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The Interagency Working Group on the Dredging Process

The Dredging Process in the United States: An Action Plan for Improvement

A REPORT TO THE SECRETARY OF TRANSPORTATION - December 1994

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TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 THE DREDGING PROJECT REVIEW PROCESS: OPPORTUNITIES FOR IMPROVEMENT

3.0 THE INTERAGENCY WORKING GROUP ON THE DREDGING PROCESS

4.0 NATIONAL DREDGING POLICY

5.0 RECOMMENDATIONS TO IMPROVE THE DREDGING PROCESS: AN ACTION PLAN

- 5.1 Strengthening Mechanisms for Dredging and Dredged Material Management Planning
- 5.2 Enhancing Coordination and Communication in the Dredging Project Review Process
- 5.3 Addressing Scientific Uncertainties About Dredged Material
- 5.4 Funding Dredging Projects Consistently and Efficiently

6.0 CONCLUSION

Exhibit 1: Summary List of Recommendations
Appendix A: Primary Federal Statutes Governing Dredging
Appendix B: Methodology
Appendix C: Executive Summary of May 1994 Options Paper
Appendix D: List of Acronyms

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1.0 INTRODUCTION

The Dredging Process in the United States:

Ports play an essential role in the United States' economy, defense, and environment. The ports of the United States meet the demand for water transportation services, which is driven by the consumers and producers of waterborne cargo. This demand for waterborne cargo initiates a chain of economic activity which contributes to the overall national economy. The economic impact of the nation's port industry, port users, and public port capital expenditures is significant. In 1992, U.S. ports handled approximately 2.9 billion metric tons of cargo and supported over 15 million jobs. [1] In addition, approximately 95 percent of all U.S. exports and imports pass through U.S. ports. Foreign trade is an increasingly important element of the U.S. economy, currently accounting for over 20 percent of our Gross Domestic Product (GDP). This percentage is expected to grow in the future.

Besides being the gateways for domestic and international trade, ports also play an important role in our national security by handling essential cargoes for military operations. Channels to ports and berths must remain navigable and safe to ensure efficient and effective response to national and international emergencies.

Likewise, many ports are located in or near some of the Nation's most environmentally sensitive areas such as valuable wetlands, estuaries and associated fisheries. These eco-systems have economic, recreational and aesthetic value. They are critical to the vitality of fish, birds, and other wildlife, and many support profitable commercial fisheries. In 1988, the commercial fishing industry generated over 350,000 jobs. Also, about 94 million people annually participate in recreational boating and fishing. [2] Port development necessarily results in impacts of varying degrees to wetlands, fish habitats, and other aspects of the environment, such as recreational areas, while improper disposal of contaminated dredged material can present costly environmental and human health risks.

Historically, many regulatory programs which govern dredging have attempted to balance economic growth and national security with the economic and environmental value of coastal resources. This is generally done on a case-by-case basis. It has become clear that these objectives are not mutually exclusive. Early planning for environmental protection ensures that economic development will cost less and reap more benefits. Acknowledging the value of a port and/or region's environmental resources early in the planning process for dredging projects can substantially reduce conflicts which arise during dredging and dredged material disposal, resulting in economic growth *and* environmental protection.

U.S. ports and their surrounding environments are facing increased difficulties. Over the past two decades, a number of factors have complicated the development, operation, and maintenance of the nation's harbors, particularly in the area of dredged material management. These factors include increases in the demands of commerce, rapid evolution of shipping practices (containerization and intermodalism), increasing environmental awareness and mounting environmental problems affecting coastal areas and ocean waters, heavy population shifts to coastal areas, and a general increase in non-Federal responsibilities in the development and management of navigation projects. As a result, dredged material management has often become a contentious problem at all stages of harbor development and operation, from planning new projects to maintaining existing ones. Left unattended, these problems could cause a crisis.

This action plan presents specific ways to improve the dredging process to ensure that the Nation can maintain and develop needed coastal port capacity while protecting and conserving our important environmental resources. Furthermore, the recommendations support the goals of the National Performance Review's "Reinventing Government" effort, since government will improve the way it does business regarding dredging issues through interagency coordination and cooperation.

