveniles is as high as it was in 1964 before the last three Snake River dams were built. We're also seeing a lot of data that shows unknown ocean impacts and how climate changes out there are going to affect fish passage. There was a scientist from Canada that presented data in Portland the end of January to that effect, some very telling information.

Also, if dams were the problem, I don't think we'd see healthy fish runs in the Hanford Reach and I don't think we would see recovered fish in the Umatilla River. Those fish all have to traverse three federal dams to get home.

Lastly, drawdowns could be made a case to be environmentally harmful. Alternative power all will have more negative air pollution impacts than hydro does, whether it's coal or nuclear or gas or whatever we want to come up with.

Also, moving all of the commodities that are in the river to truck and rail will increase fuel consumption because those are less efficient forms of transportation and they will increase particulate emissions into the atmosphere impacting our air quality and so we'll be caught in a vise grip between fish recovery and air quality problems.

So with all those things said, I think the evidence is fairly clear and our association would strongly recommend to the Corps to suggest to Congress these studies not be continued to Phase II. Thank you very much.

Stuart Stanger: Thank you. Appreciate your comments.

Bud Mercer: Thank you. My name is Bud Mercer. I'm here representing Mercer Ranch. I didn't come here prepared to speak so I'll try to make this real brief. And thank you for those comments, cause they're right on target.

I want to talk about the cultural aspects because as a resident of the region, directly adjacent to John Day for most of my life, I want to tell you a little bit about how it was before the dam. Before the dam, Hermiston and surrounding area had a population roughly half the size that it is today. Tri-Cities region was roughly half the size it is today. Since John Day Dam has been constructed, roughly ten percent of the irrigated agriculture in Washington and Oregon is fed out of John Day pool. A lot of the economic growth that has created that population boom, boom I guess you'd call it if you look at it from my perspective, is directly attributable to what's happened out of the John Day pool.

I guess my point is, it's hard for me to believe that we would seriously consider a drawdown in John Day pool on the possibility that 30,000 salmon might spawn when we're looking at displacing more than 100 thousand people and enough agricultural production to feed two or three cities the size of Seattle, let alone the power and environmental impacts that would occur there. And all of you folks with as much gray in your hair as I've got have actually seen that happen and those of you from out of the region, and I just can't believe that you'd come in here and ask us to make that kind of sacrifice on the possibility that it might affect fish. Now I have to admit you're wearing me down because we've been at this for ten years, you know, and we have submitted to you folks enough evidence to show that drawdowns really don't do any good. When they wanted to go to what, minimum operating pool, industry got busy and helped produce enough science, enough reputable science, to show that that wouldn't do any good, and it was literally over the dead bodies of the Portland crowd who wanted to pool down John Day pool, but finally we got it off the table, and we thought, you know, we really got them to look at this issue.

Now here you are back again saying now, because we have 30,000 fish that might spawn and these are not even protected under ESA, it's just hard for me to understand how this is happening. You know, I guess I'm getting old. You're wearing me out. You know we have, you know from where Dick Bechtel is on the west end to where Agri-Northwest is on the east side, and all of the land in Oregon, there are 30,000 people that depend on that river, directly, let alone indirect. So, thank you for the opportunity.

Stuart Stanger: Thank you for your comments. Eric, do you want to respond to that?

Eric Ostrovsky: Well, all I wanted to say is that the benefits, and I wasn't trying to say the total benefit was to save, you know, potentially spawning or revive spawning habitat for 30,000 fish. The real idea is that drawdown of John Day Dam, it would be part of an overall strategy and it's a strategy that has … and it has the other 4 H's in it and the study would be a part of airing out all the issues that are needed in all those H's. Students here talked about that, too. It would be a joint effort I think by a lot of people in the region.

Bud Mercer: I have to respond to that. This issue has been absolutely studied to death. The issue has been studied to death. The side of multi-use of the river has won every single time. We're going to win again. I just can't believe that the federal government to whom we pay taxes forces us to go through this every damn year.

(Applause.)

Everett Hamilton: My name is Everett Hamilton. I'm a director of Benton REA and a farmer and have been involved in this issue quite a long time, and I have some questions I would like to ask you. You keep bringing up the habitat issues and different things like that, and my first question is to the Colonel, where I know there's been a lot of discussion about this island that the Corps created down on the mouth of Columbia that has the terns on it that eat the juvenile fish, and my question to that is, what is the plan to solve that problem?

Bob Willis: Yeah. I'm Bob Willis. I'm Chief of Environmental Resources for Portland District, and I've been involved with the Caspian tern issue. The issue of Caspian terns was another item that was addressed in NMFS Biological Opinion, and they recognize that these terns may be taking juvenile salmonids, so we had a study that had occurred over the last couple of years to try to determine what was the extent of that. Information that came in indicated that the terns were taking large numbers of juveniles, so in cooperation with U. S. Fish and Wildlife Service, National Marine Fisheries Service and the state Fish and Wildlife agencies, we had come up with a plan in terms of trying to address this tern issue. The terns are located on Rice Island in the Columbia River estuary. We are currently in the process of trying to move the terns. The terns will be coming back in towards the end of March, first part of April. We're moving them down onto an island further down toward the ocean where they had come into the estuary initially. The studies that we have indicated there's a larger prey base down there of fish so that they wouldn't just be eating juvenile salmonids. We have gone out and we have done grass seeding, cause the terns want bare sand to nest in, and this weekend we have the Marines coming on in to create habitat down on East Sand Island. This is the initial part of this. We are also working with these same agencies to come up with a long-term plan. It's our hope that these actions will significantly reduce the avian predation on juvenile salmonids.

Everett Hamilton: Okay. My second question is on another habitat issue which is the foreign fishing, and I've asked this question at half a dozen different meetings and had the same answer every time, but anyway, I think I'd like to direct this to Eric from NMFS. The foreign fishing off our coast, which I understand has been moved from the twelve-mile limit into the three-mile limit, inside the three-mile limit now, why does the federal government allow that, the same federal government that is requesting that we just do these studies to tear the dams down or is discussing tearing the dams down? Why do they allow foreign fishing?

Eric Ostrovsky: I am not exactly sure the fishery that you're referring to that's currently fishing if we're able to identify though I can try to get you an answer for it. At one point, I did troll for fish in Southeast Alaska. At that point, there were factory boats within our limits that did fish. Those are no longer fishing. We've had drift net fisheries that were intercepting a lot of fish. They are no longer in it, any longer, too. I'll admit those fisheries have had historic impacts on the taking of salmon. There may be fisheries right

now, American fisheries, that have an incidental take, but I'm not aware of an incidental take in the ocean fishery of listed fish other than some Alaska troll fishery, but if you know, I'm happy to look into that further. I'm just not sure which fishery you're referring to.

Everett Hamilton: Well, the studies and the people I've heard talk are talking about the 35,000 or 3,500 kilometers of foreign nets off the Oregon/Washington coast on a daily, nightly basis.

Eric Ostrovsky: That's currently going on?

Everett Hamilton: Yes.

Eric Ostrovsky: I'll try to find out from the fisheries management at the National Marine Fisheries Service what that could be referring to, but I couldn't give you a specific answer on that.

Everett Hamilton: Well, if that is going on, my question would be why would the federal government allow that because you know everyone that I've talked to says it is happening.

Eric Ostrovsky: I'd have to find out. I mean I could only speculate. I'm not sure, as I say, what that fishery is.

Everett Hamilton: Okay. Then my last question is, and I address that to any of you that want to answer it, but the sea lions that have became an endangered species in the last few years that have been harvesting a lot of the salmon, high quantities of salmon, my feeling on that issue is and I would like someone to answer is, is the federal government's position that sea lions eating the salmon are more important than the economics of the Northwest?

Stuart Stanger: I know I don't have anybody here to answer that question either. Dawn Edwards is going to hand you a card. If you'll write down your two questions there that we were unable to answer, we'll make sure that we do get answers to you.

Eric Ostrovsky: I hate sitting up there on the table but the National Marine Fisheries Service has jurisdiction over marine mammals, and they are protected by the Marine Mammal Protection Act, and I know the service has been working on regulations where you have conflicts between marine mammals and endangered species, especially salmon, and I believe they've come up with certain protocols to ensure that that doesn't happen, that what we have is an increasing marine mammal population that's impacting steelhead, and I don't know exactly what it says on it. I do know that has been worked upon, and if I can, I'll try to get you information on exactly what's been going on. But it is real. It's a real issue and unfortunately you know that's what happens, especially when you have certain species like salmon or certain runs that do get reduced. But there has been some recent work that's been done with that.

Dave Gordon: Yes. I'm Dave Gordon with Northwest Graingrowers in Walla Walla, and I picked up some of the information, and I just wanted to make one comment on the navigation. When it says the John Day drawdown and on the back of it has the facilities that are included with secondary navigation features, I think you should also include any of the facilities that are in the McNary pool because if you can't get through the John Day pool, all of the Pasco area there will not be any barge facilities get to any of those, so I think that needs to be included in your study is all of the facilities that are up in the McNary pool and that is significant amount of movement, of transportation. Is that included, I guess. I don't see ...

Stuart Stanger: No, but it's one of the things we are looking at. Let me answer your question, and then I'll add to it. What we are looking at with regards to navigation is maintaining navigation so one of the alternatives we will look at is dredging a navigation channel from John Day to McNary. What would it cost to do that? That's what we'll develop. So under that scenario, navigation would continue up above McNary, okay? Now would that be feasible to do that? I can't answer that today, but we will be looking at that. But you're absolutely right. If there's no navigation going upstream, then certainly there's impacts further up. We are not, you've got to recognize in this Phase I study, what we're trying to do is find out whether drawdown should be considered. If it is considered and we do this feasibility study, we will be getting into a lot of details such as you're raising. Within a year's time, there's no way we could address everything. We know this study will not include everything that you can think of that should be included in a feasibility study. What we're asking ourselves is, do we have enough information in Phase I that we can make a recommendation to Congress? And recognize that when Phase I is done and handed to Congress, they will not have enough information to decide to draw down. The only decision they could make is do further study or stop studies. They will not have enough information. We will not profess to provide them enough information to decide to draw down.

Dave Gordon: But if you look at the economic issues, and that's a part of your report that you're handing to Congress, then you have to look at the McNary pool because that's going to be part of what you're trying to evaluate, and at least it should be mentioned in here and at least you can mention the number of facilities that are included in the McNary pool.

Stuart Stanger: Yeah, understand. If navigation were not possible through the existing John Day pool, if navigation were not possible, those facilities all the way upstream would be impacted, but we are going to cost out what it would cost to continue that navigation so navigation could continue into McNary, okay?

Chuck Wierman: Yeah, my name is Chuck Wierman. I'm just a Kennewick resident, and I guess I'm asking sort of the same question, and I choose these words carefully. How broad are you going to cast your economic net in this study because I believe just the fact that we're even having this discussion, you've already impacted my property values, and I would like to know who's going to send me the check?

Stuart Stanger: Yeah. We've heard that earlier and we've heard it in some earlier meetings. We understand that just the fact that the Corps has been tasked to conduct a study does have economic impacts. It causes companies to question whether or not to move into an area; it causes question of whether or not to make improvements to a pump station. It does have impacts and we realize that. We're sympathetic to that. We will assess regional impacts in this Phase I study; we have the opportunity to discuss regional impacts, not something that we would normally do in a feasibility study. Normally, the Corps would look at what's the economic impacts to the nation. That's different than regional impacts. We can discuss the regional impacts in this study, and we will.

Louis Towne: I'm Louis Towne. I'm a retired electric co-op manager, and one of the things that bothers me in some of these discussions is that it seems like whenever they try to find out where to put the money, the money cost of some of these things, they find a very convenient thing called the Bonneville Power program, and we've had, we started out with a $200 an acre cost for irrigated farms and in the last 15 or 20 years, there've been a whole lot of other things added in, and I'd like to see a more even breakout as to the various costs of these things rather than power. Just because we have low-cost power doesn't mean we have to pay for everything through the power cost.

Stuart Stanger: And thank you.

Tape changed at this point

….And Benton will be sending in some written comments later in the week. The first thing I looked at when I came in here -- I looked at the size of the crowd, and I go to all these meetings and I'm used to seeing about anywhere from 400 to 600 people come to these meetings, but I only saw a flyer just two days ago -- the first time I saw anything -- I track this pretty close. I didn't realize you all were going to have a meeting tonight, so I question how well advertised this was, because people that I'm used to seeing at meetings like this just aren't here tonight. Also, you know, some of the comments I've heard tonight -- the -- I didn't realize that reducing the level behind John Day would actually impact behind McNary. That was new to me, so, you know, there's a lot of people upstream of McNary that would have been here, I think, if they had known that that's a potential situation that they might face, the -- and I just don't think the average person in this area knows that that kind of impact can come from this kind of action that is being studied. The -- I look at the John Day pool as like a big shock absorber. You know, it's a shock absorber for flood control when you look at the floods we've had, like, I think it was three years ago, or two years ago, in -- with the work done with the Corps and the bureau, and Bonneville, they were able to prevent, I think it was up to something like $1.5 to $2 billion worth of damage to the Vancouver/Portland area. Yeah, that's a pretty significant impact. I hope that's considered in the studies, cause that can happen again. Also, the John Day is the last major dam where you can actually control the water, as I understand it. It's the last dam in the series of dams that are used for flood control, and so that's why I think of it as a shock absorber. The other aspect is when you think of the power system and transmission system, John Day Dam is really -- the generation there is

used to stabilize the federal based system, and I hope you're gonna study the impacts of what happens to the federal based system, if those generating resources are no longer there, and take a look at what happens to the intertie and then what happens to the contracts that we have -- you know -- the Northwest has with, say customers down in California to guarantee power going down on longterm power sales contracts -- things like that. How will that be replaced? And what I see is just a bunch of cascading economic impacts occurring, and I'm not clear in my mind anyway, just how many tiers out you will go in studying this issue and quantifying the numbers. Let's see, I guess that's really -- I don't want to repeat what other people have said, so that's all I have for right now. I'll put the rest in writing.

Dawn Edwards: I'd just like to make one comment, because I'm the person who is responsible for getting the word to all of you. I would suggest that you talk to your local media and ask why this wasn't publicized because we sent out three news releases, and we've made personal contacts, and if you didn't know about it, you have my apologies, but I suggest you talk to local media.

(Audience member) I just want to say, the last set of hearings that have been held here, there's been like three or four in the last six months -- they were very well attended, they were very well advertised by the federal organizations that were responsible for fielding those events, and I just was absolutely shocked at how poorly advertised this was and I can't accept that as an excuse.

Dawn Edwards: The key word is advertised, and we did not purchase advertising. We have learned from this and from now on we will, but we did not purchase advertising. We relied on the news value, and I apologize for that. We will purchase advertising; we didn't think we needed to in this case.

(audience member) Does that mean you should come back after you've advertised? Well what - and I don't want to get into the debate, but what I would suggest is instead of having meetings in Alaska and meetings in Montana, put that money for those programs into advertising here in Eastern Washington and Eastern Oregon.

(Clapping)

Stuart Stanger: Yeah, I don't want to get into a debate either, but there are Senators from Montana and Alaska who would strongly disagree with you. With regards to your comments on the power and the distribution system, that is part of the scope of this study, and BPA is working with us to identify those impacts.

Richard Beightol: My name is Richard Beightol. My wife and I are farmers and we farm with irrigation from the John Day pool. I'd just like to start out my comments by saying that I believe that the federal Columbia river hydro system is one of the greatest accomplishments of mankind on this earth and the benefits are immeasurable when you look at the economics, the recreation, the flood control. It's unimaginable for me to think about all of those benefits and to think that we might -- we in this room would allow

someone to tear that down and I'm not going to allow that to happen, and I hope none of you allow that to happen. I'd like to start out my comments with maybe a few questions -- why are we looking at drawdowns when we have the data, we have the science, if we look at the right model, that is, we have the science, that tells us that our transportation system is working and will accomplish the same thing, possibly better than this drawdown, as far as moving smolt or moving salmon through the system. I guess I don't understand that.

Stuart Stanger: Do you want me to answer that one first?

Richard Beightol: Sure.

Stuart Stanger: Eric?

Eric Ostrovsky: Everytime I get volunteered, I lose on this. Well, what I wanted to say is that I probably should have done a better job on this as I was describing things, but the Biological Opinon in 1995 that looked at the whole action of the power system had many reasonable and prudent measures in it, and the idea behind it was not to judge and weigh necessarily when looking at the longterm configuration at the cost to recover salmon. We had done that in 1994 with our Biological Opinion. We said then that there's only finite resources for recovery and this is what we would spend, and the Corps said no. The ESA to recover species does not look at the cost. We look at the activities to recover the species, but the cost can be tabulated. We did not know, and there's still a lot of information on the diverse and complex system for any species, necessarily what you're going to get back and what you're gonna get back for survival and recovery standards, and that's why we were looking, and why we're looking at this study. It is part of a whole number of reasonable and prudent measures within the Opinion, and basically what the Corps had asked of us and what NMFS is doing, is trying to implement all of those. And that's why we're looking at it and we do take it seriously as our responsibility. I'm not going to volunteer no matter what you ask.

Richard Beightol: Okay, I appreciate that answer. I'm not sure I understand all that, but I'll go on anyway. I guess you're asking us -- should we continue this study? What do we think about this activity? I say, we stop the study. Let's use the technology that we have. I don't believe at all in going back to normative rivers and I don't want to be back 50 years from now, and I guess I'm not hypocritical enough to think that somehow we can replace the generation of the John Day Dam or all the dams in the Columbia federal system with some solar generator or wind machine that's somehow going to be as clean and a renewable resource as the hydro system, so I'm saying NO, let's not study it any further. I think there's a desperate need for leadership and at times you can't be a good leader and be popular at the same time. So, I would implore upon you folks that are charged with this responsibility to be leaders, and I don't mean leaders that are measured by polls and say what's politically correct. I mean leaders are measured by results in the future, and the results in the future that I want to see is the system in place, generating clean power and providing opportunities for all of us and all of our children. I think we can study this issue and maybe we can drag it out for another five years or another ten

years. There are some meaningful things that we can do that I believe will help restore the salmon runs, and Pat has given you a list of new water management alternatives from the Columbia/Snake River Irrigators. I support those alternatives and would like to see the Corps pursue that, and with that I'll shut up. Thank you.

Stuart Stanger: Very good comments and you don't need to shut up unless you want to. But, thank you. Go ahead …

Michele Rounds: My name is Michele Rounds. I'm here -- I'm a resident of the Tri-Cities, just representing myself here this evening, and I share a lot of the same concerns that other folks have expressed, and therefore, do oppose further study of this issue, but I want to bring up something that nobody else has mentioned yet, and the significance isn't nearly what these other folks have spoken about tonight, but I moved here almost six years go because of the wind-surfing that exists on Lake Umatilla, and I could have chosen to live in the Hood River area or the Portland area, or somewhere like that, but the highest quality wind-surfing, maybe in the whole world, is on Lake Umatilla, and I'm not sure how you would quantify that or how you would put an economic value to that, but it is very valuable to me and hundreds of other people that like to wind-surf there. I also have maybe a request or something I'd like to see, maybe the gentleman from NMFS can point me in the right direction, but is -- there's a lot of talk about the methods for salmon recovery, but I think it would be very interesting to be able to see a -- like a hierarchy, or something that tells exactly what -- a hierarchy of what the problems are. What's taking the most salmon -- you know -- on down the line, because I seriously question how much impact the juvenile mortality caused by this particular dam really is in relationship to the whole salmon issue. Thank you.

Stuart Stanger: Thank you. There are ways that we capture the recreational benefits as I indicated. If you draw down John Day, your wind-surfing will change. You would have fast water recreation available but slack water recreation would be significantly impacted -- just a second -- with regards to your comment to Eric -- I'm not sure he can answer that today. Can you?

Eric Ostrovsky: No, I can't. I think it is an extremely good question. It's difficult to quantify. I mean I think, depending on any year, depending on the conditions and what's happening, you're gonna have different effects, in the H's themselves or what's going on in the river, and I think, historically over time, we would all agree now that there were mistakes made in the past that were probably very foolish, and we squandered valuable resources, but as far as, you know, what is happening and how it's occurring, you know there are attempts to be made so you can look and see what the impacts will be, but the debate goes on even today -- how do you weigh, for instance, the value of juvenile migrants -- how would you compare that to adults? And, you know, I agree, it's a difficult task. I know there is still a lot of disagreement among even the fish managers -- which is the most valuable, so I couldn't give you a real specific answer.

Stuart Stanger: Let me add just one more thing. Let me tell you what we are doing in this study. We are going to release some tagged fish. You know, Eric has mentioned

travel time through the John Day pool. We don't know whether that's a problem or not, but we're gonna release some fish and find out how long it does taken them to get from McNary to John Day to see if that is a problem.

(Question asked of Stuart, but not audible to transcriptionist.)

Stuart Stanger: No, we don't like to base any decision on one year of biology, but recognize that river is controlled flow, so we can control --there are a lot of instances where we have uncontrolled spill, but we are trying to capture what the impacts might be, caused by John Day. We don't know. That's part of what this study will do. We'll look at how much predation or how much mortality is there in the John Day pool. We're also looking at -- and we've got studies under … to determine how much, or let's say, estimate how much habitat might be recoverable from spawning habitat? We're trying to get at those questions as part of this study.

Audience member: I almost have to apologize before I ask this question, but I guess anybody can answer, but does it seem to be just a little bit bizarre that we're -- we're talking about sea lions that eat salmon and I don't know how many -- gillnets we've got across that river between Bonneville, and I've seen numbers, I guess I'd have to ask our economist exactly, but I mean -- it goes up to $900,000 per fish. Does anybody besides me feel that this is bordering on insanity? I mean, how do you sit here and talk about it so calmly as if this is normal? It's not normative to me.

Stuart Stanger: Somebody back in the back. Oh, go ahead.

Darryll Olsen: Good evening, Stuart, my name is Darryll Olsen, a resource economist with the Pacific Northwest Project located here in the Tri-Cities, here tonight representing the Columbia/Snake River Irrigators Association and the Eastern Oregon Irrigators Association. I had an opportunity to make several comments and ask several questions in Umatilla two days ago, so I won't bore you by repeating the comments or questions, but I do have four new questions I'd like to ask. The first question is to Eric and Eric, at Umatilla you indicated that in the current Biological Opinion -- '95 Biological Opinion that John Day pool drawdown, MOP, was in there, and that was an action item to be rescinded. You indicated, unless everyone in the room heard you wrong, that National Marine Fisheries Service is not going to pursue not only further review of that alternative, but that alternative is off the table. Is that correct?

Eric Ostrovsky: That's correct, Darryll, but after you left it was Fred who asked, and everyone who was remaining on the record -- so I was mistaken on that, so I'm rescinding that, though Bob, who is heavily involved in it feels, as a policy issue, it is not really being followed …

Darryll Olsen: Okay, then the Columbia/Snake River Irrigators have a request, and that is, they would like to receive a written response from National Marine Fisheries Service on what is the status of the John Day MOP drawdown alternative? Where is that in the decision-making?

The second question, Stuart -- at Umatilla I had asked the question about the development or criteria -- what criteria that you had for going into the Phase II study, and if we heard you correctly you said that there was no criteria available at this time, or none had been developed.

Stuart Stanger: Yeah, that's correct.

Darryll Olsen: Okay. How do you plan to involve participants in the development of that criteria prior to release of the draft study?

Stuart Stanger: I'm not sure we will establish any criteria. I threw out some numbers at the Umatilla meeting and what I said is that if there is a high probability of sustaining the fish runs or the fish salmon recovery in the neighborhood of 90% -- if there's a 90% chance that you could recover the salmon and the cost is $500 million, then you'd probably recommend going forward with the Phase II study. On the other hand, if you find out the cost is $3 billion and the probability of sustaining the fish run is only 10%, I said that I wouldn't buy that, and we're hoping for a black and white answer like that at the end of Phase I. If we don't have a black and white answer like that, -- if we're in the middle somewhere where it's a 60% probability and a billion dollars, I'm just glad I don't have to make that final decision. I'll have to make a recommendation, but that's going to be a much tougher decision that Congress will make, and I'm not sure that anyone could involve all of the public, organizations and agencies to come up with a consensus of whether results like that should recommend study or not. I don't think we could ever get consensus, and we've gotta have some leadership and someone will have to make those decisions. I'm hoping for a black and white answer, so my recommendation is an easy one, but I don't know where we're gonna come out on that, Darryll.

Darryll Olsen: Okay, if I understand the answer given here tonight then you're saying you're not going to establish any criteria for the recommendation.

Stuart Stanger: I guess what I'm saying is that if I have to establish a probability, whatever that is, 60% probability and X number of dollars as the cost, I don't know how to do that.

Darryll Olsen: Well, you're gonna have a tough, tough time, aren't you?

Stuart Stanger: If it's in the gray area I think the only recommendation would be that you would have to do additional studies.

Darryll Olsen: Okay. Well, I think another request from Columbia Snake River Irrigators - the board. They'd like to see what your plan is and how you're gonna develop the decision-making if not the criteria for the recommendation to enter into the Phase II study. They would like to know more about this. Something written from the Corps that discusses it.

Stuart Stanger: Yeah, we can provide you the scope of the study that Congress authorized; it includes that.

Darryll Olsen: We would like it a little more specific if you could. The third question -- Col. Slusar. You thought you were gonna get off. Okay. You heard the Board of Director (member) Mr. Tucker make a formal request on the Corps conducting a significant water resource alternative review, and requesting funding from Congress for that. The Board of Directors from Columbia/Snake River Irrigators, Eastern Oregon Irrigators are going to be going to Washington, D.C. in 30 days and do you see any reason why they can't receive a reply from the Corps within the next 30 days -- you know -- so they could go back and tell various Senators and Representatives how responsive the Corps is and what a good job they're doing -- that kind of thing. Could there be a response in 30 days?

Col. Robert Slusar: I don't think we can get through this and get the response back to you in 30 days.

Darryll Olsen: Okay. You can't send a response back saying whether or not you will be willing to engage or to request Congress on that kind of a study?

Col. Robert Slusar: Not within 30 days.

Darryll Olsen: Okay, how long would it take.

Col. Robert Slusar: I don't know ----

Darryll Olsen: One final question. Ed, you're working on hydropower?

Ed Woodruff: Yes.

Darryll Olsen: I got a call yesterday from Reservoir Control. You know Reservoir Control?
Whenever they call they never call to just say hi, how are you -- you doing okay -- everything all right? They always call with an issue. Well the issue this time was that they wanted to take John Day down to elevation 257, and as a result of that we had to contact a number of people. As you know, we're just about ready to enter the irrigation season, people are busy doing some pre-watering, and other things like that, so probably as a result of that call, there was probably, I would say, $5,000 to $10,000 worth of economic activity that was foregone, and then this morning I got another call, and it said, Reservoir Control again -- they didn't ask how I was doing, they just said they had some information again for us. And they said, you know, we're calling off that John Day study, or that John Day operation -- we're not going to do that. I said, well, why are you doing that, and they said, well, Bonneville Power Administration says they don't want to absorb the replacement power costs for that activity, so Bonneville told the Corps, don't draw down to 257, a 6-foot drawdown. The question I have is, if Bonneville Power

Administration is not willing to absorb a 6-foot drawdown for seven days, why the hell are you here now? I don't understand.

Stuart Stanger: Well, we are going to look at the total impact to the Bonneville system with the drawdown. I am totally unfamiliar with what you are talking about today. I assume it was a consideration of flood control to go to 257.

Ed Woodruff: Part of the reason they were talking about going down to 257 is that there is some construction going on in the John Day pool, and I'm not sure whether they're putting in a boat ramp or a boat dock, but they needed to do some blasting and it gets very complicated; it is a very complicated issue because it involves fish, and it involves whether or not we can physically draw John Day down that fast, and still pass the water through The Dalles and Bonneville. There are some units out at Bonneville that would not allow us to draw down to 257, so I don't know what happened today, but as of yesterday they were hoping to be down to 261 by Monday. Now, they could have changed that today, based on analysis they have done. It's a continuing evaluation and the construction still needs to be done.

Darryll Olsen: Well, I find it a little absurd that Bonneville is telling the Corps of Engineers that they are not even willing to absorb a short time economic hit for 6 days, a 6-foot drawdown, and then -- how many dollars is this gonna cost? Ed, you have a pretty good feel for it. What's the annual cost for something like this? Just the power.

Ed Woodruff: It will probably be pretty close to the Snake River results -- which are coming in at $250 to $300 million a year.

Darryll Olsen: Just curious.

Stuart Stanger: Yeah, you need to recognize -- I don't know what the dollar value of the assumed path to this drawdown is, but it is that impact versus a dock or a boat ramp, and so the trade-off there probably just wasn't justified.

Van Walkley: Yeah, I'm Van Walkley and I'm not - I don't live on the John Day. I live on the Ice Harbor pool, and we put in irritation -- my wife and I started irrigating in 1967. Now, we have -- in 1991 we needed to put some -- upgrade the system, and the banker has been very nervous all the time because the Snake River dams have been on the table since 1991, and really it's an economic impact and I don't know -- my wife kinda thinks I should stay home and farm instead of going to these hearings. I'm getting a little bit -- it's an economic impact that affects us. We attempted -- the place has been up for sale once, and it did not -- and that was one of the first questions that was asked. What's the Corps gonna do? Or what is NMFS gonna do? So, I know it would be a great help to those in the Tri-Cities and the Hermiston area to say, we're gonna stop this study, right now, because it would -- I don't have any idea how much -- the Corps puts the money in but how much the private industry puts in to either cooperative with the study, or come up with ideas, or attend these hearings. Thank you.

Stuart Stanger: Thank you for your comment.

Earl Schewck: Kennewick resident. I've just got a question about the levels that you have behind the dams there. As you get further down does your gas levels -- are they -- as water turbulence gets more, does it -- are we increasing more, or like even when you get down to natural levels, are we gonna have more gas in the water that is gonna affect the fish?

Bob Willis: We've had some gas abatement studies going on where we have been actually measuring gas development, and gas production is not simple, but what it's related to is spill at the projects. If you have more spill, then you will generate gas. Gas generally will dissipate the further you go downstream. Okay, now what we've tried to do recently is put in things that -- flow deflectors and that -- that would reduce the extent of gas, and so the amount of gas that's in the system, and how we can operate the system, has improved over the last several years, but generally the question that you're asking is the further you get downstream from a project the less gas you will have because it will dissipate.

Earl Schewck: Even when you get down to natural river flow where you get more turbulence?

Bob Willis: At natural river flow. Generally, if you're down at natural river flow where you have riffles and that, generally then that would benefit gas dissipation.

Victor Moore: I'm Victor Moore. I'm a local person. My wife, Bobbie. I don't want this evening to go by without at least one person taking an opposing view. I have heard all evening now in the comments people with vested interests, and I think that it's time that at least one person speak up and say, what is the consequences of the extinction of the salmon? Is that worthy of study? And, I've heard tonight the vested interests think that there should be no more money or industry put into that kind of a study. I want to say that I believe there should be; that I don't think we can take the consequences without studying it, and I for one, want to say that I want you to continue the study of this very vital interest. Thank you.

Stuart Stanger: Thank you.

Doug Watts: I'm Doug Watts. My brother and I have Watts Brothers Farms that we farm on the John Day pool. We started about 15 years ago, farming there on the John Day pool. At that time we had seven employees. Today -- and about 1000 acres of land. Today, we are farming 18,000 acres of land through acquisitions and have 300 to 400 employees, with 150 of them year around employees on the John Day pool. It is very important for us to know where we're at. Our financiers are all asking this question every day. Are we going to have water? It's very important for us to know where we're at. We are opposed to any more studies.

Stuart Stanger: Thank you. If there are no more questions, comments, I want to thank all of you for your comments, and I'm going to turn the meeting back over to the Colonel.

Col. Robert Slusar: Again, I want to thank you all for being here tonight. I know it's a tough issue. It's confusing for me sometimes, as being the Commander of a district; I have a mission also at the projects to increase the fish passage, and I am doing that today, as you heard, we are doing things and improvements at our projects to ensure that the smolts get down safe, and adults get up the river safely and swiftly. So, we are doing a number of things at our projects. I've also been given a mission from Congress to take on this study. As a good Army officer, I salute Congress, say, "Yes, Sir, I'll do that," and that's what we're here for, and hopefully you can help us and join our team to get through this process, because I have a mission to report back to Congress based upon the one-year study that they have told us to do, and provide them with the information, and we're gonna provide them with the best information we have available in this one-year timeframe to come up so that they can make an informed decision. And I think that's what is here tonight: we have heard you; we've heard your comments; we've heard your comments at the other places we have been at, and we take those comments seriously. So, again, I do appreciate your comments tonight, and we're looking again at those benefits and those impacts, and we're gonna do the best job we can to get the best decision in the timeframe allowed, and I appreciate it, and appreciate your time here tonight. Thank you.

GOLDENDALE, WASHINGTON
PUBLIC MEETING

April 21, 1999

Meeting Transcripts

John Day Drawdown Phase I Study
Public Meeting Record
Goldendale, Washington
April 21, 1999

COL. ROBERT SLUSAR: I'm Col. Robert Slusar, as Ray said, and I am the Commander of Portland District U.S. Army Corps of Engineers. For you out there that may not understand how we break out the Corps missions here in the Pacific Northwest, I just want to give you a quick snapshot of how we are organized here. I am one of five district commanders in the Pacific Northwestern Division, and we all report to a general officer and that general officer's division headquarters is also located in Portland, Ore., along with my office. So, I command the Portland District. There is a Seattle District commanded by Col. Mike Rigsby. There is a Walla Walla District which is commanded by Lt. Col. Bulen. There is an Omaha District commanded by Col. Robert Volz and a Kansas City District commanded by Col. George Hazel. So, those are the five districts that make up the Northwestern Division. I am here tonight because my footprint, the area that I am responsible for, includes John Day Dam. I have the responsibility, the Portland District has a responsibility, for maintaining Bonneville Lock and Dam, The Dalles, and John Day on the main stem of the Columbia. We also have the responsibility for Mount St. Helens, the Willamette Valley, and there are 12 or 13 operating projects in the Willamette and we have two down on the Rogue River plus we have the responsibility for about 13 or so coastal jetties and harbors and the navigation on the Columbia River.

With that, that is kind of the reason why I am here is because John Day is in my boundary of operation. I have a team of Corps folks that work for me here today and hopefully you have had an opportunity to meet with some of those folks out here in the other room as you saw some of the charts and what we are doing in terms of navigation, recreation, flood control, as we go through this process on this study. They are here for basically three reasons. The first reason is to come up here and talk to you about the process that we are going to use that we are going to go through in terms of this study and then answer back to Congress on. Second is to hear to comments and answer your questions. And third, to gain any additional information that you may have in terms of studies or literature of results of something that occurred that you may have that we can use as part of the study to help make our determination.

Again, two areas that we want to concentrate on are benefits and impacts. We need to know what the benefits are and the impacts. We need to know what the benefits are on the drawdown studies resulting to fish and the benefits, if any, results to the economy and also impacts and the impacts related to fish and any impacts related to the economy. So, those are the two things that we are trying to key into in terms of this process. Now there are two individuals up here at the table that are going to help us walk through the process today. On my far left, your right is Eric Ostrovksy. Eric is a representative of the National Marine Fisheries Service and he represents the federal biologist in this study. He will be talking a little bit about from the ---- perspective, the over-arching fish management process and impacts in the region. On my left, and your right, is Stuart Stanger, my project manager for this study, and Stuart represents the federal engineer. As the federal engineer it is my responsibility to oversee the maintenance and the operations of the multipurpose projects on the Columbia

River. We have been asked to look at this study, by Congress, to look at the impacts and the benefits of a potential drawdown related to fish. So that is kind of where we are at. Now, as we move through tonight's event, Stuart will be the facilitator. Since he is the project manager, he will come up in just a minute and talk about the process that we are doing tonight and walk you through that and he will turn it over to Eric. Eric will make his comments in terms of perspective of the National Marine Fisheries Service and then Stuart will talk again in detail about what we are doing with the study, how you can get involved and where we are going with it and when we need to report out.

After Stuart finishes that, I understand there are a couple of elected officials out here today that would like to make some comments so I will let them make their comments first and then we will open up to the general public to listen to your comments, any questions, we will be able to answer those. I do have my team, somewhere around here, they are scattered around here, and hopefully we can pick those out if we get into some technical questions, that they will be able to help out the project manager. So with that, I would like to turn it over to Stuart at this time.

STUART STANGER: Thank you. Welcome everyone. Thanks for taking time out of your busy evening. We have quite a crowd and I am glad to see that. As the Colonel mentioned, one of the key reasons that we have these meetings is because we do want to hear your input and we are prepared to stay here as long as that takes, although please keep in mind I haven't had dinner yet, but we are ready to listen to your comments. All we ask is that everybody be courteous to one another and be considerate. We would prefer not to have 30 minute dissertations. If you have some comments that you want to provide that are lengthy, we would ask that you do that in writing and they will be included in the report. What we will be doing tonight is using microphones. We will have microphones that are passed around and we would ask that before you start to speak, please hang onto the mike, state your name and if you represent an organization, state that as well, because this will be written up and the comments here tonight will be included in the report that goes to Congress. So, everyone will have an opportunity to see what the comments were at the various town meetings we have had. Normally, what I would do is introduce my team but I can't even see them around here tonight. Here's a few of them, but I do have Dawn Edwards, she is running the projector for us. She is in our public affairs office, her name is on all of those information papers that you picked up. If you have any questions or comments you want to provide to us later, you can get them to Dawn Edwards by calling the public affairs. We have Chuck Willis, he is the biologist on my team, raise your hand there Chuck. The reason I am introducing these people is because if you don't get all of your answers in the meeting here tonight, we will be around for a little while after cleaning up and you can still talk with us at that time. We have Brian Shenk, he is our economist, Ed Woodruff is working primarily hydropower. Ken Soderlind is working the navigation and flood control and who else do we have? John Todd hiding back there, maybe some of you can see him, he is working the irrigation pumps and utilities. With that, as the Colonel mentioned, I am going to turn this over to Eric Ostrovsky from the National Marine Fisheries Service. We are going to ask that you hold all of your comments and questions until we are done. Things will move much more smoothly and I think you will have a better understanding of what we are doing at John Day, if you let Eric and I get through our presentations. Hopefully we will do ours very quickly because we know that we

have some officials that want to make some comments as well so we will shorten ours up as much as we can and it should take about 20 minutes to get through both of them.

