

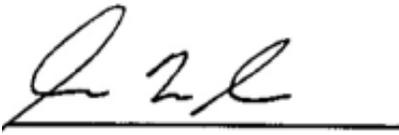
US EPA ARCHIVE DOCUMENT

APPENDIX I
Savannah Harbor Long Term Dredged Material Management Study

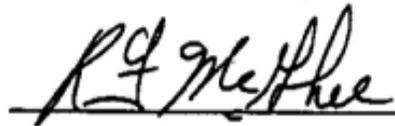
SITE MANAGEMENT PLAN

SAVANNAH HARBOR OCEAN DREDGED MATERIAL DISPOSAL SITE (ODMDS)

The following Site Management Plan for the Savannah Harbor Ocean Dredged Material Disposal Site (ODMDS) has been developed and agreed to pursuant to the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, for the management and monitoring of ocean disposal activities, as resources allow, by the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps).



8/26/97



9/11/97

Grant M. Smith
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Date

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This plan is effective from the date of the last signature and shall be reviewed and revised as necessary.

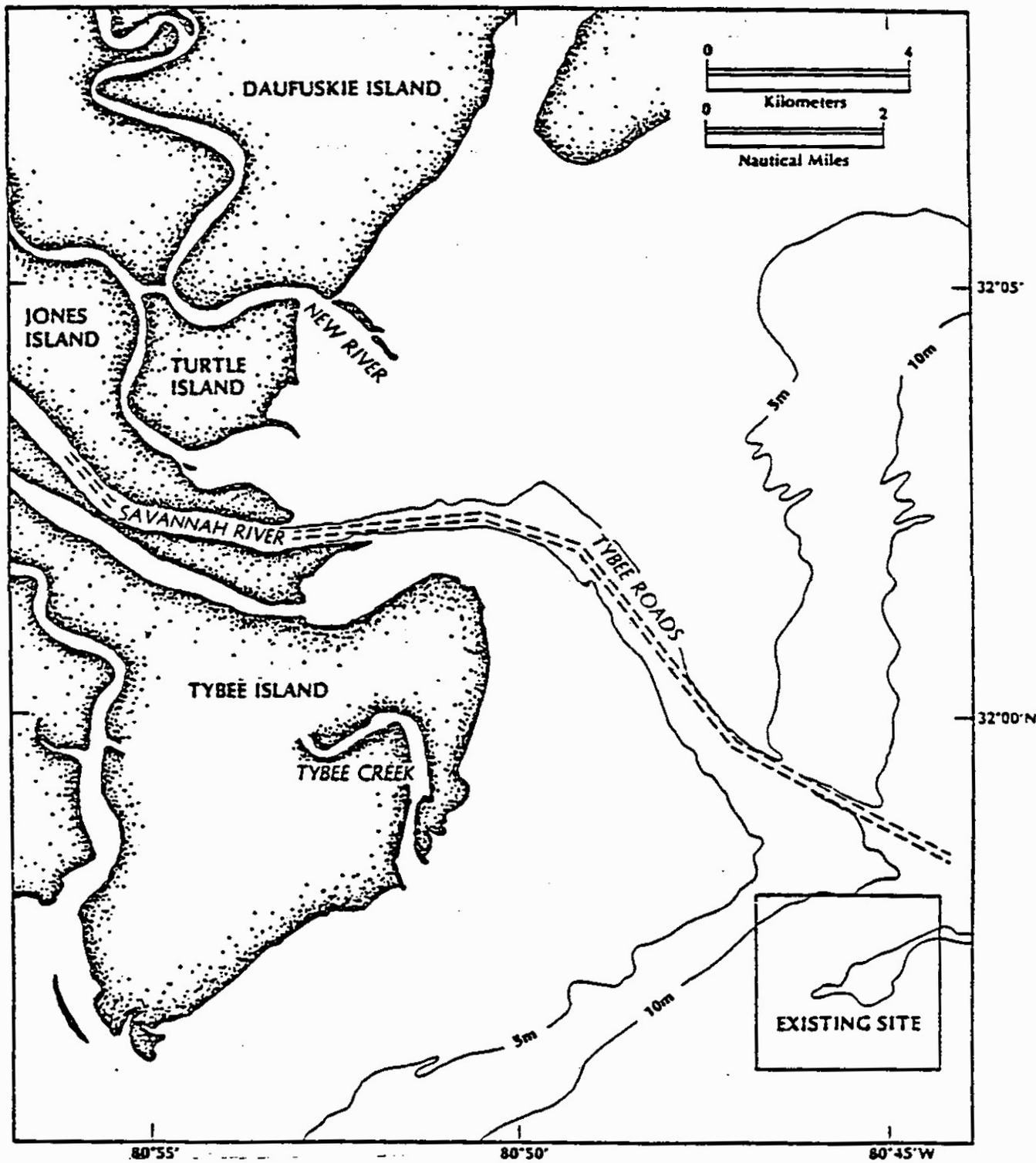
SITE MANAGEMENT PLAN
SAVANNAH HARBOR ODMDS

