

1.0 INTRODUCTION

1.1 Summary

1.1.1 Major Findings and Conclusions

The U.S. Environmental Protection Agency (EPA) with the cooperation of the U.S. Army Corps of Engineers (USACE), Jacksonville District, investigated alternative ocean dredged material disposal sites off the east coast of Florida, one to accommodate Palm Beach Harbor and one to accommodate Port Everglades Harbor. The purpose of this investigation was the final designation of an Ocean Dredged Material Disposal Site (ODMDS) for each location. The environmental amenities in the vicinity of each alternative site were investigated to determine the suitability of each location as an ODMDS. The physical, chemical, and biological characteristics of each site were examined. The fate of dredged materials dispersants from each site was considered. Non-ocean alternatives for dredged material disposal were also evaluated.

Investigations showed that the preferred ODMDSs for Palm Beach Harbor and Port Everglades Harbor were the alternative sites located 4.5 and 4 nautical miles offshore, respectively. The preferred sites (each approximately 1 square nautical mile [3.4 square kilometers (km²)] consist of primarily soft-bottom habitat. Each site is located on the upper continental slope on the western edge of the Florida Current. The depth of each site exceeds 150 meters (m) [492 feet (ft)]. Based on EPA and USACE surveys, it was concluded that no natural reefs, no natural or cultural features of historical importance, and no areas of special scientific importance are located within or near the preferred sites. Each site meets all evaluation criteria for use as an ODMDS. The conclusion is that the preferred sites are suitable for designation for disposal of dredged material.

1.1.2 Areas of Controversy

A scoping letter on the Port Everglades Harbor ODMDS designation dated April 17, 1995, was sent by the USACE to Federal, State, and local governmental offices and agencies and other concerned entities. Eleven letters were received in response to that letter from surrounding businesses and state agencies. A second scoping letter for the Palm Beach Harbor ODMDS designation dated September 26, 1997 was sent by the USACE to Federal, State, and local government offices and agencies and other concerned entities. Three letters were received in response to that letter. Copies of the original scoping letters and response letters are appended to this document (Appendix A).

The areas of controversy identified during the scoping process included proximity to nearshore reefs and the potential for transport of fine-grained material to these reefs; proximity to other significant marine resources; the recency and adequacy of the designation surveys; the scope, frequency, and costs of monitoring effects of disposal at the proposed sites; potential conflicts with the South Florida Testing Facility (SFTF); and the potential for reductions in beneficial use projects such as beach nourishment due to the availability of an offshore disposal option.

The USACE has sponsored modeling of the dispersion of disposed dredged material in order to address concerns about impacts to nearby hardbottom and reef communities. The EPA conducted additional designation surveys to identify any significant marine resources in the vicinity of the candidate sites and to characterize the sites. One of the Port Everglades Harbor alternative ODMDSs was moved to avoid the SFTF. A draft Site Management and Monitoring Plan (Appendix J) has been

developed to establish a framework for the scope, frequency, and cost management of monitoring the effects of disposal at the candidate sites.

1.1.3 Issues to be Resolved

The issues of potentially reducing the opportunity for beneficial use of the dredged material, such as beach nourishment, due to the availability of offshore disposal has yet to be resolved.

1.1.4 List of all Federal Permits, Licenses, and Other Entitlements Prior to Proposal Implementation

In 1972, Congress enacted the Marine Protection, Research, and Sanctuaries Act (MPSRA). The MPSRA controls the transportation and the subsequent dumping of materials into ocean waters. The Act disallows the dumping of materials into the ocean except in accordance with permits issued by the EPA. In the case of dredged material, permits allowing dumping activities are issued by the USACE. Permits are issued pursuant to criteria required under Section 103 (a) of the MPSRA. However, the primary user of the sites will be the Federal projects of maintenance dredging in Palm Beach and Port Everglades harbors and permits are not issued for Federal projects. A process of coordination and concurrence will be conducted through the distribution of the Draft Environmental Impact Statement (DEIS) for this proposed action to Federal and Florida state agencies, offices, and organizations having authority over issues associated with this action. The Final Environmental Impact Statement (FEIS) will include letters of concurrence, recommendations, or approvals from all cooperating entities.