ERIC OSTROVSKY: Thank you, Stuart, and I want to thank everybody especially the community leaders that have come out here. I just wanted to mention that we are going to shorten this up because there are a lot of you, but I for one, I will stay as long as there is someone here who wants to talk, as long as you want to talk and after the meeting I am willing to stay. My wife gave me explicit instructions not to eat dinner, not tonight or almost any night, so I am going to be here anyway. So, if you could maybe move onto the next one. You know, talking to everyone and in a lot of the meetings out here, one of the issues here is even before you get to our own immediate existence, who or what we all are in the Northwest, I know everyone has their own reason for being here and thinking the area is very unique. Most people, though, when they think of the Northwest do include somewhere in there, salmon and the legacy of salmon, among those other aspects, and the truth is that salmon are in trouble. They are in trouble in the Pacific Northwest. The wild runs in the Columbia Basin at one time had been around 35 million fish coming back annually. Those numbers are way down. I mean, they are way down for hatchery and wild fish, and they're drastically down for wild fish, and talking to a lot of the people, what I really wanted to emphasize -- one of the issues is that -- there are a lot of reasons why there is this loss. All of you know, if we could turn back time when Grand Coulee Dam was created, when Hell's Canyon was created, we created some dams where there really was no passage beyond them and we lost some of our prime habitat. Unfortunately, when a lot of the other dams were built we really - they were not done the way they would be done today. There was situations and other problems that did a lot of destruction, too. But, beyond that, there's a lot of things going on in the region, and NMFS does not have blinders on and they are not just looking at you, John Day, or any specific dams, and saying, that's what the problem is. There have been problems with hatchery issues and how hatcheries have been used, and those impacts on fish. There have been problems with harvest and just how fish are caught. I know many of you have concerns about fisheries on the river today and I have heard a lot about drift nets in the ocean and I assure you they're not there any more, but we could have some other discussions on that, and the region is just getting bigger, and especially in Portland, where there are a lot of listings, too. You are having major impacts in different areas, and they all have impacts on fish, and one thing that is clear, even with issues going on with the passage of salmon, it's going to take more than that. Everyone is going to have to look at all of the four H's as we like to call them, if we're going to start turning back what's happening with the fish. What I have listed here are just the six salmon stocks that migrate beyond the John Day Dam that have been listed in the ESA since 1995, but there are actually 13 stocks in the Basin. This shows proposed listings - that's when we first began that - they were proposed. These stocks have now been listed and I could do a map of the whole West Coast, and you would see those problems up and down the West Coast, and I just wanted to say, the National Marine Fisheries Service realizes that the issues are complex. There are a lot of issues everywhere but if you believe salmon are worth saving, you know, we have to get into this issue. Well, the first listing happened in 1995. It was Snake River salmon, and what occurred is, NMFS is the agency that actually took the petition, listed the fish. We do anadromous species, and after that occurred, anytime there is a federal activity, we consult with that federal agency. It is a

cooperative effort to make sure that their actions don't continue to jeopardize the existence of that species, or the habitat on which it survives. We did that for the Columbia River Power System, and if you could - it was a jeopardy opinion which meant that we needed a reasonable and prudent alternative for the system to continue, and actually, what that was is that we were looking at both intermediate measures and a long-term remedy for it which many of us call the 1999 decision. There are a lot of arguments about what the system actually does and how it can be affected, but some of the intermediate measures that we're doing for fish and trying to get them not to go extinct before we can answer some of the other questions, we've changed the flow patterns, we want - we have what are called flow objectives, and a lot of the reservoirs are now operated in the way, basically, to put water on the fish when the fish are migrating and primarily in the summer. They are objectives; we don't always hit those targets - they're soft targets. The hard targets are what the reservoir levels actually are, but as the fish are coming through the river, some of the things we try to do is increase spill to keep some of the fish in river. We have bypass systems to collect other fish as a way to sort of split the risk, while you don't know what's going on. Whether transportation is ultimately better or in-river transportation during this interim period. We're doing both, and falls we are trying to transport as many as we can catch; for the springs we try to keep as many in the river as we can. One of the other things that we've done is that we have asked that the turbines themselves be operated at peak efficiency. The fish, especially going through the turbines, is probably the worst path for them, especially in the spring, once the freshet comes, there will be a lot of water going through the system. When you have involuntary spill there can be a lot of gas, which is very harmful to the fish. One of the interim measures is putting more flow deflectors in; it can lower the gas levels; it can allow for more spill for in-river. We have been putting in extended length screens; it is a good way to keep fish out of the turbines, and especially to bring them in to juvenile transportation systems. Many of you are aware of the salmon facilities at John Day Dam or some of the other dams. It's a very good way of letting us know what is going on in the river itself, for different classes of fish, and river conditions. Concern about both. In river survival what is going on with fish that are transported, the absolute return, the smolt adult return, the effectiveness of new technology that I discussed with some of you, and that's - people here have some good ideas of what can occur, and there are ways of changing this system and through adaptive management we are constantly looking at it. But the Biological Opinion also said - look at the feasibility of actually taking out the project itself, the potential biological benefits to it, and the economic cost. You are all probably aware of the study that's going on in the lower Snake, but it also, especially for the steelhead, in the 1998 Biological Opinion it said, "look at drawdown of John Day Dam, at least, to spillway crest, and to natural river." Why? Well, we know that drawdown allows faster river velocity for a given flow, faster water velocity allows for faster travel time, and for fall Chinook, faster travel time tends to promote smolt survival, and at least between years the higher flows tend to, among at least years, to be a higher survival rate. Also, the ISAB said that we should look at drawdown because it could be a way of restoring habitat that has been inundated and we do know that Hanford Reach fish that, in their spawning area, are doing quite well, both for spawning and rearing. The question is, would this help or not? I don't know, but as far as things that we're going to be looking at, it had been estimated in the John Day Dam reservoir there were 30,000 fish spawned in the area. Finally, you know, as I was saying before, what you need to keep in mind is we're looking at John Day -- it's not just John Day itself, but it's part of a system and it is another

barrier in the system for the salmon, so we're looking at the impact, not only of the individual project but also its cumulative impact as its operating through the project itself. With that I was going to turn this over to Stuart --

STUART STANGER: Thanks, Eric. It just takes a minute to change programs here. Go ahead, just switch it --

Well, I'm going to quickly go over for you, and if you have more questions you can ask those when I finish up, but I'm going to quickly describe what John Day Dam provides now -- project description. What you need to realize is that everything I describe is at risk -- if we draw down or remove that dam. I'm going to describe to you what we're doing in this study, what we told Congress we felt the purpose of this study was, the Phase I Study. I'm going to talk to you quickly about the schedule, and I'll tell you how you can be involved. I think for this crowd we can just skip this -- you know where John Day Dam is. I want to just quickly, and this is really kind of jumping ahead, but while I have this picture, we've completed our 60% analysis, if you will, of what we call the structural modifications that would be needed at the dam, and basically, what you would have to do to the dam if you draw this down, and what we've determined is that the entire spillway plus one or two of the powerhouse units would have to be removed, to pass the water through the dam.

What John Day Dam provides right now is 500,000 acre feet of flood control storage; it provides 2200 megawatts of power, about 9 million tons of cargo go through the navigation lock annually. There are 14 developed recreation sites around the pool. I believe there are 29 pump stations for irrigation around the John Day pool. In addition, there are sources of pump stations for municipal and industrial water supply. There are about 35,000 acres of land and water that are managed for wildlife and fish, and of course, at all the dams there are fish passage facilities for both upstream and downstream passage.

Study Description: What we are doing right now is Phase I. This is a two phase study. We are not even sure we will do Phase II. The question that we are trying to answer in Phase I is whether or not further studies of John Day should be done. As a lot of you I am sure know, a very detailed study is being done on the Snake River dams -- that's what we call a Feasibility Study, and along with that goes an Environmental Impact Statement. That would all have to be done in Phase II of John Day before a decision could be made to draw down John Day Dam. We are simply trying to assess whether or not to begin a study of that magnitude. In Phase I we are looking at four alternatives and if you picked up one of the packets, on the second page, and you can go there, Dawn, you will find this sheet. I think it's the second page, and I will try to explain to you as best I can the alternatives that we're looking at. Right now we operate the dam -- our normal operating pool is elevation 265. At this time we will normally draw the pool down so that we can fill it back up with flood water, if you will. Okay. So, we prepare for the floods to come down, and we can actually draw down to elevation 257 -- that's called minimum operating pool, and we can actually fill to elevation 268, but our normal operation is 265. One of the alternatives we're looking at is to lower the pool to spillway crest. To get down to spillway crest, just open up the spillway gates and let the water go, and the pool will drop to spillway crest. A second alternative we're looking at is to provide flood control along with that, so there would be times when we would fill above spillway crest

to store flood water. The third alternative we're looking at is what we call natural river. It's essentially where did the water flow before the dam was there? That's at elevation 165. The fourth alternative we're looking at is to provide flood control there. So, you would fill during a storm event. Recognize, however, if you want to draw down to natural river you have to remove the spillway, remove the two powerhouse units, and then I have to reconstruct a spillway, 100 feet lower, so that I can hold flood water. Okay. I can't just hold that flood water without having a spillway, so we'd be talking about -- remove this spillway and lower it 50 feet. Okay. So, those are the four alternatives we're looking at. The study purpose: we told Congress what we would do is that we would evaluate potential fishery and wildlife impacts, and the key word there is potential. We would evaluate the social and economic effects and that we would provide finally a recommendation to Congress. So, how are we looking at fisheries and wildlife impacts? Back in 1993, I believe, we started -- we were told to look at drawing John Day down to minimum operating pool. That's at elevation 257, and we started a lot of biological studies; we did cost estimates for what it would cost to fix irrigation, for recreation -- a number of things. We started those, but in 1996, I believe it was, Congress said stop that; we don't want that anymore and so we stopped all those studies. We're going to finish those now. We reinitiated those and we are going to finish those. You've probably heard about PATH. That's the process that is being used on the Snake River study. We're also trying to use that and hopefully they will be able to meet our timelines. We've also formed and are still forming what we call a Planning Aid Team. We have sheets here; they'll be here after the meeting if you want to sign up to participate on that Planning Aid Team you can do that. What you'll be asked to do is review the biological studies as they are completed, to participate with the other members who have signed up at our meetings, and to as a group come up with your assessment of what you believe the benefits might be to drawdown, a benefit to the fisheries, and finally, there's a Planning Aid Letter -- that is a letter that is prepared by U.S. Fish and Wildlife Service. They do that on all Corps of Engineer's studies, and they will make an assessment of what they believe the impacts are to -- for example, resident fisheries and to the wildlife. The way we're looking at social and economic effects is we're looking -- we're going to do a cost estimate for all four alternatives, and what it would cost to replace those things that would be impacted, and then we're -- let me give you an example -- navigation, the big impact, if you took a dam out and draw down to natural river there is no more navigation lock. Navigation could not occur with the same fleet that we have today. So what we're looking at is what would it cost to dredge a channel from John Day to McNary so that navigation could continue as it does. That would be an option. It would be a very expensive option and we know that, but that's what you would lose; that's what it would cost to replace. Another option may be to change the fleet, to use smaller barges -- navigation did occur before John Day, but not with the fleet that we have today. So, you do a trade-off analysis between those two, and whichever one is the least cost, you add that up into your total cost for that alternative. We will look at employment affects. In communities like this there would be dramatic employment affects. If aluminum plants shut down and if farmers go out of business, those are employment effects. Quality of life -- we will also consider that. Other more, maybe not as significant, I guess I would judge them as not quite as significant. We will look at what it would cost to replace the adult and juvenile fish passage facilities. There are -- correct me if I'm wrong, somewhere around 23 utilities that we have identified that would be impacted, from sewer outfalls to water. There are some 360 cultural resource sites under the John Day pool that would be exposed and need some sort of protection. There are water quality issues.

Obviously, there has been a large amount of sediment deposited in the John Day pool, and when you uncover that sediment it's going to be -- it's going to be washing downstream. Twenty years ago, when John Day Dam was built we were not as sensitive to hazardous and toxic waste. There are sites under water today that will need to be cleaned up when we draw down John Day Dam. We are looking at all the costs to do those things. Our schedule: we plan to have a draft done in September of this year. We began in October of '98, so Congress gave us roughly a year to complete. We plan to send the report out to all of you, and for 30 days to review and comment on it, and we will make a final recommendation to Congress in December of '99. As you may have read we have had public meetings in Juneau, Alaska, Helena, Mont., Lewiston, Idaho, Umatilla, Portland -- yeah, we went to Pasco and we're here tonight, and we've said that if other communities want us to come, we will come and give them the same presentation.

In summary, the Corps is simply going to make a recommendation of whether or not to do further study. That's all we're doing in Phase I. Congress would have to give us additional authority and money before we could do Phase II. That's not a Corps decision. If you want to get involved, sign up on the Planning Aid Team letter, and comment on our draft that goes out in September. Additionally, you can write letters to our Colonel and he sends them to my desk or you can write to other agencies, your Congressional folks, and I think that's the last one.

Okay, we have Dr. Ogden who wants to make a few comments.

Audience Member: A quick question -- why only 30 days for the comment period, considering what you're proposing? Thirty days seems awfully short -- should be 45 days at least, or 60. Since there are lots of people interested in this. Thirty days is just way too short.

Stuart Stanger: We're allowing 30 days in our schedule.

Audience Member: So who do you write to, to make sure that they change?

Stuart Stanger: Congress. That's what's was in our --

Audience Member: Only 30 days?

Stuart Stanger: We provided the scope of work to Congress, and the schedule to Congress.

Audience Member: And they gave you 30 days ---?

Stuart Stanger: Dr. Ogden, do you want to come up and give us a little bit of history.

Dr. Dan Ogden: Thank you very much. I'm Dan Ogden. I am a political scientist. I wrote my doctoral dissertation on the Development of Federal Power Policy in the Pacific Northwest 50 years ago. I was on the faculty at Washington State a long time, but I also served in the Interior Department in the '60's. I ran the power marketing program for energy from '78 to '84, and was manager of the Public Power Council from '84 to '88, so I've been involved in this for more than

50 years. What I wanted -- what they asked me to do tonight for you in just about 10 minutes which usually should take all day to do, is to give you the story of how we got where we are. Keep in mind that the Columbia River is an international interstate river. It is the federal government's responsibility. That was why the Constitution was drafted in 1787. That was one of the purposes was to provide for a vehicle to manage the interstate and international rivers. Keep in mind also that you can't manage the Columbia for one purpose. It's gotta be managed for multiple purposes. It's got to serve all the different interests that have to be met, and that's what the Corps' review has illustrated tonight. There are four thrusts that I want to discuss real quickly with you about how we got the development -- navigation thrust, a power thrust, an irrigation thrust, and a flood control thrust, and they came in some ways overlapping each other, but in different sequence, so let's start with the navigation. Back to 1850 -- now remember, the Columbia is navigable up to tidewater where Bonneville Dam is today, but beginning there were three major obstructions on the River for navigation to Pasco: Cascade Rapids, The Dalles, which included not only Celilo Falls, but 10-mile and 5-mile rapids and others, and then Umatilla Rapids, where the controlling draft was four feet. So they put portage railways around the Cascade Rapids beginning in 1850. This wasn't successful -- you know, the Oregon Stream Navigation Company got control of the River, and so they raised the price out of sight; the Grange was formed and 1872 the Grange went after them. They said we've gotta have a canal around the Cascade Rapids, let's get the Corps to do it. The Corps got authorization in 1878 and opened it in 1896. They then said, we gotta have one around The Dalles -- the same thing, in 1902 and opened in 1915. Umatilla, a problem still because of the rapids there. Umatilla Rapids Association formed over here in 1915, to try to get a dam on the Columbia River at Umatilla. The Corps finally was asked to make a study of the Columbia River and in 1925 Congress asked for a list, and the Corps said the Columbia was one of the top streams to study, so money was provided in 1927 to study the Columbia. Now, we've gotta go back to hydropower for a second. Now, hydropower -- keep in mind that electricity wasn't a big issue until after Central Stations came in with the Pearl Street Station in 1883 in New York City, after Edison invented the electric light bulb, but the people in the Northwest knew that they were at a major disadvantage with the other regions of the country. Why? Because we have no indigenous fossil fuels of any major quantity. There's a little bit of coal up at Centralia and a little bit at Cle-Elum, but that's about it. We have to -- if we were gonna have a smoke stack type industry to diversify our industrial thing, we were going to have to import the fossil fuels. The rest of the country had 'em, all over the place, and this was what fired the industrial development in Europe. We, although, however, had 40 percent of the nation's hydro capacity, so it was very clear that if Pacific Northwest was going to have an industrialized society what they had to do was to have electric-based industry. That was the way it was going to go. Okay, we started to do that after the Central Stations came in. We also had the problem of electricity being in the cities and not in the rural areas, so the Grange was deeply involved in what happened to try to get power out to the countryside. So, at first, hydro was just in various tributaries. Nobody tried the Columbia until the Puget Sound Power and Light Company got its license about 1930, and they never finished it. So, the real start of the dams is 1933. Now, we've gotta go back to irrigation for a second, and then we'll come back and put it all together. Okay. Irrigation is a major problem in eastern Washington and eastern Oregon, and southern Idaho. Southern Idaho was demanding water out of the Snake at the turn of the century. The Minidoka project was in business at 1909 and they were producing power at the Minidoka project, distributing it with co-ops, as early as 1910. There was a

big demand for irrigation up here in the Big Bend Country in Washington. My grandfather, my mother's father came out to Hatton in 1902 to try to dry land farm and got blown out because there was no water. All their efforts to get water through the artesian wells, then a measure was on the ballot in 1914 to bring water from Lake Wenatchee over to the project lands, turned down. In 1918 two proposals -- one, divert water from Pend O'Reille Lake, 134 miles by siphon, tunnels and canals; the other, build a big dam at the head of the Grand Coulee, raise the water 340 feet, pump the water into the Coulee, put a dam at both sides so it wouldn't run out, and then take it down to the project lands. My father-in-law built the south dam at the Grand Coulee. So, the point was, these then fought all through the 20's as to what they were going to do, so the big decision-making, when the Corps of Engineers does this big study from 1927 to 1931, and in came the report, 10 dams down the river. Now, they thought of a higher dam at Priest Rapids, and when the PUD built those 10, they put in Wanapum instead, so you've got 11 dams down the River. Okay. The bottom, Bonneville, the top, Grand Coulee. That settled the fight over the irrigation thing, but nobody did anything until the Depression led to the election of Franklin Roosevelt in 1933. He came out to Portland in September of '33 and said, "we have a big hydro project in the Northeast -- Niagara Falls. We have a big project down in the Southeast, Muscle Shoals on the Tennessee River. We've got a big project in the Southwest, Boulder Dam and now they think Hoover Dam, on the Colorado. The Northwest is gonna get one, too." So, he was sworn into office on the 4th of March, 1933. The next month, Clarence Dill of Washington goes back; he gets Grand Coulee Dam for Washington, tried for McNary in Oregon. He was a republican minority leader. He comes in and says, "Frank, you promised us a dam; you came down to Portland, and we thought you meant Bonneville Dam." "Okay, you get one, too," says Roosevelt. So the Bureau of Reclamation built Grand Coulee and the Corps built Bonneville. Both started in 1933; Bonneville come on the line in 1938, so you've gotta make a decision. In 1937 the Bonneville Act is passed. Big struggle over what's gonna happen. Are we gonna dump the power in Portland; that's what Portland wanted. No, no, no, said the rest of the region. We want to have new extra high voltage transmission grid and we want the power to be spread all over the region, and both Grand Coulee and Bonneville were within transmission distance of each other. Okay. Well, that's what they did. That's what the Pacific North Regional Planning Commission did. They advocated that and it was passed. Bonneville Power Administration was created. So the Corps and the Bureau generate power at their dams -- they're the manufacturers. The Bonneville Power Administration is the wholesaler. It takes the power over the big transmission grid, delivers it to the retailers, like the Klickitat County PUD. The State of Washington and the State of Oregon created PUD's in 1930 and they began authorizing them, beginning in '34, '36 -- a whole lot of them, '38 and '40 -- it was all done; they brought power to the rural people, and the rural coops were started. Same thing - The Rural Electrification Act was in 1936, so they were there to bring power from the dams to the people, and one of the key things to remember is that that power doubled the generating capacity in the Pacific Northwest, and people were saying, oh, this is the biggest white elephant in history. It's the biggest waste of money there ever was. They'll never use one generator from Grand Coulee Dam, and one of the engineering profs from Oregon State said that to his students, they'll never use more than one generator from Grand Coulee Dam. Big criticism. Well, Grand Coulee came on the line in March of 1941, two generators, two more in November, 1941, and a month later there was no surplus, and you all know why. Okay. One third of the aluminum produced in World War II -- that means one-third of the airplanes in

World War II were produced by Grand Coulee Dam's power, and they had another 50,000 kilowatts capacity to take care of another project the Corps had up at Hanford, called the Manhattan Project that ended the war. My division was headed for Tokyo. I was over in Europe. We were sure glad when they dropped the bomb. Huh?

Okay, well anyway, the point is that during the war it became clear that they needed storage; they needed upstream storage to level that (inaudible) more. They tried to get some on the Flathead, turned down, but they came through with projects: McNary Dam and the four dams of the Snake were authorized in 1945, just at the end of the war. Most of the rest of those projects were authorized in the next four or five years. They were built later, but they were authorized as a consequence of the war and what they understood we had to have to get the thing done. Okay. Well, now, that meant they had to review what to do, so the Corps of Engineers, with the Bureau collaborating, had another (inaudible) report, an Advisory Report in 1949 and flood control became one of the major issues. There had been a big flood in 1894, 1.2 million cubic feet a second going past The Dalles. Whew! Big water. That happened again in 1948 with 1.1 million cubic feet a second, so the Corps said we've gotta get that down to 800,000 cubic feet a second, and what we'll do is we'll put a major storage project on the Snake, a major storage project on the Clearwater, and another major storage project on the Columbia. That would do it with the help of Grand Coulee Dam, 5 million acre feet, and with the help of John Day Dam with one-half million acre feet. That was a very important part of the story. Well, you know what happened at Hell's Canyon. We got three little dams instead and no storage, so we put one at Dworshak to replace that, and it didn't do enough. You know what happened at Clark Fork. Two little dams and Knoxson Rapids, (inaudible) gorge, and they didn't get anything there. They finally built Albany Falls to control the level of Pend O'Reille lake a little bit, so that meant that the only thing left was Libby on the Kootenai, but it backwatered into Canada, so we had to make a deal with the Canadians. Whew. The Canadians agreed to do that -- to build three big dams up in Canada, give us 15 million acre feet of storage, but they said, look power is half flow and half head, right -- you've got the head and we've got the flow, so we're entitled to half the incremental power. We said, yeah, guess that's right. We said okay, we don't want the power, we've got three new dams, we'll sell it to you guys for 30 years for 5 mls a kilowatt hour, and we want the cash up front, and we would use that money to build the dams so they got them for free. That's what we did. We gave them 154 million bucks, cold cash, in 1964, and the treaty was completed, and they built the three dams and had the thing under control. That's what led to the third powerhouse at Grand Coulee Dam, with treaties with California, the Regional Preference Act, and the Columbia Basin account in 1964, '65, '66. Well, by that time it was clear we weren't going to get more storage dams on the Columbia and its tributaries. We had to go to a hydrothermal program, and you're all familiar with that. We built the Boardman plant, the Centralia plant, WHOOPS got involved. they tried to have five Nukes and they finally ended up with one. You all know the story there, but that meant Bonneville had to be able to move the power from these new storage plants, so we had to have the Transmission System Act of '74 which gave Bonneville authority to carry power for everybody and also gave themself financing. Well, by that time, once the private utilities built some of these high cost thermal plants, the power rates went whango, $27 for the Pacific Power and Light Company in Portland. It was $10 for 100,000 kilowatt hours in Vancouver, right across the river. That didn't look right, so the 1980 thing -- the aluminum company stepped up to the bat, paid the difference, and we subsidized the private utilities to pay the difference between their average system cost and what

the Bonneville average system cost was, and they've been getting subsidy ever since, but Bonneville Power went up to take care of the Nukes, so there was not much difference, only two private utilities used the subsidy thing. Well, I could go on and tell you more about the story, but the point is, this is no accident. There were demands by all of us for navigation on the Columbia; there were demands for electric power because that's the only way we were going to have any kind of industrial development in the Northwest; there were demands for irrigation; there were demands for flood control, and we cannot manage the river for single purposes, nor for one major purpose. We've got to remember, its got to be managed for multiple use. Thank you.

Clapping.

Stuart Stanger: Okay, with that we're going to open it up to -- no, I guess we have some others that want to make comments -- some elected officials. Is that correct, or am I mistaken.

Ray Thayer: I'm chairman of the Klickitat County Commissioners. Excuse me, I'll probably be reading most of this. I'm not as -- I haven't given this speech as much as Dr. Ogden there, so I'm -- and since I just prepared this when we got up here. Anyway, I'd like to make a few comments, and my comments are not hard to predict. The John Day Dam drawdown work completed to date provides enough information and does not need to proceed. Congress should not continue financing any aspect of the work once the December 1999 report is completed. I have letters supporting this position from the following elected officials, local governments, and ports, Senators Jim Honeyford, Representatives Barb Liske, Gary Chandler and Bruce Chandler, Wasco County, Sherman County, the City of Arlington, the port of Moro. Those of us who live in the counties bordering John Day pool and especially Klickitat County understand the human cost of what is being proposed. We have been through federal policy changes that put our people out of work, devastate our neighbors, families, damage our schools and undermine our communities. I don't feel that the changes we have been through would come close to those economic hardships the drawdown will cause. Klickitat County has for a decade had the fifth largest unemployment rate in the State of Washington, even as unemployment drops to almost zero in many other counties. We have an aggressive effort in place to make jobs for our local residents and I don't think we need to stand by and let federal policies and unconcerned interest groups once again drag us back into the personal misery that the timber management changes caused. For you in this room who feel that the future of our neighbors is not important who would welcome aluminum workers on unemployment who would say that our ranching heritage is unimportant and should be discarded and who would cut short the bright future of being offered our newest residents by developing irrigated agricultural business, I want to tell you that the well-being of our neighbors, communities and county are our first priority. Thank you.

(Applause)

Stuart Stanger: Okay, we're gonna open it up to comments again just, if you would, come on up. Just state your name, the organization that you represent and then we can get that in the record. Thanks.

Max Benitz: I'm Benton County Commissioner, Max Benitz, and I am here representing the Board of Benton County Commissioners. The Board has passed a resolution #98587 that I would partially like to read and then ask some questions. In the matter of local government involvement in the decisions made by federal and the state agencies which could lead to economic hardship and the quality of life, whereas the Columbia and the Snake rivers are critical to the health of the agriculture, the basic economy in Eastern Washington, also provides renewable resources, transportation benefits and recreation opportunities for the entire Pacific Northwest. The Resolution goes on but the Board has some specific questions that we would like to ask and that is the additional cost for rail transportation and truck transportation that would be needed if the drawdown took place. Our estimates it would take another 700,000 semi-trucks. Where are those dollars going to come from for the transportation of the food and fiber that goes up and down the rivers? An additional 120,000 rail cars annually that would be needed to transport the commodities. These are real questions that need to be answered and we would like to have some response before you make that decision. Thank you.

Applause.

Stuart Stanger: Let me see if I can answer your question. Brian (directed to Corps economist Brian Shenk.) I believe we have some estimates of the number of rail cars and transportation costs. Is that correct?

Brian Shenk: Yes, we can translate the tonnage to truck and rail.

Stuart Stanger: Right.

Brian Shenk: But we don't have the final numbers now.

Max Benitz: Right. But if you have your analysis where did you go? If you've got that analysis and wouldn't mind sharing this we would like to have that information.

Stuart Stanger: Those costs will be included in this Phase I. Who would pay for that cost will not be discussed in this Phase I report. That's something that would have to be included in a feasibility study and then, of course, authorized by Congress as to who would pay. Recognize this Phase I study. We recognized right up front -- it would not answer all of the questions. It was never scoped that way. What we're trying to focus on are -- what are the big impacts or the big costs and then we'll try and balance those against what we think the potential benefits are, and make the decision whether or not we need to do these detailed studies to answer all of the questions, but we are not trying to answer all the questions in Phase I.

Stuart Stanger: Comments?

Alan Van Horn: My name is Alan Van Horn. I am an accounts member for the City of Goldendale. I am also a member of the Small Cities Advisory Council for the Association of Washington Cities. The Association has approximately 279 members, over 200 of which are small cities, which are under 5,000 population, with the majority of those being on this side of the mountains on the east side of the State of Washington. With the proposed breaches of the Snake River, John Day Dam, and other studies that you are conducting on dams along the

Columbia, that is going to place, in my opinion, and a lot of the members of my committee with the feeling that what happened to Klickitat County when the spotted owl became an endangered species will now occur to eastern Washington as a whole. The economic impact, the irrigation available now, if that was to be threatened, would really hurt the economic, employment availabilities on this side of the state.

Stuart Stanger: Yeah, that's absolutely right. It will, and we recognize that; we are sympathetic to that. That's some of those things that have to be considered against the benefits.

Jewell Van Horn: I guess the group that I would associate most with is homosapiens of the Pacific Northwest. I'm one of the seniors on the endangered species list -- sign up. I found that Dr. Ogden was here. My family has been into this dam situation. My grandfather's parents came from (not audible) area and migrated down into Idaho, and (not audible). They were -- the families there were instrumental in the Rimrock Dam and the Rose irrigation system, so I understand what the dams were there for, and they weren't just -- I do believe everybody here has always heard those words -- when is the cut-off date? It scares me! In more ways than one. If -- if we are continued to stand here and be spoon-fed information that turns out that actually most of it is wrong, why don't we go out and fight for it? We have been told, for instance, the raptors and the windmills; they don't get along, and yet they build their nests on those windmills. They don't get along? You bet your boots they do. Why do we get set down with one thing after another? How are we going to depend on you if you can't give us information first? Or, when the information changes, Sunday night, on the radio, or on the TV, on the news, Portland Channel 2 made the remark the dams should be taken out because that silt should be coming down and that is why our coastal areas are falling into the ocean, and yet when we had the flood or the -- pardon me -- the volcano, they were going to sue us because of the silt that got into their river, and now they want to change their mind. We'll never go back to what it was. We can't. We need this, but I do have one real question. Is this happening on every single tributary that is opening into the Columbia?

Stuart Stanger: Is the study being done for each tributary?

Jewell Van Horn: No, is this problem with the fish happening on every single tributary into the Columbia?

Stuart Stanger: Eric, do you know the answer to that?

Eric Ostrovsky: No. It's the trend. It's the trend along the whole West Coast, let alone the Columbia Basin, that salmon stocks are down, and other species. There are some stocks though that are doing well but they are the exception.

Jewell Van Horn: Well, I was going to say, there are several that empty into the Columbia on the west side of the dams.

Eric Ostrovsky: That's right.

Jewell Van Horn: So, if it's happening along all of them, the dams couldn't be the whole problem --

Eric Ostrovsky: I'll let you go on, but I was trying to say that what might have gotten missed, is that the issue is much broader than just what's going on with main stem passage. There are habitat issues and harvest issues, hatchery issues, biological impacts in the ocean. We are aware of that, and I just wanted to say, the focus is not just on John Day or even the dams of the Columbia Basin to bring back the health of this species, so we are aware of that.

Jewell Van Horn: But even if we let it go down, and let the water down, if any of you have driven by Lyle … and the sand bar comes up; that's what we're going to have for quite a while -- ways in there, and it won't be grass; it'll be noxious wheat.

Davis Duff: David Duff, from The Dalles. I have two questions. The first one -- are any model studies going to be made of the silt problem in the John Day drawdown by Vicksburg or Battelle?

Stuart Stanger: No, not in Phase I.

David Duff: The second question. The impact of drawdown on the Northern Wasco County PUD and the Klickitat County PUD's McNary Dam hydro unit, in the north fish ladder at McNary -- has anything been considered on that?

Stuart Stanger: They are looking at the fish ladders. There are some structural impacts at McNary. Recognize that John Day Dam backs water clear up to McNary, and so there are impacts of the ladders at McNary and those costs will be factored in. Yes.

Member of the Public: I've heard a little bit of history here. I'm the grandson of Sarah Emily Golden, the first white girl born in Klickitat County, and I live in Wasco, Oregon, a retired wheat farmer, and I put this together this afternoon, and I hope you won't think it burdens you. There is an island down at the mouth of the Columbia River. The Army Corps of Engineers built this island with the spoils of the dredging. They say there is 60% of the terns that live in the United States on that island. There are between 10 and 11 thousand terns on that island. They figure they eat three to five fish a day. That's 10 to 15 million fish a year. Now, they're talking about planting some wheat on there so that the terns will leave. When they leave they will go up the river a little bit and down the river a little bit, and they are still going to eat the same amount, and so that sounds to me like we're trying to regulate the river for one purpose -- fish, and I have to agree with this lady who spoke just before, there was a State of Oregon wildlife representative on TV and he even showed where a house was about to tumble into the surf at Fort Canby, south of the Columbia River where it enters, and he said that the fact that it was tumbling in is the fact of the dams that kept the silt. My understanding, most of our beaches are sand rather than silt, but if you listen to that kind of foolishness we may do something wrong, and what assurance do we have that our fish are not caught out in the ocean by seals and other fishermen from Japan, Russia and other countries? We need a way to track these little fish to see where they are lost. Why are our rivers not affected in any way whatsoever by dams losing their fish. Just in the Oregonian here not too long ago it said that the Russian River in Northern California and 30 other rivers were going to be stopping their fishing because they were losing their fish, and they're not affected by dams. We have rivers, I know, in western Oregon that don't have dams on them, and they are affected by something, and I think it's at sea, and by redoing -- taking the dams out, I don't believe is gonna help,

and no one has ever said that we ought to take out the Bull Run Dam that the City of Portland gets their water from. You know -- and we know that no fish go over that, and Portland is, I believe, the place where this initiative started -- was from Portland, the thousand friends of Oregon. I wanted to form one, 100 friends of Willamette Valley, but I couldn't find 100 friends over the Willamette Valley, and Portland has not separated their storm drains from their sewer drains, and at a high run-off they are mixing their sewer with the water, and just last year when they remodeled the City Hall -- the old City Hall in Portland, they found that it was never connected to the sewer system. It drained directly into the Willamette River. Now, that's true. You read that, and so the Willamette River is greatly affected by the sewer and the run-off from the City of Portland, but they can't see that. They want to take our dams out in order to help their recreation and one thing and another there in Portland. Now the city of The Dalles has separated theirs. The small city could not defend themselves against the state -- they went in and they have separated theirs. Portland hasn't separated theirs. They want state help to do theirs and so I don't believe we can say the Snake River dams are the ones that necessarily diminished the salmon supply. Is there any guarantee if these dams are breached that our fish will come back? I am sorry, but I think there is not. I think the fish are being lost at sea and other purposes, or we wouldn't be losing the fish in the coastal streams, and I believe the hatcheries -- there needs to be a study on the hatcheries. We've got hatcheries at various places, but not at the level in which the fish were going to hatch on their own and we -- the study has been made that you can't even grow an evergreen tree at a level where you didn't nurture it, and then bury it, plant it. It doesn't work. I believe fish are a great deal like that. You need to hatch them at the level in which they normally would have hatched. I think if this money for this study had been spent on a fish study, rather on a study of how to take the dams out, done on a fish study, how could we replenish the fish, I think the money would have been better spent. I don't want to see us take the dams out. Thank you.

(Applause)

Stuart Stanger: Thanks for your comments. I'd just like to point out one thing. The majority of the money being spent on this study is for fish studies, biological studies. We learn more about the fish every year and National Marine Fisheries changes our direction every year based on that information.

Brian Skeahan: Yes, my name is Brian Skeahan - I am the general manager of Klickitat PUD. I guess I have a couple of questions or comments for, I believe, it's Brian and Ed, your hydro guy and your economist, if they're here. In one of your handouts I picked up it talks about how the output from John Day and several scenarios that you're looking at, power output would need to be replaced, it says possibly with more expensive fossil fuel. Given that John Day produces about 2500 megawatts of capacity at about 0.3 of a cent per kilowatt hour which makes it one of the least expensive hydro resources or any kind of power resources in the nation, how do you anticipate replacing 2500 megawatts worth of capacity and how could you possibly say that you are only possibly going to do it with fossil fuel plants? How would you plan on replacing that?

Ed Woodruff: I'm glad you asked that because I got to stand up.
The possible -- this was written a few months ago. Our studies have progressed to the point that we feel that natural gas plants will replace most of the lost capacity, probably not megawatt for megawatt. We will probably build less than

2500 megawatts of natural gas plants, but we will rely on the market purchases from elsewhere to replace some of it, but most of it will be natural gas plants, similar to the ones that have been built near Umatilla and Clark County just recently.

Brian Skeahan: My quick arithmetic would say that it would take either ten of those natural gas plants or five coal plants, approximately the size of Boardman to make up that capacity. Obviously, that's got a significant impact on our air shed. Would you concur with that?

Ed Woodruff: Yes, and I plan on addressing that. The Snake River study which we have just completed has identified the pollutants that will occur from the increased generation from natural gas plants and we are now in the process of trying to put an economic cost on that, and we will do the same thing with the John Day study. What pollutants will be increased, and try to assign an economic cost associated with that pollutant.

Brian Skeahan: And would you acknowledge that almost all of those plants are going to have to be located right here in the gorge due to the existence of the transmission facilities that are already here?

Ed Woodruff: That's a really complicated issue. Some of them would be located here, some would be on the I-5 corridor, some would be in southwestern Oregon. You probably know, better than I do, the complications of transmitting electricity all over the Northwest, so there's gonna have to be strategic locations of those replacement resources throughout the Northwest.

Brian Skeahan: And how would you square trying to locate all of these fossil fuel plants in this area at the same time other people are trying to designate the gorge as a Class I airshed, which is essentially the equivalent regulations of a National Park?

Ed Woodruff: That's a very good comment, and one that needs to be addressed.

(Applause)

Brian Skeahan: If I could just make one final comment. It seems to me, you know, looking at all these studies that have been done, and again, the Snake River had some study results issued just last week, and time and time again, the results seem to be clear, that the benefits for the fish to the extent that they are still highly uncertain, but it seems to me like one thing is fairly certain, the benefits of the fish are uncertain but the cost of taking the dams out -- those benefits become extinct.

(Applause)

Dawn: We're trying to get the mikes around to everyone because we do want the comments recorded, so we've had a hand up here for quite a while. We'll get to everyone here. I want to assure you the chance to speak. Okay?

Jim Forsman: Thank you. My name is Jim Forsman. I'm from The Dalles and I have a comment I would like to address to Eric concerning the fish. I guess this whole meeting here is to save fish and you said that there was 35 million fish

that passed up the Columbia River at one time. What was the count in 1930, before the dams went in and also, what is to say that these fish aren't in a large natural cycle of natural caused extinction. I understand there are species that we lose yearly that through no cause of mankind, it's just a natural process. Could this possibly be a long term cycle that some groups want to burden the Northwest to try to solve a problem, that perhaps isn't solvable?

Eric Ostrovsky: Jim I don't have the figures right now, but what you ask is a good question. There has been a decline in fish -- a lot over the dam, adults, until more recent years of the fish through here and the ISAB, and some other groups, the Power Council, have done a fairly good job of documenting it. It has been done, and I think you could look at a lot of things that were going on through the region and almost match them with the decline in salmon, and you're right, a lot of those were not hydropower, so, you know, when you had placer dams and other development going on, you could look at different things and see where or when the decline was occurring, and it happened fairly close to a lot of the activity (not audible) -- to say specifically whether this is a function, a natural function occurring in the environment. I would imagine, I guess what you're saying, probably out in the ocean versus what's happening here on land. It's possible but over (not audible) in the area and for the effects happening this way. Most scientists that look at it think that you can draw much more direct correlation between the human activity and a lot of that decline. The more recent decline, it is a little more difficult, and there are issues going on about the impacts of the ocean and recent impacts. Those are much harder to answer. To answer your first question, I don't have the figures on me, but I am sure I could get you, you know, fairly good estimates over probably almost the last hundred years on a number of these stocks and how they have declined and when they have, so --

Jeff Albin: My name is Jeff Albin and both of my grandfathers worked on Grand Coulee Dam. Right. I've been a Washington native all of my life. My grandpa came out here in 1889, blah, blah, blah, and you know, one thing I keep -- I never could quite understand -- we built these dams with federal tax dollars, right, and then we have to buy the power back, you know, again, and again, and again -- that's something I think we can all agree on, and I don't understand why we are not decentralizing power, you know, instead of these huge projects that ship it all over the country, and have you guys considered like small -- I don't pay the PUD anymore -- my power comes from the sun and completely independent and it works just great, you know, so, you know, I'm not paying that bill. Why are we not considering a few other alternatives, decentralize -- like even Enron, well nobody can agree Enron/Windmill, yahde, yahde, yahde. One thing we will know for sure, though, if it comes in here, we're going to be paying Enron for our power. Right? That's something we can all agree on. Why are we not decentralizing, like Thomas Jefferson wanted to do. Right? Decentralize. We build these huge monstrosities that cause a lot of problems. Right? We should think about some other alternatives.

Sandra Bostick: My name is Sandra Bostick, and I'm a private citizen here in Goldendale. The fact that you're even holding these meetings, to me, is a very dangerous thing, considering the fact that up until now everybody I have talked to, my representatives, everybody, has reassured me that there would be just plain folly in removing these dams, or opening them, whatever you're planning to do, and I appreciate your studying the fish, and you're studying the wildlife, but who is studying the human habitats of this community, and the people that live in

this area, and are concerned? The fact that we have to live here. Our taxes are spent, right hand, left hand, for everything, and we willingly pay our taxes for dams, for protecting the fish, for everything that the government decides. Well, I'm fed up with it, and six years ago, almost to the day, I went to a PUD meeting and I asked the PUD commissioners that I had heard that they were talking about removing our dams on the Columbia River. They said, oh, that's so far-fetched. Why, they're never going to do that. We wouldn't let them. Well, here we are, having a meeting. Now, how many times have we been told that they really were seriously considering this, and studying it. I haven't heard anybody tell me that they were even making studies, so what's going on, and we citizens had better get riled up or we're not even going to be in this country any more. The people don't count; it's the fish, and the governor's pet project seems to be the salmon. Well, I don't care if I ever eat another salmon.