NOTES:

[1] *Public Port Financing in the United States*, MARAD, July 1994. [2] *1992-1993 Biennial Report to Congress on the Administration of the Coastal Zone Management Act*, OCRM, 1994.

2.0 The Dredging Project Review Process: Opportunities for Improvement

The Dredging Process in the United States:

The U.S. Army Corps of Engineers (Corps) dredges and disposes of about 300 million cubic yards of dredged material annually from Congressionally-authorized navigation improvement and maintenance projects. In addition, permit applicants (e.g., port authorities, terminal owners, industries, and private individuals) dredge an additional 100 million cubic yards annually from navigation projects (i.e., ports, berths, and marinas). The Corps reviews projects and issues permits for dredging and dredged material disposal in accordance with the Rivers and Harbors Act (RHA), the Clean Water Act (CWA), and the Marine Protection, Research and Sanctuaries Act (MPRSA); Congressionally-authorized projects conducted by the Corps do not receive permits but must comply with the same substantive permitting procedures and requirements. Under the CWA and MPRSA, the Environmental Protection Agency (EPA) is responsible for developing the environmental criteria used by the Corps to evaluate proposed discharges of dredged material and for environmental oversight. Several other project development and environmental compliance statutes, regulations and policies at the Federal (see Appendix A), state and local level can apply to typical dredging projects.

Ideally, dredging permit applicants submit complete and technically adequate project applications to the Corps and other review agencies for prompt review and decision; dredged material testing results provide enough information to assess the environmental impacts of dredged material disposal at the proposed disposal site, and to evaluate the risks and uncertainties associated with the proposed project; information is then shared readily among all relevant stakeholders, from Federal and state agencies to the general public; and Congress expeditiously reviews, authorizes, and funds essential new Federal navigation projects. Unfortunately, the ideal is not always achieved.

For a broad range of reasons, dredging projects can become stalled in the review process. The project review process has improved since passage of the Water Resources Development Act of 1986 (WRDA '86). Nonetheless, the process is not perfect, and in some cases, projects have experienced significant delays. During the Group's review of the dredging process, the following problems were identified:

- Lack of a unifying national dredging policy to serve as a focus for individual Agency programs;
- Unresolved interagency conflicts can result in significant delays in the dredging process;

- Inadequate planning by Federal, state, and local entities, especially with regard to dredged material management, can result in conflicts among stakeholders and long project delays;
- Insufficient information exchange and coordination among all involved stakeholders, can result in poor dredged material management planning, incomplete and/or technically inadequate permit applications, stakeholder dissension, and project delays;
- Unclear expectations of the relevant Federal, state, and local agencies, can result in the need to generate additional information late in the process, and project delays;
- Uncertainties regarding the scientific ability to evaluate risks to the environment associated with contamination and the disposal alternatives (e.g., open ocean disposal, confined disposal facilities, and beneficial use) can cloud disposal decisions;
- Inconsistent funding policies regarding open water, upland, and confined disposal, as well as beneficial use of dredged material, can skew disposal decisions and result in inefficient use of Federal and non-Federal funds; and
- Insufficient financial and staff resources at many Federal, state, and local resource agencies constrain the ability of the agencies to conduct adequate advanced dredged material management planning, dredging project reviews or disposal site management.

The problems which slow down the dredging process can be categorized into the following areas: planning, the project review process, scientific uncertainties, and inconsistent funding allocations. This action plan addresses each of these problem areas with specific recommendations which, when implemented, will make the dredging process more timely, efficient, and predictable.

NOTES:

[3] Appendix B presents a brief methodology used by the Group and Appendix C provides a copy of the Executive Summary of the Options Paper.

3.0 THE INTERAGENCY WORKING GROUP ON THE DREDGING PROCESS

The Dredging Process in the United States:

The Interagency Working Group on the Dredging Process (Group) was convened by Federico Peña, the Secretary of Transportation, in October 1993 to investigate and recommend methods to improve the dredging project review process. The Group had two major objectives:

- Promote greater certainty and predictability in the dredging project review process and dredged material management, and
- Facilitate effective long-term management strategies for addressing dredging and disposal needs at both the National and local levels.