I.1.00 INTRODUCTION. The Environmental Protection Agency (EPA) formally designated the Savannah Harbor Ocean Dredged Material Disposal Site (ODMDS) in August 1987. The location of that site is shown in Figure 1. It is the responsibility of the EPA under the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 to manage and monitor ODMDSs designated by the EPA pursuant to Section 102 of MPRSA. As part of this responsibility, EPA/Region IV in conjunction with the Savannah District, U.S. Army Corps of Engineers (COE) developed a management and monitoring plan to specifically address deposition of dredged material into the Savannah Harbor ODMDS.

I.2.00 SITE MANAGEMENT AND MONITORING TEAM. An interagency Site Management and Monitoring Plan (SMMP) team, consisting of representatives of EPA, COE, Georgia Department of Natural Resources (GA DNR), and Chatham County has been established to review and comment on all Savannah Harbor ODMDS management and monitoring activities. Other agencies will be asked to participate when appropriate. This SMMP Team will coordinate annually to discuss upcoming disposal activities, suitable management practices, and monitoring efforts for the Savannah Harbor ODMDS.

I.3.00 SITE MANAGEMENT

I.3.01 Section 223.3 of the Ocean Dumping Regulations (40 CFR 220 to 229) states: "Management of a site consists of regulating times, rates, and methods of disposal and quantities and types of materials disposed of, developing and maintaining effective ambient monitoring programs for the site; conducting disposal site evaluation studies; and recommending modifications in site use and/or designation." The plan may be modified if it is determined that such changes are warranted as a result of information obtained during the monitoring process.



SAVANNAH OCEAN
DREDGED MATERIAL
DISPOSAL SITE

FIGURE 1

I.3.02 Management Objectives. There are three primary objectives in the management of an ODMDS. These are:

- Protection of the marine environment;
- Beneficial use of dredged material whenever practical; and
- Documentation of disposal activities at the ODMDS

The following sections provide the framework for meeting these objectives to the extent possible.

I.3.03 Material volumes. To this point in time, the Savannah ODMDS has only received materials excavated from the entrance channel of the Savannah Harbor Navigation Project. Those sediments average about 15 percent fines and are located in areas of high current and wave energy. The sediments are typically removed from that channel on an annual basis. CaE records indicate that annual removal has averaged 934,000 cubic yards over the 16-year period from 1976 to 1992. EPA's Final EIS for designation of the ODMDS stated that approximately 1,000,000 cubic yards per year are excavated from the entrance channel and deposited at the site. Over 1993 and 1994, the entrance channel was deepened by the COE and annual deposition at the ODMDS averaged 3,000,000 cubic yards for those two years. Future deposition is expected to return to the long term average and approximate 1,000,000 cubic yards per year. That quantity may decrease if beneficial uses, such as beach placement or construction of nearshore berms or islands, are implemented for the entrance channel sediments.

I.3.04 The 1983 Final EIS for designation of the Savannah ODMDS placed no restrictions on disposal volumes. Disposal of unrestricted volumes is dependent upon results from future monitoring surveys.

I.3.05 Material suitability. There is no general restriction regarding the type of material that may be placed at the site at this time. However, the suitability of dredged material for ocean disposal must be verified by the COE and agreed to by EPA prior to disposal activities. Verification will be valid for three years from the date last verified. Verification will involve: (1) a case-specific evaluation against the exclusion criteria (40 CFR 227.13(b)), (2) a determination of the necessity for bioassay (toxicity and bioaccumulation) testing for non-excluded material based on the potential for contamination of the sediment since last tested, and (3) implementing testing and determining that the non-excluded, tested material is suitable for ocean disposal.