(Applause)

Stuart Stanger: Let me just see if I can address a couple of your comments. As far as I know, this is the first study that's been done at John Day for drawdown. We looked at lowering the minimum operating pool, but that's minimum operating pool that we have authority for Congress to operate the dam.

Sandra Bostick: How about the Snake River dams. They aren't in a contract with Canada, like the Columbia River, and we know that those are done. They're gonna take those babies out.

Stuart Stanger: I don't have information on the Snake. None of my teams work in that.

Sandra Bostick: You can figure that they're gone.

Stuart Stanger: But this is, as far as I know, the first study on removing any of the Columbia River dams, and we're here tonight to let you know what we are doing.

Sandra Bostick: We just have until the 30th of December to get any complaints in for our government. Give me a break.

Stuart Stanger: Recognize -- remember what I said. We are not making a decision of whether or not to remove John Day Dam.

Sandra Bostick: Oh, it's already done.

Stuart Stanger: We're not making that decision in Phase I. What we're trying to make a decision on is whether or not to recommend to Congress that we even study it. It would be a four to five-year study at a minimum before you could ever make a recommendation of whether or not to remove the dam.

Jim Buhel: My name is Jim Buhel and I'm the author of a book called "The Great Salmon Hoax," but I'm here tonight representing Goldendale Aluminum Company.

(Applause)

Jim Buhel: And, I want to say I find it pretty disturbing to hear the National Marine Fisheries Service telling us a lot of things about the fish that aren't true. Starting with the idea that there were ever 35 million salmon and steelhead returning to the Columbia River Basin. If you look it up in a fisheries journal, an academic journal, you will find that the number is like 8 million, and then the Northwest Planning Council got a hold of it and all the fish people got a hold of it, and they said that maybe it's 10 to 16 million, and now we have these people coming out and telling us it's 35 million, and it's just not true at all. They said a lot of other things that aren't true. He wants to assure us that there aren't any drift nets in the ocean. Well, I live south of Portland and I tell you what -- they were having the annual clean-up at Seaside, Ore. and they found a quarter mile of drift net washed up on the beach. Where did that come from? A UFO? I mean, come on. You know there are so many fin-clipped fish being caught and sold in the Far East that our researchers working with the Japanese have to use politically correct terms and call them fish lacking in adipose fin instead of fin-clipped fish, because they don't want to admit what's going on. The very same boats that used to be catching all the salmon before they made it illegal just drove a few miles south, threw the nets in the water, and said, oh, now we're catching squid -- no problem. What chases the squid around and eats them. Steelhead, among other things, so I don't think the fisheries service has any idea what's going on out in the ocean, especially when half the fish they catch in many of the fisheries, they throw back dead, without even counting what they are. Now, another thing that's amazing here, is we talk about the impacts and the benefits. Well, nobody has ever told us how many salmon we would get back from taking out John Day Dam. They put up these little slides with these theories of how we might get salmon back. There is like the theory that the river will flow faster so the salmon can get up and down it easier. Now, why a river that flows faster is easier for salmon to get up doesn't make any sense to anybody, but they've been doing scientific studies for ten years, and there is almost no relationship between river velocity and salmon survival. Nothing. I could put up charts there that look like a cloud of dots. There is nothing there. This is all made up, and then he says, well, oh well, maybe 30,000 fish used to spawn here in the reservoir. Well, I read that in the book, and I said, where did that come from? Well, he said, it came from a study by Leonard Fulton in 1968. Okay. So, I got the Fulton study. I have it in this folder here, and I look at the Fulton study, and it says, well, there used to be fish there. How many? He doesn't say, but he says maybe there was 34,000. How do we know? Aerial surveys, so on page 16, page 16 of the report, he says the water is too cloudy to distinguish the redds from the salmon, and then on page 20 something, well, from aerial survey we think there's 34,000 fish, so I said -- this is nuts -- then you read a few pages further and you find out -- oh, it just so happens that the difference in the number of fish counted at The Dalles and counted at McNary was 34,000 fish, so if the 34,000 fish disappeared there, they're assuming they are all spawning instead of swimming up and spawning somewhere else. And then I said to myself, well that's interesting, 34,000 fish disappeared. It couldn't be the gillnets that had anything to do with that. No, no, they must have been spawning. This must be spawning habitat here. So, I went and looked at the new data from the 90's. Sure enough, there are still 30,000 fish spawning, so what -- are they still spawning now? Why can't the fish spawn underwater? These people, I don't think, have any idea what's going on. They don't have any estimates of how many fish we're gonna get back, cause we're not gonna get any fish back. It's a hoax! Thank you.

(Applause)

Stuart Stanger: Thank you, Mr. Buhel. Do you want to comment, Eric?

(Laughter)

Bud Mercer: Thank you. Thank you, Jim. You helped with one of the questions I had, because I was gonna ask what the benefit was to draw down John Day, because you did have a lot of slides there that alluded to things but I agree with Jim Buhel. I know that none of that is true, and I know that the measurable benefit to fish is nothing, so it makes me wonder why we would want to draw down, irregardless of how the study turns out, and in fact, I think the lady in front of me was right -- you are all crazy as hell for being here, but I have a couple of other comments though that I wanted to make. The nine million tons, I think that Stuart mentioned of cargo that the barges move up and down, and Max was concerned how we would move that much tonnage if the dam was removed, and if they remove the Snake Rriver dams, and the John Day Dam, you won't have to worry, Max, because we won't have anywhere near that much production. Actually, I think it would probably be a million tons; we can probably move that on existing rails, so that's not an issue. The second thing, I guess you wanted to know about experience on this issue from those of us that might have something to add. I guess I've lived here 40 years in round numbers, and I have watched the population of this region, not Klickitat County exactly, but the lower basin, more than double. I've seen the commerce more than double that, and I think we can plan on all that leaving along with the use of the rivers, and I guess my final thought is the suggestion -- if the Corps would like to come to this kind of an area and talk about presenting feasibility studies and economic information, I would suggest that you maybe have an economist without a ponytail, because I don't think too many of us will take any of that seriously.

Member of the Public: Okay, my turn, and as far as people being crazy, I'm about to confirm that because you are all probably going to get really irritated with what I'm going to say, and since we are all listing our pedigrees here, my great, great, great grandfather helped settle Joseph in the Baker area, the stone building that remains in Joseph -- the bank. That rock came from my grandfather's rock quarry. My great, great, great grandmother was born at the encampment in The Dalles. I grew up in Morton, Wash., so as well as anyone, I am aware of the impact on small communities when your major industry is affected. My comments have nothing to do with the economic questions that are very vital and which are being discussed here this evening. One of the other issues that is being looked at is the impact on cultural resources, and I would like to make a comment on that. I find it very interesting (a) that now cultural resources are concerned. Nobody thought about cultural resources when they buried them under tons of water. I'm gratified that the Army Corps of Engineers is working with the Confederated Tribes in the area, however, I find it interesting that it is always politically expedient to say that we're working with the native American nations when we can use it to our benefit to argue against something, as the report in there suggests that impact on cultural resources of drawdown and would be negative, but when it's something that we want, we're quick to dismiss and ignore and argue against them, and it's a bit hypocritical. I think we need to examine our motivations in that area. Thank you.

(Applause)

Greg Smith: Good evening. My name is Greg Smith, and the president, Dan Kramer of the Port of Moro asked me to come here this evening and represent the Port of Moro in Moro County and I am pleased to do that. Talk about pedigrees - - in 1854 my great, great, great grandfather settled in Multnomah County. My great, great, great grandfather was the first sheriff of Multnomah County, and I love salmon. I love the environment, but I love people just as much, and you need to remember that. Gentlemen, these are real people. I'm paid to be here. There are other people, paid to be here. You and I have sat through hundreds of these meetings. We've squabbled over the issues, but remember, these are real people and they count.

(Applause)

Greg Smith: The port of Moro spent $45 thousand. That's a family wage job, paying for a study that looks at the opportunity costs of drawing down the John Day pool on the Columbia River, and tonight I'm going to leave that for you to see. What I want you to know, Moro County, the second largest port in the State of Oregon in terms of assets and in terms of revenue -- we're dependent upon the river. The people in our county are dependent upon the river. Agriculture is dependent upon the river. When we talked about the utilities, I've got a coal fired plant in a … facility at the Port of Moro. They represent 64% of the tax base. They are paying for our schools. They are paying for our hospital. That's important to remember. Eric, remember that. It's important. I'm here tonight to let you know the Port of Moro is opposed to further studying drawing down the John Day pool. I truly appreciate having the opportunity to come among you folks, among friends. It's so nice not to be in Portland where I'm the only person spreading this message. I truly appreciate this opportunity. Thank you.

(Applause)

Buck Ghost Horse: Before you throw rocks, I'm not here to defend this. My name is Buck Ghost Horse. My family was created here. How's that? No. 1 - we know a lot of people here, and their concerns are very interesting. I'm not going to get into (not audible) either, but this problem goes way back. The principal (not audible) starts way above Alaska. My comment is that we're fighting a war now or ethnic cleansing, but ethnic cleansing of local native people. The dams could be readjusted to benefit everybody, and we all know it. You keep saying, where's the money gonna come from? We all know where the money is gonna come from. Everybody who has a job is going to pay for this stuff. No. 2. - You want to stop the fish kills in the ocean and stop all these other countries and ours from dumping toxic waste and things in the ocean; it kills everything eventually and (not audible) either. I understand that we live and let live, but don't blame the Indians and don't blame the dams alone. There are a lot of things. We're over there bombing people now to stop ethnic cleansing, and why, since this country, up until recently, to have a government policy for Japanese, Russia and others to stay a thousand miles from our shore, or sink 'em.

Member of the Public: (Inaudible) as a former Marine, that's exactly how I feel. We have a right to defend our fish and our people. I don't like fish, I'm not a river person but my grandmother and them depend on it and we have to use our heads. Number two, and the Army Corps isn't going to like this at all, and I don't care; I believe that this is already decided. I think that all these studies are a bunch of BS – I've seen it over and over and a lot of you have, too. These are decided. You're gonna do what you're gonna do but I think it's a shame that this country, supposedly a democracy, doesn't allow its citizens to really talk before decisions are made, and you can't sit there and tell me it hasn't been made (inaudible). Thank you.

Stuart Stanger: If I could, let me just ask you one question. What do you think our decision is?

Member of the Public: (Inaudible)

Stuart Stanger: I can assure you that the decision has not been made, but I'm just curious what you thought we had decided.

Member of the Public: (Inaudible)

Colin Bennett: My name is Colin Bennett. I'm the Vice-President of the Washington Association of Conservation Districts and I live here in Goldendale and the conservation districts will go on record as being against further studies, and I have a question for Eric. Does the ESA apply to all species of wildlife, equally? Does that include Walleye and Squawfish?

Eric Ostrovsky: Yes, if they or their habitat were in danger, yes.

Colin Bennett: Would their habitat be in danger if we remove the dams?

Eric Ostrovsky: The question is are they indigenous to here and how it would play into – you would be looking at natural population. If you were creating new resident species, the Endangered Species Act would not apply to them.

Colin Bennett: There's a manmade irrigation canal up in the basin that now has a run of salmon that's in it that is listed, which isn't an indigenous species because it's a manmade canal, so how can your previous statement apply on that canal? It doesn't wash.

Eric Ostrovsky: Well, the species are the habitat. If you're saying there's an endangered species in some area that it hasn't been before, you could list a species as endangered. I'm not sure I (inaudible) what you're saying.

Colin Bennett: What I'm saying is that NMFS has come out and said that there's not just a species of salmon, that every run is an ecologically significant unit; is that right? And if you can say that, then can you say that Squawfish in that stretch of river above the John Day Dam can be an ecologically significant unit and therefore it would not be good to endanger them?

Eric Ostrovsky: It's not an easy question to answer. It's complicated to answer what an ecologically significant unit would be for any species.

Colin Bennett: I think I'll just wrap up my time at the mike by saying that I think that science doesn't really have anything to do with any of this; that it's all politically driven, and quite frankly, I would not feel good to call myself a biologist when I wasn't doing biology. If you're going to be a political scientist, just say it. Thank you.

Bob Lieurance: My name is Bob Lieurance. I'm an honorary taxpayer of the United States living in Klickitat County. For Mr. Ghost Horse, I would say that we've already sunk one of these ships here last month or six weeks ago off the coast of Oregon. That's really a joke but one has been sunk. My question, or rather one question or concern that I have is relevant to the threatened Endangered Species Act and the credibility of scientific data that went into developing that Act. I think that it seriously needs to be re-examined because we're discovering a lot of things about things like fish and birds that are suspicious in terms of population and this gentleman from the aluminum plant hit on a very significant thing about salmon and the numbers. The derivation of numbers, I think, is suspect, that has brought about this threatened Endangered Species Act and that needs to be revisited, in my opinion. Secondly, my concern is that there's undue focus nationally on creating free-flowing rivers and that means that not only the Columbia River or Northwest dams (inaudible) but all within the United States are subject to removal to create that free-flowing effect. There's more to it than that. That to me is just a smokescreen. The real issue here is political and we're looking at a situation that's going to literally (inaudible) the United States in terms of its being able to produce to feed this nation of people because we are dependent on these things that we've developed and when that happens, we're in a process of this happening, I see the (inaudible) of the United States a reversal of the Homestead Act – it's going back to the federal government and we do know – and I can attest to this because I worked 42 years with the Department of the Interior, the federal government is not really the best management source. It really isn't. It's totally inefficient. But I'll get back to my concern on this study focusing on dams and salmon. I would hope that before anything is finally settled -- you can do all your studies but you're going to have to examine, I mean, the federal government, the states, the counties are going to have examine every source of effect on fish, we're talking fish now, before they can even begin to make a decision relative to removal of these monstrous structures. I say monstrous because their size and what they do but you know Mr. Ghost Horse talked about these factory ships in the ocean – well, that's one thing. There are other living things in the ocean that feed strictly on fish and until that is studied to the same extent that you're studying dams on the Columbia River and the Snake, why, the job isn't done – we're not even close, in my opinion, to reaching a decision of this magnitude. Thank you.

Russ Rasmussen: My name is Russ Rasmussen. I'm an irrigator from Alderdale. I think one of the reasons for the recent salmon decline is all the studying that's going on. Mr. Buhel in his book, "The Great Salmon Hoax," which everyone should read, pointed out in 1983, more salmon came up the river than have come up in 75 years, since before the dams were built. That was about the same time that the salmon issue started getting a lot of attention from the federal agencies and ever since then, every year there's been more studies and every year there's been less salmon. So I think it's the studying that causing – and I would like to see the Corps quit studying and get back to engineering.

Dwight Campbell: Patience is my middle name. My name is Dwight Campbell. I'm with the United Power Trades Organization at John Day Dam and I'd like to make a few observations and comments about, number one, the amount of money that's been spent on the these studies. Recently, it was publicized that approximately $3 billion has been spent on saving the fish with no apparent result, $62 million was spent on a smolt monitoring facility at John Day Dam. Another $11 million is slated to be spent on extended screens to save the salmon, which, in fact, have been found to kill the salmon, and another $20 million spent for fishing access sites to the river. I fail to see how this spending of all this money is going to make any significant impact on the salmon. The proposed drawdown is gonna incapacitate the generators. They are no longer gonna be able to work like they are. John Day Dam produced more power than any other dam in the northwest outside of Coulee Dam. (Inaudible) you all are aware of, our power rates are going out the roof, which is great for the stockholders, but is not very good for us and one of the advantages of living in this part of the country is the low amount of cost of our hydroelectric power. And we are going to pay for all of this. Congress is gonna make a study to figure out how much it's going to cost and all these vague statements that are being made without any concrete evidence or concrete facts really bother me and United Power Trades Organization is not for this and it's not for breaching the dams either and we are going to become very vocal about all of this. Thanks very much.

Tamer Kirac: Good evening. My name is Tamer Kirac. I am with Mid-Columbia Economic Development District. For the economist on your team, a couple of words of wisdom: this region in the last ten years has had double-digit unemployment, the per capita in real terms have decreased significantly. Since 1990 the real wage and salary decreases have been approximately $3600 per employee. For those that are familiar, we also were informed about the benefits of another act that was enacted in 1986 called the National Scenic Area Act where promises were made that would increase employment, that would diversify the economy, increase the wages and salaries and surprisingly to a lot of the people who claim to be researchers, the results have basically been the reverse of what was projected. Just recently, we have also been exposed to a study called Eastside Study conducted by a lot of persons like yourselves at a cost of $36 million and the Secretary of Agriculture was in Spokane last year about this time apologizing for the fact that during the study none of the local jurisdictions, none of the local experts, called economic development specialists, were consulted and I think it would be a very good lesson for those on the team to consider that there are experts; there are people with a lot of know-how of the region that can provide some input to you and I think the lessons of the previous act should be lessons for the future possible acts. Thank you very much.

Alexis Thundering Buffalo Bear: Hi, my name is Alexis Thundering Buffalo Bear. I, as far as pedigree goes I'm one-quarter white, one-quarter Scottish, the Klinning (sp?) Clan, and one-half Lakota (sp?), Lacongue (sp?) Clan so I'm a very displaced person from South Dakota living in your wonderful Klickitat County and I enjoy it very much. I'm not a fish eater, I'm a buffalo eater but I do support my native relatives that do eat fish here and I think that needs to be considered in the study. I would like to ask the question as to whether or not Enron Corporation is involved in this impact statement, in this project that you are looking at right now, because I do have a leased situation going on, on Columbia Hills regarding wind turbines. That's my first question.

Stuart Stanger: I've heard Enron mentioned several times. I don't even know who they are.

Member of the Public: They're the people that are going to make a lot of money if the dam comes down.

Stuart Stanger: I know nothing about them. They're not involved in my study.

Alexis Thundering Buffalo Bear: So, nobody here on this panel has any information whatsoever? No EPA people here at all? No EPA – Enron is on your team, or EPA?

Stuart Stanger: EPA is on the team. They're working with us but they're not here tonight.

Alexis Thundering Buffalo Bear: Okay, it's my understanding that EPA has been doing some dialoging with Enron Corporation regarding wind turbines in this area and/or the potential of putting gas plants in. Now, we've got gas lines going straight across the Columbia Hills. That's gonna create a great pollution problem. If this dam goes down, you do a size-down or you don't do some adjustments for the fish. Now, I don't see, you know, turning the dam completely off as an option for this community, because it's dependent upon the electricity for the community. I see a ton of money being used for a lot of studies on this project, but I don't see anything in the economic development and help of this community and the people here to help it grow and to nurture and to grow. What do you plan to do to help the community through your project?

Stuart Stanger: Again, those kinds of questions would be addressed if we do a Phase 2 study. Who would pay for removal of the dam, what kind of mitigation would be provided to locals, would all have to be addressed in Phase 2 feasibility study. We're not even trying to mention anything to do with that in Phase 1. We're identifying the impacts, we know that the communities would be impacted and there's a cost associated with that and there is the quality of life impact and we'll identify those but we're not trying to address the question of who would compensate for that.

Alexis Thundering Buffalo Bear: Okay, just a second. Okay, hang on a second. Thank you, I didn't bring my glasses so – okay whether or not there are authorities to compensate affected users, and how about you read it – I can't --

Stuart Stanger: I can tell you what it says, um, it basically –

Alexis Thundering Buffalo Bear: --Just read it --

Stuart Stanger: Is that one of the papers that we put out? Yeah, in several of the papers, you'll see a comment that basically says, we, today, do not have the authorities to compensate for, for example, removal or displacement of an irrigation pump if an irrigation pump went out of service. We, today, the Corps of Engineers does not have the authority to compensate and to replace that pump station for that farmer, okay? Through a feasibility study, however, what happens is when the Corps of Engineers does a feasibility study and makes – comes up with a recommended plan, along with that recommended plan could include, that the federal government replace that pump station. And then if Congress says, we like the plan you put together, Corps of Engineers, and we

give you authorization to implement that, then the Corps of Engineers does have authority to replace that pump station. What we're saying in several of those papers, and it's not just irrigation that's on several of them, today, we do not have that authority and whether or not we would seek that authority in the final feasibility study, I don't know.

Alexis Thundering Buffalo Bear: So, basically if the salmon are on the Endangered Species Act and the federal government comes in and says, look you've gotta close that dam down, that's all there is to it, hatchet to it, that's it, right? And we don't have any choice here.

Stuart Stanger: I wouldn't say that, no. Um, I wouldn't go that far.

Alexis Thundering Buffalo Bear: Well, you know, you're saying possibly, maybe, you know, I'm hearing a lot of ifs, ands, buts, sugar coating stuff.

Stuart Stanger: What we look at is what's the best economic plan. So if we did this feasibility study and we showed that the best thing to do is have crops growing, then the best thing to do is have a pump station, okay. Then our plan would say, we think that pump station should be replaced. However, if our study said, we don't think that land is productive enough, it's not worth growing crops on it, then we would say, don't replace that pump station.

Alexis Thundering Buffalo Bear: Where does our say come into this?

Stuart Stanger: This is part of it right now.

Alexis Thundering Buffalo Bear: But I think you've already made these decisions, like my uncle said.

Stuart Stanger: Again, I've said, we haven't, but that's all I can do is tell you that we have not.

Member of the Public: (Inaudible) Snake River?

Stuart Stanger: There is another team. It's managed, as the Colonel mentioned, that's Walla Walla District. They have a different District Commander. Some of the people who are working on my study also work on that study.

Member of the Public: Now, if you go to (inaudible)

Stuart Stanger: No, I'd never tell ya that.

Member of the Public: But you're (audible) to go back to Washington D.C. and say, no, they don't want this. Well, what happens when the other team above us says, yeah, that's what they want.

Stuart Stanger: Yeah, the Snake River study is –they did not take this phased approach, this Phase 1, Phase 2.

Member of the Public: So they didn't let the public comment on that?

Stuart Stanger: I don't know what they did as far as –

Member of the Public: They had about 5000 on the bridge at Kennewick the other day, demonstrating. But it was already done.

Stuart Stanger: Well, they have not made a decision.

Member of the Public: I already saw it in the paper. They showed how they're gonna go around the dams.

Stuart Stanger: They've done the study and we would do a similar type study in Phase 2. You look at alternatives for how you would remove the dam, how you would mitigate for irrigation, how you would provide navigation. But until a record of decision is made, no decision is made.

Member of the Public: I hope it isn't the same messenger that we sent back with our decision that was done with the Gorge Act. Thank you.

Member of the Public: I worked for the state fisheries eight years – went to work for them for the second time in 1956, at that time, the state fisheries people that was running the state fisheries was complaining about the salmon runs declining. They blamed the main decline on the fishing pressure in the ocean. I helped build the hatcheries to help increase the fish runs, I helped shoot out falls, build fish ladders, one summer we spent the whole summer building the tunnel to put the Klickitat River through a tunnel at Casteel (sp?) Falls up 30 miles north of Glenwood, and at all times, we saw lots of fish in the rivers but they was still complaining that the fish runs were decreasing and they blamed it on the fishing pressure in the ocean. We went fishing at Ilwaco one time and they said that the other countries wasn't supposed to fish within 200 miles of the American coast. There was a Russian fishing boat, a cannery boat just two miles out of the mouth of Columbia River. Where did the fish go? I don't believe it's the fault of the dams and every once in awhile you hear somebody poke fun at somebody else's nationality. I'm a crossbreed of five nationalities. I'm still an American citizen but I'm Scotch, Irish, Dutch, and two tribes of Indian. Thank you.

Member of the Public: I would like to agree with the former Marine over here when he said that the decision has been made. I know you've assured us several times it wasn't but when the gentleman was asked how the power would be replaced he used the preposition, "will, will," not would. You know, would means that it's in question. Will means it's a fact. Now, am I wrong?

Stuart Stanger: You're wrong in the statement that we have made the decision.

Member of the Public: No, I mean on his preposition he used. "Will" means it's a fact.

Stuart Stanger: I guess you could interpret that however you want.

Member of the Public: All right, well that's what I learned in high school, but anyway, one of the sad things is, it will not be our congressman in the Northwest that makes the decision, it will be the Congress from all over the nation and that is a sad thing for us. But, I want the former Marine to know I agree with him.

Dan Duggan: Hello, name is Dan Duggan. I'm the Vice-President at the United Steel Workers out at the aluminum plant here and I've been working down there for 22 years. I hope I will continue on for awhile. I like living in the area, I'm one of the California migrants that moved on up here but enjoy it. Been here almost most my life now and have lived along the Columbia River so I've seen – I used to work Bumble Bee Seafoods so I heard the salmon issue from back in the 70's all the way up to this present time. I think we have a tendency to do a lot of finger pointing and saying that that's –we're pitting one side against the other. I think we need to do some looking at particular issues. I find it hard to believe that in this day and age that we can't come up with something that can resolve some of the issues. Also, from being down on the coast and watching those seals gulp down salmon, you know, faster then I could ever butcher them, you know, there's a lot of different issues on that there. I heard the reports also about the canneries off the coast—there are so many things there, I don't think that we can solve it all by lowering down the dams here, you know. I'd have some concerns about the power lost, and yes, our industry uses a lot of power, but I also use power in my house and right now we're paying a little bit extra for gas because of a little bit of a crunch and I really don't want to do that on the – I want the power also. In fact, I don't know how I'd pay my power bill if I wasn't working out at the aluminum plant. I guess I'd have to move along someplace. And I also have concerns about the drawdown, you know. I got a granddaughter here and I want to take her on down to the river and some of your recreational areas down there. It's even gonna be hard for people putting their boats into the river, for the unions to do their fishing. The water's gonna be level – lowered on down. We're gonna have to open up some of those areas and I'm sure that if anyone's ever put a boat in the water down at some of these little spots down here, you realize that if you lowered it down 20, 30 feet, you better have a tough bottomed boat. But, I want to go on representing 400 or 500 workers on down there and plus some other management people down there, you know. We like what we're doing and we want to continue doing it so it's an issue with us and I want to go on record as being opposed to the breaching. Thank you.

Wayne Vinyard: Yes, my name is Wayne Vinyard. I'm a port commissioner with the Port of Klickitat. I'm a community council member and I'm in forestry and private industry so I wear many hats, but most of all, I'm an American and I'm pretty saddened and sickened with what I've seen happening in this country over the past few years –watching what happened through the spotted owl wars, and realizing if there were 30,000 jobs lost in the Seattle area, there would be no spotted owl problem. This is political, and this is what's going on right now. This is kind of a veteran group you're talking to. We've lived through the Gorge Commission and continuing those battles. What we realize is that if every man, woman, and child in eastern Oregon and Washington and Idaho stood up and screamed "no" about this dam, that we would be told, thank you for your input, and whatever would happen to our lives and where we will pay the price is decided by people who really don't care. If this issue was affecting Portland, we wouldn't be here, guys. And I think this whole issue of pulling the dams, if you looked at the issues that have been presented to you through this meeting, starting with Dr. Ogden, and just the common sense of the cleanliness of hydropower, the impact of water transport, and the impacts of economic and social impacts of our communities, the impacts of trying to replace that, just think of the pollution to occur if we tried to replace the power coming out of these dams. I mean, just that factor alone—this decision you guys are studying, I think, could have been resolved in about a half-hour just brainstorming the pros and cons of this issue. The real issue is fish. I think the people in this

community are very concerned about fish. We live here and we appreciate that as part of our culture, a part of our resource and our environment. And I hate to think of putting money into this study and even the thought of continuing is just appalling to me because the real issue is fish. I have a newspaper article here that reports about a presentation made by Bill Muir who is National Marine Fisheries, gentleman, biologist. He was reporting to the Northwest Power Planning Council and his study was commenting about the success of the increasing of the smolts going over the dams and the increasing numbers that are reaching out in the river and the end result of that was that the chair of that counsel, John Eckhart, he made the comment, "it appears from this research that the Snake River dams and reservoirs are less of a problem for the movement of juvenile fish toward the ocean than was believed previously." And Mr. Muir stated the precise reasons are not clear for the declining rate of adult fish return. Ocean conditions, over-harvest, predation are all likely causes, he said, as well as delayed mortality and other unknown factors. So, gentlemen, your problem starts at the end of the dams. It's happening from Portland out through your estuaries and into the ocean. Before you'd even think about touching a dam you need to resolve those issues and work your way back. And if the dams are legitimate, there's certainly other factors that can be done to help improve those passages and help the fish. Right now, gentlemen, your problem is in the ocean and it's beyond the dams and you need to respect these communities and the people. When you make these decisions, you're talking about lives. I saw that with the owl, I've watched families and friends being crushed by that decision and I don't want to see it happen again in my community. Thank you.

Q: --------(tape rolling with nothing being recorded -----

Sandra Turner: … your river for all of my adult life and most of my childhood. I truly resent some of the things that I have heard in the last couple of months and some of the things that I have read in the local papers. I've heard that extremists want to tear away our rural life style in eastern Washington. I've watched our rural life style disappear every year. The steelhead runs continue to decline, our farming, our water tables are continued to be polluted. Centerville now has unacceptable levels of nitrates in the water system. It's all connected. When are we going to figure this out? We can stand here and point our finger and say, well, the problem is from the mouth of the Columbia to Alaska. It all is connected. The dams do have an impact. If you have any questions about that, talk to the people who live upstream from Grand Coulee Dam; talk to some of the families who lost all of their children to starvation after those dams went in; you go tell them that the dams have no impact on the returning salmon. I think we need to think about this. We look and we talk about our rural lifestyle. This is a lifestyle that has only developed in the Pacific Northwest over the last 60 years, because we have such cheap electricity, we have abundant hydroelectric power; we pay the lowest rate in the United States, and we also use four times the power of any other region of the country. Whatever happened to thinking about conservation instead of saying -- no, no, no, you can't take this away from us. There are other options. We need to use our brains and look at this. The dams do have an impact. I personally applaud the fact that there is even consideration of taking them down. It's about time people started being responsible for the lifestyle that they each have. If we're concerned about how we're gonna pay for shipping, there's a $5 a ton difference in what it costs to send something up the river by barge, and down the river by barge, and what it costs to truck it. Who pays for those differences. We do!

The barge and the navigation systems on this river are funded through tax-payers' money. We are paying for this. We are paying for this. Excuse me!

(Comments from the audience)

Male Voice: Hang on just a minute. Let's be courteous to her.

Sandra Turner: I've done a fair amount of research on this. I've looked into this, because I had questions. So, there's one issue. You know -- it's time that we started looking at the people who are using the electricity to start paying for it. And if we can do that in a manner that is affordable to everyone, then we won't have such a problem with worrying about who gets the bigger share - whether it's the fish, or whether it's the aluminum companies, or -- you know -- whether it's the barge and transportation companies, or whether it's the commercial fisheries. It's time we started looking at conservation efforts and look at the broader picture. This is about everyone's rural lifestyle, not just the employees of the aluminum plant, not just the people who work for the dams, and not just the commercial fishermen. This belongs to all of us and all of us will have to make sacrifices. Thank you.

(Applause).

Jack Bostick: My name is Jack Bostick and a retired executive from the Boeing Company in Seattle. I have lived in Goldendale for the last six years. There is a lot more than just taking out the dams on the Columbia River, the John Day Dam. If you look at and what's going on with the clean water, and so forth, you may not get a glass of water when you go into a restaurant anymore, because the governor has said we are going to cut back on the ground water. You're looking at putting meters on our wells. Certainly, you have the right to convince me that this plan you're working on is -- you've heard about the Biodiversity Treaty. Have you heard about the Heritage River Act? Have you read anything about the Clean Water Agreement?

Answers are "no."

Well, then you're very limited in your political management skill because you need to know about these things. There are treaties coming from the United Nations which are being held by the Clinton Administration back in Washington, D.C. for the Senate to ratify, and this all ties in to control the Northwest and the water and the fish, and it has nothing to do with salmon going up the river.

Jack Bostick: I'd like to respond to what Ms. Turner said. First of all, it is an utterly specious comparison to say that we can see the effect of John Day Dam by looking at the people who live upstream of Grand Coulee Dam, because Grand Coulee Dam doesn't have any fish ladders, and John Day does, so that's like apples and oranges, and people who get up and say these things, you all have to decide whether they're ignorant, or whether they're trying to mislead you. Let me give you some more information, to help you make that decision. She says that we use four times as much energy. That's not true. We use more electricity and we use less of other stuff -- I mean -- that's another misleading comparison, again, it's comparing apples and oranges, and she says, oh, all the taxpayers are subsidizing all the river traffic. Well, who do you think built the roads that the trucks go on? Who do you think gave the lands to the railroad to build the railroad tracks? This thing about -- no, we shouldn't blame anybody.

We shouldn't be blaming everybody except for those big nasty river navigation people who are sucking down all those subsidies. I mean -- come on -- this is utter hypocrisy. So, when people start telling you -- oh, we all have to make sacrifices -- we all have to make sacrifices, I say, why? We're spending $100 million a year on this stuff, and that's more than enough to figure out how to put some salmon in the rivers if we didn't blow it all on studies like this.
Thanks.

(Applause)

Jim Forsman: Well, I guess I'm lucky enough to speak a second time here tonight, which I am surprised -- Jim Forsman from The Dalles, and I earn my living on the river. I run tugboats for one of the local companies, and I think the criteria that Dr. Ogden pointed out, that we built these dams for, is still valid to this day. Transportation and flood control and hydropower, and I forgot the fourth one -- and irrigation which is significant, and I would like to go on record as being against lowering these pool levels and would like to see this study ended and give you fellas something else to do, but this -- the fish -- I've lost my train of thought. Thank you anyway.

(Applause)

Stuart Stanger: Are there any more comments applicable to the study?

Member of the Public: Yeah, several.

Member of the Public: Oops, this is very loud. Back to the first question I asked. When does the comment period technically start. You said there would be a 30-day comment period once you get through this process?

Stuart Stanger: Yeah, the schedule is in September we will issue the report. I don't know the exact day. There will be a 30-day comment and review period. We will then have until December to address those comments, revise the report as necessary, include additional information, and make a recommendation to Congress.

Member of the Public: And your comment that stated that Congress required you to put a 30-day comment period on this. This is also applicable to CERCLA and CERCLA doesn't mandate the 30-day comment period, so I need clarification for your statement to find out where, in fact, the ruling has been made that there will only be a 30-day comment period.

Stuart Stanger: We made the ruling --

Member of the Public: Who's "we."

Stuart Stanger: We told Congress we would finish the study in December, and 30 days is what is available for the comment and review period.

Member of the Public: So, you're saying that the Corps made a unilateral decision to say 30 days and that's all the comment that we will get?

Stuart Stanger: No, I did not say that. I said that we gave Congress a schedule; Congress approved, and gave us the authority, and told us to complete the study in a year.

Member of the Public: Okay, so in your box that you presented to Congress, you said only 30 days.

Stuart Stanger: That's right.

Member of the Public: Okay, so the next question I have. How much is the cost for the Phase I study?

Stuart Stanger: We don't have a cost. Our estimate was $3.3 million.

Member of the Public: For the Phase I?

Stuart Stanger: Yeah.

Member of the Public: In the 1980's there was -- when Sid Morrison was in Congress -- there was an analysis done on McNary Dam for increasing for barge traffic and dredging up the river to increase -- to get a port in the -- at the Tri-Cities -- a bigger port, and this study -- I think it was in the 80's -- it might have been the '70's. I forgot the date; I don't remember how long ago. It has been a long time, and they concluded that because of the vast amount of contaminants behind McNary Dam that they would -- the Corps said on record -- that they would never recommend the removal of McNary Dam because of the consideration of contaminants. In your document here -- the public piece that you have out here -- you talk about -- you lightly mentioned the greater activity behind McNary Dam and you give some type of justification that I think -- I'm not quoting -- four or five years of deposition, and that was it. I don't understand how you've done a complete about face about the magnitude and severity of problems when the Corps made a ruling based on those findings years ago, and now it's down-played here. Do you -- anybody can comment on that. I am very concerned that the process -- like some people are saying here -- is kind of a half-baked approach to get to the true answers, and there are a lot of things I have questioned, and that one in particular. Can anybody answer about the contaminant load behind McNary Dam?

Stuart Stanger: I'm looking at the contaminants in John Day in Phase I. Phase I -- we're going to try to make some educated assumptions based on what they found at the Snake and based on what we know has been transported into John Day, but because of the cost that would be associated, the cost and time associated with taking samples in the John Day pool, we recommended to Congress that we do that in Phase 2.

Member of the Public: Okay, just for information's sake, there has been a lot of samples done behind McNary Dam. You could talk to your partners up there, the Department of Energy that's got lots of data in different depths behind McNary Dam, so for redd content you can find a lot of information, and --

Stuart Stanger: We are aware of that. Thank you.

Sherry Petersen: My name is Sherry Petersen. I have lived here three years which is not a long time by a lot of your standards. The thing I want to talk about

is that I think, as human beings we are pretty pitiful, that most often we're motivated by need, greed or pain. So, you kinda look at this whole scenario - who's making the money -- you know -- or what's gonna happen, or who's gonna lose -- you know -- in the original instructions that the Creator gave us is to take care of those who can't take care of themselves, that includes the fish nation, that includes each other, you know -- so we got that. And you know, the truth is -- the water is polluted. There is something in that water. You talk to people who are out there in the river and they come out and their skin burns. What is that? You talk to people who fish. What's happening to the fish. They've got things on them, growing on them. Okay, so what's behind that dam? Radioactivity. Hanford's ground water is polluted. There is radioactive sage brush, tumbleweeds, or whatever. Okay. So maybe what they need to do is draw down the dam, clean up Hanford. We've been saying for a long time this needs to happen. This affects each and everyone of us in ways that we can't even calculate. It affects every species that lives, that touches water in any way whatsoever, and that includes your ground water. You think your wells are safe. No, they're not, you know. That's the real issue, folks. You know, let's get real. Let's spend some money and clean it up. They should have been doing that before. This is the cover maybe, I don't know.

Alice Courtney: My name is Alice Courtney and I'm a private citizen of Klickitat County, an American citizen. I know that you folks have been mandated by Congress. They told you to do the study and I understand that. Just like they tell the Forest Service what to do, and the Forest Service gets blamed for what they do wrong. I understand that and I can appreciate what you've been told to do, and I know you have to go through the study but my hope would be that you would do a thorough study. You need to listen to these people in all the communities that you have gone to, you need to realize that these are real, real issues for the people that make their living here and makes their lives here. You need to study what's going on in the ocean, you need to study -- it's unfortunate in my opinion that the seals are on the Endangered Species Act because I think that they are way over-populated now and they need to be done away with because they eat a copious amount of salmon every day, and they will take one bite out of 'em and eat that and the salmon is dead, and you need to study that. You need to study the species of fish that have been introduced into the Columbia River that they live off of the small salmon and they're not native to this river but they make their living off of the baby salmon. You need to study that. Maybe you need to study the pollution and you need to study the dams, but you need to study all of it, and my hope would be that at the end of the study that you recommend to Congress that they do not move ahead with Phase 2. Thank you.

Janice Menzie: I'm Janice Menzie from Northwest Aluminum in The Dalles, and I would like to go on record as representing the membership in saying that we adamantly oppose the Phase 2 and the drawdown, and I guess, Colonel, this question is for you -- can we make -- how can we -- or can we trust the Corps to make a fair and unbiased study when the record show -- shows that the track -- or the track record shows that the hiring of the people that have the salmon harvest interest at heart. You know -- that's who you are hiring.

Col. Robert Slusar: One thing about the Corps that you need to understand, that's different from some of the other agencies here. I am not a political appointee. Okay. I'm an Army officer and I have been given direction and told, you know, from Congress, that you will study this, and you will make a decision,

and I salute Congress, and I will do that, and I will tell you that I have no political ambition; I'm not a political appointee, and I will make that decision and that's why I am personally out here to listen to your concerns. I don't know if you have seen other heads of agencies, political appointees, holding public forums. I don't know. I haven't seen any since I have been here, but I can tell you, as an Army officer, you have entrusted me when I was in the Gulf War with your sons and daughters' lives, and I brought 'em back, and I can tell you that we have not made a decision on this process, and until all the facts are in and they are on my desk, then I'll make that decision, and I can tell you from the bottom of my heart, that's the case.