The Group is comprised of members from the Department of the Army, United States Army Corps of Engineers (Corps); the Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), and Office of Ocean and Coastal Resource Management (OCRM); the Department of the Interior, U.S. Fish & Wildlife Service (FWS); the Department of Transportation (DOT), Maritime Administration (MARAD); and, the Environmental Protection Agency (EPA). Liaisons from the Office of Management and Budget (OMB); the Office of the Secretary of Transportation; the U.S. Navy; the U.S. Coast Guard; and, the White House Office on Environmental Policy also participated.

To meet its objectives, the Group reviewed the current processes for authorizing Federal and non-Federal dredging projects; for identifying, planning for, and selecting dredged material disposal alternatives; and for funding Federal dredging projects. This review included analyzing the aforementioned processes and identifying ways to improve them, including coordination, information gathering, environmental compliance, overall sequencing of approvals, and use of long-term dredged material management planning.

As part of this review, the Group solicited information from the stakeholders involved in dredging and dredged material management. The range of stakeholders included Federal, state, and local governments; port and shipping interests; environmental groups; commercial fishermen; recreational boaters; maritime labor unions; local businesses; and the general public. The Group held a

series of public outreach sessions to meet with stakeholders in January and February 1994. Following the first outreach sessions, the Group issued the May 1994 *Options Paper*, which identified the problems raised and proposed a series of alternatives for improving the dredging process. A second round of outreach sessions was held in May and June 1994 to collect stakeholder comments on the *Options Paper*. Using the results of the stakeholder feedback, the Group evaluated all options and developed the set of final recommendations contained in this paper to improve the dredging process. [3].

4.0 National Dredging Policy

The Dredging Process in the United States:

The Group identified the need for a unified national dredging policy to guide in the development of recommendations and to focus Federal agency commitments. The Group recommends that the Administration adopt the following Findings and Principles as a statement of National Dredging Policy. The findings are:

- A network of ports and harbors is essential to the United States' economy, affecting its competitiveness in world trade and national security. Port facilities serve as a key link in the intermodal transportation chain and can realize their full potential as magnets for shipping and commerce only if dredging occurs in a timely and cost-effective manner.
- The nation's coastal, ocean, and freshwater resources are critical assets which must be protected, conserved, and restored. These resources are equally important to the United States by providing numerous economic and environmental benefits.
- Consistent and integrated application of existing environmental statutes can protect the environment and can allow for sustainable economic growth.
- Close coordination and planning at all governmental levels, and with all aspects of the private sector, are essential to developing and maintaining the nation's ports and harbors in a manner that will increase economic growth and protect, conserve, and restore coastal resources.
- Planning for the development and maintenance of the nation's ports and harbors should occur in the context of broad transportation and environmental planning efforts such as the National Transportation System and the ecosystem/watershed management approach.

The principles are:

- The regulatory process must be timely, efficient, and predictable, to the maximum extent practicable.
- Advanced dredged material management planning must be conducted on a port or regional scale by a partnership that includes the Federal government, the port authorities, state and local governments, natural resource agencies, public interest groups, the maritime industry, and private citizens. To be effective, this planning must be done prior to individual Federal or non-Federal dredging project proponents seeking individual project approval.

- Dredged material managers must become more involved in watershed planning to emphasize the importance of point and non-point source pollution controls to reduce harbor sediment contamination.
- Dredged material is a resource, and environmentally-sound beneficial use of dredged material for such projects as wetland creation, beach nourishment, and development projects must be encouraged.

The findings and principles are embraced by all of the Group's participating agencies. The Federal agencies commit themselves to the fulfillment of these principles, and to complete and timely implementation of the following recommendations.

5.0 Recommendations to Improve The Dredging Process: An Action Plan

The Dredging Process in the United States:

The Group has developed a series of 18 recommendations to improve and expedite the existing dredging project review process. These recommendations require up-front, comprehensive planning with increased public participation, effective interagency communication and cooperation, and better tools to ensure timely and informed project review and decision making. The recommendations represent an approach to the dredging process which recognizes the economic benefits of improving and maintaining our ports and channels and addresses environmental concerns associated with dredging and dredged material disposal.