I.3.06 Documentation of verification will be completed prior to use of the site. Documentation for material suitability for dredging events proposed for ocean disposal more than 5 years since last verified will consist of a new Section 103 Evaluation and Public Notice. Documentation for material suitability for dredging events proposed for ocean disposal less than 5 years, but more than 3 years, since last verified will consist of a review through an exchange of letters between the COE and EPA.

I.3.07 Should EPA conclude that reasonable potential exists for contamination to have occurred, testing acceptable to EPA will be completed prior to use of the site. Testing procedures to be

(Green Book) and the Regional Implementation Manual. Only material determined to be suitable through the verification process by the COB and EPA will be placed at the designated ocean disposal site.

I.3.08 Time of disposal. At present, no restrictions related to seasonal variations in ocean current or biotic activity have been determined to be necessary. As monitoring results are compiled, should any such restrictions appear necessary, disposal activities will be scheduled to avoid adverse impacts. Additionally, if new information indicates that an endangered or threatened species is being adversely impacted, restrictions for protection of that species may be instituted.

I.3.09 Disposal Technique. No specific disposal technique is required for this site. However, it is the intent of this plan to maximize any advantages of strategic placement of materials and minimize off-site migration of deposited materials.

I.3.10 Previous disposal has generally occurred in the northeast quadrant of the site. This has apparently resulted in the formation of a mound of deposited sediments (see Figure 2). Future deposition would be managed to limit excessive mounding and minimize impacts to nearby benthic communities. Materials should be placed in a manner such that the resulting top elevation does not interfere with navigation.

I.3.11 Use of any beach-compatible dredged material for beach nourishment or other beneficial use is encouraged by both the Corps and EPA where economically feasible and environmentally sound. Expected environmental benefits should be included in the evaluation of the feasibility of placement alternatives. Disposal of coarser material should be planned to allow placement within or accessible to the littoral zone, to the maximum extent practical and following the provisions of the Clean Water Act.