(Applause).

Janice Menzie: Colonel, can I kinda ask a follow-up question? The greatest way to rid yourself of an enemy is make him your friend, and so I guess what I would like to ask you is, what advice can you give us, the citizens of the Columbia Basin to help us affect the decision that's gonna be made?

Col. Robert Slusar: Again, Stuart talked about that in the beginning. That is why we're out here. We're out here to give you the information of where we're at in the study, what our timelines are, and where you can be part of that. Again, we have some groups that you can join and review that data, provide those comments to us, so that we get your input, your knowledge, any studies, and I appreciate your report going ahead and providing that money to go ahead, forward and provide us a study that's looking at it from a different perspective. If we can get that type of information as part of our study, that helps me make that decision, because I've got to take in collectively all that I hear out here, the pro's, the con's, and to weigh that against what my mandate was and what we basically testify to Congress in terms of what we provide them, so the more you get involved, either pro or con of this thing, and I've heard both things out here tonight. I need to know that information, and I need to know, you know, the best, you know, when we talk about well, you're studying it too much, you're studying it not enough. Studies are important so that we can get the best facts and studies in some areas are countered in other studies, and so we have to sort through that and make a logical decision. So, I need your input and that's why we're here today, to try and glean that -- those old nuggets that may be out there that we haven't found yet. So, I do appreciate that. That's how you can get involved. You can also get involved with your Congressmen and your Senators and forward as this goes, and I can tell you, you do have a support in your Northwest delegation as I read in the news and I've seen them out here. But, again, as you also heard, it may not be -- you know, you've got more than just a Northwest delegation that may end up making this decision and that's the entire Congress, and so, therefore, you may -- if you've got relatives in other areas, you may look at that approach. Thanks.

Cheryl Woods: My name is Cheryl Woods. I grew up in this area and I've also sat on the local graingrowers' board for quite a few years and the potential drawdown of the Snake and then the John Day Dam has been an issue that we've been listening to at meetings for the last ten years and trying to deal with and our initial reaction, of course, was nobody in their right mind would do it, and then it became much more serious. I think my main concerns, despite your assurances that this isn't political, we pick up papers and have Gore and Babbitt coming out and saying "By God, before I get out of office -- you know -- we're gonna breach some dams, and we're gonna -- you know -- do as many as we

can." And that, I think, lends quite a bit of skepticism to what we hear from you, as far as decisions not being made, and I think - uh -- I wanta just say that I very much agreed with Wayne Vinyard's comments and I would hope that when you do make your decisions they are based on facts and scientific facts, and not on manufactured numbers on the fish. As far as I've been able to ascertain and with people I've talked to, there has been absolutely no data that has really said that any type of drawdown or breaching is really gonna help the fish. A lot of us that have lived here for a while when The Dalles Dam went in, the spillways were always open and then all of a sudden the spillways stopped being open because it was nitrifying the fish. You know, it was bad for the fish, and then years we didn't have the spillways open -- well, now, the spillways are open again, and they've decided -- the scientific community has decided this is good for the fish. It makes us slightly skeptical about the biologists and what they're saying, and so I would hope you would really look at what's happening out in the ocean, at the numbers that are going out and coming in, and I think another major area of concern, and I believe you touched on it, is the hatcheries. I've listened to marine biologists speaking and they've said -- a lot of them have said -- you know -- we can't have too many of the hatchery fish; they will dilute the wild stock. Well, then, in my -- we raise cattle and in my opinion, if a fish makes it all the way down to the ocean, and if it makes it all the way back up, I think it ought to be able to lay its eggs. I don't think it should be told that it can't because it has a clipped fin or doesn't have a clipped fin. I don't think it's necessarily gonna dilute stock. Sometimes cross-breeding is kind of a good thing, and so it -- you know -- I'd work against drawdown. I think that -- unless -- I think -- you had a really good reason and so far I haven't seen or heard of facts that would support that major of a problem. And, I had one other question -- in the study of the factors involving it, with this Endangered Species Act, we have seen in this area at least, a real resurgence of predators, and I think -- she was talking about seals -- well, seals and eagles -- I mean -- if we protect all of the species and the predators rise in numbers, it would seem to me that the animals that they prey on are gonna go down, and I wonder, do you ever consider a balance, or what is an acceptable number or anything like that?

Eric Ostrovsky: What I want to mention, you know, there has been discussion of the predator population, in fact, the issues with the tern issues on Rice Island, those were all actually the studies began in our '95 Biological Opinion. Yes, we are looking at it and we are recommending changes, and we've recommended changes to Congress to take care of marine mammals. Many of those are not endangered but they are covered under the Marine Mammal Protection Act, and we have recommended that when there are problems and you weigh the issues with endangered species like salmon, that options be allowed to be taken, and whether to protect the salmon, so we have -- we are trying to look at those issues.

Joan Frey: I'm Joan Frey and I am a County Commissioner, and I'd first like to say I have never been more proud than I am tonight to be a County Commissioner in Klickitat County. These people --

(Applause)

are not paid to do this job. They work. They work hard and are donating a lot of time. I know the irrigators in the Alderdale and Mercer Ranch area have dedicated a tremendous amount of time and money into this study and into this process. It bothers me in that you feel if you participate, you're giving dignity

and credibility to this, but if you don't participate you're not counted, and your opinion can't even be ignored, so hopefully, these wonderful opinions and well thought out input will be considered and I guess my only point here is going to be -- in case you're not aware, and I'd like it on the record, that the Washington State Association of Counties, which to me represents the State of Washington, which I think is a sizable voice, has done a resolution, unanimously, to oppose the breaching or removal of any dams on the Snake or Columbia systems, so I think that needs to be in the record, and I would be glad to submit a copy of that resolution at a later date, and again, thank you all for everything you've done.

(Applause)

Member of the Public: If we don't think that we're all that well, let's stop and take time back to 1941 before Pearl Harbor when there was some certain parachutes that were found in the Pacific Northwest. They had advertisements of these particular parachutes, and be sure and pick them up and get them to our army, clear down in Texas. Now, my girlfriend isn't here tonight or she would have told you about this. We got them and we got them in. If we hadn't of we may not have had a Pearl Harbor; it may have been a catastrophe down the Columbia, and I don't want that to go unnoticed, because they did find that the Japanese were ready to bomb our dams in Washington even before they had a Pearl Harbor, so we're not the only ones concerned. Those dams are important.

Stuart Stanger: Thank you.

Member of the Public: I'm probably one of the few that is not from this area. I lived ten years in Spokane which puts me way on the other end, up towards Grand Coulee Dam. I've roller-skated on Grand Coulee Dam and enjoyed many of the luxuries up there in Electric City. It's beautiful. The economic situation is wonderful. Then I moved down to Klickitat County. I have walked from one end of the county to the other end of the county, which has been devastated. What was it devastated by? The Spotted Owl. Our community still hasn't survived or come back from the impact of that and I think you really need to look at our unemployment situation and how our county has been affected by the Spotted Owl and also the Scenic Act, and you've really gotta take a look at that because -- go right down to Klickitat -- where Klickitat is -- there's not one job for those people. The logging industry is gone and I think you guys can all say that, right? You know. So, you know, we just don't have jobs here, and you're just really gonna hurt our economic situation.

Col. Robert Sluser: Is that it, sir? Okay, you've got the last one.

Member of the Public: Colonel, I'm glad I'm the last one. I want to thank you for coming out here. You have -- you're the first Colonel I've ever seen who has come to a meeting and defended himself, and I thank you; I really do. I'd like to make another comment about The Dalles Dam. Some people saw the water flowing from The Dalles Dam here just recently. There is a good reason for this. The Dalles Dam is the only dam in the whole system that is environmentally good for fish. If you take water coming from John Day Dam you have nitrogen super-saturation in it, but if you run up through The Dalles Dam and through The Dalles spillway, that will correct itself to a great degree so the fish people have asked for this, that if we spill we spill first at The Dalles and we spill less at The Dalles. In other words, do all the other dams first, pure water at The Dalles for this economic value for the fish. The Dalles Dam -- the National Marine

Fisheries has asked a lot of times that we do not flush fish through The Dalles Dam because they couldn't get those surface fish to go through the system where they could manipulate them. The Dalles Dam, like I say, -- the water cools over the spillway, right straight across to a rock formation that's very deep there, and hitting those rocks over there dissipates a lot of that nitrogen super-saturation, and it's something you need to know, so if you think what's going on at The Dalles Dam is the same as the rest of the dams, forget it. It just doesn't work that way. Thank you.

Col. Robert Slusar: Thank you, and you're absolutely right. Every one of the projects is a little bit different, so what works at one project doesn't work at another project, and if you know what we've been doing on the Columbia River, you will see that we're doing a number of things at our projects to improve the ability of the adults to go upstream and the smolts to go downstream, and we're looking at science; we're looking at biological effects; we're also looking at rewinding our turbines to make them more efficient; we're looking at putting in blade systems in there that will minimize or reduce or maybe even eliminate any impacts with salmon going through the turbine portion of the projects. So, we're looking at multiple ways to help resolve the situation. I can tell you, Portland is now also -- has listed stock. They're looking again at their drainage systems and how they're going to conform. We're looking at our projects in the Willamette as part of this to resolve that -- temperature control on the projects, temperature control on the Columbia River, gas -- we're looking at all these and again, we're trying to make sure that our projects are as safe and as efficient for power and for fish, and for mankind, and we need your help and assistance in making that come to reality. We know just even having a study on a potential drawdown on John Day or the Snake River has a devastating effect on you and your economy. We know that that is occurring. Unfortunately, I have a mandate from Congress and I have to follow that. I can't pick and choose which studies I'd look at and which studies I do, but I can tell you, again, I am not a political appointee and I have heard that, you know -- there's other agencies out here that would like to, or some political appointees that would like to come down here and tear out dams. That's not my mission. My mission is to operate and maintain projects and when I'm directed to -- by Congress -- to look at alternate ways of doing things. I'm a good army officer, I salute. I find the best team I have available and we come out and we try and get the facts; we try to come on the ground here and meet with you folks to find out what we can do to solve the problems, and that's why we're here tonight. I really do appreciate your time and your energy to be with us here tonight so that we can do our mission.

Member of the Public: Colonel, I'm glad you finally said something about mankind and your consideration and studies. These seem to be the last items to be considered in all of these ecological --

Col. Robert Slusar: I hope that's not the message, because that's why we're out here to find out what those impacts are --

Member of the Public: We are the last ones that are considered, and I would like to see some of this money that is being wasted on all these studies being shared with the people that need jobs in this area. And do something for people that are going hungry instead of helping all the salmon.

Col. Robert Slusar: Unfortunately, without the studies, we can't get to our decision process, so again, I really do thank you tonight for your time and

energy. If you have resolutions or documents or something in your possession that you brought with you tonight, we would surely like to collect those. If you did not bring them with you tonight, please send them in to us. You have our address if you pick that up there, because again, we need all the information we can get to move forward in this process. Thank you.

(Applause)

Attachment E. 1999 Congressional Coordination and Comments

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

NOV 12 1998

Programs and Project Management Division

Honorable Slade Gorton
United States Senator
Jackson Federal Building, Suite 3206
915 Second Avenue
Seattle, WA 98174-1001

Dear Senator Gorton:

As you may know, Congress has directed us to begin the first phase of a two-phase study of drawdown options for John Day Dam on the Columbia River. We are to limit the first phase of the John Day Drawdown Study to two options for lowering the reservoir, "spillway crest" and "natural river level."

In Phase I of the study, which we began on October 1, 1998, we will begin to identify the impacts of both options. To do this, we will evaluate biological, social, and economic benefits and costs, plus potential physical impacts of each. As part of that evaluation, we will detail impacts on irrigation, fisheries, wildlife, flood control, hydropower production, navigation, cultural resources, recreational activities and water supply, as well as hydraulics and hydrology effects, and associated structural changes at John Day Dam. Water quality and sediment quality will be discussed based on evaluation of existing information and be studied more completely in Phase II.

Normal reservoir operating level is elevation 265 (normal pool). At spillway crest drawdown (about elevation 215), fish passage systems at John Day Dam would have to be modified and there would be effects on other users of the river. At natural river (about elevation 165), the river could be rerouted to bypass John Day Dam or the dam could be breached. There would be dramatic effects on navigation, irrigation, recreation, hydropower production, cultural resources and water supplies.

Some of the material that will be used to develop the Phase I study was gathered in 1994 when the Corps of Engineers was asked to study drawdown of the John Day reservoir to Minimum Operating Pool (MOP) (elevation 257).

During the course of the current study, the Corps of Engineers will ask for input from the public, various regional interest groups, and state and Federal agencies. Information-sharing open houses, tentatively scheduled for early next year, will be held at various locations to get public input and discuss drawdown impacts. Corps of Engineers study team members will be working with special interest groups to gather information prior to the open houses.

At the conclusion of the first phase, we will make a recommendation to Congress regarding whether or not further study of lowering the John Day reservoir is appropriate. Congress has asked us to complete Phase I of the Drawdown Study in about one year.

The second phase, if directed by Congress, would evaluate the costs, benefits and physical impacts of a wide range of alternatives, including potential physical modifications to the dam. That phase would likely include preparation of an Environmental Impact Statement and related National Environmental Policy Act coordination. Formal public comments would be solicited during those processes. Neither the first nor second phases of this study will include actual physical modifications at the John Day Dam or study of lowering the reservoir to MOP.

If you or others in your office have questions about this study, please contact Stuart Stanger, project manager, by telephone at (503) 808-4706, or by writing him at Portland District, U.S. Army Corps of Engineers, P.O. Box 2946, Portland, OR 97208-2946.

If your constituents have questions or concerns, please encourage them to contact Dawn Edwards, Public Affairs Specialist, at (503) 808-4510. She will be able to answer their questions, or direct them to the appropriate person.

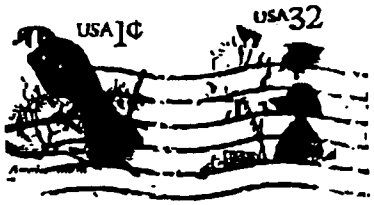
Sincerely,

Robert T. Slusar
Colonel, Corps of Engineers
District Engineer

Title	FirstName	LastName	JobTitle	Address1	City	State	PostalCode
Honorable	Ted	Stevens	United States Senator	222 West 7th Avenue, #2	Anchorage	AK	99513-7501
Honorable	Frank	Murkowski	United States Senator	U.S. Federal Building 222 West 7th Avenue	Anchorage	AK	99513-7501
Honorable	Don	Young	United States Senator	222 West Seventh Avenue, No. 3, Room 200	Anchorage	AK	99513-7501
Honorable	Jennifer	Dunn	Representative in Congress	Nine Lake Bellevue Drive., #204	Bellevue	Washington	98005
Honorable	Jack	Metcalf	Representative in Congress	322 North Commercial Street, Suite 203	Bellingham	Washington	98225
Honorable	Rick	Hill	United States House of Representatives	27 North 27th Street	Billings	Montana	59101-2343
Honorable	Larry	Craig	United States Senator	304 North Eight Street, Room 149	Boise	Idaho	83702-5820
Honorable	Dirk	Kempthorne	United States Senator	304 North 8th, Room 338	Boise	Idaho	83702-5820
Honorable	Peter A.	DeFazio	Representative in Congress	151 West 7th, #400	Eugene	Oregon	97401-2649
Honorable	Conrad	Burns	United States Senator	208 North Montana Avenue, Suite 202-A	Helena	Montana	59601-3837
Honorable	Robert F.	Smith	Representative in Congress	843 East Main, Suite 400	Medford	Oregon	97504
Honorable	Max	Baucus	United States Senator	211 North Higgins, Room 102	Missoula	Montana	59802-4400
Honorable	Rick	White	Representative in Congress	21905 64th Avenue, West #101	Mountlake Terrace	Washington	98043
Honorable	Richard	Hastings	Representative in Congress	2715 St. Andrews Loop	Pasco	Washington	99301
Honorable	Gordon	Smith	United States Senator	World Trade Center 121 Southwest Salmon, Suite 1250	Portland	Oregon	97204
Honorable	Ron	Wyden	United States Senator	500 Northeast Multnomah Street, Suite 320	Portland	Oregon	97232
Honorable	Elizabeth	Furse	Representative in Congress	2701 Northwest Vaughn, #860	Portland	Oregon	97210-5391
Honorable	Earl	Blumenauer	Representative in Congress	516 Southeast Morrison, Suite 250	Portland	Oregon	97214
Honorable	Darlene	Hooley	Representative in Congress	315 Mission Southeast, Room 101	Salem	Oregon	97302
Honorable	Slade	Gordon	United States Senator	Jackson Federal Building, Suite 3206 915 Second Avenue	Seattle	Washington	98174-1001
Honorable	Patty	Murray	United States Senator	2988 Jackson Federal Building, Suite 2988 915 Second Avenue	Seattle	Washington	98174-1001
Honorable	Jim	McDermott	Representative in Congress	1212 Tower Bldg., 1809 7th Avenue	Seattle	Washington	98101-1399
Honorable	George	Nethercutt	Representative in Congress	920 West Riverside, Suite 594	Spokane	Washington	99201
Honorable	Norman D.	Dicks	Representative in Congress	1717 Pacific Avenue, No. 2244	Tacoma	Washington	98402-4411
Honorable	Adam	Smith	Representative in Congress	3600 Fort of Tacoma Road, East, Suite 308	Tacoma	Washington	98424
Honorable	Linda	Smith	Representative in Congress	1220 Main Street, Suite 310	Vancouver	Washington	98660

Fred And Arlene Walters
78711 Estregaard Rd.
Boardman OR 97818

BOARDMAN, OR
PM
1999
MAR 4
97818



Sen. Ron Wyden
717 Hart Senate Office Bldg.
Washington, D.C. 20510

RON WYDEN
OREGON

717 Hart Senate Building
Washington, DC
20510-3703
(202) 224-5244

e-mail
senator@wyden.senate.gov

web site:
www.senate.gov/~wyden/

United States Senate

WASHINGTON, DC 20510-3703

June 15, 1999

General Robert Griffin
Chief, North Pacific Division
U.S. Army Corps of Engineers
220 NW 8th St.
Portland, OR 97209-3589

Dear General Griffin:

Enclosed please find correspondence I recently received from my constituent, Arlene Walters, regarding Northwest salmon recovery. Mrs. Walters has concerns about the Phase II study on the proposed drawdown of the John Day dam. She has outlined her concerns in the attached letter.

I would greatly appreciate your response to her concerns through a direct reply to Mrs. Walters. Please also send a copy to my Washington office, as I am interested in your response. Thank you in advance for your assistance.

Sincerely,

Ron Wyden

RON WYDEN
United States Senator

RW\atj
Enclosure

Committees:

Budget
Commerce, Science & Transportation
Energy & Natural Resources
Environment & Public Works
Special Committee on Aging

Oregon State Offices:

500 NE Multnomah St
Suite 320
Portland, OR 97232
(503) 326-7525

151 West 7th Ave
Suite 435
Eugene, OR 97401
(541) 431-0229

Sec Annex Building
105 Fir St
Suite 210
La Grande, OR 97850
(541) 962-7691

U.S. Courthouse
310 West 6th St
Room 118
Medford, OR 97501
(541) 858-5122

The Jamison Building
131 NW Hawthorne Ave
Suite 107
Bend, OR 97701
(541) 330-9142

707 13th St, SE
Suite 285
Salem, OR 97301
(503) 589-4555

PRINTED ON RECYCLED PAPER

JUL 8 1999

Planning, Programs and
Project Management Division

Mrs. Arlene Walters
78711 Estregaard Road
Boardman, Oregon 97818

Dear Mrs. Walters:

I am writing in response to your letter to Senator Ron Wyden regarding the John Day Drawdown study that the U.S. Army Corps of Engineers is conducting. As you can see from the enclosed letter from Senator Wyden, he requested that we respond to you directly.

I want to thank you for taking the time to share your concerns about this very important study. Further, I want to make sure you understand that the Corps of Engineers is currently working on Phase I of the study and will not proceed with Phase II unless directed by the U.S. Congress. Phase I is scheduled for completion in December 1999 and the estimated cost for completing Phase I is $3.3 million. Phase II of the study has not been scoped and, therefore, we do not have either a detailed schedule or cost estimate. It was stated in our February 23, 1999, meeting that, "If we do Phase II, it would take four to five years to complete and would cost approximately $20 million."

Enclosed you will find a copy of the transcript from the February 23, 1999, meeting. This transcript was prepared so that the team and the decision makers will have a clear understanding of what was said at the meeting. Transcripts of all public meetings are available on the Internet at http://www.nwp.usace.army.mil/pm/projects/jddds and they, along with your letter, will be included in our Phase I report to the U.S. Congress for their consideration.

If we can be of further assistance or if you have additional information that needs to be considered, please contact my project manager, Stuart Stanger, at (503) 808-4706.

Sincerely,

/Signed/

Robert T. Slusar
Colonel, Corps of Engineers
District Engineer

Enclosure

Copy Furnished:

Honorable Ron Wyden
United States Senate
717 Hart Office Building
Washington, DC 20510-3702

Attachment F: 1999 Tribal Coordination and Comments

OCT 30 1998

Programs and Project Management Division (CENWP-PM) (1110-2-1150a)

Mr. Samuel N. Penney, Chair, Executive Committee
Nez Perce Indian Tribe
Post Office Box 305
Lapwai, Idaho 83540-0305

Dear Mr. Penney:

Congress has directed us to begin the first phase of a two-phase study of drawdown options for John Day Dam on the Columbia River. We are to limit the first phase of the John Day Drawdown Study to two options for lowering the reservoir, "spillway crest" and "natural river level."

In Phase I of the study, which we began on October 1, 1998, we will begin to identify the impacts of both options. To do this, we will evaluate biological, social, and economic benefits and costs, plus potential physical impacts of each. As part of that evaluation, we will detail impacts on irrigation, fisheries, wildlife, flood control, hydropower production, navigation, cultural resources, recreational activities and water supply, as well as hydraulics and hydrology affects, and associated structural changes at John Day Dam. Water quality and sediment quality will be discussed based on evaluation of existing information and be studied more completely in Phase II.

As many of you know, normal reservoir operating level is elevation 265 (normal pool). At spillway crest drawdown (about elevation 215), fish passage systems at John Day Dam would have to be modified and there would be affects on other users of the river. At natural river (about elevation 165), the river could be rerouted to bypass John Day Dam or the dam could be breached. There would be dramatic effects on navigation, irrigation, recreation, hydropower production, cultural resources and water supplies.

Some of the material that will be used to develop the Phase I study was gathered in 1994 when the Corps of Engineers was asked to study drawdown of the John Day reservoir to Minimum Operating Pool (MOP) (elevation 257).

During the course of the current study, the Corps of Engineers will ask for input from the public, various regional interest groups, and state and Federal agencies. Information-sharing open houses, tentatively scheduled for early next year, will be held at various locations to get public input and discuss drawdown impacts. The Corps of Engineers study team members will be working with special interest groups to gather information prior to the open houses.

FILES
NWP-EC-T

MORGAN
NWP-EC-D

SLUSAR
NWP-DE

BRICE
NWP-DD

BRIMHALL
NWP-PA

JONES
NWP-EC

FERGUSON
NWP-EC-E

WALKER
NWP-EC-E

MAZAR
NWP-EC-D

CHRISTENS
NWP-EC-DC

FERGUSON
NWP-EC-DC
X4910/jh
29-Oct-98

Stanger
NWP-PM
10/30

At the conclusion of the first phase, we will make a recommendation to Congress regarding whether or not further study of lowering the John Day reservoir is appropriate. Congress has asked us to complete Phase I of the Drawdown Study in about one year.

The second phase, if directed by Congress, would evaluate the costs, benefits and physical impacts of a wide range of alternatives, including potential physical modifications to the dam. That phase would likely include an Environmental Impact Statement and related National Environmental Policy Act coordination. Public comments are part of those processes. Neither the first or second phases of this study will include actual physical modifications at the John Day Dam or study of lowering the reservoir to MOP.

Consultation and coordination with tribal representatives is an important facet of the John Day Drawdown Study. We would like to meet with you to discuss this Study, its impacts on the tribes and tribal concerns. Please contact my Native American Coordinator, Lynda Walker, at (503) 808-4766, to make consultation arrangements.

Sincerely,

/Signed/

Robert T. Slusar
Colonel, Corps of Engineers
District Engineer

NOV 13 1998

Programs and Project Management Division (CENWP-PM) (1110-2-1150a)

«MrMrs» «FirstName» «LastName», «JobTitle»
«Company»
«Address1»
«CityStateZip»

Dear «MrMrs» «LastName»:

Congress has directed us to begin the first phase of a two-phase study of drawdown options for John Day Dam on the Columbia River. We are to limit the first phase of the John Day Drawdown Study to two options for lowering the reservoir: "spillway crest" and "natural river level."

In Phase I of the study, which we began on October 1, 1998, we will begin to identify the impacts of both options. To do this, we will evaluate biological, social, and economic benefits and costs, plus potential physical impacts of each. As part of that evaluation, we will detail impacts on irrigation, fisheries, wildlife, flood control, hydropower production, navigation, cultural resources, recreational activities and water supply, as well as hydraulics and hydrology effects, and associated structural changes at John Day Dam. Water quality and sediment quality will be discussed based on evaluation of existing information, and be studied more completely in Phase II.

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FILES
NWP-EC-T

MORGAN
NWP-EC-D

SLUSAR
NWP-DE

Brice
NWP-DD

Moriuchi
NWP-PM

Stanger
NWP-PM

Brimhall
NWP-PA

JONES
NWP-EC

Mazar
NWP-EC-D

Christensen
NWP-EC-DC

J. Ferguson
NWP-EC-DC
X4910/JH
5-Nov-98

At the conclusion of the first phase, we will make a recommendation to Congress regarding whether or not further study of lowering the John Day reservoir is appropriate. Congress has asked us to complete Phase I of the Drawdown Study in about one year.

The second phase, if directed by Congress, would evaluate the costs, benefits and physical impacts of a wide range of alternatives, including potential physical modifications to the dam. That phase would likely include preparation of an Environmental Impact Statement and related National Environmental Policy Act coordination. Formal public comments would be solicited during those processes. Neither the first nor second phases of this study will include actual physical modifications at the John Day Dam or study of lowering the reservoir to MOP.

At this point we do not have a great deal more information to share with you. We do, however, hope to schedule public open houses shortly after the first of the year, when preliminary factual information will be compiled, and we can most benefit from your input, and also have some preliminary information to share with you.

If you are concerned about waiting until the first of the year, and have questions now, please contact Dawn Edwards, Public Affairs Office, at (503) 808-4510. She will be able to answer your questions, or direct them to the appropriate person.

Sincerely,

/Signed/

Robert T. Slusar
Colonel, Corps of Engineers
District Engineer

MRMRS	FirstName	LastName	JobTitle	Company	Address1	CITYSTATEZIP
Mr.	Thomas	Cross	Manager, Pipeline Engineering	Northwest Pipeline Corporation	Post Office Box 58900	Salt Lake City, Utah 84158-0900
Mr.	Frank	Lamb		Eastern Oregon Farm Corporation	Post Office Box A	Irrigon, Oregon 97844
Ms.	Leann	Rea		Western Extension Irrigation District #1 & #2	Post Office Box 465	Irrigon, Oregon 97844
Mr. & Mrs.	Ron	Harris			HCR2	Ione, Oregon 97843
Mr.	Olney	Patt, Senior	Chairman, Tribal Council	Confederated Tribes of the Warm Springs Reservation of Oregon	Post Office Box C	Warm Springs, Oregon 97761-0078
Mr.	William F.	Yallup	Chairman, Tribal Council	Confederated Tribes and Bands of the Yakama Indian Nation	Post Office Box 151	Toppenish, Washington 98948-0151
Mr.	Antone	Minthorn	Chairman, Board of Trustees	Confederated Tribes of the Umatilla Indian Reservation	Post Office Box 638	Pendleton, Oregon 97801-0638
Mr.	Samuel N.	Penney	Chair, Executive Committee	Nez Perce Indian Tribe	Post Office Box 305	Lapwai, Idaho 83540-0305
Mr.	Dan	Crouse		Oregon Department of Environmental Quality	400 East Scenic Drive, Suite 2.307	The Dalles, Oregon 97058
Mr.	Donald	Abbott		Washington Department of Ecology	15 West Yakima Avenue	Yakima, Washington 98902-3401
Ms.	Mary Lou	Soscia		U.S. EPA - Oregon Operations Office	811 SW 6th Avenue	Portland, Oregon 97204
Ms.	Gayle	Killam	Coordinator	Clean Water Organizing Project	520 S.W. 6th Avenue, Suite 1130	Portland, Oregon 97204-1535
Mr.	John	Malek		EPA, Region 10	1200 6th Avenue, Mail Stop WD-128	Seattle, Washington 98101
Mr.	Rick	Vinning	WDOE		Post Office Box 47703	Olympia, Washington 98504-7703
Ms.	Debrah	Marriott	Executive Director	Lower Columbia River National Estuary Program	811 SW 6th Avenue	Portland, Oregon 97204
Mr.	Bruce	Sutherland	O	Oregon DEQ	811 SW 6th	Portland, Oregon 97204
Mr.	Rollie	Montagne		Port of Portland	Post Office Box 3529	Portland, Oregon 97208
Mr.	Steve	Hinton		Oregon Trout	117 SW Front Avenue	Portland, Oregon 97204
Mr.	Gene	Foster		Oregon DEQ - Water Quality	811 SW 6th Avenue	Portland, Oregon 97224
Mr.	Jeremy	Buck		US Fish and Wildlife Service/ Oregon State Office	2600 SE 98th Avenue, Suite 100	Portland, Oregon 97266
Ms.	Kathy	Moore	City Manager	City of Boardman	Post Office Box 229	Boardan, Oregon 97818
Mr.	Pete	Taggares		Taggares Farms	3 Mile Canyon	Boardman, Oregon 97818
Mr.	Chuck	Dawsey	Manager		Post Office Box 1150	Prosser, Washington 99350
Mr.	Phil	Thor		BPA-PGF	Post Office Box 3621	Portland, Oregon 97208
Ms.	Audrey	Perino		BPA-PGF	Post Office Box 3621	Portland, Oregon 97208
Mr.	Jim	Baker		Sierra Club	2703 Klemgard Road	Pullman, Washington
Mr.	Rick	Smith		City of Pasco	Post Office Box 293	Pasco, Washington 99301

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

OCT 30 1998

Programs and Project Management Division

(MrMrs) (FirstName) (LastName) (JobTitle)
(Tribe)
(Address)
(CityStateZip)

Dear (MrMrs) (LastName):

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Sincerely,

Robert T. Slusar
Colonel, Corps of Engineers
District Engineer

Meetings on the John Day Drawdown Phase I study were presented by Program Manager Stuart Stanger and other Corps representatives to tribal governing bodies and intertribal agencies on the following dates:

16 March 1999 - Nez Perce

18 March 1999 – CRITFC

4 May 1999 - Yakama

12 May 1999 – Umatilla

8 June 1999 – Warm Springs

Tribal concerns over historic properties, the possibilities that graves would be washed out exposing human remains and looting of exposed artifacts were expressed almost universally at these meetings. Also frequently mentioned were requests that any re-vegetation programs to include native plants and that the river should be directed into its former pre-inundation channel. All tribes contacted requested reassurances that government-to-government consultations and tribal natural resources agencies involvement prior to any further study phases.

Since tribal cultural resources embrace such a broad spectrum of natural resources, the reader is directed other sections of the present Phase I study, such as Wildlife, Water Quality, Anadramous Fish, Resident Fish and Tribal Economic Impacts to address those concerns. These sections will discuss how each of these resources are affected by the proposed alternatives. An exception to this will be the impacts and cost of replacements to the Treaty Fishing Access sites, which can be found in the next paragraph.

As the John day Pool is drawn down fishing access to the Columbia River, a Treaty and Trust obligation of the Federal Government, will have to be provided for tribal fishers. Ten sites are located on the John Day Pool: Railroad Island (North Shore) (WA); Le Page Park (OR); Sundale Park (WA); Roosevelt Park (WA); Pine Creek, (WA); Quesnel Park - (Three Mile Canyon) (OR); Crow Butte State Park (WA);Alderdale (WA); Pasture Point (WA) and Boardman Park - Faler Road Site (OR).

Cost estimates are for total replacement of all sites. This will include modification of recently constructed Treaty Fishing Access sites located on the shoreline of the Columbia

River on the John Day Pool. In addition, sites planned for the John Day Pool but not yet constructed will have to be redesigned to take into account the changes in pool elevation.

INSERT Treaty Access Site Figure

EXISTING CULTURAL RESOURCES ENVIRONMENT

Overview of Area Prehistory

Human occupation of the region spans at least the past 12,000 years. Changes in climate, floral and faunal assemblages, and geologic events during this time have necessitated adjustments in human adaptation. Thus, environmental factors have played a significant role in shaping human land use patterns. Archeological Investigations reveal the presence of prehistoric groups since the close of the Pleistocene Epoch 10,000 to 12,000 years ago. Although knowledge of the earliest groups is quite limited, the evidence from artifact assemblages throughout the region documents the presence of peoples initially concentrating on big game hunting (Fluted Point Horizon) and later following a relatively unspecialized hunting and gathering way of life (San Dieguito-Windust-Milliken Horizon).

Tha Fluted Point Horizon artifact assemblage refers to a geographically widespread (throughout North America) and temporarily short-lived (11, 500 to 10,000 years before present) occurrence of large fluted projectile points (Clovis and Folsom points) frequently associated with the remains of extinct mammals. The San Dieguito-Windust-Milliken Horizon refers to a grouping of three intergrading complexes of stone artifacts known from California to Nevada (San Dieguito), the Columbia Plateau (Windust), and British Columbia (Milliken). These complexes or assemblages consist of a variety of stone artifacts including large lanceolate projectile points (both stemmed and shouldered) , leaf-shaped projectile points or knives, a variety of scraping tools, and occasionally milling atones. The dated range for this horizon is between 10,500 and 7,500 yeas before present. The later, more diverse and specialized atone tool complexes of the San Dieguito-Windust-Milliken Horizon reflect the changes in subsistence patterns noted above.

Attachment G. 1999 Public Comments

PORT OF CLARKSTON

849 PORT WAY
CLARKSTON, WA 99403
PHONE (509) 758-5272

the proud port

February 12, 1999

Col. Robert T. Slusar
District Commander
US Army Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

Dear Col. Slusar:

It was a pleasure to meet you in Lewiston last night at the scoping meeting for The John Day Dam Drawdown Study. Enclosed is a copy of our 1997 Tri-Port Economic Impact Study that describes the effect of a potential drawdown on our local economy.

We strongly urge you not to use the National Economic Development model, because it allows economists to sacrifice our LOCAL economy. If your rules require the use of NED, please educate the people in affected communities that local job loses may not count because job gains could result in other parts of the nation.

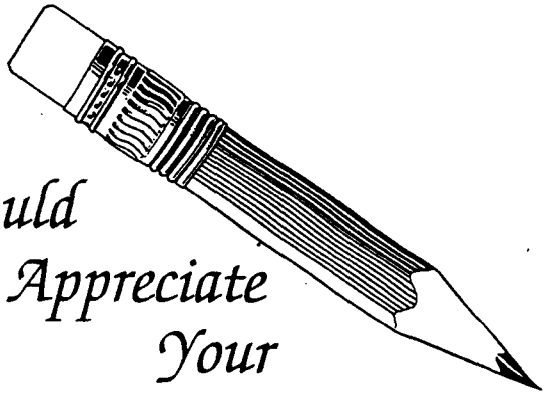
The other major area that needs to be publicized is that economic mitigation is optional; NOT a legal requirement.

Thank you for your consideration.

Sincerely,

Mack L. Funk
Manager

sc
CC: Washington State Congressional Delegation
Columbia/Snake River Ports
Governor Gary Locke
Port of Clarkston Commissioners



We Would Appreciate Your Comments!

Do you wish to be on our mailing list?
☑ Yes ☐ No

My correct mailing address is:

Ted & Joy Smith
1407 E 16th
The Dalles, Or 97058

Comments

No more study!

Let's use common sense.

Please drop in comment box, or, if mailing from home, please fold this sheet and tape or staple at the edge so that our address shows. Please add postage.

CITY OF UMATILLA

300 6th Street • P.O. Box 130 • Umatilla, OR 97882
(541) 922-3226 • Fax (541) 922-5758

23 February 1999

TO: U.S. Army Corps of Engineers

RE: Drawdown of the John Day Dam

I would like to have the following questions answered. Please send to me at the above address:

1. What studies have been made between the decline of salmon in the Columbia River and the other coastal rivers that have no dams?

2. What is the salmon catch in the ocean during the last 75 years? What effect has the increased fishing (from all countries) had on returning salmon?

3. What studies have been made on the effect of warming temperatures in the Pacific Ocean on salmon survival?

4. What studies have been made on the salmon kill by sea lions, seals, and predatory fish and birds?

Thank you,

George A Hash

GEORGE A. HASH, Mayor

City of Boardman
202 N. Main
P.O. Box 229
Boardman, OR 97818
Telephone (541) 481-9252
Fax (541) 481-3244

February 23, 1999

Ladies and Gentlemen,

The City of Boardman appreciates the opportunity to provide these comments to the Corps of Engineers concerning the impacts of alterations to John Day Dam operation. The City of Boardman made a rather courageous decision in 1974 to develop a water system that is dependent upon the Columbia River, as source water, to provide for the residents of the community, past, current and future. This decision was made based upon the promise of the federal government, US Army Corps of Engineers and the United States Congress, that the John Day Dam pool elevation would not be lower than 257 feet above mean sea level. The system was designed to effectively work within the operational limitations set forth and has been the City's sole source of water for over 20 years now. This system has met or exceeded water quality criteria set forth by the US Environmental Protection Agency to meet public health protection standards. This system now stands in a position of jeopardy that <u>may</u> threaten that long history of public health protection. This would be done by either creating difficulties in meeting the standards or preclusion of meeting those standards by eliminating the aquifer characteristics that are so vital to the quality of the water served to the citizens of this community.

Through the discussions, debates, disagreements and deliberations on how to save salmonid stocks in the Columbia and Snake River basins, it has become apparent that environmental laws enacted, to protect the very environment in duress, have been willingly and knowingly violated. These violations have become routine at the request of fisheries managers that have continued to set harvest rates for the intentional killing of the salmon that are struggling to survive. Each year, since 1994, spill waivers have been obtained that allow for violation of the Clean Water Act, the nations principal water quality law. Waivers for gas super-saturation levels of 120% have been granted annually, by the states of Washington and Oregon, since 1994. The CWA standard of 110% is known to cause problems for the fish we are attempting to save. Additionally, the USEPA dioxin TMDL is violated, during the fall and winter months, when the mean flows can not be met to prevent dioxin concentrations from exceeding the TMDL set as a public health standard. Dioxins are known to cause mutations in the fish populations and are known bio-accumulators.

In 1993 and 1994, the City performed Microscopic Particulate Analysis (MPA) samples of the City's water supply, as directed under the Safe Drinking Water Act, and found disturbing results concerning non-chlorophyll possessing micro-organisms, mostly associated with benthic organisms, which are lower food chain organisms. This data was brought forward and, to date, still appears to be the only data of this type in the John Day pool. Why should the City of Boardman have the only credible data of this type, although obtained for entirely different purposes i.e. the protection of public health, when these are basic food chain organisms that the salmonid populations are dependent upon?

Proposals to remove dams, on the lower Snake River, present a scenario that should be of concern to all citizens and fisheries managers. There are known deposits of radionuclides in the sediment column behind McNary Dam. Additionally, a strong case could be made that other contaminants are also entrapped in the sediment column. However, the projected 150 million cubic yards of sediment that will be transported into the McNary pool, should the lower Snake River dams be removed, will require dredging and re-suspension of those sediments in that sediment column. Again, there are known and, more importantly, unknown public health risks and contaminants known to cause mutations in the very listed species we are attempting to recover. However, study of these particular elements, and the effects on the fish population and human population, have either been disregarded or ignored.