1.1.5 Relationship of Alternative Actions to Environmental Protection Statutes

The relationship of the alternative actions to environmental protection statutes and other environmental requirements is presented in Table 1.

1.2 PURPOSE OF AND NEED FOR THE ACTION

1.2.1 Introduction

The proposed action addressed in this DEIS is the designation by the EPA of two environmentally acceptable and economically feasible ODMDSs in the Atlantic Ocean, one located east of the Lake Worth Inlet and Port of Palm Beach, Florida, and one located east of Port Everglades, Florida. The purpose of these ODMDSs is to accommodate maintenance-dredged material from both the Palm Beach Harbor Federal Project and the Port Everglades Harbor Federal Project. The need for ocean disposal is based primarily on the lack of economically, logistically, and environmentally feasible alternatives for the disposal of the projected quantities of dredged material deemed unsuitable for beach nourishment or other beneficial uses. Cost comparisons of ocean and non-ocean disposal of the dredged material based on environmental, engineering, and economic criteria were conducted for the areas of Palm Beach Harbor (Appendix B) and Port Everglades Harbor (Appendix C).

1.2.2 National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969, as amended, requires the preparation of an Environmental Impact Statement (EIS) for major Federal actions that may significantly affect the quality of the human environment. This EIS implements the EPA policy of voluntarily preparing

NEPA documents [FR Doc. 98-29019 (29 October 1998)] as part of the designation process of an ODMDS under Section 102 of the Marine Protection, Research, Sanctuaries Act (MPRSA) of 1972. This EIS will satisfy the USACE need for NEPA documentation relating to ocean disposal site suitability for permitting under Section 103 of the MPRSA. Suitability of any proposed dredged material for ocean disposal will be determined on a case-by-case basis.

Table 1. Relationship of Alternatives to Environmental Requirements

Federal Statutes	No Action	Proposed Palm Beach ODMDS	Proposed Port Everglades ODMDS
Archeological & Historic Preservation Act, as amended, 16 USC 469, <i>et seq.</i> PL 93-291	FC	FC	FC
Clean Air Act, as amended, 42 USC 1857h-7, <i>et seq.</i> PL 91-604	FC	FC	FC
Clean Water Act, as amended, (Federal Water Pollution Control Act) 33 USC 1251, <i>et seq.</i> PL 92-500	FC	FC	FC
Coastal Barrier Resources Act, 16 USC 3501 <i>et seq.</i> PL 97-348	NA	NA	NA
Coastal Zone Management Act, as amended, 16 USC 1451, <i>et seq.</i> PL 92-583	FC	FC	FC
Endangered Species Act, as amended, 16 USC 1531, <i>et seq.</i> PL 93-205	FC	FC	FC
Estuary Protection Act, 16 USC 1221, <i>et seq.</i> PL 90-454	NA	NA	NA
Federal Water Project Recreation Act, as amended, 16 USC 460-1(12), <i>et seq.</i> PL 89-72	FC	FC	FC
Fish and Wildlife Coordination Act, as amended, 16 USC 661, <i>et seq.</i> PL 85-624	FC	FC	FC
Land and Water Conservation Fund Act, as amended, 16 USC 4601-1601-11, <i>et seq.</i> PL 88-578	FC	FC	FC
Magnuson-Stevens Fishery Conservation and Management Act, as amended, 16 U.S.C. 1801, <i>et seq.</i> PL 94-265	FC	FC	FC
Marine Mammal Protection Act 16 USC 1361, <i>et seq.</i> PL 92-522	FC	FC	FC
Marine Protection, Research, and Sanctuaries Act, 33 USC 1401, <i>et seq.</i> PL 92-532	FC	FC	FC
National Historic Preservation Act, as amended, 16 USC 470a, <i>et seq.</i> PL 89-655	FC	FC	FC
National Environmental Policy Act, as amended, 42 USC 4321, <i>et seq.</i> PL 91-190	FC	FC	FC
River and Harbor Act, 33 USC 401, <i>et seq.</i>	FC	FC	FC
Watershed Protection and Flood Prevention Act, 16 USC 1001, <i>et seq.</i> PL 83-566	NA	NA	NA
Wild and Scenic Rivers Act, as amended, 16 USC 1271, <i>et seq.</i> PL 90-542	NA	NA	NA
Executive Orders			
Coral Reef Protection (EO 13089)	FC	FC	FC
Floodplain Management (EO 11988)	NA	NA	NA
Protection of Wetlands (EO 11990)	NA	NA	NA
Protection and Enhancement of Environmental Quality (EO 11514, as amended EO 11991)	FC	FC	FC
Protection and Enhancement of the Cultural Environment (EO 11593)	NA	NA	NA
Federal Compliance with Pollution Control Standards	FC	FC	FC
State Policies			
Florida Coastal Management Program	FC	FC	FC