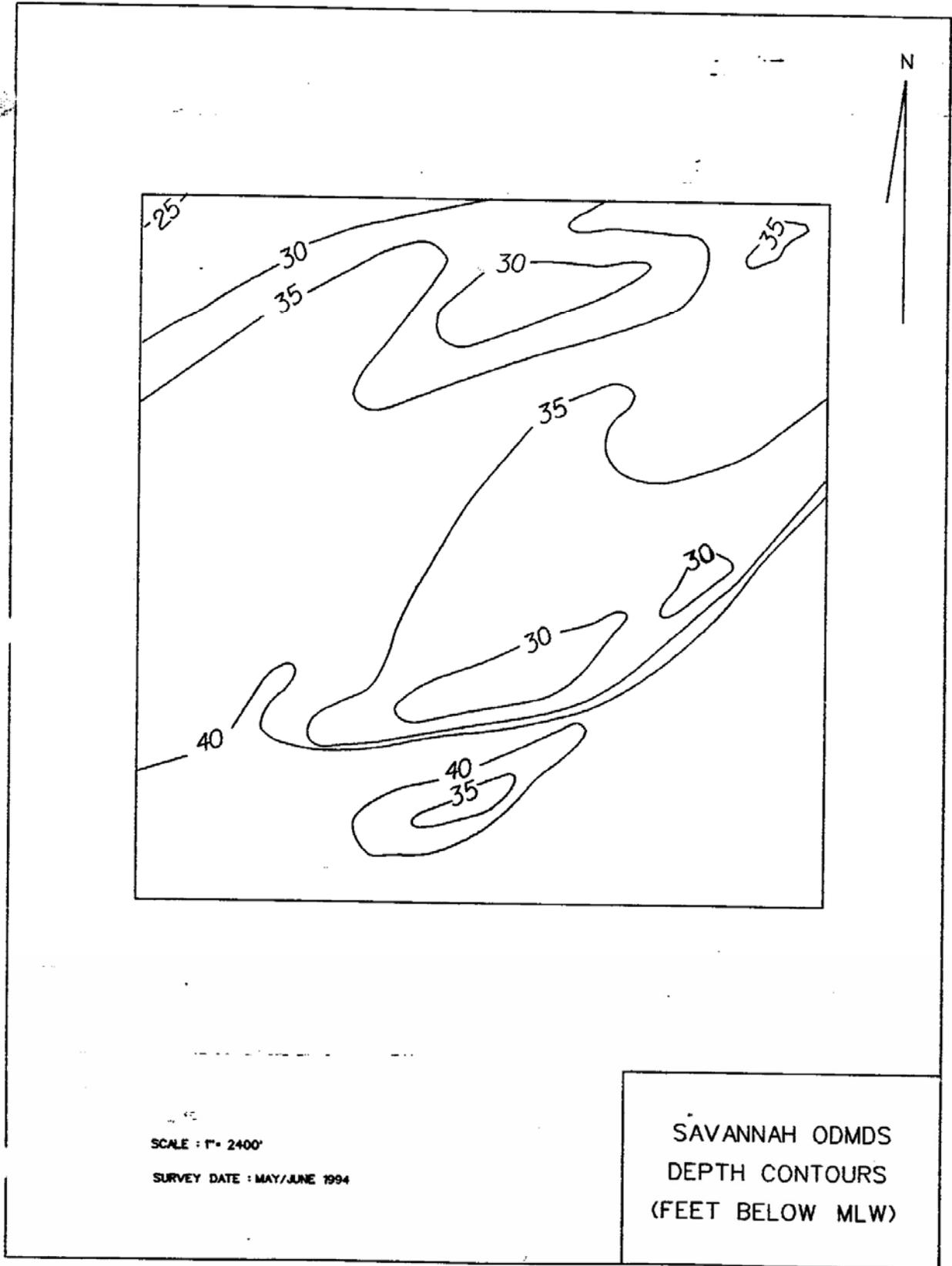


FIGURE 2

I.3.12 Placement of Materials. Prior to any disposal of dredged materials other than normal Bar Channel maintenance sediments, an agreement between EPA and the CaE will be reached concerning the exact placement of these materials. Permits/contracts will specify locations for the disposal of any material from the project. Until monitoring results necessitate the need for any alterations, materials will be placed within the ODMDS according to paragraphs I.3.8 through I.3.10. Predominantly coarse-grained material maybe used for beach nourishment or another beneficial purpose (i.e. submerged berms, feeder berms or nearshore islands).

I.3.13 Disposal Monitoring. For all disposal activities, the dredging contractor will be required to prepare and operate under an approved electronic verification plan for all disposal operations. As part of this plan, the contractor will use an automated system that will continuously track the horizontal location and draft condition (vertical) of the disposal vessel from the point of dredging to the disposal area, and return to the point of dredging. Accuracy and precision of the locational system will be at least as good as provided by Loran C. Required digital data are as follows:.

- (a) Date;
- (b) Time;
- (c) Vessel Name;
- (d) Dump Number;
- (e) Map Number on which dump is plotted;
- (f) Beginning and ending coordinates of the dredging area for each load, and the beginning and ending coordinates for each dump and the compass heading at the beginning of each dump;
- (g) Channel stations from which dredged material came;
and
- (h) Volume and brief description of material disposed.

I.3.14 Prior to commencement of disposal operations, a baseline bathymetric survey will be conducted of the disposal area and adjacent areas by the site user. The survey will be taken along lines spaced on 500-foot intervals and be of sufficient length to adequately cover the area. Accuracy will be +/- 1.0 feet. The survey will be referenced to MLW and corrected for tide conditions at the time of the survey. The Savannah District ARTIS tide gauge will be used for tidal corrections. As a follow-up to the baseline bathymetric survey, the site user will conduct a similar survey after disposal. The number of transects and accuracy required will be the same as in the baseline survey.

I.3.15 The user will be required to prepare and submit to the COE daily reports of operations and monthly report of operations for each month or partial month's work. The information contained in items (a) through (h) above will be provided in IBM-compatible computer format.

I.3.16 When disposal operations are complete, the contractor will provide to the COE two scatter plots showing where each load was deposited (beginning and end of each dump). One plot would be on a scale of 1 inch equals 2,400 feet (fit an 8 1/2 by 11 inch paper), and the other plot would be a scale of 1 inch equals 500 feet (fit a full size blue line drawing). The plots would also show the boundaries of the ODMDS.

