

FINDING OF NO SIGNIFICANT IMPACT
EXPANSION OF OCEAN DISPOSAL SITES A, B AND F
MOUTH OF THE COLUMBIA RIVER, OREGON AND WASHINGTON

The proposed action is the temporary expansion of the existing EPA-designated ODMDS' A, B, and F and changed management at these sites and Site E which will more specifically direct the disposal of dredged material at the expanded sites. A critical condition of this temporary measure will be the initiation of a dredged material management study by the EPA and the Corps. The temporary expansion will allow needed maintenance dredging of the MCR project without exacerbating the mounding problem while studies are conducted to develop a long-term management plan for disposal of dredged material from the mouth of the Columbia River and the estuary.

I have determined that the proposed action will not result in any significant effect on the human environment and that preparation of an Environmental Impact Statement for the temporary expansion and adjustment of disposal management practices would not be required.

EPA Region 10 has made a similar determination associated with their Section 102 site designation formal rule making process.

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ENVIRONMENTAL ASSESSMENT

EXPANSION OF OCEAN DREDGED MATERIAL DISPOSAL SITES A, B, AND F for MOUTH OF COLUMBIA RIVER (MCR), OREGON AND WASHINGTON

Introduction and Purpose. This environmental assessment (EA) addresses the administrative action by Region 10, Environmental Protection Agency (EPA), and the Portland District, Corps of Engineers (Corps) to temporarily expand the existing, EPA-designated ocean dredged material disposal sites (ODMDS) A, B, and F and to alter the use and management for disposal of dredged material of these sites and site E as provided for by Sections 102 and 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. The designation of expanded sites and changed management is jointly proposed by the two agencies as a temporary measure to prevent the development of a hazard to navigation and continue to allow the use of these sites by the Corps to maintain the MCR channel while the Corps and EPA scope and conduct the necessary studies to develop a long-term dredged material management plan.

Five potential ODMDSs were described in the final Environmental Impact Statement (EIS) for the Mouth of Columbia River Dredged Material Disposal Site Designation (February 1983), prepared by EPA's Office of Water. The four presently designated ODMDSs (A, B, E, and F; figure 1) were designated by EPA in a final rule published in the Federal Register (FR 29923-29927) on August 21, 1986 and the designation became effective on September 22, 1986.

Although not considered "dispersive" sites, in that large percentages of the discharge sediments were predicted to remain

within the sites, erosion and redistribution were expected to occur that would prevent the development of mounds. Dispersal rates have been low and Corps bathymetric surveys are showing significant mounding at sites A, B, and F. Site E, located adjacent to the entrance channel, is not experiencing mounding problems. The developing mounds at sites A, B, and F threaten to create a hazardous condition for large and small craft due to waves refracting from and breaking over the mounds. Commercial shippers, crabbers, and the U.S. Coast Guard have expressed concern over this situation. While the current situation does not constitute an imminent hazard to life and property which would warrant an emergency response, EPA and the Corps are in agreement that prudent management action is required now in order to prevent such a situation from developing.

In initial meetings during Summer 1992, EPA and the Corps concluded that an interim solution was required that would allow the Mouth of the Columbia River channel to remain open while studies were conducted to ascertain the extent of the problem, to develop and evaluate alternative solutions, and to prepare a longer term response. The interim response, which includes the temporary expansion and change in site management, is described in detail in the Project Description section below and is conditioned on development of a long-term plan.

It is expected that the long-term response could include designation of new ODMDS, permanent expansion of some or all of the existing ODMDS, de-designation of at least one existing ODMDS, and development of a comprehensive management plan to guide disposal of dredged material from the Mouth of the Columbia River project and the Columbia River navigation project within the estuary. This joint study is anticipated to begin in late 1992 in coordination with the proposed Columbia River deepening feasibility study and be completed in no more than 4 years. Scoping of studies and development of a long-term management plan

would require coordination with other federal agencies and the states of Oregon and Washington. EPA would complete the final site designation process using their authority under Section 102 of the MPRSA.

Project Description. The proposed action is the temporary expansion of the existing, EPA-designated ODMDSSs A, B, and F and changed site management at these sites and site E which will more specifically direct the disposal of dredged material at the expanded sites. A critical condition of this temporary measure will be the initiation of a dredged material management study by EPA and the Corps. The temporary expansion will allow needed maintenance dredging of the MCR project without exacerbating the mounding problem while studies are conducted to develop a long-term management plan for disposal of material from the mouth of the Columbia River and the estuary. This EA will support two administrative actions related to the proposed action:

- (1) A Public Notice by the Corps to identify the expanded ODMDSS A, B, and F under the provisions of Section 103 of the MPRSA and in accordance with Corps regulations 33 CFR Parts 335-338 for Corps use to place maintenance dredged material from the Mouth of the Columbia River (MCR) Federal navigation project.
- (2) Publication of proposed and final rule in the Federal Register by EPA to temporarily expand the existing, EPA-designated ODMDSSs A, B, and F and changed site management at these sites and site E which will more specifically direct the disposal of dredged material at the expanded sites. The temporary expansion and continued use of these ODMDSSs will be conditioned on (a) initiation of joint Corps/EPA studies and development of a long term solution to disposal of dredged material from the Mouth of the Columbia River

and Columbia River estuary; and (b) restriction of disposal at these sites during the estimated 4-5 year "interim" period to maintenance dredged material from the MCR Federal navigation project.

Approximately five million cubic yards of dredged material is removed annually from the entrance to the Columbia River Federal navigation channel. The material removed and disposed in the ocean is principally clean sand. Dredging of the channel is necessary to maintain the Federal project to the authorized depth of 55 feet over the approximately five mile entrance channel to allow safe passage of large commercial navigation to upriver ports. The dredging has traditionally and is expected to continue to be accomplished by hopper dredges.

The existing ODMDSs and their proposed expansions are shown on figure 2. Location descriptions and coordinates for each site (North American Datum 1983) are listed below:

Site A: This ODMDS will double in size to approximately 6,000 by 4,000 feet for a surface area of 0.86 square miles (2.23 square kilometers). The site would have an average depth of 70 feet (21.3 m). The four corner coordinates (NAD 1983) of the expanded site are:

46°, 13', 02" N;	124°, 06', 21" W
46°, 12', 36" N;	124°, 05', 39" W
46°, 11', 52" N	124°, 06', 36" W
46°, 12', 18" N	124°, 07', 18" W

Use of Site A has been temporarily discontinued until existing mounding has dissipated from that site. The site will be monitored in 1993 to determine whether material can again be placed at site A. In any event, any disposal likely will be restricted to the outer third of site A.

Site B: This ODMDS will more than double in size to approximately 6,000 by 4,000 feet for a surface area of 0.86 square miles (2.23 square kilometers). The site would have an average depth of 125 feet (38.1 m). The four corner coordinates (NAD 1983) of the expanded site are:

46°, 14', 45" N;	124°, 10', 44" W
46°, 13', 52" N;	124°, 10', 05" W
46°, 13', 34" N	124°, 10', 55" W
46°, 14', 26" N	124°, 11', 35" W

Site F: This ODMDS will expand to approximately 10,000 by 10,000 feet for a surface area of 3.59 square miles (9.29 square kilometers). The site would have an average depth of 125 feet (38.1 m). The four corner coordinates (NAD 1983) of the expanded site are:

46°, 13', 09" N;	124°, 09', 07" W
46°, 12', 00" N;	124°, 07', 24" W
46°, 10', 49" N	124°, 09', 03" W
46°, 11', 58" N	124°, 10', 45" W

Expansion of Sites A and B would approximately double the area of each existing site by moving the offshore boundary approximately 2000 feet to the West. This expanded portion of each disposal area has not directly received discharges of dredged material, although sediments placed within the boundaries of the existing sites have moved into this expanded area as a result of down slope movement and currents. Accordingly, these expanded portions of site A and B have been influenced by dredged material disposal. Site F would be expanded over five times its existing size, from 1800 feet by 1800 feet to 10,000 feet by 10,000 feet. This expanded portion also has not received direct discharges of dredged material in the past, however, like the expanded areas of sites A and B, this expanded area too has been

influenced by the redistribution of sediments discharged at the designated site.

The majority of material discharged at the ODMDS sites has come from the MCR project. New construction material from the Tongue Point project, a section 107 and permit action, was discharged at site F. Any maintenance dredged material from this project would also have gone to site F. Although no maintenance material from the Columbia River navigation project has been disposed of at any of the ODMDS sites, draft plans developed during phase 2 of the Corps' Long-Term Management Strategy (LTMS) predicted that greater reliance on ocean dumping of estuary material would be necessary. During this interim period, only maintenance material from the MCR project will be disposed at any of the expanded ODMDS sites or site E.

In the past, disposal management has allowed discharge of material to occur anywhere within the site boundaries. Over the years, hopper dredge design and navigational positioning accuracy has improved to the point where the dredges are essentially pinpoint dumping rather than dispersing the material. Given these changes in technology, plus an improved understanding of sediment resuspension and dispersion patterns, the Corps and EPA have concluded that disposal practices must be changed as well as site size reevaluated. Accordingly, dredgers will be required to increase their discharge times while under power through the sites in order to more broadly disperse the sediment. This change will minimize the thickness of deposition on the bottom, although it will necessarily increase the area of deposition. This practice will be most applicable to disposal events at sites A, B, and E. While this same practice normally will be employed at site F also, because of its greater size, some experimentation with point dumping may occur during the interim period. Additionally, discharge locations will be rotated throughout site F. For example, one year's dredging may be disposed in the

northwestern quadrant and the following year's dredging discharged into the southeastern quadrant.

Alternatives. Alternatives to ocean disposal were identified and evaluated in the EPA EIS (1983) prepared to support site designation. Increased use of disposal within the estuary, use of upland sites, and use of a site off the continental shelf were reevaluated but dropped from detailed consideration as explained below. Alternatives that were considered, in addition to the proposed temporary expansion, include:

- 1) permanent expansion of the existing ODMDS sites;
- 2) use of other existing ocean disposal sites;
- 3) designation of new ocean sites;
- 4) different site management; and
- 5) no action.

Alternatives Eliminated from Detailed Consideration: Use of estuarine disposal sites was evaluated as part of the original designation. Columbia River Estuary sites are limited in number and capacity. Resource agencies generally favor limited disposal within the estuary due to the potential for adverse impacts to aquatic resources. Accordingly, returning the approximately five million cubic yards dredged from MCR into the estuary is both inefficient and environmentally questionable. It is possible that there will be some increased use of estuarine disposal sites because only MCR material will be discharged at the ODMDS sites.

Upland disposal was also evaluated as part of the original designation. The constraints noted have not changed. Dredging of the MCR project must be done by hopper dredge. Disposal to any upland location would require development of an off-loading site and double handling of the material. In any event, very few upland sites are available. None have been identified that could

accommodate the quantities of material dredged from the mouth of the Columbia River annually. The Columbia River Estuary Regional Management Plan (McColgin, 1979) recognized the limited capacity and greater economic costs associated with upland disposal of MCR dredged materials, and recommended ocean disposal in lieu of land disposal. During the development of the Dredged Material Management Plan (DMMP), "...shore land sites were identified, and it was soon apparent that sites that would meet environmental and economic standards are not of sufficient capacity to providing for disposal needs over the next 20 years." The DMMP concluded that "(the materials at the MCR are clean sands and do not require pumping ashore to avoid pollution. Because most of the dredging is accomplished with hopper or clamshell dredges, upland disposal at any site would require pump ashore capability or rehandling, resulting in greatly increased cost. Accordingly, this option was eliminated.

A continental shelf site was initially eliminated from consideration during site evaluation and promulgation of the existing disposal sites. As a result, no such site exists and one would have to be designated (see designation of new sites). In addition, conditions have not changed to offer any environmental advantage to the use of a site off the continental shelf over use of sites located closer to the dredging location. A site does not need to be of greater distance from shore than is required to comply with MPRSA and related criteria and to minimize conflicts with important resources. As a dis-incentive, transportation costs, site sampling and testing costs, and post-disposal monitoring costs are greatly increased at an off the continental shelf site. Therefore, disposal of a site off the continental shelf is not, in this case, considered necessary or practical.

Alternatives Considered in Detail: Five alternatives to the proposed action were carried through and considered in some detail.

- 1) permanent expansion of the existing ODMDS sites;
- 2) use of other existing ODMDS sites;
- 3) designation of new ocean sites;
- 4) different site management; and
- 5) no action.