The City is also privileged to have the Umatilla National Wildlife Refuge as a neighbor and landowner of the community. This brings with it a rather diverse wildlife community that the residents of this community cherish. However, in the attempt to recover listed salmonid species other similarly treasured species will be put at risk. It would seem somewhat irresponsible to put all other species at risk for the ostensible benefit of a single species. These include the vibrant migratory waterfowl populations, shorebirds including herons and egrets, upland game birds and mammals such as deer and others. These wildlife resources appear to be expendable in the continued push from those set on the removal of dams and the resulting destruction of current wildlife habitat, which includes wetlands.

When the negative impacts on economics, navigation, flood control, power generation and recreational aspects with the removal of the John Day Dam are added to the negative and questionable ecological benefits, the removal of the John Day Dam would seem totally unthinkable, from any rational viewpoint. To continue with the charade that has prevailed, when there is so little understanding of the impacts of the majority of the salmons life cycle, it would seem that any decision made is questionable at best and disastrous at worst. Issues such as ocean conditions, predation, harvest methods and total take, adult return migration and others are barely understood if understood at all.

Can improvements be made to aid in salmonid recovery? The answer is yes. Should those improvements be made? Again, the answer is yes. Is dam removal a viable option? The answer is an unequivocal NO!

Thank you for the opportunity to comment on this very important issue.

Respectfully submitted,

Thomas D. Meyers

Thomas D. Meyers
Mayor

From: Willis, Robert E NWP
Sent: Tuesday, March 09, 1999 3:58 PM
To: 'GAHR FARM'
Cc: Graham, Gregory S NWW; Ferguson, Christine R NWP
Subject: RE: Dams

Thanks for your comments. Your concern over sediment accumulation behind the projects is an issue that is being addressed in the studies on drawdown. For your information, the snake river study is being performed by Walla Walla district and Greg Graham is the study manager. The study of John Day drawdown is at a early stage, but Chris Ferguson is the lead for this study. I've provided your comments to them.

-----Original Message-----
From: GAHR FARM [SMTP:gahrfarm@viclink.com]
Sent: Tuesday, March 09, 1999 2:04 PM
To: Robert.E.Willis@usace.army.mil
Subject: Dams

Gahr Farm

Mar.9, '99
Ted Gahr
18605 SW Masonville Rd.
McMinnville, Or 97128
503-472-6960
gahrfarm@moriah.com

To Whom It May Concern:

I have serious misgivings about the proposal to breach the Columbia-Snake River Dams for Salmon recovery. These are related to observations of the constructed seasonal wetlands on our farm. These accumulate substantial annual deposits of nutrient rich sediments from the turbid floodwaters of a small stream. For me this raises many questions about breaching dams with decades of accumulated sediments.

Will the rivers meander through unstable lake bottom deposits causing harmful levels turbidity? Will large volumes of transported sediments fill downstream reservoirs and then deposit in the lower reaches of the Columbia River? Will polluted nutrient rich sediments and turbid water move to the ocean, critically impacting aquatic life along the river and coastal regions? Will the loss of the flood control dams coupled with sedimentation buildup cause destructive flooding of cites along the river?

I would appreciate information concerning these questions.

Thank you, Ted Gahr

AMERICAN WEST
PROPERTIES

AMERICAN WEST PROPERTIES
P.O. BOX 875 BOARDMAN, OREGON 97818
541/481-2888 · FAX 541/481-3888

March 11, 1999

Portland District
U.S. Army Corp of Engineers
P.O. Box 2946
Portland, OR 97208

Dear Sir or Madam:

I had the opportunity to make a brief statement and meet your people at the local meeting in Umatilla.

Your representatives responded that the Oregon State University and the Columbia River Inter-Tribal Fish Commission joint study was funded by the Corps. That study involved the loss of one-third of the Salmon smolts. This should indicate to your Agency that further study of dams is not needed and you have a study that should indicate to all agencies where action should be directed. The following information shows 45% of the Salmon runs are consumed by predators. Control of predators should be a target to save Salmon. Additional study of dams and the economic impact should be abandoned and replaced with an effort to control predators.

I am enclosing the complete information I referred to when speaking at your session.

Thank you for the opportunity to voice my opinion.

Sincere Regards,

Art Kegler

AK:ro

Enclosure

WASCO COUNTY

Wasco County Court
Room 302
511 Washington Street
The Dalles, Oregon 97058-2237
(541) 296-2207
Fax: (541) 298-3650

RECEIVED
APR 19 1999
BOARD OF C
KLIC

Copy Sent To
BOCC/DANA

John Mabrey, *County Judge*
Scott McKay, *County Commissioner*
Dan Ericksen, *County Commissioner*

April, 16 1999

Mr. Ray Thayer, Chairman
Klickitat County Commissioners
205 South Columbus
Goldendale, WA 98620

Re: John Day Dam Drawdown Project

Dear Commissioner Thayer,

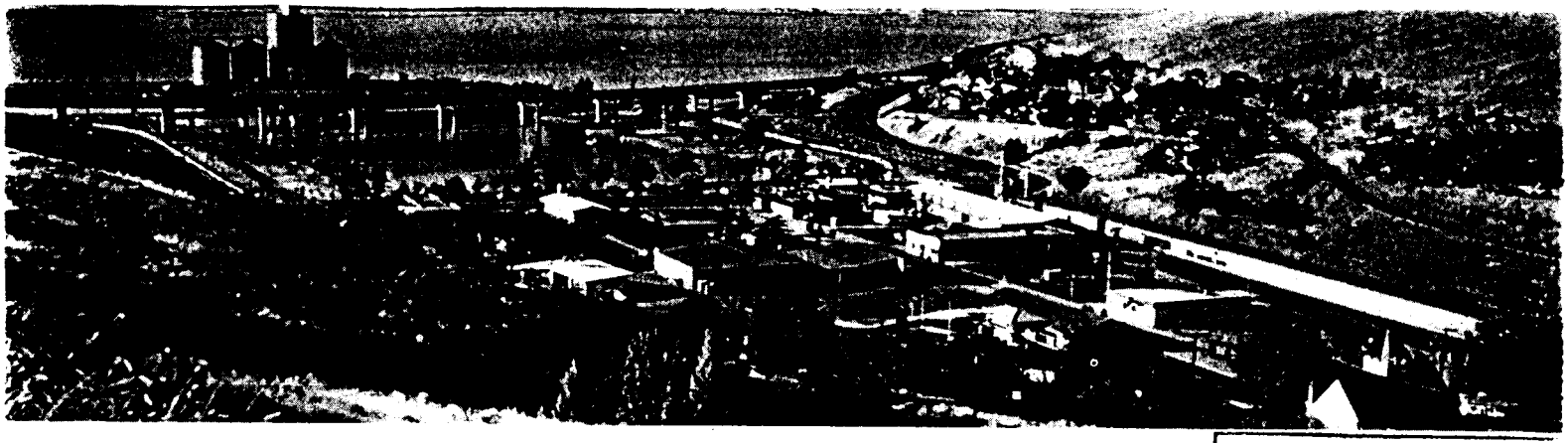
I regret that I will be unable to attend the April 21, 1999, meeting regarding the drawdown options for the John Day Dam.

This project is all guesses and no science. I personally do not mind guessing games but in this case, there are significant consequences that we will suffer, even if we were to guess right. We must have better science than that if we are to proceed.

I would appreciate your voicing my objections at the meeting with the Corps of Engineers and the N.M.F.S. at the Wednesday meeting.

Sincerely,

John Mabrey
Wasco County Judge



City of Arlington

RECEIVED
APR 22 1999
BOARD OF COMMISSIONERS
KLICKITAT COUNTY

April 20, 1999

Ray Thayer, Chairman
Klickatat County Commissioners
205 S. Columbus
Goldendale, Washington 98620

VIA: FAX and
U.S. Mail

Re: Columbia River Drawdown

Dear Chairman Thayer:

The City of Arlington would like to go on record as opposing any drawdown of the Columbia River.

Our City's recreation facilities would be adversely affected by the proposed drawdown. Our beach park would lose it's swimming area and our floating dock would be aground.

More importantly, the ground water level may drop so low that our domestic water supply would be severely reduced. As Arlington discharges treated waste water into the Columbia River, Department of Environmental Quality permit limits would be drastically altered. Compliance may become extremely expensive, if not impossible.

We strongly urge the Corps of Engineers to cease and desist with any drawdown of the Columbia River.

Very truly yours,

CITY OF ARLINGTON

Fred J. Ericksen

Fred J. Ericksen, Mayor

FE:kfw

Copy Sent To
BOCC/DANA

Mayor: Fred Ericksen
Councilors: Ruben T. Wetherell ~ Jeffery Bufton ~ Jonathan Grady ~ Gary Grossmiller ~ Diane Wetherell ~ Kenneth Matlack

P.O. Box 68 ~ Arlington, Oregon 97812 ~ Ph. 541-454-2743

SHERMAN COUNTY COURT

P.O. BOX 365 • MORO, OR 97039 • (541) 565-3416 • FAX: 565-3312

April 21, 1999

Ray Thayer
Chairman
Klickitat County Board of Commissioners
205 S. Columbus
Goldendale, WA 98620

Dear Ray:

The Sherman County Court does not support any proposed drawdown action of the John Day pool which would lead to social and economic disruption for Columbia Basin counties. We believe there are many intermediary measures short of drawdown that should be fully implemented to enhance salmon recovery. Furthermore, we believe focus on drawdown studies and the resources required to pursue them detract from real salmon recovery efforts.

We will continue to support soil and water conservation and habitat improvement through the watershed council process which has been successfully implemented in Sherman County. We support other counties in the basin in their efforts to find reasonable solutions to endangered species issues.

Sincerely,

Mike W. McArthur
County Judge

A RESOLUTION OF THE WASHINGTON STATE ASSOCIATION OF COUNTIES IN OPPOSITION TO REMOVING/BREACHING ANY EXISTING DAMS ON THE LOWER SNAKE RIVER AND COLUMBIA RIVER

WHEREAS, the Washington State Association of Counties recognizes the enormous contribution the Columbia and Snake Rivers bring to the region's economic well being and quality of life; and

WHEREAS, the Washington State Association of Counties believes that drawdowns below current operating levels or removal of these dams to enhance various salmon runs would adversely impact the citizens of Washington, Oregon and Idaho through a loss of recreation, an increase in electrical rates, increasing freight mobility costs and economic hardship; and

WHEREAS, the Washington State Association of Counties believes that salmon are in decline because of many factors, including a loss of habitat, predators, weather cycles including droughts and unfavorable ocean climatic conditions, poor hatchery practices, harvest and hydro projects; and

WHEREAS, the Washington State Association of Counties believes the salmon and steelhead can be and should be preserved and enhanced in conjunction with the continued multiple use of the rivers; and

WHEREAS, within the existing hydrosystem, the Washington State Association of Counties supports scientifically-based and cost-effective strategies for recovering and enhancing threatened or endangered salmon and steelhead throughout their life span; and

WHEREAS, there is a genuine need for public debate to develop a minimum or sufficient threshold number of smolt traveling downriver which will insure the continued existence of these threatened and endangered species.

NOW, THEREFORE, BE IT RESOLVED, that the Washington State Association of Counties supports the continued multiple use of the Columbia and Snake Rivers for fish and wildlife habitat, hydropower generation, flood control, transportation, irrigation and recreation, and opposes drawdowns below the current operating levels and removal or breaching of any dams on the lower Snake River or Columbia River; and

BE IT FURTHER RESOLVED, that the Washington State Association of Counties expresses concern over any review process which does not incorporate and take into consideration the impacts upon the citizens of Eastern Washington whose economy is dependent on the operation of the dams.

Recommendation of the Board of Directors: DO PASS

Action of the Association: DO PASS

Helen Fancher

Helen Fancher, President
Washington State Association
June 9, 1998 at the 92nd Annual Convention
Tacoma, Washington

Post-it® Fax Note 7671	Date	# of pages ▶
To Lisa Peck	From WSAC	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 509/773-4521	Fax #	

RECEIVED
APR 22 1999
BOARD OF COUNTY COMMISSIONERS

WASHINGTON STATE LEGISLATURE

Copy Sent To
BOCC/DANA

April 20, 1999

Mr. Ray Thayer, Chairman
Klickitat County Commissioners
205 S. Columbus Avenue
Goldendale, WA 98620

Dear Chairman Thayer and Commissioners:

We are writing to voice our opposition to any proposed plan to breach, remove, or alter the original design and intent of the John Day Dam, including any effort to draw down the reservoir behind the dam. We are also opposed to continued funding of Phase II of the John Day Drawdown study.

We have no science or data which proves dam removal, breaching, or reservoir drawdown would actually save fish. On the other hand, we do know those actions would:

- Drastically reduce, if not cease, agriculture production in the region
- Eliminate flood control -- jeopardizing safety of residents below the dam
- Reduce hydroelectric power generation & displace wildlife
- Devastate tourism related industries in the area

Citizens and ratepayers have created the most unique irrigation, power generation, and flood control system in the world. It is the lifeblood of Eastern Washington, producing low cost and reliable electricity, flood control, irrigation, navigation and recreation. Removing or dramatically altering any part of this system would have devastating consequences, and we have serious concern over any attempts to do so. To suggest such an action of potentially wide-ranging destructive consequences without proof of any substantial benefit to fish is short-sighted at best and reckless at worst.

Sincerely,

Sen. Jim Honeyford
15th Legislative District

Rep. Gary Chandler
13th Legislative District

Rep. Barb Lisk
15th Legislative District

Rep. Bruce Chandler
15th Legislative District

Klickitat County Port District

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APR 22 1999
BOARD OF COMMISSIONERS

Copy Sent To
BOCC/ DNA

April 20, 1999

Mr. Ray Thayer, Chairman
KLICKITAT COUNTY BOARD OF COMMISSIONERS
205 S. Columbus, MS-CH4
Goldendale, WA 98620

RE: JOHN DAY DRAW DOWN

Dear Chairman Thayer:

The Port of Klickitat's Board of Commissioners and staff wish to express our opinion regarding the proposed John Day draw down that is being considered. It appears that the results and consequences of a draw down have not been fully analyzed. Tremendous negative impacts would be made to affected agricultural and economic entities, with far reaching repercussions to the economic viability of affected surrounding communities. Additionally, the impacts to power, navigation, flood control and recreation will be very significant and are deemed unacceptable.

It is uncertain, at this time, if the proposed draw down would have a positive affect on the salmon's population. It seems unreasonable to fund Phase II of this study without better information and science to support this proposal.

When considering the far reaching consequences of pursuing the John Day draw down, without clear benefit to salmon, the Port of Klickitat has no choice but to oppose any further funding of Phase II of this study. Please join with the Port in expressing our concerns at the April 21, 1999 John Day draw down meeting.

Sincerely,

Dianne Sherwood

Dianne Sherwood
ACTING DIRECTOR

cc: Port Commissioners

C:\MD\Corresp\BOC\JDayDraw.wpd

401 Bingen Point Way #A • Bingen, WA 98605 • (509) 493-1655 • Fax (509) 493-4257

RECEIVED
APR 22 1999
BOARD OF COMMISSIONERS
KLICKITAT COUNTY

PORT OF MORROW
MORROW COUNTY OREGON
P.O. Box 200, Boardman, OR 97818
(541) 481-PORT • Fax (541) 481-2679

Copy Sent To
BOCC/DAM

April 20, 1999

Mr. Ray Thayer, Chairman
Klickitat County
205 S. Columbia Avenue
Goldendale, WA 98620

RE: JOHN DAY RESERVOIR DRAWDOWN STUDY

Dear Mr. Thayer:

The Port of Morrow, Port of Umatilla and the Port of Arlington, along with the Oregon Economic Development Department funded an Economic Study that addressed the economic ties to the Columbia River in our region. This study only addressed the Oregon side of the John Day Reservoir. This study did not include recreation, power generation, flood control or the total loss of navigation on the river system, only the impact of the loss of navigation based on cargo originating in the John Day.

The hydropower originating at the John Day Dam is critical to the northwest, not only in the amount of generation, but also to the reliability of the total transmission of the Bonneville Power System. The multiple uses of the Columbia River in the John Day Reservoir are critical for the viability of this region and the Northwest. Irrigation, navigation, power generation, flood control and recreation need to be maintained. More than 16,000 jobs and $1.6 Billion a year are tied to our local economy based on the multiple uses of the river. This is 52% of the economy on the Oregon side of the John Day Reservoir.

The U.S. Army Corps of Engineers needs to stop studying drawdowns and focus their efforts on continued improvements of fish passage at the dams. The economic impacts alone clearly dictate no further study of drawdowns. We are anxious to work toward solutions of fish recovery that incorporate the ongoing multiple uses that build this region and benefits everyone in the Northwest.

Please urge the Corps of Engineers and the Northwest Congressional Delegation to stop studying drawdowns and focus their efforts on solutions we can work together on.

Sincerely,

Gary Neal

Gary Neal
General Manager

GDN: slh
c: Port of Morrow Commission

-----Original Message-----
From: Ferguson, Christine R NWP
Sent: Monday, April 26, 1999 1:49 PM
To: 'Stranz, Jeff'
Cc: Stanger, Stuart L NWP; Edwards, Dawn M NWP
Subject: RE: John Day Drawdown Study

Dear Mr. Stranz,
Thank you for taking the time to comment on our study. I have distributed this message to the entire study team for their consideration during the study process. A copy of this letter will be included in the Public Comment Section of our report.

Chris Ferguson
Technical Team Lead
John Day Drawdown Phase I Study

-----Original Message-----
From: **Stranz, Jeff** [mailto:jstranz@nwaluminum.com]
Sent: Wednesday, April 21, 1999 7:14 AM
To: 'cenwp-ec-dc@usace.army.mil'
Subject: John Day Drawdown Study

Dear Sir:
I am a native Oregonian of 45 years, live and work within 30 miles of the John Day River. I would like to go on record as opposing this Phase II study for all of the reasons listed below. This plan affects many areas and I don't believe it is in the best interest of the people or fish to pursue this drawdown issue any further.
Thank you for your consideration.

Sincerely,

Jeff Stranz
P.O. Box 243
Mosier, OR 97040

WHY PHASE II OF THE JOHN DAY DRAWDOWN STUDY MUST BE STOPPED

Drawing Down the John Day Pool Won't Help Salmon

* By terminating barge navigation, drawdown would end the smolt transportation program that doubles adult returns of salmon, an effect that dwarfs imagined biological benefits of drawdown.

* Biologists have identified John Day pool as an important rearing area for juvenile fall chinook; loss of the reservoir may decrease fall chinook survival.

* University of Washington computer models suggest that the John Day drawdown could cause the extinction of endangered fall chinook.

* Advocates claim that lost spawning beds will be restored, but no credible data demonstrates that dam removal will produce substantial levels

of spawning in the John Day pool

* Advocates claim that drawdown will increase river speed, but the best science shows no relationship between Columbia River flows and salmon survival.

* Drawdown would destroy the Region's investment in the Umatilla Wildlife Refuge and the Willow Creek and Irrigon wildlife areas by leaving them high and dry.

* Drawdown would interfere with operation of the Umatilla and Irrigon fish hatcheries.

The Socio-Economic Costs of John Day Drawdown Are Enormous

* Commercial river navigation would not be possible, jeopardizing $10 billion in commerce.

* All 250,000 acres irrigated from the John Day Pool would be eliminated or require costly and uneconomic modifications to irrigation pumping systems.

* The John Day Dam is the 3rd largest in the system, the most cost-effective power source, provides 2,500 megawatts of peak capacity and supports the high-voltage transmission system; maintaining power reliability after drawdown would cost hundreds of millions of dollars every year.

* John Day Dam provides flood control and kept the City of Portland from flooding in 1996.

* Recreation and boating opportunities would decrease dramatically.

What's Wrong with Expanding the Study to Phase II?

* Supporting efforts to save salmon means opposing the waste of salmon recovery dollars; spending the study dollars on real world improvements for salmon-not more paper-would produce far greater benefits. Phase II of this study would cost $20 million, and must be stopped.

* The mere existence of the study makes financial institutions perceive economic risks in investing and lending, hindering economic development efforts.

* The Corps cannot be trusted to provide a fair and unbiased study, and has a track record of hiring those linked to salmon harvest interests to write the studies; the Corps has already decided to use biased and inaccurate PATH modeling to predict fish benefits from John Day drawdown.

Ferguson, Christine R NWP

To: Kathy Neal

Subject: RE: Unanticipated effects of a drawdown of John Day pool

Kathy,
Thank you for taking the time to comment on our study. I apologize for the delay in replying to your message, this is a fairly new mailbox and when I'm gone it doesn't always get checked. I have forwarded your comments to our Fisheries Biologist, Chuck Willis. Your comments will be included in our Public Comment appendix to the Study Report.

Chris Ferguson
John Day Drawdown Phase I Study Technical Team Lead
(503) 808-4910

-----Original Message-----
From: Kathy Neal [mailto:neal@pacifier.com]
Sent: Tuesday, May 11, 1999 9:54 PM
To: CENWP-EC-DC@usace.army.mil
Subject: Unanticipated effects of a drawdown of John Day pool

A drawdown cannot be considered in isolation, or its effect may be the exact opposite of what is desired. Since fish are presently collected for transport at Lower Granite, Little Goose, Lower Monumental, and Mcnary, the number of Snake River fish still in the river at John Day is pretty low. However, the Hanford Reach fish and Mid-Columbia runs are collected only at Mcnary. Therefore, assuming a drawdown is actually good for fish, the non-endangered fish are helped more than the endangered fish. This would mean an increase in returning adults, which would lead to an increase in mixed stock harvest. However, since the endangered fish are helped less than the rest, a drawdown would actually be harmful to the endangered fish due to the increased harvest. Therefore, its either necessary to eliminate transportation, which despite extensive verbage by the agencies and tribes, is still the best way to get fish past the dams, or eliminate or cap harvest at some fixed number (not percentage) of fish. If one of these two actions isn't taken, a John Day drawdown will only harm the endangered Snake River Runs.

Central Klickitat Conservation District
1107 South Columbus Avenue - Goldendale, WA 98620 - Phone (509) 773-5823 - FAX (509) 773-6046

U.S. Army Corps of Engineers
Portland District
P.O. Box 2946
Portland, OR 97208-2946
May 20, 1999

RECEIVED
MAY 24 1999
PUBLIC AFFAIRS

Dear Sirs:

The Central Klickitat Conservation District board of supervisors is opposed to the proposals for drawdown of the John Day pool, which are currently being studied. We request you recommend to Congress that there be no further study beyond the phase 1 process you are currently conducting. Our opposition is based on the potentially extreme economic hardships that would be imposed on the agricultural and industrial communities, as well as the general population of our area, especially when the biological benefits to salmonids cannot be assured or accurately estimated.

In the event that you proceed to phase 2, we wish to be on your mailing list in order that we may provide our input and to stay current on the National Environmental Policy Act (NEPA) process.

Sincerely,

Colin D. Bennett

COLIN BENNETT
Chairman, Central Klickitat Conservation District

Planning, Programs and Project
Management Division

JUN 23 1999

Mr. Pat Tucker, Board of Directors
Columbia-Snake River Irrigators Association
3030 W. Clearwater, Suite 205-A
Kennewick, Washington 99336

Dear Mr. Tucker

This letter is in response to the Columbia-Snake River Irrigators Association's Policy Memorandum on the John Day Pool Phase I Drawdown Study dated February 25, 1999.

The John Day Phase I of Drawdown Study may be too far along to address the issues you have. However, we would welcome the opportunity to discuss any additional technical and economic studies that may be warranted for any new water management alternative for the Columbia River Basin.

Please feel free to contact me at (503) 808-4703 to arrange a meeting to discuss the proposal.

Sincerely,

Martin L. Hudson
Chief, Planning Branch

Copy Furnished:
Tom Mackay, President CSRIA

Columbia-Snake River Irrigators Association
Policy Memorandum

Transmittal: 3 Pages and Attachments

DATE: February 25, 1999

TO: Br. Gen. Robert Griffin/Col. Robert Slusar, USACE
Mr. Will Stelle, Director, NMFS Northwest Office
Gov. Gary Locke, State of WA
U.S. Sen. Slade Gorton, WA
U.S. Sen. Gordon Smith, OR

FROM: Pat Tucker, Board of Directors
and Tom Mackay, President
Columbia-Snake River Irrigators Association

SUBJECT: 1) John Day Pool Phase I Drawdown Study/Proposal
2) Formal Request to NMFS/Corps for Review of New Water Resource Management Alternative

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In response to the federal agencies' request for comments, the CSRIA Board of Directors is providing comments/recommendations to the National Marine Fisheries Service (NMFS) and the Army Corps of Engineers (Corps) on two issues: the John Day Pool drawdown study and proposal; and a formal request for the Corps to initiate a technical and economic study on the implementation of a new water management alternative for the Columbia River Basin.

John Day Pool Phase I Drawdown Study/Proposal:

The CSRIA Board of Directors have serious concerns surrounding the Corps' John Day Pool Phase I study and proposals to drawdown the John Day Pool. Neither drawdown proposals nor the study of drawdowns are supported by the CSRIA. The CSRIA is adamantly opposed to the Phase I study and any attempt to proceed with a Phase II process.

The CSRIA further states for the record:

- **The Northwest Congressional delegation should stop all further funding for any drawdown or dam breaching studies on the Snake-Columbia River system.**

3030 W. Clearwater, Suite 205-A, Kennewick, WA 99336
509-783-1623, FAX 735-3140

- **It was wrong and incredibly poor public policy for the John Day Pool Phase I drawdown study to be funded by Congress. Funding the study represents failed political leadership on the part of Northwest Congressional leaders.**

- **Neither the drawdown study nor the proposed drawdown action is supported by the local residents or state and county elected officials representing the area.**

- **The Corps' study creates perceived economic risk impacts, where financial institutions and lenders are hesitant to proceed with economic development projects within the area. The study itself creates economic impacts to the local area--perceived risk impacts affecting financial investment and economic development. The study is creating negative economic impacts to the local area.**

- **The social and economic disruption posed by a drawdown is unacceptable to the local communities and to the Pacific Northwest region. The impacts to power, navigation, flood control, and recreation are significant and unacceptable.**

- **The OR/WA governors should aggressively oppose any further drawdown studies or proposed actions. The Governors must display explicit political leadership on the drawdown proposals.**

- **The credibility of the Corps is rapidly diminishing by bringing forward these totally impractical drawdown studies. The Corps is beginning to lack credibility as competent resource managers. The Corps must stop further work on any drawdown proposals.**

- **The Corps of Engineers is wasting salmon recovery money by conducting the John Day Pool drawdown study. The Corps is simply becoming a part of the "salmon recovery industry"--interested in operations money not sound resource management.**

- **The John Day Pool drawdown study is a major distraction away from pursuing real salmon recovery actions.**

- **The Corps has spent almost ten years on six major studies for salmon recovery. During this same period of time, what has been done by the Corps to engage in studies and programs to benefit the future economic vitality of the region?**

Formal Request for the Corps to Review a New Water Management Alternative:

The Corps should refocus its technical analyses away from drawdown proposals and place attention on pragmatic and workable measures for salmon recovery and for the benefit of the Pacific Northwest economy.

We specifically request that the Corps initiate actions to proceed with a technical/economics review of the attached proposal for a new water management alternative for the Columbia River Basin.

This new water management alternative would call for:

- **Restructuring the existing fish flow targets/augmentation program--based on water policy, hydrology, biological, and economic justifications contained within the attached technical information.**

- **Reregulating the hydro system, producing additional hydroelectric power and revenues.**

- **Identifying within the tributaries new water resources projects, including new water storage projects, opportunities for water marketing and transfers, and selected water efficiency measures.**

- **Applying the new water resource projects to bring about fish, economic, and recreational benefits.**

- **Encouraging tribal participation in the development of new water storage projects by allowing then to become equity partners.**

Specifically, the Corps should:

- **Initiate an internal, preliminary scoping review to assess water management review tasks and prepare a detailed budget for the study.**

- **Prioritize its funding requests to Congress to give preference for the water management review study.**

- **Formally submit the review study request and budget to Congress for immediate funding.**

It is further recommended to the Corps that they provide the CSRIA/EOIA Boards of Directors with a formal reply to this study request, so that the associations may inform Congress of the Corps' progress in complying with this important constituency request.

606713

U.S. Army Engineer District, Portland
Corps of Engineers
ATTN: Dawn Edwards, CENWP-PA
P.O. Box 2946
Portland OR 97208-2946

To whom it may concern:

A public hearing was held in Umatilla, Oregon on February 23, 1999 for the purpose of discussing the possibility of Congress condoning a Phase II study for a proposed drawdown of the John Day Dam. This meeting was an information gathering hearing for the committee, which will make recommendations to Congress based upon information gathered at this hearing as well as others. From this data gathering a determination for a possible Phase II study will be made. I would like to go on record that I have grave concerns that an objective study can be made by the group of people who have been chosen to make this study. The intelligence of even making such a study and the $20,000,000 of taxpayer money being spent on this study is questionable.

The reasons for the questions are as follows:

1. The group has one member who stated he has been making similar studies since 1990. This appears self perpetuating and in my opinion cannot produce the kind of objectivity needed in a study which has such potential for grave impact on regional, national, and international agricultural, as well as on local economic and quality of life issues.
2. What are the results of these meetings (Phase I John Day Dam drawdown and on the Snake River Studies) going to produce in real terms for this region and for the nation? In my opinion what happens in the Walla Walla District on the Snake River Studies (Now Phase II) happens in the Portland District. We are discussing a continuum. We understand that the Corp provides resources to its various regions, but these studies are interconnected and the fact that the Snake River study is in Phase II proves that there are self perpetuating tendencies in place.
3. I would like to skip all the various buzzwords and know what the fact gatherers really heard. My impression was that the so called fact gatherers had held so many hearings they were jaded and that their impressions of the Umatilla meeting were that the audience consisted of the expected anti bunch of yokels who were whining about their region being trashed by the government. It was pointed out by the Study Committee that at a meeting held in Juneau, Alaska, all those attending were in favor of of a John Day Drawdown in order to enhance salmon recovery. Only when a knowledgeable member of the Umatilla audience pointed out that the Juneau audience consisted of 10 persons (no doubt all fishermen), did the moderator admit that the 10 member audience was correct.
4. The historical abuse given by U.S. government agencies in this region over the years, and endured by the residents of the Columbia River basin is shameful. It is my opinion that close attention should be paid by the fact gathering committee to the history of this region.
5. It was pointed out that in previous times the sensitivity of the government to our environment was not as great as it is today and that additional clean-up costs could be incurred at dam sites if drawdown occurred due to radioactive contamination of silt from Hanford operations, etc. In my opinion this is an admission that consideration of the drawdown of the John Day could cause severe health and welfare problems for salmon and the human residents living along the river.
6. The issue of electrical power was never fully addressed, but the possible continuation into a Phase II study is certainly a major concerns for all power users who are members of the Northwest power grid.

It is my hope that what the fact gatherers heard at our meeting was the need for the following:

1. Stronger enforcement of river quality regulations so that river becomes a more desirable habitat for salmon smolt.
2. The need for dealing with the very real threat of the offshore foreign fishing fleets. Offshore salmon harvest efficiency rates over the last few years appear to be in direct correlation with the decline of salmon population.
3. The very real need for dealing with predator control on a direct basis. The protection of seals and sea lions, admirable as it is, has created an enigma for salmon recovery.
4. Working in conjunction with regional successful fisheries studies and programs to further the improvement of our salmon population is key to the successful management of this endangered resource.
5. The possibility of a moratorium on harvesting an endangered species should be put in place.
6. Acknowledge the fact that this area is a major world producer of agricultural products.
7. The formation of a fact-finding group that can deal with the realization that this is a controlled river that contributes to a successful economic environment. We are greatly affected by each study including the ones that are not in our particular Corps of Engineers District. Other river studies, no matter what phase of recommendation they happen to be in, affect all of us.
8. The need to acknowledge the criteria upon which the possible recommendation for a drawdown is being based on, including various dubious scientific programs. Just the fact that studies are taking place make huge impacts on this region, and no doubt on the nation as well.
9. Throughout the years the stewardship by the U.S. Army Corps of Engineers on Columbia River Dams and Snake River Dams has been commendable. Our current river resource management is weak to non-existent. Radioactive contamination of silts by Hanford operations is shameful. Dumping of raw sewerage into the Columbia River waters by the City of Portland is inexcusable in this day and age. What effects do these two contamination sources have on salmon reproduction?
10. The Northwest has experienced a large increase in population, which undoubtedly has had a heavy impact on our natural areas affecting our salmon populations. This isn't 1928, when 16,000,000 salmon returned to the Columbia River on an annual basis. We now have commercial factory ships offshore, (foreign and domestic). Treaty Rights to Northwest Indian Tribes who now have "Religious" rights to huge fish nets in the Columbia River, when previously they utilized small nets and spears to provide subsistence fishing for their villages. We have man-made dredge spoil islands that are the habitat of predators such as the Caspian Terns, deadly to salmon smelt.
11. This committee has a direct mandate from this region to urge Congress to see that every alternative should be thoroughly examined before any consideration is given to such an extreme measure as dam drawdown. If the committee recommends that drawdown studies move on to Phase II as has happened on the Snake River Studies, and to eventual drawdown, the cost to the American taxpayer and to he world food supply would never be recoverable no matter how our salmon runs improve.

What I heard as a citizen of this nation and this region is that it is very hard for an objective study to be completed when there are people making these determinations whose jobs depend on the continuation of these studies. The Corps has been directed to be involved in these studies but who is really responsible for the reality of the financial disruption and emotional chaos these studies cause? It is my opinion the cost of real economic impacts can never be recovered. We are hanging by a thin thread for the survival of this region. Economic impact is already here as a result of these studies. Businesses are hesitant to make huge investments or move to this region with the possibility of economic disaster hanging over the region. The government brought these dams into our lives and we are still recovering from the first economic blows of relocating communities when the dams were first built. Now we are forced again by the very same entity to consider another devastating blow with the possible recommendation to drawdown these dams. The economic burden to the citizens of this country can never be recouped by even the most incredible return of the salmon. It was stated that this was not anything but a recommendation fact-finding committee. Well, get a clue! This is a very real economic blow. No matter what the committee's good intentions may

be in phase I, it is currently a negative force in our region. Let us make it clear we do understand exactly what is happening in Phase I. With the Snake River Studies having progressed to Phase II, we can take little comfort in the immediate point that these are merely hearings being held for fact gathering and these facts will somehow magically be in the best interest of the salmon and our region when presented to Congress.

Save our Phase II money for real salmon recovery, but don't dismember our economy while you do!

Sincerely,

Arlene J. Walters

Arlene J. Walters

cc.
Sen. Ron Wyden
717 Hart Senate Office Bldg.
Washington, D.C. 20510

Sen. Gordon Smith
359 Dirksen Senate Office Bldg.
Washington, D.C. 20510

Rep. Greg Walden
1404 Longworth House Office Bldg.
Washington, D.C. 20515

CITY OF ARLINGTON

P. O. BOX 68
ARLINGTON, OREGON 97812
PHONE: 454-2743

August 18, 1999

David Bissell, HDR Engineering, Inc.
10300 SW Greenburg Road, Suite 500
Portland, Oregon 97223

Re: John Day Dam Drawdown
Recreation Impacts

Dear Mr. Bissell:

As you requested, we have obtained estimates of the economic impacts of the proposed drawdown of the John Day Dam. If the drawdown occurs, the following financial losses would result:

ARLINGTON BP STATION $40,000 gas/diesel sales
$20,000 mini-mart sales
Note: Summer months heaviest volume. Approximately 15% of sales from park/boaters/rv users.

DEVIN CHEVRON STATION $60,000 gas/food sales
Note: Largest sales volume May through September.

PHEASANT GRILL DRIVE-IN $55,000 food sales
Note: August is biggest volume month. 22% of sales related to park usage.

VILLAGE INN RESTAURANT $61,000 food sales
Note: Fourth of July/Band Festival biggest days of summer. Loss represents 21% of total business.

We estimate the average number of visitors to the Earl Snell Memorial Park is 75/per day May through September. If we can be of further assistance do not hesitate to contact us at any time.

Very truly yours,

CITY OF ARLINGTON

Kay F. West

Kay F. West, Recorder
CA:kfw

DAVE WILKERSON
PO BOX 1089
LEWISTON 83501
SEPT 24 1999

TO DAWN EDWARDS

I WISH TO SEND MY COMMENTS REGARDING THE BREACHING OF JOHN DAY DAM.

I AM OPPOSED TO ANY SUCH BREACHING OF JOHN DAY DAM

I AM NOT AWARE OF THE REASON THAT CONGRESS HAS AUTHORIZED A FEASIBILITY STUDY OF BREACHING JOHN DAY DAM. IF POSSIBLE MAY I HAVE SENT TO ME ANY INFORMATION AVAILIBLE THAT WOULD EXPLAIN THE REASON FOR THE STUDY

RECEIVED
SEP 27 1999
PUBLIC AFFAIRS

THANK YOU

DAVE WILKERSON

9/29
Mailed complete info packet
DCR
PAO

Ferguson, Christine R NWP

From: Dan Spanner [dan.spanner@telops.gte.com]
Sent: Wednesday, November 03, 1999 8:22 AM
To: CENWP-EC-DC@usace.army.mil
Subject: John Day pool draw-down

Hi Ms. Ferguson, this is a quick note to inform you of some of the negative impacts a draw-down of the John Day pool would have.
Quality of life in the Columbia Basin area is tied to the John Day pool for a substantial number of people, as well as wildlife. In the past twenty years, I have spent countless days, along with others, appreciating the section of the Columbia river referred to as the John Day pool. The following is a summary of some of my observations:

- The number of Pelicans that make the Crow Butte area their primary habitat during summer months has steadily increased. The flooded sloughs of the John Day pool seems to be a critical factor in the Pelican habitat.
- The number of Mule Deer living along the river's edge has steadily increased as the trees and brush along the river banks and sloughs has self-propagated and matured. Remember, this process had to start over when the river level was permanently changed.
- Waterfowl numbers in excess of a million at one time take residence in the Refuge area near Paterson during winter months. Key factors in supporting the waterfowl while they are seasonally "frozen-out" of their real home in the northern parts of the continent are refuge and food. Refuge is provided by the large body of water created by the John Day dam. The primary food source for the waterfowl during their stay is a result of a man-made crop of irrigated corn. Will a draw-down of the John Day pool effect irrigation capabilities?
- The area is home to some of the finest fresh-water wind surfing in the world. I personally know dozens of people that have permanently

re-located to the area solely due to the quality of wind surfing on the
John Day pool.

Thank you for your time. Please feel free to contact me if I can be of any assistance in the future.

Dan Spanner
509-735-5207
dan.spanner@telops.gte.com

Ferguson, Christine R NWP

From: victor@gorge.net
Sent: Wednesday, November 03, 1999 11:47 AM
To: cenwp-ec-dc@usace.army.mil
Subject: john day pool drawdown

Ms. Ferguson: I was just alerted thru an e mail from Randy Britch via CGWA that there's a study going on to lower the level of the John Day pool. I'd like to go on record for myself and my numerous friends against such an action. The John Day pool has BY FAR the best windsurfing conditions in the Northwest and probably the country. It's location east of the Cascades offers unobstructed "clean" wind like nowhere else in the Gorge, and for some reason it's vastness and water level produce the best swells for optimum windsurfing fun on the river. Also, many times the only place for consistent wind is east of the John Day dam, so eliminating this pool would eliminate many sailable days from the calender.

On any weekend when the wind is "out East" {as we say in the Gorge, the condition which I just described}, just go to Roosevelt Park in Roosevelt WA. and see the HUNDREDS of folks camped there for the weekend, most of them families because it's a user friendly launch and a great place for sailors with children. The same situation exists on the Oregon side at Three Mile Canyon, so lowering the pool and eliminating these sites would be devastating for family recreation.

I live in the town of Lyle WA. and moved here for the windsurfing. I know of at least 3 dozen families that have done the same. We enjoy the proximity of Lyle to the "out East" sailing sites, and that situation factored heavily in our decisions to buy property here. On many occasions we'll drive right past Doug's Beach in Lyle and go the 55 miles to Roosevelt Park, buying gas in Murdock or Biggs Jct., spending money at the Riverview Mini Mart in Roosevelt, simply because we know the best conditions for windsurfing are out there in the John Day pool.
Lowering the pool's level and eliminating these sites would be a mistake,
and I hope it stays the same. Thank you, Victor Roy

Ferguson, Christine R NWP

From: MICHELE ROUNDS [bhba@3-cities.com]
Sent: Wednesday, November 03, 1999 1:54 PM
To: CENWP-EC-DC@usace.army.mil
Subject: John Day Drawdown - affects on windsuring.