I.4.00 SITE MONITORING

I.4.01 Part 228 of the Ocean Dumping Regulations establishes the need for evaluating the impacts of disposal on the marine environment. Section 228.9 indicates that the primary purpose of this monitoring program is to evaluate the impact of disposal on the marine environment by referencing the monitoring results to a set of baseline conditions. Section 228.10(b) states that in addition to other necessary or appropriate considerations, the following types of effects will be considered in determining to what extent the marine environment has been impacted by materials disposed at an ocean site (excerpted):

1. Movement of materials into estuaries or marine sanctuaries, or onto oceanfront beaches, or shorelines;
2. Movement of materials toward productive fishery and shellfishery areas;
3. Absence from the disposal site of pollution-sensitive biota characteristic of the general area;
4. Progressive, non-seasonal, changes in water quality or sediment composition at the disposal site, when these changes are attributable to materials disposed of at the site;
5. Progressive, non-seasonal, changes in composition or numbers of pelagic, demersal, or benthic biota at or near the disposal site, when these changes can be attributed to the effects of materials disposed at the site; and
6. Accumulation of material constituents (including without limitation, human pathogens) in marine biota at or near the site.

I.4.02 Part 228.10(c) states: "The determination of the overall severity of disposal at the site on the marine environment, including without limitation, the disposal site and adjacent areas, will be based on the evaluation of the entire body of pertinent data using appropriate methods of data analysis for the quantity and type of data available.

I.4.03 Impacts will be classified according to the overall condition of the environment of the disposal site and adjacent areas based on the determination by the EPA management authority assessing the nature and extent of the effects identified in paragraph (b) of this section in addition to other necessary or appropriate considerations."

1.4.04 The Monitoring Plan for the Savannah Harbor ODMDS is described in Attachment A. The Monitoring Plan will be implemented subject to the availability of funding. Should shortfalls in funding occur, the SMMP team will recommend which aspects of the Monitoring Plan should receive priority. Results of monitoring will be reviewed by the SMMP team and recommendations made to the Corps and EPA on appropriateness and detail of future monitoring efforts.

I.5.00 MODIFICATION OF THE SITE MANAGEMENT PLAN.

I.5.01 Should the results of monitoring surveys indicate that continuing use of the Savannah ODMDS would lead to unacceptable impacts, then either the Savannah ODMDS Site Management Plan will be modified to alleviate the impacts, or the location of the ODMDS will be modified.

I.5.02 This Site Management Plan may be modified at any time by joint agreement of the signatory parties to the reflect the views of the SMMP team.

ATTACHMENT A

SITE MONITORING PLAN

FOR THE

SAVANNAH HARBOR ODMDS

ATTACHMENT A

SITE MONITORING PLAN
FOR THE
SAVANNAH HARBOR ODMDS

A.1.00 INTRODUCTION

A.1.01 The Savannah Harbor Ocean Dredged Material Disposal Site (ODMDS) is an active, frequently used site in the South Atlantic Bight (part of EPA's Region IV area of responsibility). This is the first Site Management Plan which has been developed for the Savannah ODMDS.

A.1.02 The Savannah ODMDS encompasses an area of 4.26 nautical miles (NM) (approximately 2.1 by 2.0 NM) and is located about 3.7 NM east of the coastline and about 0.25 NM (1,500 feet) south of the Navigation Channel. The site's center is located at 31 56'54"N and 80 45'34"W. The site was formally designated by EPA as an ODMDS on August 2, 1987. To date, the site has only been used for placement of material obtained from the Savannah Harbor Navigation Project. The site has received both new work and maintenance dredged material from the harbor's Bar Channel (entrance channel), which is located oceanward of Station 0+000. No disposal activities are known to have occurred outside the boundaries of the site.

A.1.03 Monitoring activities were initially conducted by Savannah District in 1994 to assess the fate of dredged material placed within the ODMDS during the early 1994 disposal activities. At that time, both new work material from the Savannah Harbor Deepening Project and maintenance material were placed at the site. The primary objectives of these bathymetric surveys were to: (1) document the bathymetry of the site prior to configuration of mounds created at the site with dredged material during the 1994 disposal activities, (3) determine whether any material deposited is moving offsite, and (4) attempt to determine the rate and/or direction of material migration.