Permanent Expansion of the Existing ODMDS Sites. Under this alternative, the temporary expansion which is the proposed action would be permanent. Although this is within the administrative scope of EPA and would result in no greater environmental effect than the temporary expansion, the action makes no allowance for future needs. The LTMS being prepared by the Corps indicates that there will be increased need to ocean dispose of maintenance dredged material from the Columbia River estuary for the current 40-foot channel. A reconnaissance study to deepen the existing channel was conducted by the Corps and a feasibility study is expected to be initiated in early fiscal year 1993. Construction and maintenance of the deeper channel, if authorized by Congress, could generate significant additional volumes of material. A critical item in the feasibility study for the deeper channel will be the need for additional ocean dumping capacity. Given the current mounding problem, the preliminary results of the LTMS, and the impending feasibility study, it was deemed prudent to take a comprehensive approach to dredged material disposal at the mouth of the Columbia River. Permanent expansion of the existing ODMDS sites will be evaluated as a long-term solution. Accordingly, permanent expansion at this time was considered inappropriate.

Use of Other Existing ODMDS Sites. The nearest existing ODMDS sites other than the four ODMDS at the mouth of the

Columbia River are located offshore of the mouths of Willapa Bay and Grays Harbor, Washington, to the north, and offshore of Tillamook Bay, Oregon, to the south. These sites are well beyond the economic haul distance for the MCR project and are not considered to be viable alternatives to the MCR ODMDSSs.

Site E of the MCR ODMDSSs is not being expanded, however this site currently is used only as a "safety valve" site when adverse weather conditions do not allow the hopper dredges to safely cross the bar to dispose of material at one of the other ODMDSS sites. Site E does not have sufficient capacity to accept all, or more than a minimal increase of volume from the MCR project because of the size and the potential for dredged material migrate from site E and re-shoal the navigation channel due to currents and waves. Accordingly, expanding use of site E alone is not seen as a practicable solution to expansion of other MCR ODMDSSs.

Significant mounding has already occurred at sites A, B, and F, creating navigation concerns, as previously discussed. Expansion of site boundaries and use of only one of these existing ODMDSSs would provide a place to dispose of annual maintenance dredging for a very short term, approximately 1-2 years depending on the expanded site boundaries, total volumes of material dredged in any single year, and the amount of dispersion that actually occurs. Given the large volume of material that is annually dredged and disposed from the MCR project, use of any single site would inevitably create a mound at that location. The ability to manage the dredged material disposal is constrained and would serve only to exacerbate the mounding problem at one location rather than to potentially avoid and/or reduce the problem. Merely concentrating what is judged to be an unsafe and unacceptable adverse condition at only one location is judged to be an inappropriate management response. Accordingly, this alternative was rejected as unacceptable.

Designation of New ODMDS Sites. Designation of new, entirely separate ocean sites as either a temporary or permanent solution would require further studies to identify and characterize potential sites. Site designation would still have to follow Corps and EPA procedures, including preparation of appropriate environmental documents and selection (under section 103 by the Corps) and formal rule making (under section 102 by EPA) anyway. This process would take much longer than temporary expansion of the existing sites ;and is would not be significantly dissimilar to the proposed action, other than that continued use of the current sites would exacerbate formation of mounds, or dredging and disposal of MCR material would have to be curtailed. Neither option is judged to be prudent or acceptable to the federal government.

Different Site Management. Different site management would consist of discharging the material more evenly within the existing sites. Although different site management is needed in any event, the extent of the current mounding condition, and the restricted size of the ODMDSs does not allow the flexibility to evenly spread MCR project sediments such that without continued mounding. Additionally, this alternative would not provide a long-term solution.

No Action. The no-action alternative was eliminated because continued use disposal at the MCR sites would definitely result in development of mounds and a hazardous condition to navigation to go unchecked. Dredged material is already exceeding site boundaries at the sites which is arguably a violation of the conditions of use implied in the original designation. Ignoring this developing condition is not a prudent or responsible management option.

Selection of Preferred Alternative. In the judgement of Region 10 EPA and Portland District Corps, immediate and

proactive attention to the development of mounds is a necessary and appropriate response. Both agencies have reviewed recently collected monitoring information at sites A, B, and F and have jointly concluded that this information is sufficient to support expansion of these sites, require changes in disposal operations for use of the sites, and to begin development of a long-term management plan for dredged material disposal at the mouth of the Columbia River. The existing information are not considered sufficient to direct EPA and the Corps to select a long-term solution to the MCR ocean dredged material disposal at this time. This question will be more thoroughly addressed in conjunction with other proposed actions (i.e., the proposal to deepen the Columbia River channel). While it is anticipated that a long-term solution would include permanent expansion of some or all of the existing sites and/or designation of one or more new disposal sites, the input by other federal and state agencies, the primary users (i.e., port districts), and the public in scoping necessary studies and development of a long-term management plan is a necessary and appropriate measure. Accordingly the proposed action was selected as the preferred alternative by EPA and the Corps.

Existing Environment

Introduction. Several physical and biological studies have been conducted in the Columbia River offshore area since the mid 1970's including the Dredged Material Research Program; Mouth of the Columbia River Ocean Disposal Site Designation EIS; Columbia River at the Mouth, Channel Deepening Feasibility Study/EIS, and recent and ongoing site monitoring and testing studies conducted for the Corps and EPA by the National Marine Fisheries Service (NMFS). Information from these studies have been considered in the preparation of this EA and are referenced as appropriate.

The area off the mouth of the Columbia River is a productive biological environment that is influenced by a variety of complex physical processes. The major short-term processes that affect the area are tides and, secondly, local winds and currents. River flow also has a major seasonal impact on the area, the extent of which depends on the volume of flow.

Benthic Invertebrates. The MCR area exhibits a considerable seasonal and yearly variation in community structure and species composition. Seasonal variability is due primarily to changes in sediment type by deposition from the Columbia River and winter storms, Yearly variation is thought to be more significantly influenced by changes in Columbia River flows.

In general, benthic invertebrate density at the MCR increases offshore and to the north. This is likely a result of the increased stability of sediments offshore due to a lack of disturbance at winter storm depths and the presence of tube-dwelling polychaete worms that help stabilize the sediment. These areas are also outside of an area of major deposition of Columbia River sand and receive the fine-grained silts and organics which increase overall productivity. The high energy area inshore is less productive and generally has lower density and diversity. This is likely due to the instability of the sediment and lack of input of silt and organics.

Fisheries. A variety of both anadromous and resident fish species occur as both adults and juvenile stages within the oceanic area offshore of the Columbia River and estuary. Anadromous species such as salmon, steelhead, shad, lamprey, smelt, herring and sturgeon are present in the area as adults prior to migrating to spawning grounds in the estuary or upstream in the Columbia River. Juveniles of these species are present following their migration out of the river or estuary into the ocean. Some remain in the near shore area for various periods of

time feeding and rearing, while others move directly offshore. Juvenile flatfish in particular rear in the inshore area.

Resident species occur throughout the year with many using the estuary as a rearing and nursery area. Species present include various species of flatfish, rock fish and other demersal species.

Durkin and Lipovsky performed a detailed analysis of the demersal fish species present in the offshore area and Bottom, et al. completed an assessment of the fish within the estuary. Fifty-one species of fish were collected of which 11 represented 95 percent of the total catch.

In general there are two species assemblages: one north of the river mouth and one south. The northern assemblage included anchovy, white bait smelt, longfin smelt, Pacific tomcod, pricklebreast poacher, and showy snailfish. The southern assemblage includes the shiner perch, Pacific staghorn sculpin, Pacific sanddab, butter sole and sand sole.

Occurrence of adult migratory species off the Columbia River is correlated primarily with their spawning period. Although some species such as coho salmon may spend large portions of their lives in the area, the actual residence time has not been determined. Juvenile species appear at varied times of the year. Some species migrate immediately into the ocean, while others rear in the estuary or immediately offshore for varying lengths of time.

Commercial Fishing. Almost all of the Columbia River offshore area is used for some type of commercial fishing activity. The major fisheries are for crab, bottom fish, salmon, and shellfish. Crab fishing is done by pots and occurs predominantly from winter to late summer for the Dungeness crab

(Cancer magister). Bottom fishing by trawling occurs year-round. The fishery is predominantly for flatfish and rock fish species as well as pink shrimp. Trawling is also done throughout the area except in established shipping lanes. Commercial and recreational salmon fishing also occurs over much of offshore area. Species include, Chinook, coho, and to a lesser extent pink salmon. The season varies yearly and depends upon the catch quota set by the Pacific Fisheries Management Council.

Marine Mammals and Birds. Twenty-three cetacean species occur along the Oregon coast. The larger cetaceans (whales) typically occur as migrants. The most prominent example is the California gray whale. Essentially, the entire population of 11,000 to 15,000 animals migrates through the offshore areas. Southbound gray whales are present from November to early February; the northward migrating begins in mid-February and extends until May. Pinnipeds observed in the MCR vicinity include harbor seals, California sea lions and northern sea lions.

Pelagic birds are extremely numerous off the Columbia River. Gabrielson and Jewett reported sooty shearwater in uncountable numbers off the Oregon coast during their southward migration in August and September (ca. 1930's). Such mass movements still occur. Northern anchovy and squid were shearwater prey species, according to Gabrielson and Jewett. Other shearwater species including alcids, albatrosses, gulls, terns, jaegers, phalaropes, storm petrels, cormorants, and pelicans, occur off the Columbia River mouth. These species are most numerous during and fall when migrants are passing through.

Threatened and Endangered Species. A current list of threatened and endangered species was requested from the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) specifically for the proposed site expansion.

Information on the species listed by both agencies is discussed in biological assessments prepared as a requirement of the Endangered Species Act. Information on currently known endangered, threatened or candidate species is described in the following paragraphs and is based on these assessments and biological assessments previously prepared for designation of ocean dumping sites at the mouth of the Columbia River and other offshore locations along the Oregon Coast.

The USFWS listed the bald eagle, peregrine falcon, brown pelican, and snowy plover as occurring in the vicinity of the disposal sites. Any use that does occur appears transient in nature; no nesting pairs are located nearby and there is limited use by migrants. There are no significant concentrations of prey that occur at the proposed expanded disposal sites.

NMFS listed the gray, humpback, blue fin, sei, right, and sperm whales and leatherback sea turtle as occurring in the vicinity of the disposal sites. Coastal waters off Oregon serve as a migrational corridor for gray whales moving to and from their breeding, calving and assembly areas off mainland Mexico-Baja California, and their primary foraging areas in the Arctic. Gray whales summer along the Oregon coast with most sightings occurring within 500 m off shore. Near shore areas with silty sediments appear to be foraging areas for this species.

The humpback, right, fin, blue, sei, and sperm whales may occur in the project area, but information on numbers, distribution and feeding habits is lacking other than in a general sense. Blue whales occur off the Oregon coast primarily in May-June and August-October. Humpbacks occur primarily between April and October with peak numbers occurring June, July, August. Sperm whales occur as migrants and some may summer off the Oregon coast. Fin whales range well off the coast during

summer. Right whales may occur off the Oregon coast during winter; sei whales winter south of Oregon.

The leatherback sea turtles occurrence off the Oregon coast is associated with the appearance of albacore which, in turn, is strongly associated with warm waters of the Japanese current. These warm waters generally approach the Oregon coast in late summer, but typically occur 30 to 60+ miles offshore. It is expected that leatherback sea turtles would only be casual visitors to the project area which lies well inshore from their normal range.

Environmental Consequences

The areas proposed for the expansion of Sites A, B and F have not previously been used for the disposal of dredged material. Some of the sediments disposed at the sites, however do move into the expanded areas as a result of littoral drift and downslope movement. The effects of previous disposal at the existing sites were discussed in the earlier referenced documents. In summary, material deposited at the sites slowly moves along the coast with the littoral drift system. Primary movement is to the north and slightly offshore. Short-term increases in turbidity occur, but such impacts are minor. No significant biological impacts have been associated with disposal at these sites.

In, general, dredged material disposal presents four potential problems to aquatic organisms: (1) direct burial, (2) temporary increases in turbidity, (3) changes in physical and chemical characteristics of sediments, and (4) the possible introduction of pollutants. It is difficult to distinguish significant adverse effects caused by sediment disposal from changes due to natural variability in species abundances.

Releases of dredged material do not produce a persistent turbidity plume (Boone et al., 1978), thus decreased light transmission with a concomitant decrease in phytoplankton primary productivity is not expected to occur. In addition, no detectable changes in dissolved nutrient or trace metal concentrations accompany disposal; therefore, no significant adverse impacts on phytoplankton productivity are expected.

Benthic organisms at the MCR Interim Sites are subjected to burial and slight changes in sediment texture. Adverse impacts due to disposal-related turbidity are improbable because post disposal, suspended particulate concentrations are not significantly different from predisposal concentrations (Hinton, et. al., 1991). Similarly, because no detectable amounts of trace contaminants are released from the dredged sediments subsequent to dumping, significant impacts on the benthos due to the introduction of pollutants are not expected (Richardson et al., 1977).

The dredged material disposal sites are repopulated by benthic organisms which either burrow up through the substrate or migrate into the site from the adjacent shelf. A temporary recolonization process involving the introduction of new species was evident at Site F following disposal of fine-grained sediments for the Tongue Point Project. (Hinton et al., 1991).