Ms. Ferguson,

Although it does not appear to be a part of the record anywhere (who knows what happened to the record of the meeting), I voiced my opposition to the drawdown of the John Day reservoir at a meeting in Pasco, WA on February 25, 1999. Many others spoke against this action, also. I hope that all of their comments were not lost, as mine appears to have been.
My comments were related to the devastating effects the drawdown would have on windsurfing. Seven years ago I moved to this area in order to be close to the best windsurfing in the world. The John Day reservoir exceeds even the Hood River area for high quality wind and waves. The conditions that occur on a regular basis cannot be duplicated anywhere else. This is evidenced by the over 50,000 visitors to the Roosevelt Park last year. (The overwhelming majority of these visits are by windsurfers.)
In addition, dozens of individuals from the Tri-City area have taken the lead in making enhancements to Roosevelt Park...on their own time and at their own expense. This includes trees, paint, grass seed, hauling vehicles, heavy equipment and more. As a result, the Park become a beautiful oasis in Klickitat County - contrary to the neglected eyesore it was in the early 1990's.
Besides Roosevelt Park, Crow Butte is a wonderful place for families and those just beginning to windsurf to learn in a protected place. There are very few (if any) other places on the Columbia River that offer these amenities along with the added safety feature of a beach protected from high winds.
Plymouth has a couple of places that are becoming more popular with windsurfers and there are a lot of possibilities with this area.
Overall, the John Day reservoir is a wonderful place for windsurfing and cannot be replaced. Although our concerns pale in comparison to those of farming families and others who have a lot to loose should this experiment ever happen, I hope the US Army Corp of Engineers will take them under consideration.

Thank You,
Michele Rounds
1469 Rimrock Ave
Richland, WA 99352
(509) 735-2745

Ferguson, Christine R NWP

From: Bart Vervloet [bart@gorge.net]
Sent: Wednesday, November 03, 1999 12:37 PM
To: Ms. Chris Ferguson
Subject: Concern over John Day Drawdown

Hello Ms. Ferguson,

Though not as informed as I should be on the proposed John Day Drawdown, I would like to express that the water recreation affected in the pool be considered. As an owner of a windsurfing business, a radio host for the "wind report" in the Gorge and an avid "out east" sailor myself, my concern is for loss of good access to the water, an excessive narrowing of the channel and the "mud flat factor" adversely affecting our sport and our local tourism dollar. Please take these concerns into consideration when making decisions concerning the proposed drawdown.

I would appreciate receiving any information on this subject by email or snailmail at the following addresses.

Bart Vervloet
PO Box 440
Mosier, OR
97040

Or email at bart@gorge.net

Thank you for your consideration

Ferguson, Christine R NWP

From: randy harrison [randy@practicesales.com]
Sent: Thursday, November 04, 1999 6:52 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: Erin & Jeff
Subject: John Day Pool

Dear Ms. Ferguson,

My wife and I moved from Portland, Oregon to White Salmon Washington this June to be closer to our favorite wind surfing spots in the John Day Pool. There are several of these spots that we cherish. Roosevelt, Arlington and 3 mile are just a few.

It would be a tragedy if these spots were ruined because of lowering the river level. There is a very large number of windsurfers in the John Day Pool from March until October. The financial impact on local business would be substantial.

Windsurfing is a very clean sport with little impact on the environment. The worst part is the gasoline used to get to the sailing spots.

All of our winsurfing friends plead with us "Please do not lower the level of the John Day Pool"!

Sincerely,
William R. Harrison
President
Professional Practice Specialists, Inc.

Ferguson, Christine R NWP

From: cgwa@gorge.net
Sent: Thursday, November 04, 1999 4:12 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Subject: Proposed John Day Drawdown

To: Chris Ferguson

Chris,

I just wanted to give you some advance information on our Association and what windsurfing means to the area.
The Columbia Gorge Windsurfing Association has over 1,000 members who come from across the US, Canada, and Europe. Our main purpose is to enhance the windsurfing experience for all along miles of the Columbia River. We create, maintain, and improve windsurfing sites on the Columbia River in both Oregon and Washington working with Oregon and Washington State Parks, the US Army Corps of Engineers, port districts, cities, counties and other property owners. Our volunteers put in many hours to improve these sites; debris & trash cleanup, repair potholes in roads, provide port-a-potties, vault toilets, parking barriers, control erosion planting grass, trees, deposit rock, etc., install irrigation pipes, paint buildings, provide picnic tables, benches, planter boxes...on & on.
The drawdown will have a great affect on many windsurfing sites in the John Day Pool. I have listed some here: Alderdale, Alpha 23, Arlington, Bart's Beach, Big Pipe, Blalock Canyon, Boardman, Crow Butte State Park, Mercury Cove, Number 9, Number 23, JT's Hideaway, Paterson, Plymouth Park Recreation Area, Randy's Rock Launch, Rick's Rock Beach, Roosevelt, Three Mile Canyon, Whitcom Island.
I've lived in the Gorge for almost 25 years and watched the economy sink, especially in my county of Klickitat, WA. Windsurfing has been like a gold rush for so many businesses. One doesn't realize that windsurfing sites way up river...miles from the central Gorge would affect businesses in Hood River. I had one of the first bed and breakfasts in Hood River. My guests came from around the world, and they sailed from Clatskanie to Arlington. That's what makes the Columbia River such a significant windsurfing destination place—"Windsurfing Capital of the World." Wind can't be found everywhere all at once, but here on the Columbia it can be found in many places most all of the time for different degrees of sailing ability. When families come here for their vacations, they know they can find wind and enjoy sailing. That's why so many windsurfers have purchased homes here. That's why so many have located their businesses here. That's why so many are retiring here.
I receive calls from other cities and towns...asking me how they can attract windsurfers to their areas. I tell them they need the wind, the current, the swells, and the waves and especially access to find these conditions on the water. These conditions aren't worth much if you can't get access to the water, and I'm afraid access will be gone if a drawdown occurs.
Looking forward to meeting you Monday, and I appreciate your coming to the office to explain the proposed drawdown and its effect on windsurfing and the economy.
Diane Barkhimer
Executive Director

Columbia Gorge Windsurfing Association
A 501©(3) Nonprofit Corporation
202 Oak St., Ste. 150
PO Box 182
Hood River, OR 97031
Web Site: www.gorge.net/windsurf/cgwa
E-Mail: cgwa@gorge.net

Ferguson, Christine R NWP

From: Erin Burnham [erinjeff@gorge.net]
Sent: Thursday, November 04, 1999 9:04 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: cgwa@gorge.net; Quail
Subject: John Day Drawdown

Dear Ms. Ferguson,

We are writing you about the proposed John Day Drawdown, to express our opposition to this plan. We believe it would have a devastating impact on the environment and economy of the area, and would negatively impact one of the most popular recreations in this area - windsurfing. My husband & I moved to the Pacific Northwest 12 years ago for one reason only - windsurfing. We had both become infatuated with the sport, and the Columbia Gorge is one of the 2 best windsurfing locations on earth, (the other being the north shore of Maui). In addition to sailing, we have spent the last 12 years educating and training ourselves so that we would have occupations that would allow us to live in the Gorge—to be closer to the sailing sites we love. During those years, we have met hundreds of other people from around the world who come here for the same reasons, and our closest friends are our windsurfing companions. Each year, my mother and father come up from California to spend a month windsurfing here in The Gorge. In fact, in the summer, our home in Hood River is a virtual halfway house for windsurfers from around the world who come here to enjoy not only windsurfing, but also to enjoy the beauty of the Pacific Northwest and the many other cultural and recreational opportunities in this area. Needless to say, the sport has had a profound impact on our lives, and our family and friends have spent a lot of time and money at various businesses in the Columbia River Gorge basin.

Windsurfers have made a substantial financial impact throughout the Gorge, from Rooster Rock to the Tri-Cities area. Through the Columbia Gorge Windsurfing Association, windsurfers have had a positive impact on these communities in many other ways - establishing and maintaining multi-use recreation facilities and creating programs to allow underprivileged children an opportunity to channel their energies into a constructive pursuit. Annual work parties sponsored by the CGWA have made improvements at Viento State Park, Rowena State Park, Rufus, and the Port of Arlington in Oregon, and the Spring Creek Fish Hatchery, Dougs Beach, and Roosevelt State Park in Washington, to name a few. The improvements made at Roosevelt by the Eastern CGWA are phenomenal, especially considering the state the park was in prior to their involvement. Since these improvements have been completed, the Park has become one of the most popular sailing sites in the Gorge, with hundreds of sailors showing up when the conditions are right.

The non-windsurfer might question the impact that the drawdown would have on recreation in the Gorge. Although there are several sites throughout the Gorge that we can windsurf, we are limited by access to the river, and the climatic conditions that create the wind do not equally effect all sites in one day. There are many days when the best or only sites to sail are in the John Day Pool. In fact, most of our favorite sites in the Gorge are in the John Day Pool - Arlington, 3 Mile Canyon, Roosevelt and Mercury Cove to name a few. We relish the days when the wind picks up out east, and we can meet up with our friends from the Tri-Cities out at Roosevelt. The proposal to draw down the pool would undoubtedly affect these sites, and would probably eliminate this part of the Gorge as a sailable region.

According to my understanding of the studies thus far completed, this would not be expected to have a significant effect on salmon recovery. Based on the data already accrued, it seems fruitless and financially irresponsible to continue into Phase II this study. Given the negative impact on the region, we therefore urge that you support termination of this study.

Erin Burnham, MD
Jeff Blackman

Ferguson, Christine R NWP

From: Kathy Criddle [criddle5@3-cities.com]
Sent: Thursday, November 04, 1999 10:43 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: CGWA; Randy Brich
Subject: John Day Drawdown

November 4, 1999

Dear Ms. Ferguson,
I'm writing this letter to let you know that I oppose the John Day Drawdown for a number of reasons.
My primary reason has to do with windsurfing. I began windsurfing in 1992 and it has definitely become my favorite recreational activity. My husband and I learned how to windsurf at Three Mile Canyon on the Columbia River in Oregon. It is an excellent site to learn because of the enclosed boat launch area, which is safe, secure and away from the main channel of the river. The proposed drawdown would eliminate this area for windsurfing. The numerous friends we made while learning at Three Mile Canyon were from Yakima, Whidbey Island, Pendleton, Boise, Alberta Canada, Portland, and Seattle. We would see these same folks every weekend. Some we still meet along the river every year. When we became more proficient at windsurfing we began to sail at Roosevelt Park on the Washington side of the river. We have now been sailing for seven seasons and with the exception of Avery Park and Mary Hill State Park we sail no where else except Roosevelt. It is the best place to sail. The reach is wide, the swells are terrific and the park is wonderful. Every year we volunteer at least a full day to help clean-up and enhance Roosevelt Park for the benefit of all windsurfers and ourselves.
Both my husband and I frequently drive to Roosevelt after work to sail during the summer. One evening, after a particularly wonderful evening session I was talking with various visitors. I was amazed to discover that one couple had come all the way from the east coast to spend their vacation on the Columbia River for the sole purpose of windsurfing. Another man piped up that he was from Aruba in the Carribean! Every summer I am amazed at the range of license plates that adorn the windsurfing vehicles in the Roosevelt parking lot. I have seen plates from Kansas, Colorado, Alaska, California, New York, Minnesota, Florida, Alberta, Ontario, and even Hawaii besides the numerous Oregon and Washington plates. It is also very common in the summer months to hear many different languages spoken at Roosevelt. Probably most frequently German and French. I should also mention that we have spent thousands of dollars on windsurfing equipment and gear over the last seven years. Every cent was spent either in Hood River, Oregon or Lyle, Washington. We also spend between $100 and $200 a month on gas during the spring, summer, and autumn months just to go windsurfing in the Columbia Gorge.
I also oppose the John Day Drawdown because the draw down will expose a wide swath of mucky unfriendly mud flat area to invasive weeds such as purple loosestrife and other noxious weeds. If the drawdown is permanent this exposed river shoreline should be restored to a decent riparian zone which would be usable by wildlife and recreationists. Such a restoration project would be quite expensive but absolutely necessary.
Finally I oppose the drawdown because I don't believe it, as a single act, will significantly benefit salmon. I believe there are many other projects that many different people could do on a broad scale across the region, which could have far more significant beneficial affects on restoring salmon numbers. I don't believe that there is a single simple answer to restoring our unique northwest salmon populations. I believe that all people in the great North West from windsurfers, fishermen, and farmers to Native Americans, environmentalists, businessmen and ordinary citizens need to make a concerted effort to take responsibility for restoring salmon by finding some project or action that each can do or take to help restore the amazing and marvelous North West salmon That discussion however is for another letter.
In summary I oppose the John Day Drawdown because it will have an adverse affect on windsurfing. It will cause a serious degradation of the river shoreline and finally the draw down by itself will not significantly help restore salmon populations

Sincerely,

Kathy Criddle
(509) 943-2967
Richland, WA 99352
Criddle5@3-cities.com

Ferguson, Christine R NWP

From: Quail [mr.rb@worldnet.att.net]
Sent: Thursday, November 04, 1999 9:54 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: HBA; Whitney - Lance; Victor Roy; Van Zandt - Doug; Trantow - Mike; Stewart - Forrest; Stampfli - Steve; Spanner - Dan; Skrdla - Matt; Skrdla - Larry & Becki; Sheen - Dave & Rose; Roadkill; Radkins - Hugh; Mercer - Will; McKenzie - Gordie; McCauley - John; Maryott - Jim (home); Langdons - Andy & Lisa; Keuer Jim home; Keuer - Jim; Johnson - Maggie; Johnson Jeff (E-mail); Humphreys - Mike & Kathy; Hinde - Brian; Fox - Mike; Fies - Carl; Dr. Chris; Criddles - Jim & Kathy; Colburn - Al (w); Burrows - Donnie; Brich - Sol; brad; Blackburn - Jeff & Erin; Biro - Brian; Beauchene - Bruce & Jody; Bart Vervloet; Antonio - Ernie; Alderson - Scott & Shirley; bjorn@televar.com; Brich - Randy's Office; CGWA
Subject: John Day Dam Drawdown Phase I Study -- Impacts to Windsurfing

Ms. Ferguson:
In 1988, I voluntarily relocated from Las Vegas to the Tri-Cities solely for the incredible windsurfing that exists on John Day Pool. At that time, Roosevelt Park, near Roosevelt, WA, was an idyllic campground desert oasis replete with hot showers, no crowds, tons of steady wind and large, smooth swells. Over the next few years Roosevelt Park slowly deteriorated due to lack of maintenance.
In the early '90s, a group primarily consisting of Tri-Citians affected "do or die" emergency repairs on the frost-damaged UGS just in time for one of the record dry spells which characterized that time period. Larry South, USACE, can attest that these volunteer efforts, totalling hundreds of dollars and thousands of person-hours, have occurred annually for the past 7 years. The net result is a restored park at minimal cost to the government and maximum benefit to all recreationists and river enthusiasts.
In 1999, in cooperation with the Port of Arlington, the Tri-City volunteers affected launch improvements at Arlington, hoping to draw some of the now infamous Roosevelt windsurfing crowds to their community thereby increasing revenue from camping fees and ancillary food and gas purchases. In short, windsurfers have a stake in Roosevelt Park, Arlington, and John Day Pool. Any significant changes to John Day pool would severely impact windsurfing, not to mention the Park and City and Port of Arlington.
Regarding specific impacts of drawdown on windsurfing, it is important to recognize that windsurfers can launch from virtually any location on the pool that has reasonable vehicle access. At least sixteen* John Day pool windsurfing locations would cease to exist if the pool was significantly lowered. Please take these sites into consideration in the "Benefits and Impacts" section of the Phase I report. My follow-on hard copy letter will provide the location of these sites.
It's obvious that during the past few years the northwest climate transitioned from hot and dry to cool and wet. According to the NWS the current wet cycle will continue through the next decade. The cool, wet weather caused record snowfall the past two winters resulting in increased, cooler inriver flows. At the Umatilla Planning Aid Team (PAT) meeting last August you may recall several fisheries biologists stating that the affect of the overall climate far overshadows any benefits from drawing down John Day pool 100 feet to natural river levels. This same group of academic fisheries experts also testified that drawing down the pool, by itself, would have absolutely no benefit unless it was accompanied with the removal of the four lower Snake River dams. Finally, this group of objective experts stated that even if they studied the matter for another 4 or 5 years their initial findings would not change significantly. Listening to these experts told me there is no scientific basis to continue with the John Day Dam Drawdown Study, let alone spend another $15-20 million over the next four or five years studying this apparent non-issue.
In closing, it is imperative that your official website be maintained concomitant with the study effort. For example, at a minimum, the August PAT meeting minutes need to be placed on the site immediately. I look forward to receiving a copy of the draft Phase I report sometime in January and will make additional comments subsequent to my review.
Sincerely,

Randy Brich
509-627-6303
mr.rb@worldnet.att.net
cc: Colonel Sulsar, USACE, Portland
Doc Hastings
Slade Gorton

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* Plymouth Park Recreation Area, Paterson, Boardman, Whitcom Island, Crow Butte State Park, Bart's Beach, Alderdale, Three Mile Canyon, Alpha 23, Roosevelt, Arlington, Big Pipe, Rick's Rock Beach, Mercury Cove, Randy's Rock Launch, and JT's Hideaway.

Ferguson, Christine R NWP

From: Wade Bird [bird@oneworld.owt.com]
Sent: Thursday, November 04, 1999 9:00 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Subject: RE: John Day Draw down

To Whom It May Concern:

My name is Wade Bird and I am a resident of eastern Washington. I am extremely concerned about the impact of the proposed draw down of the John Day pool.
As an avid windsurfer the effect of a draw down would certainly have a huge effect upon me,, personally. In the scheme of things, I am sure that is very, very insignificant but I do represent a community of recreational users of the river, not to mention of the likes of the many other recreational users (fishermen, boaters, campers, etc.) of the Columbia.
However, I do feel that the ramifications of the draw down would have a huge impact upon our community and area that cannot be completely understood by the studies, from my reading of the existing information presented at this time.
I also believe that alternatives to the draw down have not be adequately addressed and given the opportunity to succeed/fail.
I strongly encourage that all other alternatives be considered prior to this drastic measure.
Thank you for your attention,
Wade Bird
509-375-4007

Ferguson, Christine R NWP

From: Williams, Bruce A [ba.williams@pnl.gov]
Sent: Thursday, November 04, 1999 7:35 AM
To: 'CENWP-EC-DC@usace.army.mil'
Subject: CONCERNCS OF THE PROPOSED JOHN DAY DAM DRAWDOWN

My name is Bruce Williams, I am an avid Columbia River recreationalist. I sail, ski, canoe,and windsurf year round in/on the river. I am living and working in Eastern Washington. I am apposed to the proposed extreme draw down of the John Day dam. This draw down does not, in my opinion, provide any added benefit to the local community, fish population, States of Washington or Oregon, etc.

As a windsurfer, that portion of the river that will be most impacted by the draw down, or the "eastern gorge corridor" is a major destination area for sailors from around the world. Indeed, the advent of the sport of windsurfing has put the "Columbia River Gorge" on the map. I know many people who for the past two decades travel (some annually) from all across the U. S. to the Gorge to sail the broad swells and dependable steady stiff breezes that this area has come to be known for. Before I moved to WA I also traveled from the Midwest in search of the fabled winds. The Columbia River Gorge and the recreational opportunities it provides is why I chose to live and work here!!

The Columbia River Gorge is unique because there is no where else in the U. S. where people can come to enjoy the combination of reliable strong wind, clean and plentiful water and abundant river access points. Drawing down the John Day will virtually eliminate the sailability of the river. The draw down will shrink the river width, expose rock hazards, and eliminate access to this valuable resource.

I believe in saving salmon, however, drawing down the John Day is not the correct solution. What is needed is a revised policy of Indian fishing rights, gill netting, etc which also contributes to much of the reduced salmon survival rates. Drawing down the John Day Dam will not fix the problem but it will create more difficulty for people and the States that rely on the Columbia river as a way of life.

Sincerely,

Bruce A. Williams
Senior Research Engineer
Applied Geology and Geochemistry
Pacific Northwest National Laboratory
(506) 372-3799
Fax: (509) 376-5368
E-mail: ba.williams@pnl.gov

Ferguson, Christine R NWP

From: DOUG BEAMAN [mdbeaman@compuserve.com]
Sent: Thursday, November 04, 1999 10:53 PM
To: Ms. Chris Ferguson
Subject: Drawdown of John Day Dam

Dear Ms. Ferguson,
I am writing to you regarding the potential drawdown of the John Day Dam.
Regarding my background, I moved to Portland from Michigan about five years ago primarily because of the world-class windsurfing on the Columbia River. I am a physician in the Portland area, and have worked very hard to develop a practice that allows me to enjoy the sport of windsurfing.
The Columbia River provides a truly unique combination of wind and water that is unmatched anywhere on the planet. The stretch of river east of the John Day is the finest part of this windsurfing mecca, and should be preserved at all costs for not only our generation, but for all those in the future. I am convinced that the loss of this portion of the river to windsurfing will severly impact the region economically, decreasing the allure of The Gorge as both a vacation destination, and as a permanent home.
I strongly oppose a drawdown of the John Day Dam. Please do not hesitate to contact me if you have any questions about my viewpoints or the quality of windsurfing that exists in this area of the Columbia River.
Sincerely,
Doug Beaman
ph. 503-257-4938

Ferguson, Christine R NWP

From: Van Verst, Scott [spv0303@doh.wa.gov]
Sent: Thursday, November 04, 1999 8:52 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Subject: John Day drawdown

Ms. Ferguson,

I am an avid windsurfer who frequents the windsurfing sites in the eastern Gorge, such as Roosevelt, 3 Mile, and others. Up until 1996, i was a research scientist in the physics department at MIT in Boston. At that time, i left my job to move to the northwest where i could pursue my hobbies of windsurfing and mountain biking to a higher level. I am concerned about the effects a drawdown of the John Day Dam may have on the recreational opportunities of the Columbia River.
I am hoping that any studies into this matter consider the large number of people who use this portion of the river to pursue their passions. Windsurfing in what we call the 'east', is the best there is - anywhere. I would be quite disappointed to see this oportunity disappear.
Thank you for your interest in my comments,
Scott Van Verst

Ferguson, Christine R NWP

From: Sol.Brich@state.sd.us
Sent: Friday, November 05, 1999 7:55 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: MR.RB@worldnet.att.net
Subject: John Day Dam Drawdown Phase I Study -- Impacts to Windsurfing

Dear Ms. Ferguson,

My name is Sol Brich, and I am from Pierre, SD, home of the Oahe Reservoir COE project. I have been windsurfing for fifteen years, and I have made four journeys to the Columbia River specifically to windsurf. I have never sailed anywhere else where the wind blows as consistently as it does in the Gorge. On one vacation, I sailed 8 of 10 days. I understand the COE is studying the feasibility of drawing down John Day Reservoir.

As Randy Brich has said, drawing down the reservoir will make it impossible to sail the best windsurfing sites in the eastern Gorge. It will also negate the efforts of local windsurfers to improve sailing sites such as Roosevelt. These people have taken the initiative to take a rundown old park, clean it up to acceptable standards, and maintain it. They have invested their time and money in developing a recreation area that not only benefits windsurfers but other people seeking recreation on the Columbia River.

As I understand it, the main reason for drawing down John Day is to help revive the ailing Salmon population. I agree that measures should be taken to restore Salmon to their native range, and give them as many advantages as possible to increase their number to a more stable level.

As a water resources engineer, who researched the impact of streambed siltation on trout reproduction in the Black Hills of South Dakota, I wonder if the drawdown approach is the only solution to this problem. As a person whose free time is spent pursuing watersports on a similar reservoir in South Dakota and who journeys to the Columbia whenever I can, I worry that the sacrifice won't be enough to have the desired affect of reviving the Salmon. As a member of society I can see that salmon and windsurfing are just two small pieces of a much larger puzzle.

I have tried to clearly present in this my viewpoint as a member of the concerned public. Now I would like to make three requests of the John Day Study Group. I would like you to consider how drawing down the reservoir is going to affect the beneficial use of recreation, especially windsurfing. I would like you to carefully consider all of the issues involved, and make your recommendation based on a firm foundation of fact. Finally, I would ask that you keep us informed on the progress of your study.

Sincerely,
Sol Brich
Natural Resources Engineer II
South Dakota Department of Natural Resources

Ferguson, Christine R NWP

From: William Ayer [wayer@pobox.com]
Sent: Friday, November 05, 1999 12:48 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Subject: Eastern Gorge Drawdown

Dear Ms. Ferguson,

I'm writing to express my dismay at the possibility that sailing sites at the eastern end of the Columbia River Gorge may be lost due to a possible drawdown of the water levels.
I've been coming to the Gorge for a decade, and moved here full time last January. The availability of world class windsurfing sites is what brought me here in the first place, and 10 years later continues to be one of the many things I love about this beautiful area.
People travel from all over the world to sample the incredible sailing available in the Gorge. The windsurfing community has played a significant part in the economic revitalization of this area, and the destruction of 15 well known sailing sites could have significant impact on the number of visitors to the area, and could significantly hurt the local economy.
Please register my strong objection to the proposed eastern gorge drawdown.
William Ayer
509 493-1888
wayer@pobox.com

Ferguson, Christine R NWP

From: Jeff Johnson [heffe@whitesalmon.net]
Sent: Friday, November 05, 1999 11:08 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: Quail
Subject: John Day Pool Drawdown

Ms. Ferguson -
My wife and I are residents of White Salmon, WA and former Tri-city residents. We are writing you to register my opposition to drawing down the John Day Pool to improve Salmon habitat. The Salmon issue is a very complex situation, as you well know. Commercial fishing, sedimentation of spawning habitat, climate fluxuation, urban population growth and Columbia River dams have all contributed to the serious decline of many species. As with any complex biological system, there is no single answer that will address the problems that face the Snake River runs.
The studies conducted to date do not indicate that lowering the John Day Pool to natural river levels will improve the Salmon runs. In fact, current climatic patterns may have a greater effect than such a draw down.
Many windsurfers enjoy the prime sailing conditions found in the John Day Pool. Upper level systems create steady wind in the Pool while the central Gorge remains unsteady and difficult to sail in. In addition, warm spring and fall days attract sailors from all around North America to the "far east". We are currently working with our Congressional District to secure study funding to improve recreation benefits in the John Day Pool. To sacrafice this valuable recreation amenity to a neutral to slightly beneficial environmental benefit is a poor trade-off.
We therefore urge the US Army Corps of Engineers to maintain the John Day Pool at current levels and propose solutions that address the entire system, not just one element of the problem.
Thank you for hearing our concerns,

Jeff and Maggie Johnson
PO Box 778
White Salmon, WA 98672

Ferguson, Christine R NWP

From: Jim and Betty Maryott [maryott@3-cities.com]
Sent: Friday, November 05, 1999 10:53 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: Randy Brish; Diane Barkhimer; Jim and Betty Maryott
Subject: Draw Down of John Day Dam - Impact on Windsurfers

Dear Ms. Ferguson

I have received information from Diane Barkhimer (Columbia Gorge Windsurfing Association) and Randy Brish (Roosevelt Site Representative) that there is new interest in removing the John Day Dam.
I wanted you to know that the pool of water above the John Day Dam is very important to a large number of windsurfers from Washington, Oregon, all over the US and Western Canada. Our local group of about 200 windsurfers that use the John Day Dam Pool waters live in the Tri Cities, Yakima, Walla Walla, Spokane, and areas between these cities.
In addition to this small group are the windsurfers from the Portland, Hood River, Bend, Seattle, The Dalles, Bend, and the areas between that come to John Day Dam Pool waters often. Then there is an amazing large number of windsurfers that come from every where, Canada, California, The East Coast, The Midwest, Texas, Florida, etc. that we see each year especially in the summer.
In fact we have problems finding parking places in the summer and have had to find other new locations on the river for our local group to sail. The shocking thing is that the windsurfing in the area between Roosevelt Park and Crow Butte is probably the best windsurfing in the US. We know because we also go to the Hood River area and the Oregon coast to windsurf on rare occasions and we know where the best condition are. Well all the other windsurfers are also finding this out and the number of windsurfers is growing exponentially each year.
This last summer there were many days with several hundred windsurfers on the water between Roosevelt and Three Mile Canyon. Ten years ago we had ten windsurfers on the water if we were lucky.
I want to thank you for putting some money into Roosevelt Park. The park is really a nice family place and many windsurfers drive the extra distance because the park is so nice.
I know you have a difficult problem dealing with the dam breaching issue and maybe this information will help. I will watch your web site for further information and Diane and Randy will keep us informed.

Jim Maryott
2143 Harris Ave.
Richland, Wa 99352

Ferguson, Christine R NWP

From: John McCauley [jmccauley@nwinfo.net]
Sent: Friday, November 05, 1999 6:20 PM
To: CENWP-EC-DC@USACE.ARMY.MIL
Cc: John Riggs; mike frank; Marty Schoolcraft; Brian White; Quail; CGWA
Subject: John Day Dam Drawdown Study Phase 1 .....Impacts to Windsurfing

Ms. Ferguson: November 5, 1999

In 1989, I too, like Randy Birch, relocated from Colorado to Washington State to windsurf the Columbia River. I feel very fourtunate to live near a place where people from all over the World come to sail. Although I started sailing spots along the River closer to the town of Hood River, I soon found that there is no comparison to the fun and challenge of those sites along the pool above the John Dan Dam.

I can usually manage to sail at least 40 times during between the months of April to October. In the past 10 years that adds up to 400 days I've spent sailing somewhere along this stretch of the Columbia. I've also been active in donating my personal time to the revitilization of the Rosevelt Park over the past 5 years. To be honest, there are no other sites along the Columbia River that I'm even interested in sailing except those located up stream of the John Day Dam. I believe that a draw down of that pool would severely impact the sport of windsurfing.

Thank You for Your Consideration.....
Sincerely,
John D. McCauley

Ferguson, Christine R NWP

From: Will Mercer [WillM@mercerr.com]
Sent: Friday, November 05, 1999 4:18 PM
To: 'CENWP-EC-DC@USACE.ARMY.MIL'
Subject: JOHNDAY DRAW DOWN

Dear Ms. Ferguson,

I would like to let you know my feelings on the John Day Pool Draw down. I am one of the few local people that live and make their lively hood off of the John Day Pool.

There are thousands of agricultural jobs are dependent on this water resource.

The John Day Pool is home to the best freshwater windsurfing in the world. Windsurfers around the world come here to test their abilities on the large swells and high winds. I am a team rider for Open Ocean surfboards and it would be detrimental to ability to enjoy this sprot and great resource. It would cause extreme mental anguish to so many of us that I couldn't image what the impacts would be to this area's citizens.

Please take special note of this as it may seem like a small issue to our Government, it is the life blood of eastern Washington and Oregon, as well as tourists from all over the world.

Bottom line is that I would like voice that I as well as countless other citizens of this great country are against lowering the John Day Pool.

Thank you for your time and consideration of this matter
Willis Mercer
509/894-4773

Ferguson, Christine R NWP

From: Wells, Beric E [Beric.Wells@pnl.gov]
Sent: Friday, November 05, 1999 7:25 PM
To: 'CENWP-EC-DC@usace.army.mil'
Subject: John Day Dam Drawdown Study

Ms. Ferguson:
Randall Brich has informed me of his desire that windsurfers who sail at sites to the east of John Day Dam send comments to you in regards to the detrimental effects the drawdown would have on those sites.
As the significance of windsurfing probably pales in comparison to saving a species, I would like to first specifically address the often touted statistics for the increase in tourism and associated economic benefits of that nature that are assumed to result from altering the dams. I would encourage you to consider, as many sailors do, that any spot on the river that has public access and wind probably has been, or, with the continuously increasing number of windsurfers visiting and moving to the area each year, will be a "sailing site" and is immeasurably valuable as such. The Columbia River and the steady winds of the region provide fresh-water windsurfing that is arguably the best there is in the world. The vast numbers of sailors seen on the water on any windy day are a testament to this. The drawdown of the John Day dam pool appears to very negatively affect all of these "sites". I strongly urge you to consider any statistical studies for the tourism benefit to the area by the suggested increase in sport fishing etc. that the altered dam situation may create in light of the economic changes those areas affected by the windsurfing phenomenon in the region have undergone in the last 15 years. I believe that one can find world class fishing in areas other than the Columbia and Snake Rivers. With the projected tourism increase due to assumed attraction of the area for sport fishermen etc., one would expect that other world class fishing areas should have or are experiencing this influx of people and money. While I will readily admit that I am uniformed as to whether conditions like this exist (Maui, HI, which one can argue is a good example of world class fishing, has seen growth and tourism attributable to its status as a windsurfing location, not as a fishing destination), please consider, as an example, the overwhelming and massive effect that windsurfing has had on Hood River. I would suggest then, in light of this example, that the "power" of tourism and economic impact on a region by sport fishing etc. is negligible compared to the effect that windsurfing has and is continuing to have, and should no longer be considered except when it is compared to the economic effects that windsurfing has been shown to have.
I would also like to briefly address the issue of saving the fish so that more fish can be caught (Alaskan governor, Native American, commercial fisheries, etc.). An obvious question that results from this issue is that if more fish are available to catch and they are indeed caught, how does that help the fish population? Further, although I must again admit to a lack of information, the data that I have seen does not seem to show that dams are the major source of the problem as seems to often be suggested (inflow of adult fish). Consider the comments that relate larger numbers of fish to greater fish harvests, and consider data printed in the Tri-City Herald. The Native Americans reported catching approximately 75,000 fish below the lower Snake River dam. Approximately 500 fish were counted passing this dam. The upper dam reported counting 200 fish passing, thereby leaving that number to spawn on the upper Snake River, or 40% of the fish that were at the first dam. The dams were than assumed to account for the loss of 60% of the fish. If one neglects the fish that were caught that would have continued up the Columbia (or other rivers and streams) instead of the Snake, the fishing accounted for the loss of 99% of the fish. Under the same assumptions, without fishing, 40% of 75,500 leaves 30,200 fish to spawn on the upper Snake River. While there are numerous points of contention to be made with this argument, I hope that analyses like this are being conducted on collected data, and that decisions will not be made based on projections and conjecture.
Thank you for your time,
Beric Wells

Ferguson, Christine R NWP

From: Brian Biro [babiro@owt.com]
Sent: Saturday, November 06, 1999 8:21 AM
To: CENWP-EC-DC@USACE.ARMY.MIL
Subject: John Day drawdown

Ms. Ferguson,

I understand you are accepting comments regarding the proposed John Day drawdown. I believe strongly in being a good sheppard of the earth's dwindling resourses and that would include salmon in the Columbia and Snake rivers. However, I am also some what pragmatic. It makes little sense that simply drawing down a single dam will have any significant impact on the survival rate of salmon. One must take into account numerous other environmental factors such as pesticide/fertilizer run off from agricultural and residential concerns, silt in stream beds from logging and development, over fishing in the ocean, gill netting by Native Americans, sport fisherman in droves etc. Until an integrated plan can be formulated addressing ALL issues, I believe it is foolhardy to procede with drawdowns. The other factors mentioned certainly play a much larger role in the dwindling fish stocks so the impacts of a drawdown would likley be minimal on fish populations. However, the impacts would be huge for agriculture interests and recreationalists.
Thank you in advance for your consideration of my comments.
Brian

Ferguson, Christine R NWP

From: Hugh & Marilyn [hcrcapp@urx.com]
Sent: Sunday, November 07, 1999 10:26 AM
To: Chris Ferguson
Cc: Quail; CGWA
Subject: John Day Drawdown

Dear Ms. Ferguson:

With a Masters in Geophysical Engineering I moved to the Tri-Cities (Richland) without a job. Sure, the Hanford site offered prospects for work and I did know one college friend here; but, the main reason I chose this region was the world renown windsurfing in the Columbia River Gorge. Over the past seven years I have spent I don't want to count how many thousands of dollars on equipment and logistical supplies to pursue this sport in what is one of the most spectacular locations on the planet. Now I don't know if all of this has been good for the environment but I know it hasn't done the local economies any harm. And, if you've ever happened by one of the many windsurfing sites on a windy day, you'll know that there are a lot of people in the region doing the very same thing. Throw in the tens of thousands of annual visitors to the region who are coming to the Gorge because of the windsurfing and you'll witness the real dearth of windsurfing access sites.

When the visitors come to the 'Gorge,' they are usually thinking Hood River. They are also rewarded with the fabulous choices of windsurfing on the Columbia, and, skiing and snowboarding and hiking and kayaking and mounting biking in the Cascades. But they can do those other activities at many other locales; the reason they come here is windsurfing in the Gorge.

Now the Gorge deserves its reputation for the windsurfing and with dozens of shops and manufacturers here, many entrepreneurs have truly lived the American Dream. There are dedicated web sites, phone services, and even pagers to alert the windsurfer that the wind is blowing. But the wind isn't always blowing in the Gorge proper, and these dedicated wind alert services then often tell the visiting and local sailors to go East. The new to the region then learn what the knowledgeable have known, the East means the John Day Pool.

With at least four parks and several more launch sites, the Eastern Columbia River Gorge is gaining a reputation as a destination in itself. And literally thousands of hours of volunteer labor by the Eastern Columbia River sailors is what has made this happen.

Now I don't know much of the science regarding how the drawdown will affect the salmon populations but I do know how it will affect the windsurfing and I can imagine the effect on some 100 miles of shoreline and the indirect effects to the many small merchants in eastern Washington and Oregon. I also seems that drawing one pool down can't do too much with so many other dams on the river. Plus, maybe the salmon just need moe time to adapt and 'learn' the new river. Now, I would give about anything to have seen the Columbia River before the dams; it would be truly awesome to hear Celilo Falls in person. But drawing the pools down will not bring back the original River. Alternatively, let's stop the wholesale harvesting of the salmon in the ocean and give them a chance to return.

Thank you, Hugh Radkins

Ferguson, Christine R NWP

From: Quail [mr.rb@worldnet.att.net]
Sent: Monday, November 08, 1999 5:29 PM
To: CENWP-EC-DC@usace.army.mil
Cc: Stewart - Forrest
Subject: PHASE I DRAWDOWN STUDY -- WINDSURFING IMPACTS

On behalf of Forrest Stewart, Pasco firefighter, father, and windsurfer the following is provided regarding the real impacts any drawdown would have on windsurfing. Forrest was instrumental in saving Roosevelt Park from years of neglect. Please consider his comments as you prepare the benefits/impact section of the Phase I report. Randy Brich

Ms. Ferguson:

My name is Forrest Stewart and I have lived in Eastern Washington for over 30 years. I do not claim to know the reasons for the draw down of the John Day pool or the impact it might have toward the saving of our salmon; but, I would like to talk briefly on one effected Sailing site Roosevelt Washington.

There are at least a dozen sailing sites that would be impacted by the draw down as Randy has stated. Several of these sites are not your basic family picnic and camping areas. I have seen many changes to Roosevelt in the last ten to fifteen years of sailing this area and the one that is most noticeable to me has been the shift from bring your girl friend and dog to that of bring your van and the whole family.

The new generation of sailors is upon us. The Windsurfer baby boom has arrived. Roosevelt is the only area east of Maryhill state park for the family to enjoy camping and sailing together. All one has to do is spend an afternoon at Roosevelt on any weekend and see that this is a family sailing site.

Most of the original sailors who braved the big water of Roosevelt in the early days may have changed their lives with the average of 2.2 children but not their love for sailing. Roosevelt has changed from the site of the brave to the site for the family.