A.1.04 The Monitoring Plan is a component of the initial Site Management Plan for the Savannah Harbor ODMDS. The Monitoring Plan should be regarded as a flexible strategy with the various task and techniques applied as appropriate and as dictated by disposal activities and observed effects. The following sections describe the objectives and methods for the site monitoring.

A.2.00 OBJECTIVES

A.2.01 Major objectives of the Savannah ODMDS Monitoring Plan are to:

- (1) Determine the fate of dredged material placed at the site, and
- (2) Assess the impact of dredged material through the early detection of changes in sediment characteristics (physical and chemical), and biological communities which may be deemed as adverse and chronic.

A.2.02 Since several different ecological components are susceptible to perturbation by dredged material disposal, and an alteration to one component may have a resultant impact on another, a comprehensive monitoring approach is proposed with several specific objectives. These objectives are to:

- 1) Continue bathymetric mapping of the ODMDS and surrounding area, and relate findings to plotted coordinates of disposal events.
- 2) Using sediment mapping techniques, periodically review the direction and rate of migration of deposited dredged material.
- 3) Evaluate the effects of disposal and subsequent movement of dredged material on the physical and chemical characteristics of the sediments and benthic infaunal communities in and adjacent to the ODMDS.
- 4) If determined necessary, determine the areal distribution of turbidity plumes generated during a major disposal operation and compare the turbidity data with the ambient turbidity plume emanating from Savannah River.
- 5) Select and characterize a sediment testing "reference site" meeting Green Book criteria, for use by public and private dredging projects, in conducting sediment toxicity and bioaccumulation test for ocean dumping evaluation.

A.2.03 Responsible Party. The activities described above in Section A.2.02 will be implemented by various agencies and parties. The site user will implement activities to accomplish objectives 1 and 5. EPA will implement activities to accomplish objectives 2 and 3. Should implementation of objective 4 become necessary, the SMMP team will advise its members which agency should be responsible and could best perform the necessary work.

A.3.00 MONITORING APPROACH AND RATIONALE

A.3.01 Sediment Mapping and Site Bathymetry.

A.3.02 An essential initial requirement for effective implementation of site monitoring activities at the Savannah ODMDS is accurate placement, recording, and plotting of disposal events. The Savannah District, USACOE, will require such information from all dredging contractors and will compile and continuously update computer plots depicting placement of dredged material. Plotted coordinates will be in GPS-corrected latitude/longitude to enhance use by all associated monitoring agencies.

A.3.03 Using the above information as a basis, close grid bathymetry will be conducted at least annually. The sediment mapping effort should encompass the entire area of the ODMDS designated for maintenance disposal and a 0.25 NM buffer zone around that site (Figure 1). The spacing of the grid may be expanded on the southern half of the ODMDS if disposal activities occur only in the northern half of the site. While the scheduling of these surveys is complicated by the frequency and quantity of dredged material disposal at the site, it is expected that sediment mapping will occur at least twice annually; before and after annual winter disposal operations. Experience with these techniques at the Savannah ODMDS thus far indicates that this frequency is the minimum necessary to effectively detect gross changes in dredge material redistribution. Due to the apparent highly dynamic nature of sediment transport at the site, detection of more discrete migration patterns may require mapping at a greater frequency, possibly targeting a specific disposal mound. In addition to bathymetric sediment mapping, areal mapping of sediment chemistry may be employed to differentiate and track native sediments and dredged material migration. Baseline studies were conducted in August 1991 to develop a complete isotopic, elemental, and physical (particle size) history for this location. The 1991 study indicated higher concentrations of fine sediments in the western half of the ODMDS.

A.3.04 Two existing bathymetric surveys conducted at the Savannah ODMDS sites (late 1993 and 1994) clearly depict the location of mounds within the ODMDS. These surveys indicate that significant off-site migration of deposited material is occurring, as the post-construction survey revealed a smaller total volume than did the pre-construction survey, even with deposition of 2.3 million cubic yards of sediments at the site as part of the 1993/1994 Savannah Harbor Deepening Project.

A.3.05 Biological Impact Assessments.

A.3.06 The primary intent of these sampling efforts will be to assess whether ocean disposal of dredged material at the Savannah ODMDS results in unacceptable adverse impacts to the biological communities adjacent to the ODMDS.