The effects of disposal on demersal fish and shellfish were evaluated by Durkin and Lipovsky (1977). Conclusions drawn from this study were limited by insufficient predisposal data and by seasonal variabilities in the abundances of natural populations in the MCR area. Nevertheless, the authors suggest that dumping results in a 3- to 6-month decrease in the numbers of finfish species and individuals. In addition, individual fish captured following dumping tended to be smaller than individuals of the same species from control sites.

Demersal finfish within the MCR disposal sites are not subjected to increased turbidity, toxic materials, or burial by released dredged materials. Dredged sediments sink rapidly without significantly increasing suspended particulate concentrations, and therefore suffocation of finfish by gill-clogging is not expected. Because of their mobility, demersal finfish can prevent burial by escaping from released dredged materials. Durkin and Lipovsky (1977, p. 141) state "sediment removal from the navigation channel annually exceeds 4,000,000 cubic meters, but deposition at Sites B and F in prior years revealed no apparent lasting effect on the diversity and number of finfish."

Effects of disposal on shellfish, particularly dungeness crabs, are unclear (Durkin and Lipovsky, 1977), although no significant impact was evident. Natural seasonal variations in shellfish abundance are greater than predisposal or post disposal changes. Chang and Levings (1978), who evaluated the effects of burial on Dungeness crab variability in the laboratory, claim that "exposed crabs are able to avoid burial except during extremely rapid deposition" and can escape from up to 10 cm of sediments. Crabs directly beneath the path of the hopper dredge, where sediment deposition exceeds 10 cm may suffocate. Dredged material is predominantly clean sand and resistant to transport; therefore, the impacts of dredged sediments on shellfish will be restricted to areas within the site.

Dredged material disposal involves negligible risk to marine mammals. Marine mammals tend to avoid human activities, therefore the probability of an animal colliding with a hopper dredge or released dredged sediments is small. In addition, dumping will not likely cause injury. Pinnipeds (seals and sea lions) and cetaceans (whales, dolphins, and porpoises) are strong swimmers and can escape the sediment release zone.

Sea lions and fur seals breed, feed, and migrate in the vicinity of the MCR (Everitt et al., 1980). Disposal at the MCR sites will neither significantly alter the breeding and haulout areas nor disturb the food supply of the harbor seals, California sea lions, or sea otters (CE, 1975). Gray whales do not generally migrate through the MCR area during the dredging season; humpback and finback whales occur within 100 miles of the coast during summer, but their appearance nearshore is rare. Dredged materials from MCR do not contain significant quantities of toxic substances that could possibly bioaccumulate in the food sources of migratory cetaceans.

Threatened and Endangered Species. Several species of baleen whales and sperm whales migrate offshore of the Oregon-Washington coast. Only gray whales occur consistently within the vicinity of the MCR. However, gray whales migrate past MCR from November to December and from February to April, whereas dredging operations occur from mid-April to mid-October. Therefore, infrequent and localized ocean disposal of dredged material will have no significant effect on the food source or migratory routes of these endangered species.

Cultural Resources Shipwrecks are the most probable (and recoverable) cultural resources expected to exist in the study area. The potential resource base includes a wide variety of sail as well as mechanically powered vessels. Vessels may include those engaged in early exploration of the coast and the fur trade (1790's - 1850); those limited to the coastal trade supplying pioneer settlements (1820's to early 1900's); and vessels engaged in the parallel development of the international trade.

Shipwrecks are considered the most likely cultural resource for the following reasons: (1) documentary evidence indicates numerous vessels that wrecked over time; (2) given the size of these cultural resources and the project's depositional environment, preservation of some shipwrecks is likely in portions of the MCR; and (3) records of shipwreck sites are sufficiently accurate that the likely distribution of this resource can be determined.

Prehistoric cultural resources are unlikely to be found in the project area. The assumption that Native Americans could have been present in the project area is based on the fact that 5,000 years ago sea levels were considerably lower than present levels. However, any prehistoric sites present on former shorelines are now inundated by present ocean levels and buried under substantial amounts of sand deposited during recent geological times. Though it is unlikely that wrecked vessels are present, records indicate that some of the vessels damaged at interior bar locations jettisoned cargo and in one instance, cannons, in an attempt to lighten vessels and pass over shoals. These abandoned items may still be present along former shoals. In general, areas beyond the 60 foot contour are low probability areas because this is the area of minimum current transport of sand. Most vessels wrecked on beaches, surf lines or shoals; thus, low frequency of vessels loss and poor preservation context support the low probability designation for locations deeper than the 60 foot contour.

Coordination

A Public Notice and Draft Environmental Assessment addressing the proposed action were issued for 30-day review on August 7, 1992. The following agencies provided comments in response to the Public Notice:

U.S. Environmental Protection Agency Region X
U.S. Fish and Wildlife Service
National Marine Fisheries Service
Oregon Dept. of Environmental Quality
Oregon Dept. of Land Conservation and Development
Oregon Dept. of Fish and Wildlife
Washington Dept. of Ecology
Columbia River Estuary Study Taskforce

EPA Region X provided suggested revisions to the environmental documents which more clearly reflected the partnership nature of the proposed site expansions. They also informed us of their concurrent site designation/public notice action pursuant to EPA Section 102 authority. The suggested revisions have been incorporated into the Environmental Assessment and Section 103 Evaluation.

Oregon Dept. of Land Conservation and Development reviewed the proposed action for consistency with the Oregon Coastal Management Program. They determined that an amendment to the Clatsop County Estuary Management Plan would be necessary for consistency. We concurred that the plan amendment would be required for expansion of Site A. Application for a zone change and plan amendment was made with Clatsop County and the County Board of Commissioners approved the amendment effective May 14 1993.

Columbia River Estuary Study Taskforce comments identified some inconsistencies in the Environmental Assessment. They also pointed out the need to amend the Clatsop County Plan. The Environmental Assessment has been corrected or clarified to reflect their comments.

Consultation Requirements

The status of administrative actions to comply with applicable environmental consultation requirements is summarized below:

a. Cultural Resources Acts A review of the latest version of the National Register of Historic Places and Addenda shows that the expanded disposal area does not contain any registered properties or properties determine to be eligible for nomination to the National Register.

b. Clean Water Act of 1977 (33 USC 1344). Section 401 water quality certifications have been received from the states of Oregon and Washington.

c. Coastal Zone Management Act of 1973, as amended. A coastal zone consistency determination was prepared for the site expansion. Concurrence with this determination has been requested from the States of Oregon and Washington. The State of Washington has concurred in our determination. The State of Oregon has concurred pending compliance with the Clatsop County Plan. We have determined that we must comply with the plan for expansion and use of Site A since it is the only site within the jurisdiction of the county. Application for plan amendment with Clatsop County was initiated, recommended for approval by the County Planning Commission and is pending approval from the County Board of Commissioners.

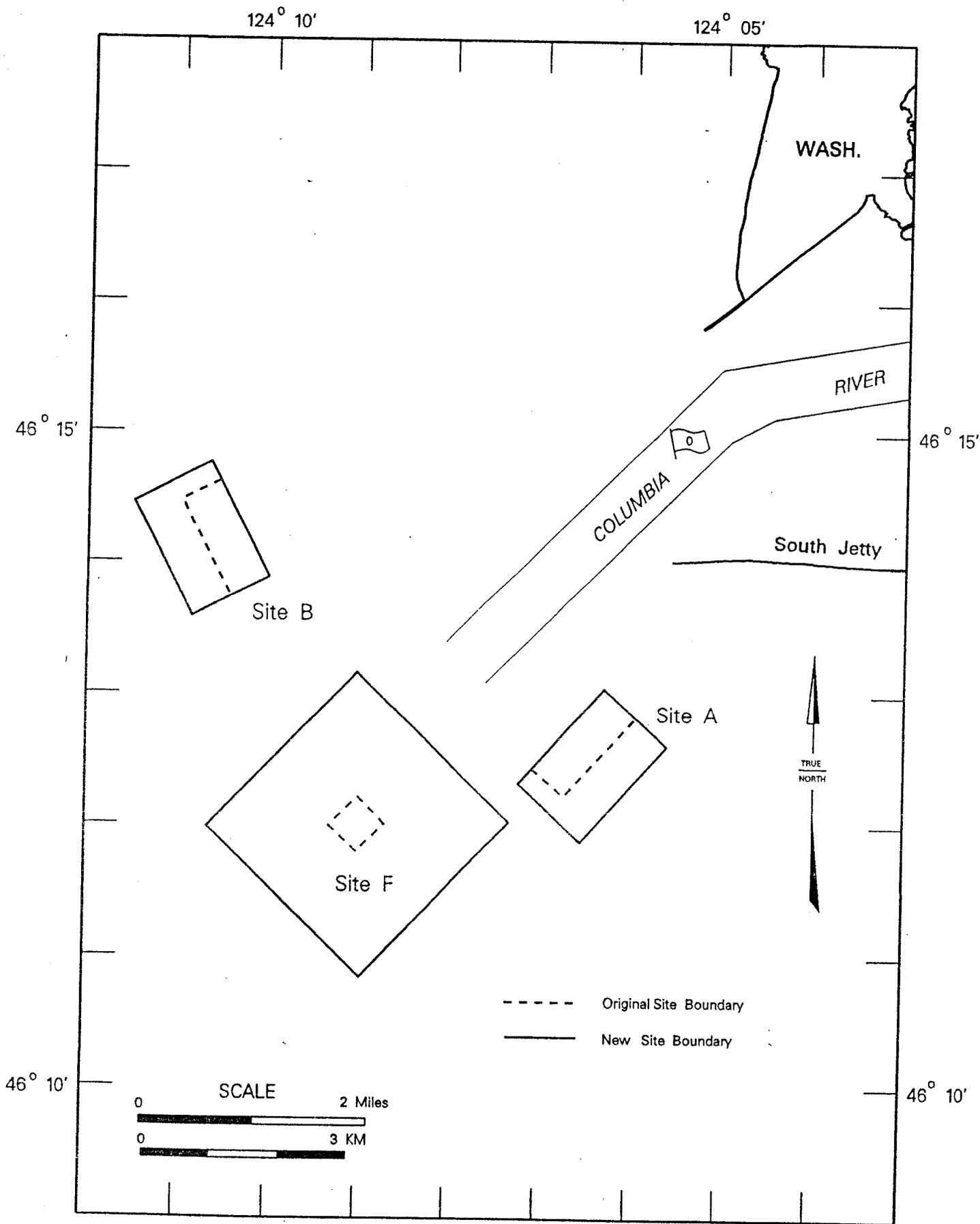
d. Endangered Species Act of 1973, as amended. Biological assessments have been prepared addressing effects on listed species. The assessments concluded that the proposed site expansions would have no impact on these species or their habitat. National Marine Fisheries Service has concurred with this assessment. A copy of their concurrence letters is attached.

e. Fish and Wildlife Coordination Act. The proposed expansions have been coordinated with the appropriate Federal and state fish and wildlife agencies through the circulation of this EA, Corps public notice, and through the formal rule making undertaken by EPA. A formal fish and Wildlife Coordination Act report is not required for this project because the act does not apply specifically to O&M activities or to ocean disposal.

f. Marine Protection, Research and Sanctuaries Act. A Section 103 Evaluation has been prepared in compliance with the Act and is included with the EA and the Corps' public notice. EPA is initiating formal site designation procedures under Section 102 of the Act. These actions by the EPA and Corps are being undertaken in concert. Because the EPA process is more time consuming, the Corps public notice process and 103 selection authority is being done to administratively cover any site use actions until the EPA process is completed. Formal designation by EPA will supercede the 103 selection.

g. Executive Orders 11988 and 11990. No floodplain or wetlands would be affected by the site expansion.

h. Analysis of Prime or Unique Farmlands. No farmlands would be affected by the proposed action.



124° 10' **FIGURE 1** 124° 05'

46° 10' MOUTH OF THE COLUMBIA RIVER DISPOSAL SITE LOCATIONS 46° 10'

SECTION 103 EVALUATION
OCEAN DISPOSAL SITES A, B AND F
MOUTH OF THE COLUMBIA RIVER
OREGON AND WASHINGTON

INTRODUCTION

This evaluation addresses the temporary expansion of disposal Sites A, B and F as provided for by EPA regulations (40 CFR 228.4(e)(2)). This designation is a temporary measure to allow the use of these sites by the Corps of Engineers until necessary site designation studies can be conducted and EPA can complete the final site designation process. For the reasons discussed in this evaluation and the attached environmental assessment (EA), it is no longer considered feasible to continue to use the existing sites with present dimensions. Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA) requires that all actions involving the transportation of dredged material with the intent to dispose of the material in ocean waters be evaluated for environmental effects prior to making the disposal. This evaluation assesses the effects of the discharge using the criteria set forth by the Environmental Protection Agency (EPA) under the authority of Section 102(a) of the act.