On any weekend or Holiday Roosevelt Park can be the destination location for hundreds and hundreds of family oriented sailors. I would hate to see the loss of this site. I believe it would impact many families; not just from Eastern Washington, but from visitors around the world, which travel to Roosevelt to sail and camp for their summer vacation. Thank You.
Forrest Stewart
benttree@cbvcp.com

Ferguson, Christine R NWP

From: Rolland Waters [rwaters@halcyon.com]
Sent: Thursday, November 11, 1999 7:33 PM
To: CENWP-EC-DC@usace.army.mil
Cc: cgwa@gorge.net; ldhr@gorge.net; erinjeff@gorge.net
Subject: A drawdown of the John Day Dam pool would have a substantial negative impact on windsurfing

Dear Ms. Ferguson—

I do not envy anybody who has to try to balance industrial, recreational, and agricultural needs against actions potentially required to restore salmon runs. The salmon, after all, were here first and are important both culturally and economically. As somebody who lived a great number of years in Ballard up here in Seattle, the winter home of the Alaskan fishing fleet, I know that salmon are not just a symbol of the Pacific Northwest, but a critical part of our economy.
On the other hand, one of the reasons I moved to the Northwest was the superb quality of the windsurfing here, and while I have to admit a certain fondness for the wave sailing on the Oregon coast, there's also nothing quite like a good day at Arlington, Roosevelt, or Three Mile Canyon, all sites that would be lost if the John Day Dam pool was drawn down.
I don't know if you've been lucky enough to have a good day sailing at Roosevelt, but if you've been there recently, you know that the windsurfing community has put a lot of work into restoring the park. When you go windsurfing in Hood River, the river is crowded, the channel is narrow, the barges plentiful, the sky partly cloudy, and the air a little chilly. Out East, at Roosevelt or any other of the many sailing sites, the river is wide, the swell plentiful, the barges easy to avoid, the air is warm and the sky always sunny.
The John Day Pool is an important resource that must not be given up lightly.
The central Gorge has less than half as many sailing sites as does the John Day Pool, and only a few of those sites are windy on any given day. When the wind blows out East (and boy does it blow!), almost all of the sites are windy. This means that sailors can spread out to many different areas, making sailing safer and far more fun.
Nonetheless, if, after the lower Snake River dams have been removed, if they ever are removed, it turns out that drawing down the pool might save the salmon runs, the option should be considered then. But until then, why are we wasting your time and our money considering it?

Thanks,

Rolland Waters

a registered voter at
1803 180th Ave NE
Bellevue, WA 98008

CC: U.S. Senators Slade Gorton, Patti Murray,
U.S. Representative Jennifer Dunn

Columbia Gorge Windsurfing Association

P.O. Box 182 · Hood River, Oregon 97031

November 29, 1999

Christine Ferguson
Stuart Stanger
Brian Shenk
US Army Corps of Engineers
PO Box 2946
Portland, OR 97208-2946

Dear Chris, Stuart, & Brian,

When windsurfing "struck" the central Gorge in the eighties the local lifestyle was greatly impacted. The communities (most were timber depressed), started to pull out of this depression. Some are still not completely recovered, but what a change! Hood River began to bustle with new restaurants, hotels, and B&B's. Windsurfing retail and manufacturing businesses were established offering good wage-paying jobs with many of these companies constructing new buildings. Homes were purchased for vacation retreats so the sailors could spend holidays in the Gorge.

Seeing all the windsurfers sailing at the Hood River Marina, it was evident to those of us in living in the local area that we had been invaded, but what was not so evident was what they were doing to our local economy. They were bringing in outside dollars and spending them in quiet, not so flashy/obvious ways as mentioned above. They bought gas and groceries. They were in the hardware stores finding "stuff" to make necessary windsurfing gear repairs and auto repairs, and those who were not so talented paid for the professionals to fix what was broken. They were buying funny cars, and they were buying car insurance. They were creating an environment that was creating jobs. Then the windsurfers began to buy year-round homes and relocate their businesses in the area; doctors, lawyers, dentists, writers, software designers, on and on. They needed contractors, plumbers, electricians, paint, carpeting, furniture, appliances, etc. This process continues to this day. These are no longer just tourist dollars that only pay for the low income wages of a hotel maid.

Have you heard that windsurfing is not what it used to be? No it isn't. Windsurfers are no longer crammed into small spaces as much as they once were at the Hood River Marina and other central Gorge sites vying for space to park their cars or skimming across the water dangerously close to other sailors. They have spread out -- out to the warmer air, more constant winds, and bigger swells of the eastern Gorge...the John Day Pool. They are no longer finding jobs and creating new jobs in just the central Gorge. They have spread out -- out to the other welcoming towns of the eastern Gorge...along the John Day Pool.

The Columbia Gorge Windsurfing Association's mission statement is "to enhance the windsurfing experience for all along the Columbia River." The Association (over 1,000 members) with its hundreds of volunteers and its dollars have been able to work with the cities and towns, the Oregon and Washington State Parks, the Ports Districts, the US Army Corps of Engineers and others to improve many windsurfing sites along the River while consideration for improvements have been made for other users of those sites for different forms of recreation.

Changing the terrain and the waterways above the John Day Dam would not only affect the economies along the river, but would also remove a highly treasured recreation area visited by millions of people and families from the United States and other countries. In these days of "preservation" let's not forget what the people need for their livelihoods, their rest and relaxation, and their quality of life.

Sincerely,

Diane Barkhimer
Executive Director

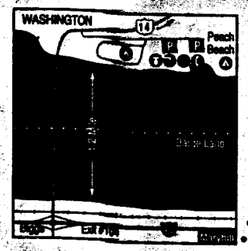
PS: Enclosed in this packet are the lists and descriptions of the windsurfing sites in the John Day Pool including those sites just below the John Day Dam; all of which would be affected by the proposed John Day Dam Drawdown. We offer this so that you may document the locations and numbers of users, and for you to understand and get a "feel" for their importance.

PPS: I need to tell you that I have been in the Gorge for about 25 years; pre-windsurfing. I do not sail. I worked in a local insurance office as the windsurfing clients grew. I owned and operated the first Bed and Breakfast in Hood River County successfully depending on the windsurfing trade. I own several rentals whose many renters have been windsurfers. I now work for one of the largest and most successful windsurfing associations in the country. Windsurfing is special to many of us non-windsurfers for all of the now obvious reasons mentioned above.

Tel: (541) 386-9225 · Fax: (541) 386-2783
Email: cgwa@gorge.net · http://www.gorge.net/windsurf/cgwa

MARYHILL ◆

River: Narrow–strong current & big waves
Wind: Strong west
Beach: Pea gravel
Parking: Free
Amenities: Riverfront camping, grass rigging, restrooms, showers, picnic area, boat launch.
Cautions: Fast current in spring. Watch for barges, fishing nets
Tip: Expert-only in nuclear conditions. Warm early season sailing. Moderate winds later in the summer offer intermediate conditions.
Directions: Exit 104 off I-84, cross Sam Hill Bridge & turn right. From Hwy. 14, go south on Hwy. 97 to Maryhill.



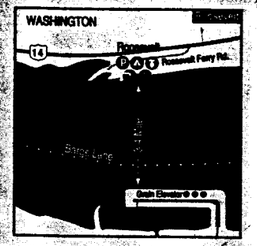
SAM HILL BRIDGE ■ ◆

River: Smaller waves than Maryhill
Wind: Gusty west wind
Beach: Shallow
Parking: Free
Amenities: No facilities
Cautions: Watch for deadheads & bridge supports. Big "1st step" where riverbank has eroded if you launch at the main parking area.
Tip: Water access is better toward bridge, with a gradual, river rock launch into the wind.
Directions: Exit 104 off I-84; cross Sam Hill Bridge, turn left on first gravel road, then a steep left down to grassy parking.

PEACH BEACH ◆

River: Narrow–strong current, big waves
Wind: Strong west
Beach: Small rocks
Parking: At campsites
Amenities: Riverfront camping, restrooms, showers, fresh fruit stand.
Cautions: Barges, fishing nets. Limited day-use access.
Tip: A great alternative to Maryhill, especially when it's crowded.
Directions: Exit 104 off I-84, cross Sam Hill Bridge & turn right. From Hwy. 14, go south on Hwy. 97 to Maryhill. On your right just past Maryhill Park.

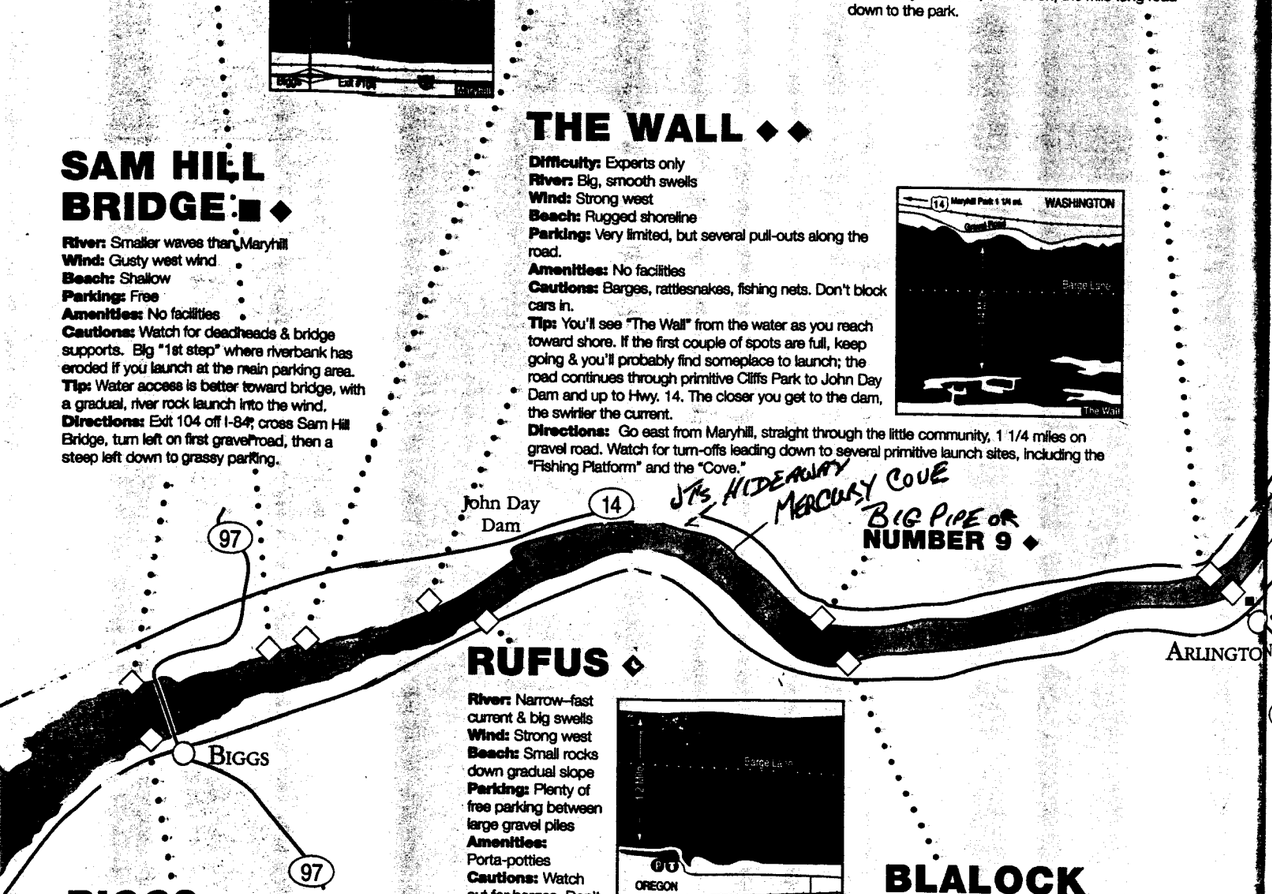
ROOSEVELT ■ ◆



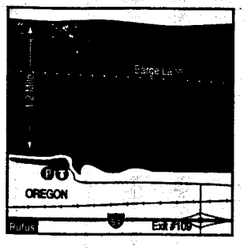
River: Flat inside; large swells outside
Wind: Strong west
Beach: Sand, small rocks
Parking: Plentiful
Amenities: Restrooms, camping, grass rigging, boat launch
Cautions: Fishing nets, barges.
Tip: Best early & late season, especially when cloudline is at Maryhill. East side of jetty is good for beginners– no current & sandy bottom.
Directions: 33 miles east of Maryhill on Hwy 14 near milepost 133, watch for sign to park. Tiny community is next to, but not on, the mile-long road down to the park.

THE WALL ◆◆

Difficulty: Experts only
River: Big, smooth swells
Wind: Strong west
Beach: Rugged shoreline
Parking: Very limited, but several pull-outs along the road.
Amenities: No facilities
Cautions: Barges, rattlesnakes, fishing nets. Don't block cars in.
Tip: You'll see "The Wall" from the water as you reach toward shore. If the first couple of spots are full, keep going & you'll probably find someplace to launch; the road continues through primitive Cliffs Park to John Day Dam and up to Hwy. 14. The closer you get to the dam, the swirlier the current.
Directions: Go east from Maryhill, straight through the little community, 1 1/4 miles on gravel road. Watch for turn-offs leading down to several primitive launch sites, including the "Fishing Platform" and the "Cove."



RUFUS ◆



River: Narrow–fast current & big swells
Wind: Strong west
Beach: Small rocks down gradual slope
Parking: Plenty of free parking between large gravel piles
Amenities: Porta-potties
Cautions: Watch out for barges. Don't get stuck driving in loose gravel.
Tip: More consistent wind than Maryhill when the cloud line is at The Dalles.
Directions: Exit 109 off I-84, head for the river, go left after you cross the tracks, almost 1 mile to the gravel piles.

BIGGS ■ ◆

River: Slightly wider & flatter than Maryhill
Wind: Strong west
Beach: Steep rocky path to rocky launch
Parking: Free
Amenities: No facilities
Cautions: Barges (moored & moving).
Tip: Launch just west of the grain elevator. Walk farther west from parking to a small sand beach for launching. Or try the small site just before weigh station, right down by the water (easier launch, bigger wind shadow).
Directions: Exit 104, take a right off westbound on-ramp.

BLALOCK CANYON ◆

River: Big, smooth waves
Wind: Northwest
Beach: Gradual rocks, better than Phillipi Canyon
Parking: Free
Amenities: No facilities
Cautions: Hazardous & rocky. Parked trains sometimes block access.
Tip: Good sailing once you're out on the water.
Directions: Exit 129 off I-84, go toward river & turn left.

BART'S BEACH ◆

River: Big waves
Wind: Strong west
Beach: Gentle, with weeds & small rocks
Parking: Limited
Amenities: No facilities
Cautions: Trains, barges, rattlesnakes. It is illegal to cross the tracks where there is no safety crossing.
Tip: Named for Bart Munson, Kennewick Sport Haus. It might remind you of Avery's launch, but narrower, more primitive & barren.
Directions: 18 miles east of Roosevelt on Hwy. 14 at milepost 151. Watch for unmarked steep downgrade road to river.

CROW BUTTE ■ ◆

River: Flatwater lagoon inland; swells off southwest outside
Wind: Strong west
Beach: Pea gravel or sand.
Parking: Free
Amenities: Camping, restrooms, showers, picnicking, boat launch, marina
Cautions: Barges pass on Oregon side of island (you'll see why they can't pass on WA side). Area is posted for rattlesnakes.
Tip: A good weekend destination for varying ability levels. Flatwater lagoon hones Gorge skills. Best launching is near campsites.
Directions: Park is 1 mile south of Hwy. 14 at milepost 155.

ALDERDALE ◆

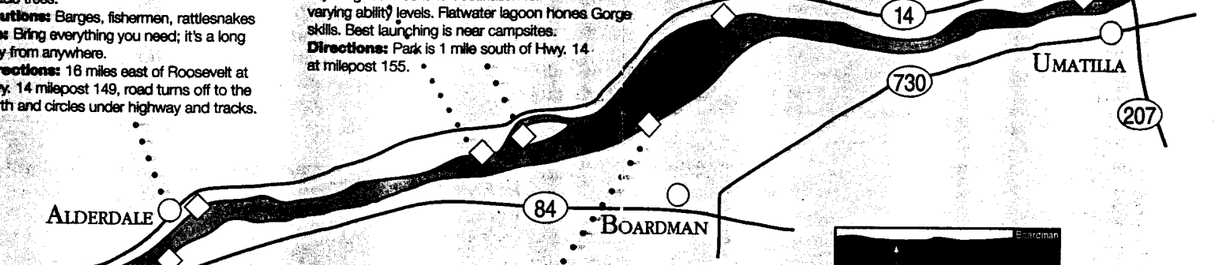
River: Wide, big waves
Wind: Strong west
Beach: Flat with small rocks
Parking: Free
Amenities: Primitive camping, a few shade trees.
Cautions: Barges, fishermen, rattlesnakes
Tip: Bring everything you need; it's a long way from anywhere.
Directions: 16 miles east of Roosevelt at Hwy. 14 milepost 149, road turns off to the north and circles under highway and tracks.

PLYMOUTH ■

River: Strong current; swells on windy days
Wind: Irregular
Beach: Small rock or sand
Parking: $1-3/day or $25/year
Amenities: Boat launch, porta-potties, restrooms, camping & groceries nearby.
Cautions: Boats, fishermen, barges.
Tip: Lighter winds because you're far east of the Gorge's funneling walls.
Directions: Hwy 14 at milepost 180, go 1 mile south through Plymouth, turn right past campground, to the boat launch entrance.

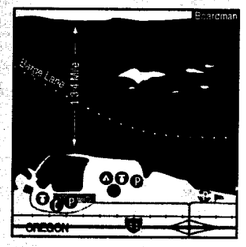
PATERSON ■

River: Very wide & flat
Wind: Moderate
Beach: Easy rock slope into shallow water
Parking: Free along narrow dirt road
Amenities: Primitive site
Cautions: Barges, rattlesnakes. Watch your fin if you go island-hopping.
Tip: Good funboard conditions with un-explored naked islands to the west.
Directions: Near Hwy. 14 milepost 167, at Hwy. 221 junction, take Kent Road 3/4 mile to the river, turn right.



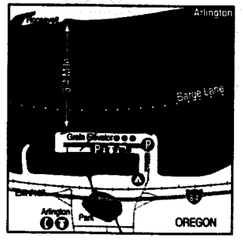
ALPHA
NUMBER 23 ◆

BOARDMAN ■



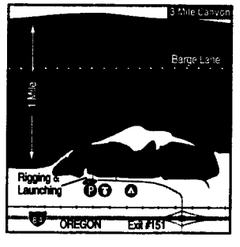
River: Wide river offers flat, chop & rollers
Wind: Variable, but usually sailable
Beach: Pea gravel, rocks or sand
Parking: Plenty
Amenities: Nice waterfront park, marina, camping, restrooms, showers, swim beach
Cautions: Popular fishing & waterski area.
Tip: Best launch is east of park, turn right at the "T" intersection and head for the water. Bring all your toys: bikes, blades, waterskis, canoe, etc.
Directions: Exit 164 off I-84. Go north toward river, turn left at "T" intersection for park & amenities. Turn right to the sailboard beach, or for a very sandy launch, go about 1 mile farther to the Port of Morrow West Beach.

ARLINGTON ■ ◆



River: Big swells
Wind: Strong west
Beach: Steep rocky paths down to rock launch
Parking: Free, close to water.
Amenities: Nice park in town with swimming beach, playground equipment; marina has restrooms & boat launch
Cautions: Barges (moving & moored).
Tip: Best sailing is out near grain elevator. Protected water for beginners & families on the town side of the freeway.
Directions: Exit 137 off I-84, loop under the freeway and out to the grain elevator.

3 MILE CANYON ■ ◆



River: Flat inside; huge, wide swells outside
Wind: Strong west
Beach: Small rocks or sand
Parking: Plenty of free parking
Amenities: Outhouse, primitive camping
Cautions: Fishing nets, barges, snakes. Be sure to land on the Oregon side–it's a long way to a bridge across the river to be picked up in WA, so paddling back across would be quicker.
Tip: Best late spring & early summer. Great spot for different ability levels. From the boat launch, sail past the west end of the island to get out into the main river; the water's too shallow at the east end.
Directions: Exit 151 off I-84, head toward river almost 1 mile on bumpy road.

Windsurfing On The John Day Pool
(It Doesn't Get Any Better!)

Contents

1. Introduction
2. Map
3. List of John Day Pool Windsurfing Sites
4. Description of John Day Pool Windsurfing Sites
5. List of Windsurfing Sites Below John Day Dam
6. Description of Windsurfing Sites Below John Day Dam

Introduction

The following description of the 14 windsurfing sites on the John Day Pool and 7 windsurfing sites just below John Day Dam has been provided by the Roosevelt Rangers, CGWA East Members, and the *Gorge Guide*, the premier visitor and recreation guide for the Columbia River and surrounding areas.

The John Day Pool spans the 76 mile stretch of Columbia River between John Day Dam and McNary Dam. This stretch of river contains an abundance of sailing locations offering everything from developed campgrounds to primitive launches. John Day Pool sailors enjoy mostly consistent wind and long reaches with large swells every month of the year. Accommodating long down-winders, several stretches feature miles of steady predictable wind and captivating swells.

In addition to the wind, the reduced current and long fetches at the John Day Pool sites set up some of the best waves for windsurfing in the whole Columbia Gorge, without the chop so prevalent in most of the Gorge Sites. In a typical windsurfing season the wind blows at John Day Pool locations on average twice a week. The season of greatest influx of windsurfers usually begins in April and lasts through October, and during the moderately strong La Nina weather phenomenon, sailing conditions are the best ever encountered. We estimate that an average windy day at Roosevelt will attract 150 sailors while Threemile Canyon will have 60 sailors. The other sites along the river also have sailing activity, and we estimate an additional 90 sailors total. We emphasize this is an average with perhaps triple that number in prime days in July and August, but only a few sailors at the start and end of the season. This calculates to 16,800 sailor-recreation days on the John Day pool each season (7 months X 4 weeks/month X 2 days/week X 300 sailors/day).

List of Sites Presented Geographically from the Tri-Cities:

Plymouth Park Recreation Area

Paterson

Boardman

Crow Butte State Park

Bart's Beach

Alderdale

Three Mile Canyon

Alpha 23

Roosevelt

Arlington

Blalock Canyon

Big Pipe or Number 9

Mercury Cove or T Birds

JT's Hideaway

John Day Pool Windsurfing Sites

Arranged in order of proximity to the Tri-Cities, 19 sites provide a variety of windsurfing conditions spanning all levels of ability as depicted on the accompanying map.

Plymouth Park

Difficulty: Advanced intermediate to advanced

Location: Located on State Route 14 between mile marker 179 and 180. Follow Plymouth Rd. toward river turning right on Christy Rd. and immediately to the park.

Rigging: Grass

Facilities: Seasonal Day use and Camping

Many sailors claim Plymouth reminds them of the Corridor with sections of spectacular swells, steep faces, and mondo chop. Several sailing choices exist at Plymouth. Take an immediate left into Plymouth Park ($3 per day user fee, $8 per day camping fee) and rig on grass and launch from the bank. Or, continue west down Christy Rd., about 3.55 miles to just before the railroad tracks, to the Rock Island launch, a favorite for Tri-City sailors. Follow the dirt road about 100 yards west and park in the small, protected area along the river. The launch is rocky. Beware of Rock Island just upwind of launch area. Avoid this shallow area. This area hosts sweet swells, but during high flow the chop can be somewhat intimidating.

Plymouth is one of the few locations not significantly dependent on the direction of the wind. Typically, expect steady wind with excellent port as well as starboard ramps. Best swells are in the barge channel, close to the Washington side of the river, especially near channel markers which are only accessible on downwinders. Note: Upstream barges appear "out-of-nowhere" due to the close proximity of the upstream locks and travel quickly with the fast current immediately below McNary Dam.

Paterson

Difficulty: Advanced beginner to advanced

Location: Located on State Route 14 between mile marker 167 and 168. Turn toward river on the access road, and park near the water.

Rigging: Gravel

Facilities: None

Paterson features very little current. The channeled islands provide superb breaks in the wind for advanced beginners to practice their turns or for long boarders to explore. Anticipate interruptions in the reaches and choppy water, but also expect to only share the area with a few fishermen. Local cafes cater to the hungry agriculture workers and can be a welcome fiesta after a hard late day sail.

Boardman

Difficulty: Beginner to advanced

Location: Located on Interstate Route I-84. Take exit 164. Go north toward river, turn right at the "T" intersection, and park near the water.

Rigging: Grass

Facilities: Seasonal day-use

The Columbia River's widest point at nearly 3 miles challenges even the most advanced windsurfer. Although a near shore wind shadow can frustrate beginners, the knowledgeable slalom boarder should have a great time on Boardman's long white-capped expanses with few other sailors contending for your space.

Crow Butte State Park

Difficulty: Beginner to intermediate

Location: Follow State Route 14 to Crow Butte State Park at mile marker 155.

Rigging: Grass

Facilities: Seasonal Day-use and Camping

Few places on the Columbia River offer a full-service campground and a safe sailing location. This site works well for beginners since the protected bay and launch are plenty forgiving. Although big winds occur here occasionally, usually steady, moderate winds greet the determined beginner. Shade trees, a luxury in the desert, complement the site. A favorite day-use area as well as a weekend destination Crow Butte, provides campsites and picnic tables. Typically, expect the wind to increase during the late afternoon and also in the early to mid-morning hours.

Bart's Beach

Difficulty: Intermediate to advanced

Location: Located on State Route 14 at mile marker 151. Turn toward river on the access road, and park near the water.

Rigging: Shrub-steppe

Facilities: None

About 1 mile downstream of Crow Butte Island, Bart's Beach, named for Tri-City Sporthaus owner Bart Munson, features open river sailing working on most wind directions. Usually small swells form with moderate chop. Bart's Beach can be a favorite for those seeking an executive session, but don't want to be faced with the long return drive back to the Tri-Cities from Roosevelt. The beach is currently in need of some brush clearing.

Alderdale

Difficulty: Intermediate to advanced

Location: Located on State Route 14 between mile marker 149 and 150. Take Alderdale Road, and follow a short distance to left turn. Follow gravel road under the highway and toward river. Park near the water.

Rigging: Gravel

Facilities: None

Working best on southerly winds Alderdale claims a point break when the south swell is big. Alderdale provides the solitude-seeking sailor with plenty to cogitate on while ripping across the frothing surface.

Three Mile Canyon

Difficulty: Beginner to advanced

Location: Located at Exit 151 off Interstate Route 84. Head west toward river, and park near the boat ramp.

Rigging: Gravel

Facilities: None

Three Mile Canyon is absolutely the only place on the Columbia River, including the Gorge, where beginners, intermediates, and experts can sail at the same time, frequently on the same size sail. The flat water inside the lagoon is perfect for beginners learning to up-haul, advanced beginners learning to waterstart, intermediates learning to jibe, or advanced intermediates learning to duck jibe. In the main river channel higher winds and bigger swells offer challenges to intermediates and others with bombproof water starts; or, advanced sailors wishing to practice their aerials or swell-riding. If the wind is blowing 4.7 or better, accomplished sailors can sail a little bit upwind to perhaps the finest swells the Columbia has to offer. Bring a tent and spend the evening as morning winds also frequent the area. Beware of shallow areas and near-surface rocks in the west portion of the lagoon.

Alpha 23

Difficulty: Advanced intermediate to advanced

Location: Located on State Route 14 between mile marker 138 and 139. Turn toward river on the access road, and park near the water next to the channel marker (A23).

Rigging: Gravel

Facilities: None

To take advantage of a southerly breeze, or launch for a down-winder, Alpha 23 rests at the birthplace of future swells. A great place to perfect your starboard jumps. Expect choppy conditions, but fairly steady wind with no wind shadow; an excellent choice when the wind is too southerly at Roosevelt.

Roosevelt

Difficulty: Beginner to advanced

Location: Located on State Route 14 between mile marker 133 and 134. Follow the signs on the paved road to Roosevelt Park.

Rigging: Grass

Facilities: Restrooms

Maintained by volunteers and the US Army Corps of Engineers, Roosevelt Park features the only shady, grassy rigging, sandy launch, free camping, and sailable site on the entire Columbia River. Year-round frontal winds coupled with summer thermals make Roosevelt the preferred destination location for many knowledgeable sailors. With a protected cove for beginners and increasingly stronger wind and bigger swells as one ventures out into the main channel, Roosevelt provides everyone with a fun and challenging sailing arena.

Arlington

Difficulty: Advanced

Location: Exit 137 off Interstate Route 84. Turn toward river on the access road and park on the west end of the jetty near the water.

Rigging: Gravel

Facilities: Day-use, camping, gas, food, lodging.

Boasting the only full hookup campground that you can sail from on the Oregon side, Arlington remains the last best kept secret. The town of Arlington entices non-sailing family members with a protected sandy beach, swim area and playground minutes from the windsurfing launch. It is one of the few windsurfing sites where you can get groceries, a good meal, or even a hotel room after an exhaustive day of sailing the impressive swells.

An agreement with the Port of Arlington (May 1999) allowed installation of a sandbag launch into the river. According to Bingen Bart, the sandbags work swell at Arlington. Even so, this launch is primarily intended for advanced sailors. Exits probably are safest in the lagoon. With frequent large, steep swells near the shoreline, Arlington provides optimum conditions for swell riders and aerialists. The tendency for the wind to go "northerly" later in the day makes Arlington the preferable launching site over Roosevelt, which is directly across the river.

The sandbag launch and future site enhancements at Arlington depend on the relationship between windsurfers and the Port of Arlington. Launch from the sandbag trail (on the west end of the jetty) only. If you park overnight, please pay the $7 "dry camp" fee. Payment is on the honor system (a payment box is near the entrance to the boat docks). Since installation of the sandbag launch, camping revenues have increased significantly. Hopefully, the increased revenue will continue to compensate the Port for their cooperation.

Blalock Canyon

Difficulty: Advanced

Location: Exit 129 off Interstate 84, go toward river, and turn left.

Rigging: Rocky

Facilities: None

Big, smooth waves with a northwest wind. Hazardous and rocky. Parked trains sometimes block access. Good sailing once you're out on the water.

Big Pipe or Number 9

Difficulty: Advanced

Location: Located on State Route 14 between mile marker 129 and 130. Enter through an open gate following the gravel road. Unless you are driving a 4X4, park above, and carry rig to the river.

Rigging: Gravel

Facilities: None

Approximately 3 miles upwind of Roosevelt, Big Pipe attracts many short course down-winders determined to see their destination before departing. A favorite for those who do not mind a challenging launch and wishing to sail away from the Roosevelt crowds. Big Pipes glassy, cresting swells form just offshore.

Mercury Cove

Difficulty: Advanced

Location: Located on State Route 14 between mile marker 124 and 125. Turn toward river on the access road, and follow the dirt road over the hill to the east. Park near the water.

Rigging: Gravel

Facilities: None

Expect a wind shadow near shore necessitating a swim to the wind line. Mercury Cove provides sweet swells and nice ramps, both starboard and port, and mostly steady winds.

JT's Hideaway

Difficulty: Advanced

Location: Located on State Route 14 between mile marker 117 and 118. Follow the gravel road west across the R&R tracks, and park near the water.

Rigging: Shrub-steppe

Facilities: None

A pebbly launch working only on extreme northerly winds, JT's Hideaway provides the determined sailor a retreat from the frustrating offshore winds at Roosevelt on certain days of the year. Increasingly stronger winds on the far side and gorge-type conditions with steep port ramps greet the weather-wise sailor.

Windsurfing Sites Immediately Below The John Day Dam

List of sites presented geographically west, downriver, of the John Day Dam:

The Wall

Difficulty: Experts only

Location: Drive east from Maryhill through community, 1 1/4 miles on gravel road. Watch for turn-offs leading down to several primitive launch sites, including the "Fishing Platform" and the "Cove."

Rigging: Rocky

Facilities: None

Big, smooth swells with a strong west wind. The beach has a rugged shoreline, and parking is very limited. However, there are several pull-outs along the road.

Rufus

Difficulty:

Location: Exit 109 off Interstate 84, head for the river, go left after you cross the tracks; almost 1 mile to the gravel piles.

Rigging: Rocky

Facilities: Porta-potties

Narrow-fast current and big swells with a strong west wind. Small rocks down gradual slope to beach. More consistent wind than Maryhill when the cloud line is at The Dalles. Watch out for barges. Don't get stuck driving in loose gravel.

Peach Beach

Difficulty:

Location: Exit 104 off I-84, cross Sam Hill Bridge over to Washington, and turn right. From Hwy 14, go south on Hwy 97 to Maryhill. It's on your right just past Maryhill State Park.

Rigging:

Facilities: Riverfront camping (parking at camp sites), restrooms, showers, fresh fruit stand. Limited day-use access.

Narrow-strong current, bug waves with a strong west wind. Beach, small rocks. This site is a great alternative to Maryhill, especially when it's crowded.

Maryhill State Park

Difficulty: Intermediate. Expert only in nuclear conditions.

Location: Exit 104 off Interstate 84, cross Sam Hill Bridge to Washington, and turn right. From Hwy 14, go south on Hwy 97 to Maryhill.

Rigging: Grass

Facilities: Riverfront camping, restrooms, showers, picnic area, boat launch

Narrow-strong current and big waves with a strong west wind. Beach, pea gravel. Fast current in Spring. Warm early season sailing with moderate winds later in the summer offer intermediate conditions.

Sam Hill Bridge

Difficulty:

Location: Exit 104 off Interstate 84, cross Sam Hill Bridge over to Washington, turn left on first gravel road, then a steep left down to grassy parking.

Rigging:

Facilities: None

Smaller waves than Maryhill with a gusty west wind. The beach is shallow. Watch for deadheads and bridge supports. Big first step where riverbank has eroded if you launch at the main parking area. Water access is better toward the bridge, with a gradual, river rock launch into the wind.

Biggs

Difficulty:

Location: Exit 104 off Interstate 84. Take a right off westbound on-ramp.

Rigging: Rock and sand

Facilities: None

The river is slightly wider and flatter than Maryhill with a strong west wind. Access beach via a steep rocky path to a rocky launch. Launch just west of the grain elevator. Walk farther west from parking to a small sand beach for launching. Or try the small site just before the weigh station, right down by the water (easier launch, bigger wind shadow). Parking is free.

Attachment H. 2000 Federal Caucus Public Comments

PORTLAND, OREGON PUBLIC COMMENT SESSION
FEBRUARY 3, 2000

DR. JEFFRY GOTTFRIED: I'm Dr. Jeffry Gottfried, and I am speaking on my own behalf today. I live at 7040 SW 84th Avenue, Portland, Oregon. I'm a biologist by training.

I am speaking at this time advocating the breaching of the dams on the Snake River and lowering the pool behind John Day Dam and doing -- and taking whatever steps necessary to return the Columbia River to a river, to its being a river as opposed to being a series of lakes.

Everyone who has studied what the salmon need, not what the barge operators need, not what the aluminum industry needs, not what the wheat growers need, but what the salmon need, have concluded that they need moving water. The smolts need to be transported by moving water to saltwater within the time of their biological clocks. They need to be able to get past obstacles in a timely fashion. They're not good swimmers. I won't go on and on about the biology of the salmon, but they need to live in a river and not in a series of ponds.

Unfortunately, we have created -- we as a society has created a giant economy that depend upon an altered river. I have to point out that the aluminum Industry, for one, is only here because of that altered environment and the ultra-inexpensive electricity. The fact that we give away our electricity is why the aluminum industry is here.

I'm not saying they're bad people. I'm just saying that they have no allegiance to this region. The electricity -- the price of electricity goes up, they're out of here. There is nothing indigenous about the aluminum industry.

As a matter of fact, the ore is mined in Australia and transported here. And it's ridiculous to think about the energy that's expended in getting that ore here and the whole thing and still it's profitable. It's just an indication of the fact that we are not charging for the destruction of our natural resources, for the destruction of our salmon runs in what we charge for electricity.

The dams need to go. They're not providing benefits that equal the negatives that they are creating for the survival of the salmon.

And -- let's see. That's really what I have to say here tonight. And I, for one, would be very happy to pay more for electricity if that was the case. I have already purchased the salmon friendly power that's been in -- made available by Portland General Electric and would pay more. I'd double my bill to save the salmon. I think --

Let me go on here a little bit longer because I think it's also --

On a whole other level, I think this is a moral question, as well. I think it's a moral and ethical question that we are driving a magnificent living thing, a species to extinction and destroying the genetic potential of living things. I mean, it brings tears to my eyes really to think about what is being destroyed when we destroy salmon.

And it's not simply -- it's not simply the fish because when we destroy a run of salmon, we are destroying the whole richness of the Northwest. You see, what is the Northwest? The Northwest is defined by many as anyplace the salmon can swim and so the Northwest is really shrinking. It's getting smaller.

And, you know, they have traced elements from salmon to trees so that they know that these salmon are bringing the wealth, the richness, the energy that's fixed by green plants in the ocean is transporting it from the ocean to basically sterile rivers.

The rivers of the Northwest are not rich rivers. The Columbia River tributaries are not biologically rich without the carcasses of the salmon. They're depositing this. And everything eats those carcasses from insects to the resident fish. If we want to know why our cutthroat trout are disappearing, cutthroat trout are disappearing because they have no salmon to eat. Cutthroat trout eat the salmon carcasses, they eat the salmon eggs, and they eat the salmon fingerlings and even smolts. And cutthroat trout are disappearing because there is no salmon left for them to eat. And the whole web -- ecological web of the Northwest is going to unravel because, really, it's a salmon economy. We can't say anything is all important, but it's -- there is a far -- far-reaching ecological effects when salmon are gone in terms of the numbers of things that depend on that salmon.

And wheat can be grown elsewhere. I mean, wheat could still be grown. I mean, so it has to be shipped on trains instead of barges. We can't let these, you know these people are being hurt financially. Help 'em out. Give them tax subsidies. Do something to -- you know, don't cut them off, but do whatever is necessary, figure it out. But take action now.

We can always fix those problems later. If we don't take action now, very soon, the salmon are gone, never to be restored. This is a crossroad and an important decision that needs to be taken in a timely fashion because we can never bring back animals from extinction and not populations from extinction. The information will be gone. The opportunity will be gone and this will be a moral tragedy and a blot on our society forever. Thank you.

RALPH WIESER: I am Ralph Wieser and I've been a citizen of Oregon for a long time.

While I was still a child we had a farm on the Columbia River sand out of Astoria where they housed the horses that did the nets that dragged the fish out of the river. When I read of the Caspian Terns at the mouth of the river, I figured that probably our mistake was that we didn't leave a Tern unstoned.

I don't think that the Columbia River or the Snake River dams are the last items on the agenda of the folks here. If you go up to Orofino on the Clearwater you can look right up there and see the Dworshak Dam, which has no fish passage.

I highly invite people, everybody here, to remember what the Colonel said about John Day Dam and what they had, perhaps, in mind for it. But I also invite you to remember that we're in the year 2000 and that we're talking about old technologies and old techniques.

And I noted in the Corps of Engineers report reference to a transponder. Well, the vibrational technologies are available to herd fish where we want them to go. And if we can do that, apparently the fish have no trouble getting up the creek, but the little ones have the trouble getting down the creek.

We can build fish streams around those dams without much expense or trouble, comparatively speaking, and we can get the small fish, the smolts or the fry, or whatever you want to call them, into the fish streams and get them around the dams.

We can do that for McNary and John Day and Bonneville and The Dalles, as well. We can also put them up over Grand Cooley or any other man-made or natural barrier that we have in mind.

We are into a new decade, a new century, new technology. We would do very well to use them. I can't imagine that we can't get the fish around those dams on the lower Snake. Thank you.

SPOKANE, WASHINGTON PUBLIC COMMENT SESSION
FEBRUARY 8, 2000

JOHN OSBORN: My name is John Osborn. I'm a contractor and lifetime resident of Spokane Pacific Northwest. I'm also a fisherman, a son of a fisherman and a father of a fisherman.

We're in the throes of an emotional debate that will have a significant life changing effect on everyone present in this room, assuming we all live long enough.

There are arguments for and against breaching that are backed by apparent science, genuine conviction, thousands of years of culture and of course personal, economic, and lifestyle considerations.

I'm opposed to breaching for many reasons. Some ideological and some selfish. However, in the midst of all the research and emotions, one paramount reason not to breach has to my knowledge not been discussed.

If we breach those four lower Snake River dams tomorrow, and if all the salmon runs that are recovered in a year, there's one clear reason not to breach would still tell us that it was a poor decision to have breached those dams. Breaching is not a transferable solution.

The problems on the lower Snake River exist on rivers throughout the United States and the world. Hydropower, flood control, irrigation, barging and other benefits are generated on those same rivers all over our planet. We will never breach all those dams. So we must create a solution that gives us hope to save fish runs throughout the United States and the world.