A.3.07 Benthic organisms are the resident community at the disposal site and do not have an ability to avoid increased sedimentation resulting from sediment disposal and movement. They also serve as a primary food source for the fisheries associated with the nearshore zone off the Georgia coast. Their sessile life cycle subjects them to both the physical and chemical perturbations on the seafloor generated by disposal activities. Because of their importance in food web dynamics, assessment of the benthic community structure should be a primary focus for detection of biological impact.

A.3.08 A limited benthic assessment consisting of one station within and one station southeast of the ODMDS was conducted by EPA in March and December 1979 prior to its official designation of the site as an ODMDS. A more comprehensive benthic survey of the ODMDS was conducted in May 1992. Six benthic monitoring stations were located within the disposal area and six stations were located just outside this area. The latter survey indicated the presence of two main species assemblages, based on apparent habitat type; a gravelly sand assemblage, and a silty sand assemblage. The gravelly-sand stations occurred in the eastern portion of the study area, and the silty-sand stations in the western half of the disposal site. The 1992 study will be used to direct subsequent ben

A.3.09 In order to expand the benthic database and allow evaluations to be made on the impacts which disposal operations at this site have on benthic communities, benthic surveys will be conducted both in the ODMDS and in the area immediately surrounding the site. The benthic data will allow determinations to be made concerning whether benthic resources outside the ODMDS are being affected by disposal of fine-grained materials, and determine whether these changes are detrimental. The primary focus of this monitoring effort will be to determine whether disposal operations cause a major change in the faunal composition of benthos (which could affect trophic functions) and/or whether there are significant alterations in species numbers or biomass. Changes in other biological metrics, similar to those currently being evaluated in EPA's EMAP program will also be considered based on their applicability to this survey area.

A.3.10 After the bathymetric surveys, sediment mapping, and current studies conclusively determine the direction(s) of sediment migration, benthic surveys would be conducted. The benthic monitoring would be concentrated in those areas where sediment transport was expected or documented to occur. The benthic surveys will involve collecting benthic samples in and around the ODMDS using an appropriate stratified sampling design based on available information, such as areal mapping of sediment chemistry. The general zones (strata) will include areas both within the ODMDS and adjacent to all boundaries of the ODMDS. The zones within the ODMDS would be used to document changes in the benthic communities following disposal operations for comparison with zones outside the ODMDS.

A.3.11 The number of samples obtained per zone will be sufficient to adequately represent the benthic community composition (based on species saturation curves) and detect moderate changes in faunal densities, biomass, and species numbers (based on power analyses). At least one sample will be taken within the area of steepest slope in the south-central portion of the ODMDS. Each benthic sample obtained for faunal assessment will be subsampled to determine sediment characteristics of the sample (eg, grain size, percent silt, clay, sand, CaCO, etc.). The sediment samples will be used to (1) further characterize the composition of surficial sediments in and around the ODMDS, and (2) aid in interpreting changes in benthic infaunal composition.

A.3.12 Disposal Plume Dispersion.

A.3.13 At infrequently used disposal sites, the turbidity plume generated during ocean disposal of dredged material is generally viewed as an episodic event with impacts being limited and temporary. However, at frequently used ODMDS's, consideration of the potentially chronic effects of the turbidity plume should be considered. Sessile live bottom organisms such as octocorals and sponges may be particularly susceptible to suspended solids' concentrations chronically above ambient. While no live bottom communities are known to be associated with the Savannah ODMDS, such communities, when present, are an important habitat for productivity and fish use. Should any significant benthic communities be identified in the area, an evaluation would be conducted to determine if they would be impacted by turbidity plumes. At that time, a typical turbidity plume generated by a major disposal event should be delineated and its areal distribution plotted. A ship-mounted transmissometer could be used to profile light attenuation at grid points encompassing the plume. The outer boundaries of the grid could be determined using an aircraft mounted GPS during an aerial reconnaissance of

the disposal operation prior to initiating the grid profiling. Information gleaned during this effort could be compared to plume turbidity/suspended solids concentrations for consideration of plume impact.

A.3.14 Sediment Turbidity Transport Studies.

A.3.15 An overall southerly movement of littoral material occurs in the general vicinity. That trend is interrupted, somewhat, by flows leaving the Savannah River. It is believed that the tidal inlet at Savannah tends to shift the overall southerly littoral drift pattern seaward to some degree. Shoaling patterns along the Bar Channel support the position that the littoral drift movement is from north to south.