The Corps of Engineers and EPA jointly prepared an Environmental Impact Statement (EIS) which evaluated the environmental effects of designating ocean disposal sites off the Columbia River entrance. This EIS, Mouth of Columbia River Dredged Material Disposal Site Designation (ODMDS EIS), included Sites A, B and F and the area proposed for designation. Information from the EIS and other related studies will be referenced and incorporated where appropriate. An Environmental Assessment has also been prepared for the proposed action and is referenced in this document.

PROPOSED ACTION

The proposed action is the temporary expansion of ocean disposal Sites A, B and F and the transportation of dredged material for disposal at this expanded site. Approximately five million cubic yards of dredged material is obtained annually from the maintenance of the five mile Federal entrance channel. The dredging removes restrictive shoals of sedimentary material which is principally clean sand. Dredging is necessary to maintain the Federal

entrance channel to the authorized depths. The work would be accomplished by hopper dredge. Expansion of Sites A and B would more than double their size. Site A boundaries would be expanded approximately 2,000 feet to the southeast and 1,000 feet to the southwest. The boundaries of Site B would expand approximately 2,000 feet to the west and 1,000 feet to the north (Figure 1). The expanded portions of the sites have not previously been used for disposal of dredged material, although sediments placed within the existing boundaries of Site A and B do move into the expanded area as a result of downslope movement. Site F would be expanded from 1,800 feet x 1,800 feet to 10,000 feet x 10,000 feet. The existing sites have been used annually since 1957, and received final site designation on April 29, 1983. The present size of the existing sites are no longer considered adequate because of slow material dispersal rates and mounding problems identified as a result of annual bathymetric surveys conducted since 1981. This is creating a hazardous situation which occurs in the form of breakers apparently created as waves form over the mounds. Commercial shippers, crabbers and the U.S. Coast Guard have expressed concern over this situation. With the expansion of the sites, a management plan would be developed to distribute dredged material over the expanded areas, thereby alleviating the mounding problem. Use of the expanded sites would begin in the summer of 1992 and continue for a period of five years (as coordinated with EPA).

The area offshore of the Columbia River entrance has been studied and reported in the ODMDS EIS. Additional studies have been conducted around Site F during a four year monitoring program following Tongue Point Disposal. Further discussion regarding the area and resources to be affected by the proposed actions, as well as the environmental effects, is provided in the Environmental Assessment prepared for this action.

LOCATION OF THE DISPOSAL SITES

The disposal sites are located approximately four miles offshore of the entrance to the Columbia River at depths of 23 to 24 fathoms (135 to 145 feet). See Figure 1 for the location and configuration of the expanded sites.

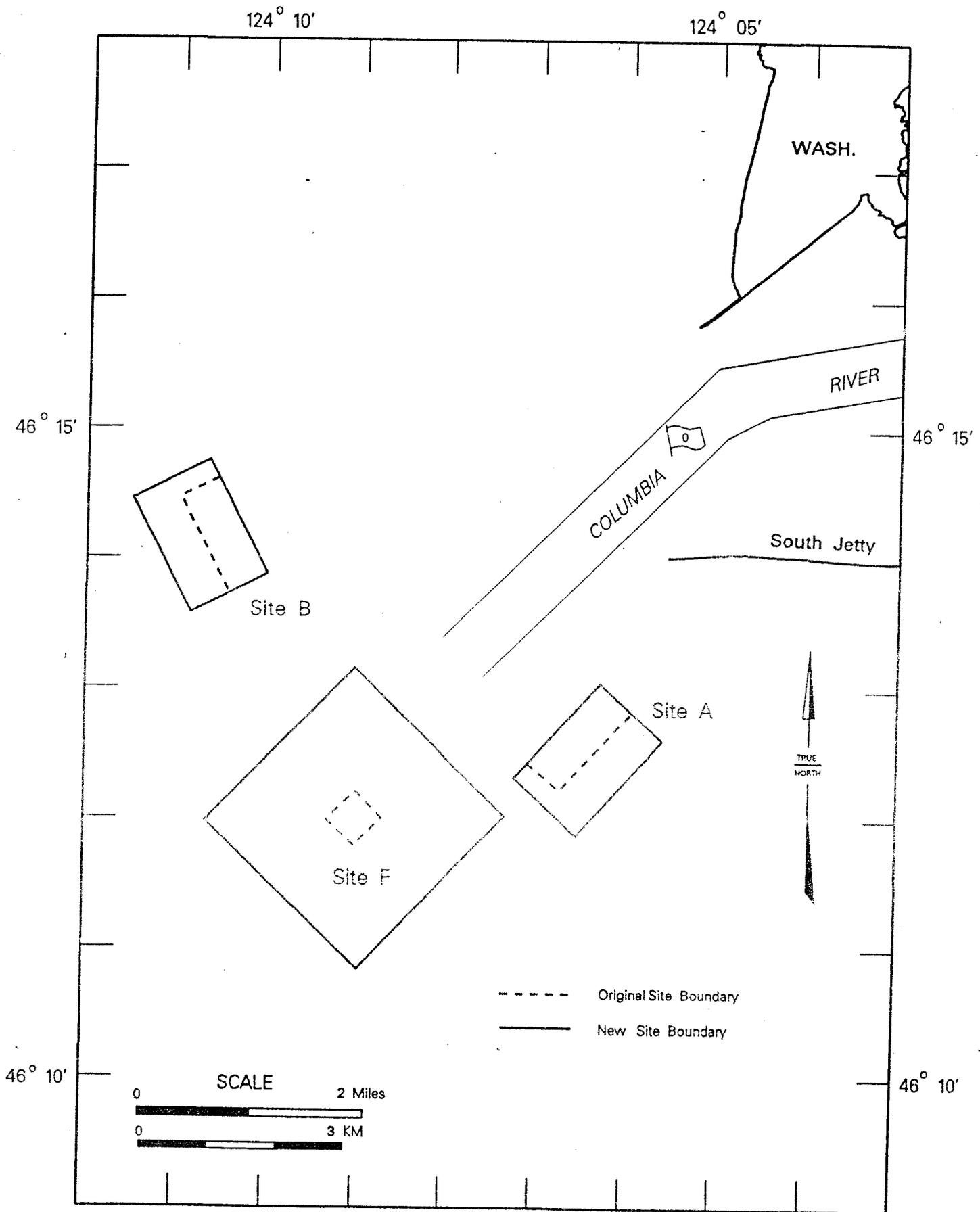


FIGURE 1
MOUTH OF THE COLUMBIA RIVER DISPOSAL SITE LOCATIONS

DISPOSAL PLAN

Prior to use of the disposal site, a management plan would be developed to provide for even distribution of dredged material over the entire area. The dredges would be required to deposit material in a dispersive manner.

EVALUATION OF NEW DISPOSAL SITES

EPA regulations require the evaluation of an ocean disposal site based on 11 specific criteria and five general criteria, as shown in 40 CFR 228.5 and 228.6. The following evaluation addresses these criteria. This evaluation is based on information established in the ODMDS EIS and information from monitoring activities since formal site designation.

Specific Criteria (40 CFR 228.6)

1. Geographic Location. Figure 1 indicates the location of the proposed disposal sites. The sites lie in 23 to 24 fathoms of water approximately four miles offshore of the entrance. The geographic coordinates and size of the existing and expanded sites are shown in Table 1.
2. Distance from Important Living Resources. The biological resources within the proposed disposal area are described in detail in the ODMDS EIS. In summary, seasonal variability of benthic species in the vicinity of the sites is high. The most abundant epibenthic species collected during trawl sampling of the area in 1986 and 1990 include the English sole, butter sole, northern crangon, Pacific sanddab, and whitebait smelt. Threatened and endangered species in the vicinity of the proposed disposal site include the gray whale, bald eagle, peregrine falcon, brown pelican and Snake River salmonids. A detailed discussion of the listed species in the area can be found in the biological assessments prepared for those species and in the Existing Environment section of the Environmental Assessment prepared for Sites A, B and F expansion.
3. Distance from Beaches and Other Amenities. Sites A and B are located within five miles of the Long Beach peninsula. Site F is located within seven miles of Clatsop Spit. These locations are essentially out of the littoral system and a small percentage of material is redistributed to local beaches.

Table 1

OFFSHORE DISPOSAL SITES - BOUNDARY COORDINATES AND SIZE CHARACTERISTICS

<u>Site</u>	<u>Boundary Coordinates</u>	<u>Dimensions, ft</u>	<u>Area, mi²</u>	<u>Average Depth ft.</u>
A	46°-13'-03" N, 124°-06'-17" W 46°-12'-50" N, 124°-05'-55" W 46°-12'-13" N, 124°-06'-43" W 46°-12'-26" N, 124°-07'-05" W	5000 x 2000	0.359	60
A	Expanded	6000 x 4000	0.861	70
B	46°-14'-37" N, 124°-10'-34" W 46°-13'-53" N, 124°-10'-01" W 46°-13'-43" N, 124°-10'-26" W 46°-14'-28" N, 124°-10'-59" W	5000 x 2000	0.359	70
B	Expanded	6000 x 4000	0.861	110
E	46°-15'-43" N, 124°-05'-21" W 46°-15'-36" N, 124°-05'-11" W 46°-15'-11" N, 124°-05'-53" W 46°-15'-18" N, 124°-06'-03" W	4000 x 1800	0.258	70
F	46°-12'-12" N, 124°-09'-00" W 46°-12'-00" N, 124°-08'-42" W 46°-11'-48" N, 124°-09'-00" W 46°-12'-00" N, 124°-09'-18" W	1800 x 1800	0.116	125
F	Expanded	10,000 x 10,000	3.59	125

4. Types and Quantities of Material to be Disposed. Sediments to be dredged from the entrance channel are principally clean sands of marine origin. Median grain size is relatively constant at 0.1 - 0.2 mm and volatile solid content varies between 0.3 and 1.0 percent. The material meets the exclusion criteria as specified in CFR 227.13. Approximately five million cubic yards of this material are dredged annually.

Future dredged material volumes disposed at the sites may exceed present volumes if the sites are used in association with the proposed Columbia River channel deepening project, or if other dredged material is disposed at the sites. Any materials disposed at these sites must be within their capacity and must comply with EPA dredged material criteria in Part 227.13 subpart B of the Ocean Dumping Regulations (40 CFR 220 to 229). Additional studies will be conducted, as necessary, to develop a permanent solution to the disposal issue.

5. Feasibility of Surveillance and Monitoring. Surveillance of the disposal sites can be made from shore facilities or vessels. Approaches to the Columbia River entrance, including the proposed expanded disposal areas, are currently surveyed annually by the Corps. Surveillance during heavy weather conditions is expected to be unnecessary since heavy weather curtails ocean disposal operations.

6. Dispersal, Horizontal Transport, and Vertical Mixing Characteristics of the Area. Average currents in the region generally flow parallel to bathymetric contours. Local current strength and direction, however, reflect the variability of local winds. Sediments are expected to settle rapidly with no persistent turbidity plumes. Resuspension of material will be at a maximum during winter storms.

7. Effects of Previous Disposal. The areas proposed for expansion have not previously been used for the disposal of dredged material. Some of the sediments disposed at Site A and B however, do move into the expanded area as a result of downslope movement. The effects of previous disposal at the existing sites are discussed in the ODMDS EIS and by Hinton, et. al., 1991. Primary movement is to the north and slightly offshore, short-term increases in

turbidity occur, but such impacts are minor. No significant biological impacts have been associated with disposal at these sites.

8. Interference with Other Uses of the Ocean. Commercial and recreational uses occurring in the vicinity of the disposal site include marine navigation and commercial and recreational fishing. Disposal activities would have minor effects on these uses. Commercial fishing occurs further offshore from disposal Site F, but no significant impact would be anticipated. The extent of recreational fishing in the vicinity of the sites is not known, but significant impacts to this activity would not be expected.

9. Existing Water Quality and Ecology. Water quality in the proposed disposal site and adjacent area is discussed in the ODMDIS EIS. In summary, water quality analysis for surface and bottom water did not indicate an atypical or polluted condition for seawater of the Pacific Northwest.

10. Potential for Recruitment of Nuisance Species. Organic material is the major component of dredged material which might attract nuisance species. The clean sand to be disposed at the sites does not include this component.

11. Existence of Significant Natural or Cultural Features. No known significant natural or cultural features exist at or near the disposal site.

General Criteria (40 CFR 228.5)

1. Minimal Interference with Other Activities. The location of existing disposal sites was based upon reasonable distance from the entrance, depth of water, biological conditions, historical use, estimated amount and type of dredged material, and the desire to keep the sand from reentering the channel. Disposal activities in the expanded portion of the sites are not expected to result in more than minimal interference with activities in the marine environment.