I have observed and helped work on fish bypass systems at Rocky Reach, McNary, Bonneville, John Day, The Dalles, Priest Rapids, Wanapum, Rock Island, as well as all four of the lower Snake River dams. There is hope with this work. And the successes that we have achieved with these systems and successes that we will achieve in the future are transferable.
This is a solution that works and that we can share with the world. If we do anything less than save those fish with those dams in place, then we are being short sighted and foolish.

CLARKSTON, WASHINGTON PUBLIC COMMENT SESSION
FEBRUARY 10, 2000

ROBERT FOUSE: My name is Robert Fouse. I'm a native son of Asotin County. I've spent a large part of my life not living in this county, but I was raised along this river. And I have returned to it, and there are some things that bother me about what's going on here.

I was kind of raised with some common sense, and I think we have lost it. I was catching on television two days ago on PBS they were telling us we are going to get 10,000 jobs created once the salmon came back.

Couple days before that I was reading in the paper that says people in the City of Portland greatly support removal of the dams on the lower Snake River. Never said they supported removing Bonneville Dam or the John Day or The Dalles or the McNary or the Grand Coulee. They are talking about these little dams down here on the Snake.

Thirty years ago almost this month I was president of the Clarkston Jr. Chamber of Commerce, and I held several public forums here and pleaded with the people in this town not to allow the Corps of Engineers to build Lower Granite Dam. Not because of the dam, not because of the reservoir, but the impact that this would have on this community in the future.

You've lost the town of Asotin. Lost a lot of our property and our homes along this river. This is what we have now. Now we are being asked to drain this reservoir and turn what was once our homes into a muddy silt bank that's going to create a great ecological disaster with no proof of what it is going to do with the salmon. And, yes, I have seen the cycle of the salmon. Raised along the Grande Ronde and Snake River. I can remember in the '50s when there were salmon and as the dams in the Columbia were built they dwindled. They dwindled not when the dams in the Snake were built, they dwindled with the dams in the Columbia were built.

We have -- as everybody has mentioned, the salmon on the plates in the restaurant and everybody's freezer, if you want to do something for the salmon, let's use some common sense. We put a man on the moon in '68. We can figure out how to get salmon around these dams. I support that these dams stay. Thank you.

ASTORIA, OREGON PUBLIC COMMENT SESSION
FEBRUARY 15, 2000

RICK GEORGE: My name is Rick George. I'm a staff member with the Confederated Tribes of the Umatilla Indian Reservation. I very much appreciate the opportunity to cut in line. We are out here from the Umatilla Indian Reservation, flew out at 5 a.m. this morning, are driving back to Portland tonight, fly out early tomorrow. I very much appreciate that and very much appreciate the sensitivity from the audience to allow me to speak first.

The Confederated Tribes of the Umatilla is a confederation of three tribes. The reservation is located in northeastern Oregon on the Umatilla River. It's the Walla Walla, Cayuse and Umatilla tribes. They signed a treaty with the Federal Government in 1855 and ceded to the Federal Government 6.4 million acres of land, and all resources that went with it. They got in

trade for that a reservation homeland to live upon, and they reserved very specifically rights to themselves that they already had. One of those rights is to fish for salmon for economic, cultural, traditional and religious uses. I want to talk specifically for a minute about the issue of the context.

I agree very much with Colonel Mogren's advice that we need to look at the big picture, we need to look at the whole thing. We also need to recognize that many, many doors have already been closed. John Day, for instance, has been -- draft opinion says basically the John Day dam at Full Pool with turbines operating is good for fish, and it should stay. We have decisions that have been made for other dams that are in place and aren't going to go anywhere that permanently block about half of the historic salmon habitat. We have federal processes now that are ongoing, and a decision is ripe and ready for the Lower Salmon River, and it is time for us to focus on that decision not in a vacuum, but to focus on that decision and to make the right decision in the context of all of the rest of the habitat, harvest and hatchery decisions that must be made now and at the same time that we decide to breach the lower four Salmon River dams and restore 140 miles of reservoir back to river conditions that are a home for the salmon. One of the things that the tribes is out here to do, in addition to being here at the hearing, is to tell the people of Astoria that there's a huge missing factor in the federal processes, and that's you, that's people really influencing decisions, really having an impact on what comes out of this federal process.

What we're here -- what the Umatilla tribes are here to offer is their treaty rights to work for people, to work for commercial fishermen down here on the coast, to work for people throughout the Columbia basin and to work for tribal members. So the tribes is here to fill a big gap that the Federal Government can't fill, and that's to accommodate human values, family values. We believe that in order to take out four federal dams on the Lower Salmon River, which must be done to prevent extinction, you've got to give people certainty who are going to be impacted negatively by that.

So we ask for your assistance, to help us work with the irrigators on the 13 farms who need to know that they're going to continue to have water before this decision is made to breach the dams and to transport commodities through the Snake and Columbia River system and to give people certainty in the coastal communities for fishing, tribal communities for fishing, that salmon will be here for our children forever.

PETER HUHTALA: I'm Peter Huhtala, executive director of Seadog, the Columbia deepening opposition group. I'm Really pleased to be here, hi.

I had a nightmare last night. Senators Ron Wyden and Slade Gorton were standing out on the deck at the Port of Portland dredge auctioning off the last of the Salmon River salmon. There before me, as the corporate sponsors clapped gleefully, were politicians from the Northwest selling salmon down the river. As my alarm went off, these renegade representatives got a wake-up call.

The first federal lawsuit to halt the channel deepening plan had been filed in Federal Court by some seriously powerful plaintiffs. The most aggressive assault ever planned on the Columbia River estuary is now exposed before the entire nation. I believe that the citizens of this country will not stand for this unjustified destruction. The message from salmon lovers from one end of this basin to the other is the same: Stop driving these fish to extinction. We want our salmon back and we want them back bad, but we're going to have to

take a couple big steps in my nightmare is to be averted. Yeah, drawdown the John Day reservoir, breach the Lower Salmon River dams, do it swiftly and do it right, and take exceptional care of the good people in the Lewiston area and other areas that are affected by this action. Treat them like royalty for the sacrifices they have to make. The other big step is to change some ways that the Columbia estuary is managed.

The deepening project is the worst possible way to manage the Columbia River estuary. To quote a bit from the Valentine's Day card that NMFS got yesterday, the project will have significant unquantified, unexamined and unexplained adverse effects on young salmonids among a host of impacts, changes in water quality, ecosystem function, sediment transport, turbidity, restriction of contaminated sediments and changes in solidity intrusion in the estuary affecting its productivity and suitability to support salmonids.

Now, we must insist that this plan to eviscerate the lower river be abandoned immediately. Further, if the Corps is going to maintain the present navigation channel, they're going to have to make some changes. We want no new Caspian tern habitat, no more sediments dumped back into the river, utter respect for salmon and other life of the estuary. Stop doing more harm. Stop polluting and degrading this place. We don't make things better by making them worse. Then we can get on with the essential business of making this river better, taking untold numbers of small steps to restore and enhance this watershed. The steps we need to take to nurture salmon from the streams of their birth to their miraculous transformation in this precious estuary to the ocean and hope again, that's the legacy we can leave for our children's children. We don't need to leave a nightmare.

ANTHONY STOPPIELLO: I'm Anthony Stoppiello. I live in Ilwaco. I'm here to speak for all of those that eat salmon, especially the (inaudible) that live in the small streams that eat off the bodies of their dead parents. I want to talk about energy. The Columbia River is one big energy system. We keep ignoring that. If we breach these four dams and drawdown the John Day, we'll be taking one big step for humanity and a small step for salmon. I'd like to tell you what we did for salmon. We live in a house that was built in 1895. We moved into that house in 1992. That house was using 13,460 kilowatt-hours of electricity. The average house in the state of Washington under the Washington Energy Code used 11,900 kilowatts of electricity. From 1993 to 1996, we did the following: We insulated our house, we put double-glazed windows in our house, we put a foundation on our house, we brought a Sunfrost refrigerator which uses a half a kilowatt of electricity a day, we have a passive solar water heating system on our house which provides us with 60 percent of our water use, we're going to put on a solar PV net metered system which means that the utility company will be paying us the same amount for electricity that we give back that we buy. From 1993 when we were using 10,520 of kilowatt-hours, we are now using 3,494 kilowatts of electricity, which is a savings of 67 percent. Now, imagine for a moment what would the system, the electrical system, the context look like if we had a 67 percent reduction in our electricity? What would that habitat look like? It certainly wouldn't like what we have now, dams from Bonneville to who knows where. What I would suggest and what I would hope would happen is I would like to see energy as an issue brought into this discussion. What would we do with that saved energy? Let's not sell it. Let's save it and let's take down dams. I would love to see Celilo Falls again in my lifetime.

JOHN VHAY: My name is John Vhay, and I am speaking for myself as a citizen of the state of Oregon. My first comments are with respect to the John Day

Reservoir drawdown study and its recommendations. Following that, I will address some of the studies concerning the breaching of the Snake dams. Although I agree with the recommendations of the Phase I study of the John Day drawdown, I am absolutely amazed that the Corps would release a summary with such poor use of significant figures. Someone in your management should explain to the editor or writer of this document the use of the numbers. The case in point is on page 21, the projected numbers of spawning salmon indicated by the biological life cycle modeling for drawdown and the barge transportation are reported to four significant figures. At least the calculations for the spawning habitat in the reservoir are stated as estimates and reported only to two significant figures, 5500 and 55,000. Such juvenile work in this summary casts some degree of doubt as to the professionalism of this entire study.

I want to direct my next comments to the NMFS All-H Studies and the Path Analysis. Everyone acknowledges the problems confronting us are very complex, but some want absolute certainty of the outcomes before taking any action. From my part, without oversimplifying things, I think it is fair to state that since we cannot control ocean conditions, cannot control basin-wide precipitation and the occasional drought years, but in spite of these do have moderately successful runs of bright fall Chinook and steelhead above McNary on the Columbia, it is obvious the current practices for the Snake -- the survival of the Snake runs are totally inadequate. We shouldn't be looking at a few thousand fish on the Snake. We should be looking at millions of fish coming back out of that Snake nursery. These runs do not have the luxury of study time. This is not a classroom experiment.

True, biological assessment is necessary, but it should not be an excuse for doing nothing now. Action must habitat, what is wrong with letting these Snake River runs have free access to the 1,000 miles of spawning and rearing waters welcoming them in the main stream and tributaries of the Grande Ronde, Imnaha, Clearwater and especially the Salmon? A thousand miles are already in -- above the river mouths are already in protected areas or forests. That's out of the 5200 miles of river in these -- in this Basin. Don't include the 140 miles of current Snake -- on the current Snake River reservoirs in the calculations until they're flushed of silt.

We can't go blaming people in the past for doing things. We have to take action and do it now. But are we too proud and bullheaded to admit that these dams were a mistake? I hope not. But if we do not breach these structures as soon as possible and assist those who'll be temporarily affected, we might as well forget this whole exercise. Just back up, direct the Bonneville and the Corps to let contracts for permanent signs stating "The following extinction’s were brought to you by the citizens of the Pacific Northwest through their elected officials and the bureaucrats due to inaction and lack of courage in the years 2000 through 2010." Thank you for listening.

PASCO, WASHINGTON PUBLIC COMMENT SESSION
FEBRUARY 17, 2000

JIM MATTHEWS: Okay. My name is Jim Matthews. I am here today as a private citizen and a fisherman. It's been interesting to listen to many of the comments today at this meeting and to hear some of the different viewpoints. I would like to bring forth my viewpoints today regarding the DEIA and the other papers. I've been fishing in this area for a long time and I've looked at a lot of the information out there and heard a lot of what the biologists

and other experts have talked about. It's been somewhat confusing at times because there is a lot of information out there, but I would like to speak about it.

One particular fish on the Snake River that seems to me is a good example of one of the problems, the Snake River fall Chinook, are right next door to the Hanford River Hanford Reach fall Chinook, and yet the Hanford Reach Chinook are doing well and the Snake River fall Chinook are doing terribly. At least with that run, it appears that breaching the Snake River dams is the best thing to do. And for that reason, I do support the Alternative 4 and the breaching of the Snake River dams. I also believe that there needs to be a lot of work on the other factors, the other Hs that are affecting the stocks. If we're going to bring these fish back, there is going to need to be a concerted effort to look at all of the impacts and deal with all the impacts on these fish.

I agree with some of the discussion that there is probably no silver bullet in this issue, and that we're all going to have to work together on this to make these fish -- bring these fish back.

In closing, I support Alternative 4, the breaching of the Snake River dams, and also support further study on the John Day Pool drawdown.

BOISE, IDAHO PUBLIC COMMENT SESSION
FEBRUARY 23, 2000

NO COMMENTS SPECIFICALLY FOR THE JOHN DAY PHASE I STUDY

SEATTLE, WASHINGTON PUBLIC COMMENT SESSION
FEBRUARY 29, 2000

MR. ADLER: My name is Paul Adler, and I'm from Shoreline, Washington. I'm just here representing myself. I'm in construction and education. And I'd like to comment on the All-H Paper and the draft EIS and on the John Day drawdown. And I support the most conservative alternatives for listed species, including removal of the four Snake River dams, and I also support the full drawdown proposal for the John Day.

Extinction of Snake River salmon runs are a very real possibility unless we remove these dams and take serious attempts in all the four H's. I'd particularly like to comment on the use of hatcheries, particularly hatcheries for compensatory measures for the existing dams. Hatchery fish are not wild fish. And studies show that in the long-term, compensatory hatcheries actually have an adverse impact on wild salmon returns.

And we need to decrease the mitigation rates, and we need to consider the impact of compensatory hatcheries in terms of the endangered species acts and their potential in terms of adverse impacts. I think that hatchery impacts need to focus specifically on genetic conservation, and long-term management strategies also must consider (inaudible) integrity of the runs, especially as outlined under the Endangered Species Act. And these dams being federally licensed certainly have that federal access. So in summary, I support the most conservative measures on all four H'S; the full drawdown proposal on the John Day and removal of the four Snake River dams. Thanks.

DOUGLAS FLETCHER: I'm Douglas Fletcher. I'm not representing any organization. I'm a retired fish biologist. I spent 36 years in the fish business, the last 27 with the Washington State Department of Fish and Wildlife.

This is of interest because of the amount of controversy and conflict that it's generated. Doesn't seem that it generated much understanding of the issue. This is caused mainly because of one of the options breaching the dams.

I would like to address the issue of what's going on with survival of the juveniles. Right now the Corps says that between loss to the cost of fish trying to migrate through the dams and fish marched past the dams, 95 percent of each survive the Snake, and 45 to 60 percent get through all eight.

If the dams were breached, the survival is estimated to increase from the previous 95 percent up to 99 percent past the point where each dam increase has been. This is where it gets complicated, and I think people are losing track of what's the actual impact. There no longer would be any transportation of the Snake fish around the Columbia River dams. In other words, 100 percent would be forced through the four lower dams on the Columbia River.

That's some of the most deadly area for smolts, particularly the John Day pool. It's a bad one. So what would the loss rates be? You can extrapolate from some of the Corps's information. Looks like that loss would be around 20 to 35 percent. That's when the fish are barged around the dam, half of them. So it tells us that the best chance for recovery – however there's a couple of flaws in the premise.

For one thing, two models used to make the prescriptions were based on so many assumptions that I don't think they have much good ability. Also they were based on older data. Using these artificially legal high estimates for fish mortality makes a case for breaching stronger and other options weaker. What the Corps said on this, they said the draft -- I asked, the models generated very uncertain outcomes. They also said it's unlikely that even breaching will allow spring and summer Chinook to recover in the fall and winter, increases by 20 percent over what it is now.

KALISPELL, MONTANA PUBLIC COMMENT SESSION
MARCH 1, 2000

MS. MILLER: My name is Carol Miller, and I'm representing the Lake Koocanusa Coalition. We're 400 members of local citizens and concerned citizens. We live in Rexford, Montana.

I'd like to comment on the All-H Paper. And I'd like to read an excerpt from the biological assessment regarding recreation considerations. And I'll quote. This is from the biological assessment. "To support high levels of recreational use that occurs at the John Day project, about 17 recreational areas/facilities (federal and local) are located along Lake Umatilla. Presently there are 13 boat ramps with 26 launch lanes, 160 picnic sites, and 242 individual camp sites. For the period 1987 to 1991, the average number of visitors per year to the recreational sites along the John Day pool was 2,272,000. August is the peak months for visitation to the project, with about 350,000 visitors. The plan of operation at John Day does not

specifically provide for special regulation of the reservoir in the interest of recreation, but the stable pool levels enhance the popularity of these recreational sites.

The Corps of Engineers cooperates with Oregon and Washington state park departments and a variety of local entities such as counties, cities and port districts to build and manage a system of water related recreational facilities," unquote.

The above text illustrates the disproportionate level of concern that the biological assessment provides to the authorized purpose of recreation. A commensurate level of consideration was not provided for the recreational interests at Libby and Hungry Horse or for the unimpounded river reaches below them. The federal government should be held accountable for this inequitable treatment. Like Lake Umatilla, August is a peak month for visitors to Lake Koocanusa. However, unlike Lake Umatilla, which enjoys a stable lake level, Lake Koocanusa is drawn down 20 feet making much of the recreational facilities unusable.

We should be provided with the same level of assistance in developing recreational use of both Libby and Hungry Horse dam as well as the river reaches below them that is provided by Lake Umatilla behind John Day Dam. Thank you.

SHERMAN LEE: Good evening. My name is Sherman Lee. I'm co-chair of the Koocanusa International coalition.

The U.S. Fish and Wildlife Service convened an international blue ribbon recovery team for the Kootenai River white sturgeon in 1994. They made specific recommendations for flow provisions out of Libby Dam. The primary harm to the white sturgeon is the modification of the hydrograph, especially in spring and summer, by Libby Dam. Since no other federal project can provide the requested sturgeon flows, the priority at Libby Dam must be to meet the sturgeon flow objectives first and then the salmon flow objectives; not the other way around.

This blue ribbon sturgeon recovery team unanimously supported and recommended the IRC concept for sturgeon recovery. Reservoir drawdowns in Libby of 115 feet are typical in all years. Even the summer drafts for salmon augmentation of 20 feet are very significant in terms of the areas dewatered. The U.S. Fish and Wildlife Service should accept the recommendations of this blue ribbon international panel in entering their biop call for the implementation of IRC.

The harmful effects against both the Kootenai whiteriver sturgeon and the bull trout are backed by sound biological science, as listed in the biological assessment, and should tell you not to continue with a 20-foot summer draw down.

The federal courts require the feds to consider the IRCs at every relevant stage of the decision making process, but they've also been ignored. The question is why. I was told by Cynthia Hendrickson that the August drawdown was required by National Marine Fishery Service for the purpose of improving river flow to John Day dam.

As you've heard here this evening, the Corps of Engineers, with the National Marine Fishery Service blessing, recommended not proceeding with John Day

drawdown to increase stream flow because they provide only minor change in fish travel of a day or two. Simple hydrologic calculations show that the maximum expected benefit from Montana flow augmentation is in the range of one day or lower. This benchmark of one or two days is justification for not drawing down -- if this benchmark of one or two days is justification for not drawing down John Day, it certainly should provide the U.S. Fish and Wildlife Service a standard for modifying, suspending or delaying Libby and Hungry Horse drawdowns.

Montana's offered a compromise IRC with a 10-foot draft, thus providing some flow augmentation still providing the entire range of IRC related benefits. The U.S. Fish and Wildlife Service should acknowledge the marginal change in fish travel time, the independent science of harm to bull trout and sturgeon, the intent of the court mandate and, thus, recommend and adopt the IRCs.

Finally, the Northwest Power Planning Council has included there's a 24-percent chance the northwest won't have enough electricity to meet demands during the next four winters. They're short by -- just four sentences to go. They're short by 3,000 megawatts, enough power to fuel three Seattle's. That's without removing these four dams that are in question tonight. It only makes sense to adopt a 10-foot drawdown, leave the extra water in our region to be released according to IRCs and VARQ, thereby providing more water to bring the October through January period to meet this short electric -- this electrical shortfall. Thank you.

DAVE SKINNER: My name's Dave Skinner. I'm with Montanans for Multiple Use. I just happened to prepare this little sheet of notes on my hydroelectrically powered computer.

I just went to this here decision document, and basically looking at 1, 2, and 3, I think they're all unacceptable. Like Alternative 1, they talk about no hatcheries, no mitigation aside from aggressive restoration on public and private lands. And I can see the implications for timber harvest for agriculture basically gutting the entire economy. And this assumes that natural rivers are the best way. And, again, you know, the guy from Flathead Electric said we got a society here.

Then we got wood mitigation for significant economic costs. Well, I'd like to know who's going to mitigate and who's going to pay those costs. And it's going to be -- it's certainly not going to be the high-dollar environmental groups that have banners and salmon suits and things like that.

Ecosystem and steward primarily for native fish and wildlife. Well, I tell you something. I kind of like fishing for regular rainbows and brown trout and brookies and that sort of thing. In fact, I caught a 24-inch one up on the Middle Fork of Dolly Varden Creek. That has been a while back, but I like fishing for those sort of things.

I think what we need to do is look at Alternative 4, start looking at what's going to work before we start throwing billions of dollars. At John Day Dam, three billion dollars. In general, I find the claim that half a billion dollars a year in increased tourism will result from the dam breaching, that's kind of fallacious that would mean that you got 500,000 fish a year, spending a thousand bucks a day just to stand someplace along the river with a fishing pole.

Now, I think the added expense of northwest power users is going to be considerably more than the quarter billion dollar figure that's been bandied out about by the Idaho statist -- statesman. In the best case, what you got is 250 million dollars of perpetual economic loss spent just on fish and fishing. Never mind the private properties instructions and all that.

Now, you look at the fish habitat, you look at the fish population, we're talking 16 million fish a year, under ideal circumstances. Divide that 250 million dollars in net economic losses, that's $15 per fish, if we catch them all and if they all come back.

To me, I mean, the numbers aren't making sense here, if we're going to foot the bill. I don't know. I just would say we need look to Alternative 4 to see what works, and then blend Alternative 4 with Alternative 6 with active management, with Alternative 7, and come up with something that makes some common sense. Thanks.

IDAHO FALLS, IDAHO PUBLIC COMMENT SESSION
MARCH 7, 2000

GARY LAMBSON: Hello. My name is Gary Lambson with Lost River Electric. My comments relate to the draft EIS, the All-H Paper and the John Day study. I care deeply about the issues before you today. I feel strongly that the region should come together behind a plan to recover these salmon and steelhead runs. And make no mistake; the real issue here is recovering fish runs. Something we all want. Focusing mostly on dam breaching just doesn’t make sense. One reason is --focus on dams doesn’t make sense is that the main river part of this complex problem has seen great improvements in passage. Around 95 percent of juvenile salmon successfully pass each dam.

And according to your All-H Paper, in-river survival of spring migrants through these projects is higher than ever, similar to that before dams were built on the Snake River. Dams are easy targets, but they are only one part of the equation. Fish cannot spawn without good habitat, and they cannot grow to return unless they have good estuary and ocean conditions and unless they can avoid predators, including humans. To tackle this problem, we need to clarify our goals here. Clear goals and accurate measurements of progress towards these goals can be the only manner in which accountability takes place within a complex project. The draft performance measures and standards outlined in the All-H documents and in the biological assessment are a first step in this much-needed direction.

This won’t be easy, but creating measurements and integrating them among all of the HS is a task well worth the effort. We must set aside misguided proposals and focus on what we can work today. I applaud the Army Corps’ study of the proposals to draw down John Day Reservoir. It showed an up-front cost of almost five billion and annual costs of up to 700 million in exchange for negligible fish recovery. It is an equation that does not make sense.

With all of the current gaps in the science, and there are a lot of gaps, we still have a lot to learn. Because of the complexity of this problem, we are hopeful that you will resist the temptation to act in a manner that will cause irreparable harm to rural areas, and will work towards a comprehensive recovery plan. Thank for you this opportunity to share my views with you today.

KETCHIKAN, ALASKA PUBLIC COMMENT SESSION
MARCH 6, 2000

NO COMMENTS SPECIFICALLY FOR THE JOHN DAY PHASE I STUDY

SITKA, ALASKA PUBLIC COMMENT SESSION
MARCH 7, 2000

AMY SKILBRED: Hi. Good evening. My name is Amy Skilbred and I am representing the Alaska Department of Fish and Game.

Welcome to Alaska and thank you for the opportunity to comment here and in the other three towns that you are visiting.

Fish and Game fully supports the fishermen and fishing communities of southeast Alaska and believes that they make significant sacrifices for Snake River fall Chinook recovery. We have reviewed the federal documents and have the following comments.

On the John Day drawdown, Fish and Game reviewed the summary and arrived at a very different conclusion than the Corps. We believe Phase II should be undertaken, that the Corps has greatly underestimated the possible benefits of a drawdown. Fish and Game biologists believe benefits could be significant enough to delist the Snake River fall Chinook. We also further request an extension of the comment deadline because the study is not yet available.

Second, as to the Corps' DEIS on the Lower Snake River. Fish and Game, based on its review of the documents, the Corps' own assessment, and the U.S. Fish and Wildlife Service recommendations, believes that the alternative that will provide the most benefits for endangered salmon and offer the best chance to restore fish populations is the natural river drawdown, establishing a river ecosystem.

As for the technical fix alternatives, the study shows that after 20 years of transport, the transportation has not worked sufficiently and also I think the Corps itself said that adding more transportation is not likely to do a lot because we are already transporting a lot of the fish.

For the 4-H paper, Fish and Game agrees with the concept that harvest, hydropower facilities, habitat restoration, and hatcheries, all have a role to play in recovery of the Columbia and Snake River salmon.

Alternative B, the harvest reductions alternative, however, will not recover Snake River salmon, but would greatly affect all southeast Alaska fishermen, commercial, charter and sport.

Under the alternatives, the harvest could be cut from 50 to 75 percent, but fall Chinook will not recover and this will do nothing for spring, summer Chinook, steelhead or Sockeye, where harvest rates are already negligible.

Fish and Game manages fisheries in Alaska as to assure the long term health of the fish populations, the people of Alaska expect us, in fact we depend on it. We take this responsibility seriously. If we believe that any reasonable additional conservation measures by the Department of Fish and Game were

wanted to ensure the recovery of Snake River fall Chinook, we would step forward to help.

Fish and Game's position regarding the recovery of Snake River salmon is clear. Alaska's fishermen are already doing their part. NMFS agrees that the scientifically harvest reductions put in place with the 1999 Pacific salmon treaty agreements are sufficient.

Furthermore Fish and Game back scientific findings demonstrating that the best option for recovery of Snake River salmon includes removing the earthen portions of the four lower Snake dams and habitat and increasing water flow. We do stand by our statement in the mailer saying that 50 to 75 percent is being looked at, whether you call it an opening, a proposal, an alternative, it's being analyzed and looked at. So thank you.

HOWARD PENDELL: My name is Howard Pendell. I have been a commercial fisherman in Alaska for 15 years. I have personal experience in many of the cuts in our catch over the years in a vein effort to save these fish, and now I would like to see you tackle the real problem, the dams.

Thank you all for coming to Sitka and listening to us. And thank you for bringing this beautiful weather.

As it would happen, the Army Corps of Engineers has recently conducted a study and released the results in what is called the summary of the John Day drawdown phase I study. The John Day reservoir stretches for 80 miles. It is considered the most lethal for juveniles. Elevated temperatures, delayed migration time and increased predation all help turn the John Day reservoir into a lake of death. The Walleye alone are estimated to consume 400,000 juveniles annually in the John Day Reach.

Drawdown to natural river condition would turn this death trap into 80 miles of excellent spawning habitat, similar to the Hanford Reach.
It seems a reasonable assumption that all salmon stocks on the Columbia and Snake would benefit substantially from this change in configuration.

It goes without question that the dams can and do decimate salmon runs. In the case of John Day, the Army Corps of Engineers has decided to defend the position that drawdown does not substantially benefit the listed stocks.

The Army Corps goes even further into the realm of unbelievability by stating with the John Day drawdown the Hanford Reach stock would likely decrease in berms.

Yes, that's right. Not only did these fish take a major hit when the John Day was built but according to the Corps, will take another when it is removed. Or if it were removed.

I would support a Phase II study of the John Day drawdown so the analysis by the Corps could be improved upon.

I also support the breach of the lower four Snake River dams. Thank you.

LINDA BEHNKEN: Well, my name is Linda Behnken. I have been a commercial fisherman for 16 years. I am also director of the Alaska Long Line Fishermens Association and I am speaking today on their behalf. ALLF is a nonprofit fishing association of approximately 100 members who reside in

Sitka, Pelican, Petersberg, Ketchikan, Upsnow, Port Alexander, and cities and towns in the lower 48.

Our association has a long history of supporting conservation measures, including reductions in harvest, when indicated to preserve the health of a particular stock or the health of an ecosystem in general.

We have supported cuts in the fishery, which is one of the primary targets of our association of up to 50 percent off the coast here in the last five years, because we recognized that as necessary to rebuild those populations due to current low spawning stocks.

However, in this case there is no information to convince fishermen that any reductions in our harvest would contribute to the rebuilding of Snake River Chinook.

I think from the information you have presented it is very clear that the dams are the problem, that your focus needs to be on habitat and safe passage.

As a member of this panel said, extinction is permanent. Certainly aggressive action is necessary at this time. On behalf of our association, I ask that you address the problem. You breach the dams, move ahead with Phase II of the John Day drawdown study, and leave Alaska fishermen alone. Thank you.

PAT KEHOE: I am Pat Kehoe. I have been commercial fishing in southeast Alaska for 19 years with my husband and two daughters. Trolling is our lifestyle as well as our means of making a living. We, like other people in the commercial fishing business, charter fishing industry, sport fishing, native community and local businesses, all depend on salmon as the backbone of the coastal communities of southeast Alaska.

We have been willing to sacrifice through the years to help prevent damage to the salmon run, but all our sacrifices are meaningless unless the fish habitat -- fish have habitat once again.

Everything I've read shows that breaching the Snake River dams and possibly the John Day Dam can provide the habitat that these fish need to have healthy stocks again.

It has been shown other places and most recently I believe on a tributary of the Sacramento River that the salmon stocks are able to recuperate well if the dams are breached before the stocks are extinct.

It is your responsibility to see that that's done now. You have the opportunity to do something really worthwhile for the salmon and for the Pacific Northwest.

Breach the dams. And if you shuffle papers too long the fate of the salmon will be your fault. Thanks.

JUNEAU, ALASKA PUBLIC COMMENT SESSION
MARCH 8, 2000

KAREN GLASS: Hello. I am Karen Glass. I am a concerned private citizen, an Alaskan. It's great to see you here and all the planning that's going on in having these meetings here in Alaska to restore our salmon.

It's wonderful to have an Endangered Species Act. Since man has almost destroyed the Columbia River Basin salmon, it's up to man to restore them.

There are 75,000 dams in the United States. 500 have been dismantled with great success stories of restoration of native fish and natural habitat. I was born here in Alaska and I grew up in the commercial troll fishery. It is a vitally important way of life in income for many Alaskans. Don't destroy it.

I have also sport fished all my life, in Alaska, for many years, I sport fished for Chinook salmon at the mouth of the Columbia River, at Ilwaco. I have steelhead fished in the lower Snake by Walla Walla. I have, when I lived in Idaho for a few years, I sport fished for Chinook at the headwaters of the Salmon River. And these are huge Chinook salmon, and it was amazing to see them and realize how many thousands of miles they had traveled to spawn at the headquarters of the Salmon River which branches off of the Snake River. I've also river rafted on the Salmon River and seen dead salmon floating next to the raft. I have seen salmon jump the falls in Idaho the early '70s. There were many Chinook salmon there then. I have been to Red Fish Lake which was named red fish for the many Sockeye that migrated up the Columbia and the Snake and into the Salmon River to Red Fish Lake. They are gone now. They had one fish return there.

Anyway, I support breaching these four dams, using new turbines, do the John Day drawdown, et cetera, et cetera, to restore the salmon and steelhead. Thank you.

PETERSBURG, ALASKA PUBLIC COMMENT SESSION
MARCH 9, 2000

AMY SKILLBRED: Hi. My name is Amy Skillbred and I am with the Department of Fish and Game, and I would first like to say that Commissioner Frank Rew apologizes that he isn't able to make it here tonight and I am going to submit his comments for the record, and then make some brief comments.

First of all, welcome to Alaska, and Fish and Game supports the fishermen and fishing communities of southeast Alaska and believes that they have made significant sacrifices to the recovery of the Snake River fall Chinook.

We have comments on specific -- specific comments on the different studies, and first on the John Day drawdown. We're also asking that the comment deadline be extended on that, as the complete document is not yet available.

Further when this summary was reviewed by Fish and Game biologists, they came to a vastly different conclusion than the Corps, and believe that the Corps has greatly underestimated the possible biological benefits of a drawdown and would recommend that a Phase II study be undertaken.

Secondly, on the DEIS for the Lower Snake River, Fish and Game, based on its review of the documents on the Corps' own assessment and on the U.S. Fish and Wildlife Service recommendations believes that Alternative 4 will provide the

best benefits for endangered salmon and offers the best chance of restoring fish populations. That's the natural river drawdown.

And third, on the All-H paper, Fish and Game believes that alternative B, the harvest reductions alternative, will not recover Snake River salmon but would greatly affect all southeast Alaska fishermen, commercial, charter and sport fishermen.

Furthermore, that this cut from 50 -- of 50 to 75 percent would not recover the fall Chinook and would doing nothing for the spring and summer Chinook and steelhead.

Furthermore, Fish and Game backs the scientific findings demonstrating that the best option for recovery of Snake River salmon includes removing the earthen portions of the four Lower Snake River dams, restoring the habitat, and increasing the water flow. Thanks.

TWIN FALLS, IDAHO PUBLIC COMMENT SESSION
MARCH 8, 2000

LYNNE STONE: I am Lynne Stone from Ketchum. I'd like to begin by thanking Governor John Kitzhaber from my native state of Oregon for his support and genuine desire to save wild salmon and steelhead. I thank him for his commitment to breaching the four dams in Washington state. But there's one other dam I would like to talk about here today, the John Day. I disagree you have overestimated the cost and underestimated the benefits.

Growing up in Oregon, I watched The Dalles and John Day dams being constructed. I was 12 years old when Vice President Richard Nixon dedicated The Dalles in October 1959. The Dalles Dam buried Celilo Falls, an ancient fishing and gathering grounds on the Columbia. What a tragedy. I hope I live long enough to see Celilo come back.

As a teenager, I water-skied on the Columbia when there was still a current. Other times we floated on inner tubes, and went along the shoreline, feeling the strength of that mighty river. But the river stopped flowing in 1968, the year that John Day Dam was finished.

My dad was a county commissioner when Vice President Hubert Humphrey came west to dedicate the John Day. My family was at that event. Little did we know then, that what a killer that the John Day hydro-project would turn out to be. This dam and its over 78-mile long slack water pool it created kills more juvenile fish, I'm told -- and I know it's debatable -- than any other on this system.

I urge you not to dismiss considering a draw down of the John Day Dam. Maybe not right away, but in the future. Lowering the John Day Dam pool would benefit juvenile fish migration and restore historic spawning grounds.

I know that breaching the four dams in eastern Washington and lowering the John Day pool will require changes in river commerce, namely with the barges. I'm well acquainted with barges. I hauled grain to the Arlington elevator for ten summers. My family still trucks the grain to Biggs Junction or into Arlington. But if we had the will and technology to build eight dams, then Northwesterners can certainly figure out a way to move grain and other projects.

A word about barging fish. When I return to Oregon and go down the freeway and see the barges with our fish, I feel sick knowing most of them will be dead by the time they reach Astoria.

I'd like to say a word about our Idaho politicians. I am outraged with you. I am disgusted. You're letting our great salmon runs go extinct. I hear you mumble about fish friendly turbines, whatever that is. It's a contradiction, at best. For advocating more barging, or Wildwaters-type water slide, or getting rid of the terns. Give me a break. Our endangered salmon don't need a ride. They need to stay in the river, in a river that flows like a river. Breaching the dam, lowering the pool at John Day, will help achieve this. Thank you.

DEBRA KRONENBURG: Thank you. I'm Debra Kronenburg. I'm a lawyer from Ketchum, Idaho, located in the Wood River Valley in Blaine County. On occasion, I represent Fish and Wildlife.

I was struck with the sense of awe and disbelief, frankly, when our human population numbers reached 6 billion. At such a stratospheric figure, our obligation to the other species on this planet is both magnified and intensified.

At stake here is the extinction of salmon. Salmon are a species whom many of us on this planet consider sacred. Salmon are the totem of the Pacific Northwest; and salmon, some would say, my friend the professor particularly, define our region.

At stake also are our uncontrolled behaviors, whether reproductive or consumptive are behaviors which will lead to our own extinction as well. Since I truly believe that we, as a species, have the capacity to moderate our behaviors and find a considered balance where we are not destroying this planet ourselves and the other species who share this earth with us, I support the immediate breaching of the four lower Snake River dams. I support the return of a natural river. The scientific justification is as clear as the moral imperative. It may not be enough. On my worst days I fear it is not enough. It may not be that silver bullet we've heard about a couple times here today, but it is a start, and a good one. It won't bring back the falls and the fishery at sacred Celilo, but it may bring back the salmon to Idaho.

I obviously am speaking for maximum protection. Breaching the dams, and I also am speaking for the draw down of the John Day Dam, or the pool behind the John Day Dam.

I think we've reached the time in our history where we just have to take a stand. I don't know how much more any of us can say. We've all been saying it; I've been saying it; I think some of you have been saying it. I hope the message to Congress is clear, and I thank you for staying up with us tonight.

TWIN FALLS, IDAHO PUBLIC COMMENT SESSION
MARCH 8, 2000

KELLY WESTON: My name is Kelly Weston. I'm from Hailey, Idaho. I'm testifying in favor of breaching the dams. I believe that the consensus of the scientific information is that breaching the dams is the best solution to recovering salmon. I also believe that it has economic benefits that far outweigh the benefits that now accrue to the dams as they are presently. I'm

also in favor of the John Day dam becoming a free-run dam, free run-of-the-river.

That's all I have to say.

JOHN MARVEL: My name is John Marvel. I live at 316 East Bullion Street in Hailey, Idaho. I'm here to represent myself and Idaho Watersheds Project, a nonprofit conservation organization with more than 1,000 members in Idaho. I'm a 30-year resident of Idaho. I've lived next to the Salmon River for many of these years.

I'd like to provide these comments.

In regard to the draft lower Snake River migration feasibility EIS, I support the breaching of the four lower Snake River dams. This is an opportunity for the Army Corps and the other agencies to finally meet the requirements of Indian treaties and their obligations under the Endangered Species Act. It also is an opportunity for the agencies and the people of the United States to change a long-term attitude about human beings' relationship with nature and the need for working harmoniously with natural systems by reopening this migration route to the salmon and other species of river fish.

I'd like to support, also, and provide these comments on the John Day drawdown phase one study to support a drawdown of the John Day reservoir to natural river level by modifications of that dam.

I'd also like to provide these comments on the All-H, the federal caucus paper, in that the agencies at this time still have not provided sufficient leadership in the management of habitat and headwater streams which provide spawning habitat for salmon, steelhead, sockeye salmon and indigenous native fish.

These areas need to have strongly directed regulatory action to affect positively habitat that has been severely altered by water diversions, water withdrawal, livestock grazing and other inappropriate practices.

I would also like to comment on the BPA issues and alternatives for fish and wildlife, implementation EIS. And I suggest that it's well past time for the BPA to start funding habitat protection and regulatory action in regard to livestock grazing in central Idaho and other portions of the Columbia River system where this degradation continues to occur. No more funding of livestock projects, please.

Thank you for this opportunity to comment.

Attachment I. 2000 Phase I Study Report Review Comments

- **Technical Comments with Corps of Engineers Responses**
  The comments in this section are technical and directly related to the Phase I Study report and appendices.

- **General Review Comments**
  The comments in this section are general in nature, with some supporting the concept of drawdown, and some opposing drawdown. Those who oppose drawdown supported the Corps' draft and resulting final recommendation to Congress that no further study is needed. All comments are reproduced here to allow readers to see for themselves all opinions and ideas that were presented to the Study Team.