A.3.16 There is no known existing data on ocean currents specifically at the Savannah ODMDS. However, predictions can be made based on the overall direction of waves which are recorded nearby. Review of the Hindcast wave Information for the U.S. Atlantic Coast (WIS Report 30) prepared in March 1993 by the Corps of Engineers, Waterways Experiment Station (WES) reveal the predominant wave directions are from the E-SE. Those directions also produce both the largest and longest period waves. July and August are the months of lowest wind strength, while the period of November through March produce winds of the greatest strength (over 40 miles per hour).

A.3.17 Based upon these limited findings, present management strategies involve placement of dredged material and construction of submerged berms down the eastern side of the ODMDS. Actual current data over an annual cycle would (1) add confidence to this management strategy, and (2) help clarify sediment redistribution patterns revealed by bathymetric surveys.

A.3.18 The primary task required for current data collection would be the deployment and retrieval of continuously recording current meters. Ideally, a long-term continuous data base obtained over a two-year period should be obtained to evaluate both seasonal and yearly variability in current patterns. Deployment of a Acoustic Doppler Current Profiler (ADCP) placed within or adjacent to the ODMDS would provide the best data base for this effort. Quarterly or semiannual retrieval of the data record would provide timely information on prevailing current patterns. Collection of such data should be coincident with a major disposal project during which sediment mapping, plume dispersion, and sediment sampling occurs. This would allow integration of current data into these programs, thus enhancing interpretation of plume dispersion, sediment transport and sedimentation.

A.4.00 CONTAMINANT STUDIES

A.4.01 Sediment Contaminant Monitoring.

A.4.02 Previous sampling of sediments in and around the ODMDS conducted by EPA prior to their official designation of the site as an ODMDS did not detect significant elevations of sediment contamination. A critical component of the proposed monitoring plan will be to periodically sample sediments in and adjacent to the ODMDS to monitor for changes in sediment contaminant levels. This sampling would be conducted using a tiered approach, where sites outside the ODMDS are not monitored until elevated levels are detected inside the ODMDS. A Tier I evaluation of the need for sediment chemical testing would be conducted every 3 years to coincide with a similar evaluation of sediments in the Bar Channel. More frequent sampling of the sediments may be warranted if elevated levels of certain contaminants are found, but the analysis could be restricted to only those constituents which are above acceptable levels.

A.4.03 Reference Site Assessment.

A.4.04 Testing of sediments for ocean disposal in conformance with the "Green Book" requires comparison of the project sediments with that from sediments outside the influence of the project. Questionable results can arise if low survival is experienced in the reference sediment. Concern for the acceptability of the reference sediment is also generated when the survival in both the reference and test sediments is low and there are similar percentages for survival or mortality. As defined in the testing guidance, a reference sediment should (1) be substantially free of contaminants, (2) be as similar to the grain size of the dredged material and sediment at the disposal site as practical, and (3) reflect conditions that would exist in the vicinity of the disposal site among the reference, control, and test sediments.

A.4.05 Satisfaction of the above requirements is often complicated because the disposal activity often does not involve the disposal of "like" material. The grain-size of sediments removed from the Bar Channel may be different than that found several miles offshore where the ODMDS is located. Sediments in the Bar Channel would be expected to be somewhat finer since that channel carries ebbing tidal water which have just flooded extensive salt marshes known for their detrital export functions.

A.4.06 Finding a reference sediment which is uncontaminated and similar to the grain size of the Bar Channel sediments, and yet represents conditions which would exist at the disposal site, which is primarily sand, is difficult. However, to aid in the long-term analysis of disposal at the Savannah Harbor ODMDS, selection of a single location for a suitable reference sediment which can be used for repeated sediment analyses would (1) ease the process of developing a sampling plan, and (2) allow comparison of the dredged material with similar material outside the influence of the project in accordance with the "Green Book".

A.4.07 Test Organism Assessment.

A.4.08 Selection of test organisms appropriate for the Savannah area, yet consistent with recommended national and regional "Green Book" species should be a part of this assessment. Information developed from this effort could then be used by the Corps both in-house and as instruction to any other organization which may be considering use of the Savannah Harbor ODMDS.