2. Minimizes Changes in Water Quality. The nature of material to be disposed is primarily clean sand which meets the exclusion criteria, therefore no contaminants or suspended solids are expected to be released. Periodic testing and evaluation of material proposed for dumping would occur as necessary to insure acceptability.

3. Interim Sites Which Do Not Meet Criteria. There are no interim sites in the vicinity. The proposed disposal site expansions have been selected to allow the distribution of dredged material over a larger area, thereby alleviating the mounding problem and resulting safety hazard at existing sites.

4. Size of Sites. The size of the existing disposal sites was originally thought to be adequate to handle annual dredging activities. Sediments disposed at the sites were expected to be rapidly reworked by strong tidal and surface-wave generated currents. Winter reworking was expected to be especially intense, resulting in the erasure of any mounding. Bathymetric surveys conducted since 1981 have shown that this has not been the case, however, as much of the material disposed annually has not been dispersed. Increasing the size of the sites and imposing a different management disposal scheme are expected to be adequate to handle dredged material from each season and will allow the existing mound to eventually dissipate. Annual bathymetric surveys will be conducted as part of the site monitoring, and the results will be used to determine if the expanded sites are adequate or if mounding is still occurring and additional area is required.

5. Sites Off the Continental Shelf. Such sites were eliminated from further consideration during site evaluation and promulgation of the existing disposal sites. Conditions have not changed to offer any environmental advantage to the use of a site off the continental shelf over expanding one of the existing, approved sites. In general, the relatively clean sand dredged from the entrance does not warrant selection of a site at greater distance from shore than is required to comply with MPRSA and related criteria. Also, transportation costs, sampling and testing costs, and post-disposal monitoring costs associated with disposal at a continental shelf site would increase significantly over the current costs. Therefore, disposal at a site off the continental shelf is not, in this case, considered necessary or practical.

During supporting studies to determine a more permanent solution to the mounding problem, however, this option will be re-evaluated.

DETERMINATION OF ENVIRONMENTAL ACCEPTABILITY OF DREDGED MATERIAL FOR OCEAN DISPOSAL

The material to be dredged is principally clean sand with a median grain size of 0.1 to 0.2mm. The sediments contain no contaminants of concern in excess levels, and have been excluded from the requirements for further biological and chemical testing as provided in 40 CFR 227.13(b). The sediments are also similar to bottom materials at the proposed disposal site and the entire nearshore area. Future dredged material volumes are addressed under Specific Criteria No. 4 in this 103 Evaluation and in the Environmental Assessment. Additional sediment characterization will occur as needed.

Ocean disposal is essential to the maintenance of the MCR navigation channel as other disposal options are limited to a very few estuary and upland sites. Resource agencies are currently opposed to disposal at other areas within the estuary due to the potential for adverse impacts to productive and other resources.

Existing or potential new upland disposal sites are very limited and could not accommodate the quantities of materials dredged. Upland disposal is also limited by the technical limitations of a pipeline dredge operating in the rough conditions at the Columbia River Bar.

IMPACT OF THE PROPOSED DISPOSAL ON ESTHETICS, RECREATIONAL AND ECONOMIC VALUES

The proposed ocean disposal would not have significant impacts on esthetics, recreational or economic values of the area. Short-term increases in turbidity would occur; however, because the dredged material consists primarily of sand and is free from chemical contaminants, the proposed action is not expected to adversely affect water quality or related recreation or economic values.

IMPACT OF THE PROPOSED DISPOSAL ON OTHER USES OF THE OCEAN

No significant impacts on other known uses of the ocean such as commercial and recreational fishing or navigation; actual or anticipated exploitation of living marine resources; actual or anticipated exploitation of non-living resources, including sand and gravel or other mineral deposits, oil and gas explorations, or structural development; and scientific research and study are anticipated. Use of new, expanded areas would help alleviate mounding at existing sites and remove potential hazards to navigation.

FINDINGS

The material to be dredged has been evaluated according to the criteria in 40 CFR 227 and determined to be suitable for ocean disposal. The proposed expanded ocean disposal sites have been evaluated using the criteria specified in 40 CFR 228.5 and 228.6 and have been determined to be suitable sites for the disposal of material dredged from the Columbia River entrance channel.

On the basis of this evaluation, I find the proposed action acceptable under the provisions of Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972.

Date: 1 June 1993


CHARLES A. W. HINES
Colonel, Corps of Engineers
District Engineer

Stevens

*****start of document*****

U.S. Fish and Wildlife Service
Portland Field Office
2600 S.E. 98th Avenue
Suite 100
Portland, Oregon 97266

September 28, 1992

Colonel Charles E. Cowan, Jr., District Engineer
Portland District, Corps of Engineers
ATTN: CENPF
P.O. Box 2946
Portland, Oregon 97208

Dear Colonel Cowan:

The Fish and Wildlife Service has reviewed the project plans advertised by the following public notice. No significant adverse effects on fish and wildlife, their habitats, or human uses thereof are expected to result from the proposed work or activity. Therefore, the Service has no objection from the standpoint of fish and wildlife to the issuance of permits related to this notice, provided the applicant adheres to all conditions and requirements specified by the Oregon Division of State Lands.

Type of Permit: Section 404 of the Clean Water Act
of 1977 (P.L. 95-217)
Section 10 of the 1899 Rivers and
Harbors Act

Notice No./Date	Applicant Name	Due Date
CENPP-PE-RP-92-07/9-28-92	Corps of Engineers	9/29/92

Other Bureaus of the Department of the Interior do not expect to submit comments on this notice at this time.

Sincerely yours,

Russell D. Peterson
 Russell D. Peterson
 for Field Supervisor
 Acting for U.S. Department of
 the Interior Coordinator

Original Signed by: Russ Peterson

Surnames: none

Document ID: CENPP-PE-RP-92-07

Number of ENCLOSURES transmitted: 0

This is a DRAFT/FINAL copy: FINAL

Version/Revision Number: 1.0

TRANSMITTED TO:

for ACTION: CNPP

for INFORMATION: ODSL

DATE: September 28, 1992

Confirmation copy sent by Beth Larson

regular mail? (Yes/No): No-FAX

***** end of document *****



AUG 27 1992

Reply to
ATTN of: WD-128

Colonel Charles A. W. Hines
District Engineer
Portland District, Corps of Engineers
P.O. Box 2946
Portland, Oregon 97208-2946

RE: CENPP-PE-RP-92-05, Expansion of Ocean Disposal Sites A, B, and F, Mouth
of the Columbia River, Oregon and Washington

Dear Colonel Hines:

This letter provides our formal comments on the subject public notice regarding continued use of the existing sites off the mouth of the Columbia River for discharge of dredged material. As noted in the public notice, the District and Region are working together to resolve the potential problem resulting from mounding at these three sites and to develop a long-term disposal plan to meet future needs. This Section 103 site selection action by the Corps is intended to allow immediate access to the expanded sites for maintenance dredging this fall. Concurrently, the Region is pursuing an expansion action under Section 102 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (MPRSA); a copy of our proposed rule is attached for your information (enclosure 1). We anticipate publication in the **Federal Register** in the next two weeks.

We have separately provided to your Mark Siipola and Steve Stevens our comments and suggested revisions for the environmental assessment and section 103 evaluation that will more clearly reflect the partnership nature of this action. Copies of those two documents are provided as enclosures 2 and 3 for your information. It is our intention that the final environmental documents reflect the joint evaluations and conclusions of the District and Region.

To that end, we wish to clarify the actions proposed in response to the development of mounds at the ocean dredged material disposal sites (ODMDS) off the mouth of the Columbia River. While the current situation does not constitute an imminent hazard to life and property which would warrant an emergency response, EPA and the Corps are in agreement that prudent management action is required now in order to prevent such a situation from developing.

In initial meetings during Summer 1992, EPA and the Corps concluded that an interim solution was required that would allow the Mouth of the Columbia River channel to remain open while studies were conducted to ascertain the extent of the problem, to develop and evaluate alternative solutions, and to prepare a longer term response. Because the feasibility study phase for

deepening of the Columbia River channel is expected to begin in late 1992 or early 1993, coordination of the future disposal needs for the existing maintenance dredging and potential deepening project was advised. Scoping for this comprehensive effort is expected to coincide with initiation of the feasibility study.

It is expected that the long-term response could include designation of new ODMDS, permanent expansion of one or more of the existing ODMDS, de-designation of at least one existing ODMDS, and development of a comprehensive management plan to guide disposal of dredged material from the Mouth of the Columbia River project and the Columbia River navigation project within the estuary. This joint study is anticipated to begin in late 1992 in coordination with the proposed Columbia River deepening feasibility study and be completed in no more than 4 years.

Based on these considerations and understandings, Region 10 EPA concurs with the Corps that this proposed action is necessary and prudent, complies with the ocean dumping criteria, should result in no unacceptable environmental impacts, and does not require preparation of an environmental impact statement. We are prepared to assist your staff in responding to comments generated by this public notice, EA and section 103 evaluation. Please provide us with ten (10) copies of the final environmental documents for our files and distribution to support processing of our rule.

Please continue to coordinate these actions with John Malek, Dredging and Ocean Dumping Coordinator, at telephone (206) 553-1286.

Sincerely,



h Charles E. Findley
Director, Water Division

Enclosures

cc: - EPA-Portland (000)
- Corps-NPD (Reese)
Corps-Seattle (Cagney)
USFWS-Portland
NMFS (Murrell)
Ecology (Elwell)
WDF
WDW
DNR
ODFW (Snow)
ODSL
ODEQ (Foster/Olsen)
- ODLCD (Tobey)
CREST
- Port of Portland (Friedenwald)

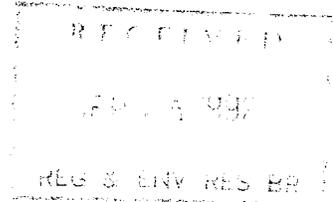


UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
ENVIRONMENTAL & TECHNICAL SERVICES DIVISION
911 NE 11th Avenue - Room 620
PORTLAND, OREGON 97232
503/230-5400 FAX 503/230-5435

F/NW03

SEP 11 1992

Colonel Charles A. W. Hines
Corps of Engineers
Portland District
P. O. Box 2946
Portland, OR 97208



Attn: CENPP-PE-RPP

RE: CENPP-PE-RP-92-05, Corps of Engineers
(August 7, 1992)

Dear Colonel Hines:

We presently lack sufficient personnel to review the public notice listed above, and therefore, will not provide comment.

We may re-evaluate this position and provide further comment to you if additional information becomes available indicating there would be significant adverse impacts to fishery resources or to the habitat that supports them.

Sincerely,

Nicholas E. Iadanza
Chief, Habitat Conservation Branch

cc: Oregon Department of Fish and Wildlife
U.S. Fish and Wildlife Service, ES, PFO
Environmental Protection Agency, Portland
Corps of Engineers, North Pacific Division



Oregon

DEPARTMENT OF
FISH AND
WILDLIFE



September 3, 1992

KLG 5-17-92

District Engineer
Portland District Corps of Engineers NPP-PE-RP
P.O. Box 2946
Portland, Oregon 97208-2946

Subject: 92-05, Expansion of Disposal Sites A, B, and C Mouth of Columbia
River

Dear District Engineer:

We have reviewed the subject public notice. We do not object to the proposal and support the continued efforts for long term management of dredge material disposal. Attached are specific comments as submitted by our marine region.

Sincerely,

A handwritten signature in black ink, appearing to read "James C. Turner", written over a horizontal line.

James C. Turner
Waterways Alteration Coordinator
Habitat Conservation Division

jct

cc: Gail McEwen, ODFW
Rick Starr, ODFW
DEQ
USFWS
NMFS
Bob Burkle, WDF



2501 SW First Avenue
PO Box 59
Portland, OR 97207
(503) 229-5400

Crab Fishery

The crab fishery utilizes some of the proposed expansion areas. Disposal would preclude crab fishing. We feel, however, that impacts to the fishery would be minimal. Most of the crab fishing activity occurs during the winter months when the Corps would not be using the sites. Also, sites B and F are within tow-boat lanes; crab fishermen have agreed to avoid these areas. Since we can't speak for crab fishermen, the Corps should determine if there is concern about the proposed expansion among the fishery participants.

Razor Clams

The area off the mouth of the Columbia contains a large population of razor clams that may be important in replenishing clam populations along nearby beaches. We do not know the specific impacts of disposal on razor clams, but suspect that they are minimal because razor clams are rapid borrowers adapted to live in areas of extensive sand movement and turnover. Future impact assessments by the Corps should examine impacts on razor clams to confirm if clam burrowing behavior allows them to survive disposal.