FC= Full Compliance NA= Not Applicable

1.2.3 Marine Protection, Research, and Sanctuaries Act (MPRSA)

The transportation and disposal of dredged material in ocean waters, including the territorial sea, is regulated under the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) (Public Law 92-532, 86 Stat. 1052, 33 U.S.C. §§1041 *et seq.*) as amended by Title V of the Water Resources Development Act of 1992 (WRDA 92; Public Law 102-580). Section 102(a) of MPRSA authorizes the U.S. Environmental Protection Agency (EPA) to establish and apply regulations and criteria for ocean dumping activities. Consequently, the EPA issued in October, 1973, and revised in January, 1977, Ocean Dumping Regulations and Criteria (40 CFR 220-229). These regulations establish control of ocean dredged material disposal primarily by two activities, designation of sites for ocean dumping and the issuance of permits for dumping.

MPRSA Section 102(c), authorizes the EPA to designate recommended sites for ODMDs. An ODMD is a precise geographical area within which ocean disposal of dredged material is permitted or authorized under conditions specified in MPRSA Sections 102 and 103. The primary purpose of site designation is to select sites that minimize adverse environmental effects and minimize the interference of dumping activities with other uses of the marine environment. The designation of an ODMD by the EPA is based on compliance with general (Part 228.5) and specific [228.6(a)] site evaluation criteria. Final site designation under Section 102(c) must be based on environmental studies of each site and on historical knowledge of the impact of dredged material disposal on areas similar to such sites in physical, chemical, and biological characteristics. The EPA has the primary responsibility for site designation. A site may be selected by the USACE under MPRSA Section 103(b), with EPA concurrence, if no EPA- designated site is available.

The transportation of dredged material for the purpose of disposal into ocean waters (i.e., the actual use of the designated site) is permitted by USACE (or authorized in the case of federal projects) under MPRSA Section 103(e) applying environmental criteria established in the EPA's Ocean Dumping Regulations and Criteria. MPRSA Section 104(a)(3) provides that ocean disposal of dredged material can occur only at a designated site and Section 103(b) requires the USACE to utilize dredged material disposal sites designated by the EPA to the maximum extent feasible. Prior to issuing a dredged material permit or authorizing a federal project involving the ocean disposal of dredged material, the USACE must notify the EPA, who may disapprove the proposed disposal.

1.2.4 Other Needs

The USACE anticipates that the new ODMDs offshore from Palm Beach Harbor and Port Everglades Harbor will be used initially for the disposal of suitable maintenance-dredged material from the existing Palm Beach and Port Everglades Harbor Federal Navigation Projects, respectively. Disposal volumes of up to 50,000 cubic yards (cy) of suitable dredged material may be placed annually at each ODMD. The site may also be an option for other Federal or private dredging projects near the Palm Beach Harbor and the Port Everglades Harbor, provided the dredged material meets the criteria specified in the MPRSA. Additional testing of dredged material and NEPA documentation would also be required for the transportation of dredged material. Only suitable dredged material (dredged material that meets the EPA Ocean Dumping Criteria [40 CFR 220-229]) would be placed in the site. A need for use of the proposed ODMDs must also be shown for all dredging activities.