September 23, 1992

Steven L. Stockton, P.E.
Chief, Planning and Engineering Division
Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

DEPARTMENT OF
LAND
CONSERVATION
AND
DEVELOPMENT

**RE: Federal Consistency Review -- Mouth of the Columbia River Ocean
Dredge Material Disposal Temporary Site Expansion**

Dear Mr. Stockton:

The Corps is proposing the temporary expansion of the boundaries of three designated ocean dredged material disposal sites. The sites are located offshore of the mouth of the Columbia River in the state of Oregon. The department has completed its review of the Draft Environmental Assessment (EA) and coastal zone management federal consistency determination for this proposed action. The proposed action was reviewed for consistency with the Oregon Coastal Management Program as a federal action affecting the coastal zone under Section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended.

The State supports the development of a long-term dredged material disposal management plan for the mouth of the Columbia River. We encourage the efforts being undertaken by the Corps and EPA to resolve the mounding problems encountered at the existing sites. However, we cannot at this time agree with your determination that the proposed site expansion is consistent with the Oregon Coastal Management Program.

To be consistent with the coastal management program, the proposed activity must be consistent with the requirements contained in the three elements of the Oregon Coastal Management Program:

1. The Statewide Planning Goals as adopted by the Land Conservation and Development Commission.
2. Acknowledged city or county comprehensive plans (those plans approved by LCDC as being in compliance with the goals).
3. Selected state laws.

Statewide Planning Goals

Actions affecting resources in Oregon's territorial sea must satisfy the requirements of Goal 19, Ocean Resources. We believe that the draft environmental assessment and the proposed monitoring program comply with Goal 19 requirements.

Barbara Roberts
Governor



1175 Court Street NE
Salem, OR 97310-0590
(503) 373-0050
FAX (503) 362-6705

Acknowledged Local Comprehensive Plans

Clatsop County's Columbia River Estuary management plan provides land/water use designations for the proposed disposal sites. Presently, the proposed sites are designated Aquatic Conservation (AC-2) which prohibits dredged material disposal. Consequently, the proposed federal action is not consistent with the local plan and thereby the Oregon coastal program.

If the county's estuary plan were amended and the proposed sites redesignated for Aquatic Development, then the proposed action would be consistent with the Oregon coastal program. The county planning director can explain the procedures and requirements for such a plan amendment. Of the county plan policies that would have to be addressed for a plan amendment, it is our opinion that the following would be particularly relevant:

- * Zoning Section S4.232.18 regarding "ocean disposal" of dredged materials; and
- * Subarea Policy 1 of Plan Section P-30.1 "Mouth of the Columbia River" regarding commercial and recreational crabbing.

It is also our opinion that the draft EA will provide satisfactory findings for the county's substantive effects policies, once the minor inconsistencies reported to you by the Columbia River Estuary Study Taskforce staff (August 31) are corrected.

Other State Laws

We are not aware of objections or negative comments from other state agencies. At this time, however, a decision from the Department of Environmental Quality (DEQ) regarding 401 Water Quality Certification is still outstanding. Consequently, the proposed action will be consistent with other state laws once DEQ issues the certification.

Conclusion

The proposed expansions of dredged material disposal sites at the mouth of the Columbia River Estuary is not yet consistent with the Oregon Coastal Management Program. To be consistent, an amendment to the Clatsop County Columbia River estuary management plan will have to occur, and a 401 Water Quality Certification from DEQ obtained.

NOTE: There is an assertion on page 12 of the EA that state concurrence with this project is being sought as a "matter of comity". The department respectfully disagrees. The disposal area is within state jurisdiction, which extends to 3 nautical miles as measured from the territorial sea "baseline" rather than the "shoreline" as assumed in the EA. Regardless of the location, a clear reading of the federal Coastal Zone Management Act leads to the inescapable conclusion that expansion and use of an ocean dredge material disposal site is an activity which requires a federal consistency determination from the Corps. Recent changes to the Coastal Zone Management Act (i.e., the Coastal Zone Act Reauthorization Amendments of 1990) further clarify that all federal agency activities, whether in or outside of the coastal zone, are subject to the consistency requirements of Section 307(c)(1) of the CZMA if they affect natural resources, land uses, or water uses in the coastal zone. There are no exclusions from federal consistency provided for ocean dumping, for dredged material disposal, or for any Corps activities.

Please contact Don Oswalt of my staff at 373-0091 if you have any questions regarding our comments.

Sincerely,



Richard P. Benner
Director

RB:DO
<per>mcr.fc

cc: Steve Stevens, Corps of Engineers
Curt Schneider, Clatsop County
Bill Parks, DSL
Don Yon, DEQ
John Marra, Eldon Hout, DLCD
Trudy Coxe, NOAA/OCRM
W. Stanley Wilson, NOAA Assistant Administrator
Cheryl Coon, Department of Justice
John Malek, EPA

January 6, 1993

Gary Gustafson, Acting Director
Oregon Division of State Lands
775 Summer Street NE
Salem, OR 97310

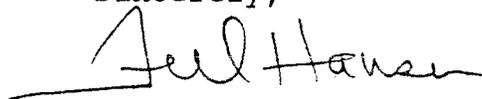
Re: Corps Project CENPP-PE-RP 92-05
Columbia River Mouth Dredging

Dear Mr. Gustafson

We have reviewed the above referenced project, which involves dredging approximately 5 million cubic yards of uncontaminated sandy material, with disposal in expanded ocean disposal sites. Mounding at the existing sites has occurred, and the proposed action will expand the three sites previously authorized for ocean disposal.

With the exception of the size of the disposal sites, this project is identical to the Columbia River Mouth dredging project we reviewed and certified in 1990. Based on the information available, the Department does not believe the project will result in long term violation of state water quality standards. The Department hereby certifies that the proposed project can comply with applicable provisions of the Federal Clean Water Act and water quality regulations of the State of Oregon. If you have any questions, please contact Dana Siegfried at 229-5546.

Sincerely,



Fred Hansen
Director

FH:DS

cc: Emily Toby, DLCD
Corps of Engineers



CREST

Columbia River Estuary Study Taskforce

750 Commercial Street, Room 214

Astoria, Oregon 97103-4513

(503) 325-0435

Date: August 31, 1992

To: Colonel Charles A. S. Hines, District Engineer

From: Carol M. Rushmore and Jon Graves *CMR*

RE: CENPP-PE-RP-92-05, Expansion of Ocean Disposal Sites A, B and F, Mouth of the Columbia River, Oregon and Washington.

CREST has reviewed the public notice on the Expansion of Ocean Disposal Sites A, B and F, Mouth of the Columbia River, Oregon and Washington. CREST has both general and specific comments regarding the Environmental Assessment (EA).

In general, most of our concerns focus on the proposed expansion of site F. Enlarging site F by over thirty times could possibly effect shipping since the site is directly in front of the entrance to the Columbia River navigation channel. If the expanded dredged material disposal site is allowed to mound as areas A and B have, the entrance to the Columbia River could become more hazardous. The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) should consult with the Columbia River Bar Pilots regularly during the interim disposal of the dredged materials to ensure that the Bar Pilots do not perceive mounding at the dredged material disposal sites.

The EA states that the present size of the ocean disposal sites are no longer adequate because of slow dispersal rates and mounding problems, identified as a result of annual bathymetric surveys conducted since 1981. CREST is concerned that merely expanding the sites will not solve the mounding problem should these sites continue to be used for the long term disposal of dredged material. CREST is also concerned about the Corps' monitoring and management program of the ocean dredged material disposal sites. The fact that the Corps had bathymetric surveys since at least 1981, but was not able to determine there was a mounding problem until spring of 1992 warrants a change in annual review procedures.

On page 8 under the heading Environmental Effects, it is stated that, "*material deposited at the sites move along the coast with the littoral drift system.*" If this is true, why is there a mounding problem? In other places in this EA, it is stated that there are "*slow material dispersal rates*" and "*dredged material is predominantly clean sand and resistant to transport.*" There seems to be an inconsistency.

At the top of page 9 under the heading Environmental Effects, it is stated that, "*No significant biological impacts have been associated with disposal at these sites.*" Yet later on the same page, it is stated that, "*the introduction of new species was evident at Site F following disposal of fine grained sediments for the Tongue Point Project.*" An increase in density and introduction of new invertebrates into a site could be considered a significant biological impact. Although the proposed materials to be

disposed of are not nutrient rich fines, there could be biological impacts associated with dredged material disposal. Benthic samples taken just west of Site F (within the proposed Site F expansion) during the summer of 1992 found densities of adult, soft dungeness crabs (*Cancer magister*) close to one crab per square meter (Emmett, personal communication, 1992). Although dungeness crab populations are cyclical in nature, this is a high density of crab currently existing which could be impacted during dredged material disposal.

Under the Threatened and Endangered Species section on page 8, there is just one sentence stating that three stocks of listed Snake River salmonids migrate through this area. One sentence stating their existence is not adequate. There should be some discussion of how this project will or will not affect their habitat and chance of survival.

Under the Consultation Requirements section C. Coastal Zone Management Act of 1973, as amended, it is stated that the coastal zone consistency determination was "*a matter of comity*." Clatsop County has designated Dredged Material Disposal sites A and F as Aquatic Development areas and considers these areas within their jurisdiction. The waters surrounding the present sites are zoned Aquatic Conservation environments, and a zone change will be necessary for the proposed expansion of the dredged material disposal sites. In summary, a coastal zone consistency determination as well as Section 401 Water Quality Certification are required for Oregon.

CREST realizes the importance of ocean disposal to the maintenance of the mouth of the Columbia River navigation channel. We are looking forward to working with both the Corps and EPA for a long term solution to the dredged material disposal problem.

Thank you for the opportunity to comment on this EA.

cc: Curt Schneider, Clatsop County
Emily Toby, DLCD
Bill Barrons, Clatsop County



CLATSOP COUNTY

"Striving To Be First In Quality Service"

DEPARTMENT OF PLANNING AND DEVELOPMENT

SEP 17 1992

COASTAL ZONE MGMT. & LEVEL. REPAIR ENV. RES. BR.

September 2, 1992

SEP 03 1992

Richard Benner
DLCD
1175 Court Street
Salem, OR 97310-0590

Dear Mr. Benner:

Clatsop County has reviewed the proposed Coastal Zone Management Act Consistency Determination prepared by the Corps of Engineers for the interim expansion of dredged material disposal sites A, B, and F at the mouth of the Columbia River. We have the following comments:

1. The proposed project must comply not only with Goal 19 but also with Clatsop County's Columbia River Estuary policies and standards for dredged material disposal. The Determination does not address these standards and policies. The pertinent policies are numbers 2 and 3 within P20.5 Dredging and Dredged Material Disposal. The relevant standards are numbers 4-6, 13, 14 and 18 of Section S4.232 Dredging and Dredged Material Disposal Standards.

Under policy P20.5(3) and standards S4.232(4) and S4.232(18) the dredged material disposal operations shall minimize interference with commercial and recreational fishing. The expansion of the sites could interfere with both crab and anadromous fishing. The mouth of the Columbia River is used by crabbers, commercial and recreational fishermen year round. The timing of dredge materials disposal is very important, and the Corps must coordinate with the local commercial and recreational fishing interests regarding the site expansions.

Under standard S4.232(6) and S4.232(18) the biological effects of aquatic area disposal shall be minimized. The proposed area F expansion is in an area of potential importance to crab fisheries. Trawl taken during the summer of 1992 showed an average density of about 1 adult, soft Dungeness crab per square meter (personal communication Emmett). While crab populations fluctuate greatly on a 7 to 12 year cycle, there is a high density of crabs presently at Site F which should be considered.

Under standard S4.232(18) the amount of material deposited must be compatible with other uses of the area. Area F is situated on a main approach to the Columbia River navigation channel. The Corps should coordinate with the Columbia River Bar Pilots Association regarding potential impacts to navigation and to ensure that no excessive shoaling occurs.

2. The proposed project must also comply with the requirements of the Comprehensive Plan Subarea Policy P30.1 Mouth of the Columbia River subarea. The offshore disposal sites (Areas A, B, and F) are defined as within the outer portions of this subarea. The Corps states that the proposed site expansions are outside the limits of the territorial sea, however the Clatsop County Comprehensive

Plan designates each of the Corps ocean dredged material disposal sites as Developmental areas. All aquatic areas in the subarea are designated Aquatic Conservation (AC-2) except:

1. *Dredged material disposal sites A, B, E, and F, which are designated Development.*
2. *The navigation channel, plus a flowlane disposal area on each side (either 600 feet wide or to the 20-foot bathymetric contour, whichever is the narrowest), is designated Development.*
3. *Shorelands on the South Jetty are designated Development. The South Jetty is entirely within the regulatory shorelands boundary.*

The subarea policy is:

1. *Adverse impacts on Dungeness Crab habitat and on commercial or recreational crabbing in the Mouth of the Columbia River subarea caused by dredging or by in-water dredged material disposal shall be minimized.*

It is the County's position that the proposed expansions are within the territorial sea and must comply with the County's Comprehensive Plan.

3. The proposed project must also comply with the purposes of the zones in which it will occur: AC2 and AD Zones. The proposed expansion of Areas A, B, and F would result in ocean in-water disposal in a Conservation Aquatic management unit (Aquatic Conservation Two Zone) which is not consistent with the purpose of that zone. A zone change from the AC-2 to AD Zone is required.
4. The Corps states that they are consistent with Oregon Goal 19. The County maintains that the proposed expansion of Area F could effect both fishing and navigation. Whether the impacts are considered significant, the County does not know at this time and defers to the state. If the impacts are considered significant, an exception to Goal 19 would be needed. Increasing Area F by 30 times in area could impact the crab fishery. Since Area F is directly in front of the Columbia River navigation channel, excessive mounding could adversely affect navigation into the Columbia River. The Corps at this point has not demonstrated an ability to manage their ocean dredged material disposal sites to keep them from mounding, creating potential navigational hazards.

The County would like to thank the state for the opportunity to comment on this Consistency Determination. If you have any questions, please do not hesitate to call. If you have any technical questions regarding the Environmental Assessment, please call Carol Rushmore or Jon Graves at CREST, 325-0435.

Sincerely,

CURT SCHNEIDER

Curt Schneider
Planning Director

cc: CREST
Emily Toby, DLCD



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

October 7, 1992

District Engineer
Portland District, Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

ATTN: Steve Stevens
Regulatory and Environmental Resource Branch

WQC RE: Public Notice No. CENPP-PE-RP 92-05
Expand Ocean Disposal Sites A, B and F
Columbia River at the Mouth

Dear Mr. Stevens:

The public notice for authorization of the above referenced work or activity has been reviewed in accordance with all pertinent rules and regulations.

On behalf of the State of Washington, we certify that the temporary expansion of inwater disposal sites A, B and F (see map in notice) complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and other requirements of State law as modified by the provisions stipulated by the Department of Fisheries in the enclosed letter, and in accordance with the following conditions:

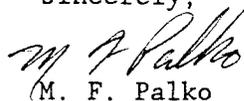
1. This Certification shall expire two years from the date of this letter.
2. Upon request by the Corps, and satisfactory demonstration of progress toward a long-term solution to MCR sediment disposal which would ensure entry of the sediment into the Northward longshore transport system, this Certification could be extended for an additional two years.

Please note that this certification does not exempt, and is provisional upon, compliance with other statutes and codes administered by federal, state, and local agencies.

Mr. Steve Stevens
October 7, 1992
Page 2

If you have any questions about this certification, please contact Tom Elwell at
(206) 459-6053.

Sincerely,



M. F. Palko
Supervisor
Environmental Review

enclosure

cc: Shorelands, WDF, EPA



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

October 7, 1992

District Engineer
Portland District, Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

ATTN: Steve Stevens
Regulatory and Environmental Resource Branch

State Response RE: Public Notice No. CENPP-PE-RP 92-05
Expand Ocean Disposal Sites A, B and F
Columbia River at the Mouth

Dear Mr. Stevens:

This public notice has been reviewed in accordance with all pertinent rules and regulations.

The State of Washington is quite concerned about the long-term maintenance of the longshore transport system along the Washington coast. Work done by Grays Harbor Community College indicates that the submerged spit trending southwest from the North Jetty (Peacock Spit) has significantly decreased in size since the damming of the Columbia River removed a major source of sediment input. Presumably, the spit has decreased in size because it is serving as a donor to the longshore transport system.

This could not go on without eventual effects to the Washington coast. The hope has been that placement of Mouth of Columbia River (MCR) dredged material onto Peacock Spit would balance the sediment budget.

Now, the site chosen for this purpose has mounded to the point that the Corps wishes to move it to avoid further mounding. The sites to which placement would be moved appear to be less likely to contribute to the longshore transport than the current site. We are told that this is a short-term measure pending further study aimed at a new site within the transport system.

We would prefer that the current site ("B") be expanded to the North and East pending further analysis. If this is not possible, we prefer the option of expanding the current site to the West rather than placing material at a different site ("A" or "F") further South.

Although one might argue that three or four years is not going to make much difference in the longterm sediment budget, we are concerned that good intentions

Steve Stevens
September 28, 1992
Page 2

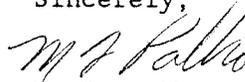
can be overtaken by budget and administrative realities. If a long-term solution which adequately deals with the longshore transport budget is not achieved as hoped, the interim solution could easily become the defacto long-term solution.

Thus, Washington approval of this project is granted for a period of two years only, with the understanding that it may be extended for an additional two years if the Corps demonstrates satisfactory progress toward a long-term solution, and there is no significant worsening of the long-shore transport situation. Within four years, we want the longterm solution implemented.

Subject to these provisions, we concur with your CZM consistency determination dated August 26, 1992.

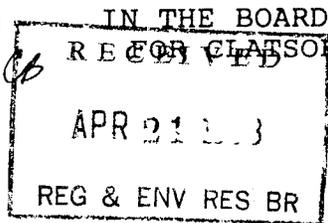
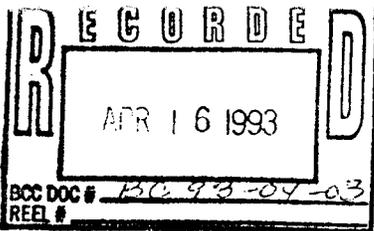
If you have any questions, please contact Tom Elwell at (206) 459-6053.

Sincerely,



M. F. Palko
Supervisor
Environmental Review

cc: Shorelands, WDF, EPA



IN THE BOARD OF COMMISSIONERS
RECORDED FOR CLATSOP COUNTY, OREGON

(AN ORDINANCE AMENDING THE
(CLATSOP COUNTY COMPREHENSIVE PLAN
(AND LAND AND WATER DEVELOPMENT
(AND USE ORDINANCE 80-14 AS
(AMENDED AND RESCINDING
(INCONSISTENT PROVISIONS

ORDINANCE NO. 93- 13

The Board of County Commissioners of Clatsop County, Oregon ordains as follows:

SECTION 1. SHORT TITLE.

This ordinance shall be known as the Ocean Disposal Dredged Material Disposal Amendment.

SECTION 2.

The Board of County Commissioners of Clatsop County, Oregon recognizes the need to revise and amend the Clatsop County Comprehensive Plan/Zoning Map. In the interest of the health, safety and welfare of the citizens of Clatsop County and pursuant to State law, the Board of Commissioners hereby determines the necessity of amending the said Clatsop County Comprehensive Plan/Zoning Map.

The Board of County Commissioners determines and takes notice that the adoption procedure for this ordinance complies with the Post Acknowledgement rules of the Land Conservation and Development Commission. The County Planning Commission has sought review and comment and has conducted the public hearing process pursuant to the requirements of ORS 215.050 and 215.060. The Planning

Commission held a public hearing on February 18, 1993. The Board of Commissioners held a public hearing on this ordinance pursuant to law on March 24, 1993.

SECTION 3. CONFORMITY WITH THE LAW.

This ordinance shall not substitute for nor eliminate the necessity for conformity with any and all laws or rules of the State of Oregon, or its agencies, or any ordinance, rule or regulation of Clatsop County.

SECTION 4. INCONSISTENT PROVISIONS.

This ordinance shall supercede, control and repeal any inconsistent provision of the Clatsop County Comprehensive Plan and, the Clatsop County Land and Water Development and Use Ordinance, as amended, or any other ordinance or regulation made by Clatsop County.

SECTION 5. SEPARABILITY.

If any section, subsection, sentence, clause, phrase or any other portion of this ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION 6. EFFECTIVE DATE.

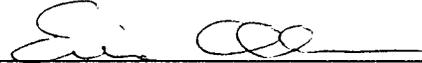
This ordinance shall be in full force and effective 30 days following the date of adoption of this Ordinance.

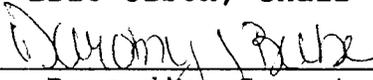
SECTION 7. ADOPTION CLAUSE.

The Board of Commissioners hereby adopts the Ocean Disposal Dredged Material Disposal Amendments set forth in Exhibit "A" attached hereto and by reference herein made a part of this ordinance in its entirety.

ADOPTED this 14th day of April, 1993.

THE BOARD OF COUNTY COMMISSIONERS
FOR CLATSOP COUNTY, OREGON

By 
Eric Olsen, Chair

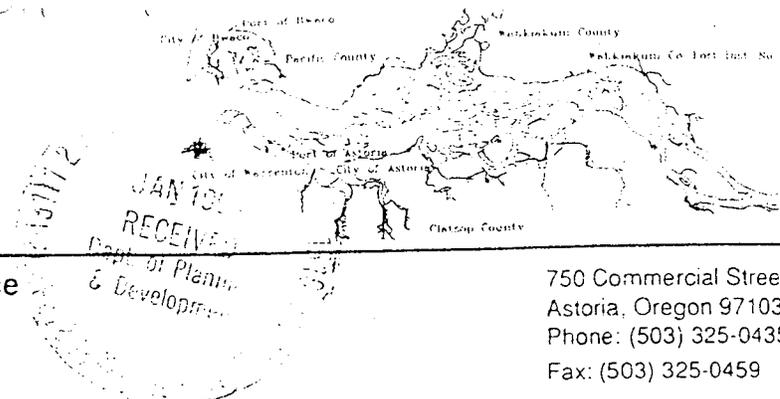
By 
Recording Secretary

Effective Date: 5-14-93

APPROVED AS TO FORM: 
Clatsop County Counsel

CREST

Columbia River Estuary Study Taskforce



750 Commercial Street, Room 214
Astoria, Oregon 97103
Phone: (503) 325-0435
Fax: (503) 325-0459

Date: January 7, 1993

To: Curt Schneider, Director Clatsop County Department of Planning and Development

From: Carol Rushmore *CR*

Re: Clatsop County's proposal, on behalf of the Corps of Engineers and Environmental Protection Agency, for a zone change and plan amendment pertaining to ocean disposal sites A, B and F

I. SUMMARY

Proposal: A zone change at existing ocean disposal site Area A from Aquatic Conservation Two to Aquatic Development to enlarge the existing disposal area, and a plan amendment to the Mouth of the Columbia River Subarea Plan.

Location: Area A is located at the mouth of the Columbia River and is an Environmental Protection Agency's designated ocean disposal site. The proposed expansion will double the size of the existing site to approximately 6,000 by 4,000 feet.

Background: The Portland District Corps of Engineers and the Environmental Protection Agency seek to enlarge ocean dredged material disposal sites Area A, B, and F at the mouth of the Columbia River in order to improve disposal operations in that area, to facilitate increased use of the disposal sites, and to prevent additional mounding which is creating hazardous conditions for shippers and fishermen. The enlargement will require a zone change and plan amendment for site Area A. The aquatic area to be added as part of disposal Area A would be changed from Aquatic Conservation Two Zone (AC-2) to Aquatic Development Zone (AD). Attached and on file in the County Planning office is an environmental assessment prepared by the Portland District Corps, describing the proposal, and estimating its environmental impact.

The proposed enlargements are an interim response to a potentially hazardous situation: continued mounding at ocean disposal sites Area A, B and F. The enlarged sites allow the Columbia River channel to remain open, while preventing additional mounding and allowing the Corps and EPA to jointly study and evaluate alternative solutions to the ocean disposal requirements. It is expected that the long-term response will be to designate new ocean disposal sites, permanent expansion of some or all existing sites or removal of some sites from EPA designation. The study is being initiated in conjunction with the proposed channel deepening study and is expected to be completed within five years. A comprehensive management plan guiding disposal at the mouth and within the estuary is expected to be prepared as well.

Recommendation: CREST recommends that the area proposed for enlarging be changed from AC-2 to AD, with the understanding that the Corps and EPA are pursuing a long-term solution to the ocean disposal issue and will confer with the County regarding potential impacts concerning proposed disposal sites during the five-year planning process.

II. OUTLINE OF PROJECT REVIEW

Procedures: The proposed zone change and comprehensive plan amendment require a Planning Commission recommendation to the Board of County Commissioners. The Board of County Commissioners will make the final decision based on the Planning Commission's recommendation.

Federal Consistency: This project primarily affects the Army Corps of Engineers and Environmental Protection Agency (EPA), both federal agencies. Federal agencies must meet the requirements in Clatsop County's Comprehensive Plan only to the maximum extent practicable. This means that the Corps of Engineers and EPA will generally meet the requirements in the County's Comprehensive Plan, but in extreme situations will not be held to them. As a practical matter, the Portland District Corps of Engineers cooperates with CREST, County government and the port districts on dredging and dredged material disposal matters, and can be expected to comply with the County's Comprehensive Plan. The Corps does not normally go through the local permit process when it wants to use a disposal site, but instead coordinates its activities with the state and with other federal agencies.

Statewide Planning Goals: The proposed actions by the Corps and EPA should comply with Oregon's Goal 19 Ocean Resources which is implemented by the Oregon Department of Land Conservation and Development. The County shares jurisdictional authority with the state, as allowed by state law, to the outer three mile limit of state waters. The state has already notified the COE that the proposal complies with the intention of Goal 19, and no exception to the goal is needed. The state also indicated the activities should comply with Clatsop County's Comprehensive Plan.

Oregon Statewide Planning Goal 16, Estuarine Resources, requires that actions which could potentially alter the Columbia River estuarine ecosystem be preceded by an assessment of potential impacts. In-water dredged material disposal Section 5.820(9) and other uses or activities potentially affecting estuarine resources (Section 5.820(11)) are activities requiring an impact assessment. Attached to this document and on file in the County Planning office is the impact assessment prepared by the Portland District Corps of Engineers.

Because of the potential for off-shore activities to affect estuarine resources, the ocean area off the mouth has been zoned similarly to the estuarine aquatic areas: designated disposal sites and the navigation channel are zoned Aquatic Development and all other aquatic areas are zoned Aquatic Conservation Two. Activities in these areas should comply with the applicable zones and development standards.

Impact Assessment and Resource Capability: As mentioned above, an impact assessment is required for this project. Prepared by the COE, it is attached and on file in the County Planning office. Some uses and activities in the Conservation Aquatic Zones are allowed only if determined to meet the resource capabilities of the area, and if consistent with the purpose of the affected zone Section 5.860). A use or activity is consistent with the resource capabilities of the area if

a) impacts on estuarine resources are not significant; or

b) resources of the area will be able to assimilate the use and activity and their effects and continue to function in a manner which, in Conservation Aquatic designation, conserves long-term use of renewable resources, natural biological productivity, recreation and aesthetic values and aquaculture.

Dredged material disposal does not conserve the long-term use of the aquatic resource or biological productivity. For these reasons, a zone change to Aquatic Development is necessary for the activity to be consistent with the purpose of the affected zone. This staff report reviews the zone change and plan amendment request.

Zone Change Review Criteria: The proposed zone change must be reviewed against the following four criteria listed in Section 5.400 Zone Change of the Land and Water Development and Use Ordinance.

(1) The amendment shall be consistent with the Comprehensive Plan.

(2) The revision will not interfere with the development or value of other land in the vicinity when compared to the public interest in allowing the change in zone.

(3) A demand exists for the development and uses listed in the proposed zone at the proposed location.

Factors which should be considered in determining whether or not this demand exists include (a) availability, including an assessment of the public facilities and services and roads to supply the area, and (b) an assessment of availability of other appropriate zoned property.

(4) The revision will not be detrimental to the general interests of the community.

The proposal must meet all four criteria before it can be approved.

Plan Amendment: The County's Zoning Ordinance does not provide any criteria for making a decision on a plan amendment. This staff report reviews the plan amendment proposal for consistency with the Comprehensive Plan and Zoning Ordinance.

III. FINDINGS

A. ZONE CHANGE

CRITERION 1: *The amendment shall be consistent with the Comprehensive Plan.*

(1) Policy 10 Introduction and Background of the Columbia River Estuary Land and Water Use Plan designates Development Aquatic areas to be

"managed for navigation and other identified needs for public, commercial, and industrial water-dependent uses consistent with the level of development or alteration allowed in the aquatic area and the need to minimize damage to the estuarine ecosystem. The objective of Development Aquatic areas is to ensure optimum utilization of appropriate aquatic areas by providing for intensive development. Some water-related and other uses may be permitted. Development Aquatic areas may include: deep water areas adjacent to or near the shoreline, navigation channels, turning basins, subtidal areas for in-water disposal of dredged materials, mining or mineral extraction areas, and areas adjacent to developed or developable shorelines which may need to be altered to provide navigational access or create new land areas for water-dependent uses."

The area proposed for the zone change is a subtidal area at the mouth of the Columbia River. The existing Area A site is currently zoned Aquatic Development (AD). The area proposed for expansion is currently zoned Aquatic Conservation Two (AC-2). The Corps is proposing to use this enlarged site for dredged material disposal for at least the next four years until a long-term solution to ocean disposal can be determined.

(2) The purpose of the Aquatic Development Zone in Section 3.742 is

"to provide for navigation and other identified needs for public, commercial and industrial water-dependent uses consistent with the level of development or alteration allowed in this zone and the need to minimize danger to the Columbia River estuarine ecosystem."

Areas included in Aquatic Development zones include:

"deep water areas adjacent to or near the shoreline, navigation channels, turning basins, subtidal areas for in-water disposal of dredged materials, areas of minimal biological significance needed for uses requiring alteration of the estuary not included in Aquatic Conservation or Aquatic Natural Zones, and areas for which an exception to Statewide Planning Goal 16, Estuarine Resources has been adopted."

The Aquatic Development Zone allows "estuarine in-water disposal of dredged material at sites designated in the Comprehensive Plan" as a Review Use subject to a Type II procedure (Section 3.746(5)). Existing Area A is an EPA designated ocean disposal site and is also designated as such in the County's Comprehensive Plan (mouth Columbia River Subarea).

The proposed enlarged site will also be used as an ocean disposal site for dredged material, but is not currently a local designated dredged material disposal site in its enlarged proportions. The Corps is requesting a Plan Amendment (see finding III B of this staff report) to have this enlarged site designated simultaneously with the Zone Change proposal.

(3) Section S4.232(14) of the County's Dredging and Dredged Material Disposal Standards requires:

Proposals for in-water disposal of dredged materials, including flowlane disposal, beach nourishment, estuarine open-water disposal, ocean disposal, and agitation dredging, shall:

(a) Demonstrate the need for the proposed action and that there are no feasible alternative disposal sites or methods that entail less damaging environmental impacts; and

(b) Demonstrate that the dredged sediments meet state and federal sediment testing requirements and water quality standards (see Dredging Standard 5); and

(c) Not be permitted in the vicinity of a public water intake.

Ocean disposal sites A, B, E and F at the mouth of the Columbia River were designated by EPA as ocean disposal sites in 1986 to dispose of the approximately five million cubic yards of material dredged from the mouth each year. Sites A, B and F are showing significant mounding due to low dispersal rates. The mounding is creating hazardous conditions for shippers, fishermen and Coast Guard, and while not currently requiring emergency action, does require an interim solution to prevent a life-threatening situation from occurring and maintain navigability of the river.

Sediments typically disposed of at the ocean disposal sites are clean sand from the river entrance. Approximately five million cubic yards of material is dredged annually from the entrance to maintain the depth at 55 feet over the entire length of the five mile entrance channel. Use of site A has been temporarily discontinued until the existing mound has dissipated. The site will be monitored in 1993 to determine if and when it can be used again. Sites B and F are beyond the three mile state/county jurisdiction. Site E lies in Pacific County, WA.

(4) Section S4.232(18) of the County's Dredging and Dredged Material Disposal standards requires:

Ocean disposal to be conducted such that:

(a) The amount of material deposited at a site is compatible with benthic populations, other marine resources, and other uses of the area;

(b) Interference with sport and commercial fishing is minimized;

(c) Disposal is strictly confined to the sites designated by the US Environmental Protection Agency; and

(d) The disposal site does not shoal excessively and create dangerous wave and swell conditions.

The enlargement of disposal site A will prevent further mounding from occurring and creating hazardous conditions. Likewise, as mentioned above, use of site A will be discontinued until the present mound has dissipated. All disposal is limited to the EPA designated sites. The Corps has indicated they have notified and talked with bar pilots, crabbers and other fishing groups that may be interested in the proposal. The Corps and EPA are initiating studies of the enlarged disposal sites as well as other areas to determine if these sites should be continued or new sites designated. These studies are being conducted in coordination with the proposed channel deepening study and will take approximately four to five years.

CRITERION 2: *The revision will not interfere with the development or value of other land in the vicinity when compared to the public interest in allowing the change in zone.*

The proposed zone change should not unduly interfere with development or value of the shoreline. The area proposed for the zone change is a subtidal area. Uses in the area include navigation and fishing. Continued use of Area A causing mounding could potentially disrupt navigation and endanger lives. Enlargement may impact the fisheries occurring at the site location by temporarily removing a larger area from productive habitat and fishing opportunities. The enlarged site will, however, resolve part of the safety and operational problems that are occurring at the existing ocean disposal sites.

CRITERION 3: *A demand exists for the development and uses listed in the proposed zone at the proposed location.*

Factors which should be considered in determining whether or not this demand exists include (a) availability, including an assessment of the public facilities and services and roads to supply the area, and (b) an assessment of availability of other appropriate zoned property.

Area A has been used since 1986 for disposal of dredged material from the mouth of the Columbia River, although its use is temporarily discontinued until the existing mound dissipates. There was extensive studies and monitoring of the current ocean disposal sites prior to designation in 1986. The Corps feels that impacts from disposal at the enlarged site should not differ from those at the existing ocean disposal site, and should alleviate mounding.

CRITERION 4: *The revision will not be detrimental to the general interests of the community.*

The proposed zone change for the enlarged Area A should not be detrimental to public interest. Currently the ocean disposal sites provide a disposal area for the five million cubic yards of material dredged each year from the river mouth to maintain navigability at 55 feet. Area A and the other ocean disposal sites pose operational and safety hazards to ships and fishermen near the sites. The ocean disposal sites are crucial for continued navigation of the mouth of the Columbia River and the lower estuary. The ocean disposal situation will be studied and monitored during the next four to five years to assess whether the new site is acceptable as a long-term ocean disposal site or whether new sites should be designated. Monitoring will include information on the movement of material and productivity of the area.

CONCLUSION: The proposed zone change meets all four of the County's criteria for a zone change, if the following proposed plan amendment designating the proposed enlarged ocean disposal site Area A as a designated dredged material disposal site is approved (see Findings A, Criterion 1 and Findings B).

B. PLAN AMENDMENT

(1). The County has adopted the *Columbia River Estuary Dredged Material Management Plan 1986* as the County's background report identifying and describing the region's dredged material disposal sites. The plan does not, however, discuss the ocean disposal sites, as these are designated by EPA and managed by the COE.

(2). The following text amendments addressing the zone change, and designation of the enlarged site as an ocean dredged material disposal site, are proposed to The Mouth of the Columbia River Subarea Plan (P30.1). New material is underlined, material to be deleted shows a strikeout.

Human Use

This subarea contains the downstream end of the authorized navigation channel (55 feet deep by 1/2 mile wide to RM 3). The channel is stabilized by the entrance jetties and maintained primarily by hopper dredge. The average amount dredged from this subarea is about 5.8 million cubic yards per year. Two of the four ~~The~~ offshore disposal sites (Areas A, and B, E, and F) are in the outer portions of this area. Area A is located in Clatsop County OR; Area E in Pacific County, WA. An in-water estuary site (Area D in the Estuary channels Subarea) was used for disposal of material from the inner bar when, during rough bar conditions, disposal at sites outside the mouth (disposal sites A, B, E, and F) was too hazardous. The Corps of Engineers has adopted a change in practices to discontinue disposal of entrance material in Area D. Recreational use of the waters by small boats is high. The Buoy 10 sports fishery draws large numbers of recreational anglers to this area each summer. Commercial fishing is intensive throughout the year.

Aquatic and Shoreland Designations

1. Dredged material disposal site ~~A, B, E and F, which are~~ is designated Development. The coordinates for Site A are:

<u>46° , 46' , 02" N;</u>	<u>124° , 06' , 21" W</u>
<u>46° , 12' , 36" N;</u>	<u>124° , 05' , 39" W</u>
<u>46° , 11' , 52" N</u>	<u>124° , 06' , 36" W</u>
<u>46° , 12' , 18" N</u>	<u>124° , 07' , 18" W</u>

CONCLUSION AND RECOMMENDATION: The proposed Zone Change and text Plan Amendment to the mouth of the Columbia River Subarea Plan should receive a positive recommendation from the Planning Commission, if determined to comply with the Comprehensive Plan and Zoning Ordinance provisions described in this staff report. The following conditions are also recommended for approval:

- (1) The Corps will update the County Planning Department and CREST regularly regarding the ocean disposal site alternative study and potential impacts of proposed alternatives.
- (2) The Corps, at the end of the five years will seek the necessary local approvals regarding permanent site expansion, new ocean dredged material disposal designations, or removal of Area A from local designation.

CREST



Columbia River Estuary Study Taskforce

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Date: January 21, 1993

To: Curt Schneider

From: Carol Rushmore *CR*

RE: Staff report for the ocean dredged material disposal zone change

I have recently been informed by Steve Stevens of the Corps of Engineers that there is a typographical error in the staff report pertaining to the coordinates for Site A (p. 7 Staff Report).

The first coordinate currently reads:

46°, 46', 02" N:...

It should read:

46°, 13', 02" N:...

The second coordinate currently reads:

46°, 12", 36" N:...

It should read:

46°, 12', 36" N:...

Please note the needed change. Call if you have any questions.



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