Specific recommendations for improvement are presented in four areas: dredging and dredged material management planning mechanisms, the project review process, scientific understanding of dredging activities, and funding methods. Each recommendation is numbered for the reader's convenience, though this is not intended to convey any priority or ranking. These final recommendations will be implemented by the headquarters of the relevant Federal agencies, except where specifically noted.

Most of the recommendations can be initiated immediately, while others will require legislative and regulatory modification. These recommendations pertain to the dredging of deep-draft channels and berths and do not specifically address inland waterway dredging. However, many elements of the recommendations can be applied to similar issues in the dredging of inland waterways.

5.1 Strengthening Planning Mechanisms for Dredging and Dredged Material Management

Problem Statement: Inadequate early planning for dredging and dredged material management at the local, regional, and national levels impacts most aspects of the dredging project review process:

- Federal and state regulatory agencies often do not adequately coordinate or communicate their concerns about dredging projects early in the permitting process. This contributes to delays in the decision making process and the approvals required by Federal and state law;

- Stakeholders frequently do not effectively participate in planning efforts. Concerns and issues may be raised late in the review process, resulting in conflicts and project delays;
- Planning decisions for dredging projects are often based on an incomplete analysis of the comparative values and/or cumulative effects of the entire plan;
- Planning decisions about dredged material management, including disposal alternatives, site monitoring, and determining the suitability of dredged materials for beneficial use, are not always realistically incorporated into port dredging plans. Thus, disposal alternatives may be unavailable when they are needed and dredging projects are delayed;
- Long-term port planning has not been linked to broader watershed management. Specifically, despite increased control over upstream pollution, downstream sediment quality continues to suffer due to historic sources and continued inputs, such as non-point sources of pollution;
- Decision-making criteria for the selection and funding of Federal dredging projects have not always maximized beneficial uses of dredged material. When resource agencies or the public believe that opportunities for beneficial uses have not been adequately formulated, project delays may result; and,
- The need for port dredging and dredged material management is not always integrated with planning for landside transportation systems.

In addition to these problems, changes over the last two decades in the economy and in technology have created new challenges to be addressed by the planning process. These changes include: increased international/waterborne commerce; rapid evolution of shipping practices to include containerization and intermodalism; increased environmental awareness and understanding, particularly regarding the impacts of contaminated sediments, as well as the ecological value of wetlands and coastal resources; population growth in coastal areas; and increased cost sharing and management responsibilities for local partners in dredging projects.

Recommendations: The planning process for dredging projects and dredged material management must be improved. Individual port development, regional and national economic development, and appropriate management of the environmental effects of dredging and dredged material disposal must be considered during the planning process. Progressive dredged material planning also must be coordinated with broader watershed and transportation planning efforts. Properly executed, dredged material management planning provides a framework for all Federal, state and local agencies to commit to a specific, integrated approach to implementing dredged material management.

Encouraging all concerned parties to participate early in the dredging planning process will promote proactive, rather than reactive, decision making. Further, advanced planning will provide an open forum for the affected parties to voice

their concerns, thus providing an opportunity to resolve issues before they become adversarial. The following are key concepts to consider during the planning process for dredging projects:

- The planning process must reflect the unique mix of environmental, political, and economic circumstances in the individual port and the region;
- Planning strategies must be flexible enough to consider advances in technology, new scientific data, and changes in economic circumstances, and to efficiently integrate these new factors into the decision making process;
- Regional and local planning interests must develop direct mechanisms for early coordination and advanced planning for dredging activities, and selection and management of dredged material disposal sites;
- Public participation must be broadened to include all stakeholders so that there is widespread understanding of: the role of the local port in the regional economy, the availability of dredged material management options, the environmental considerations of dredging, and the roles and responsibilities of the involved agencies;
- Local dredged material planning efforts must be consistent with, or at least must not conflict with, regional or national dredging policies; and
- All agencies must be committed to developing, as well as implementing, the plans.

The project review process currently uses an *ad hoc* planning process, resulting in a piecemeal rather than an integrated planning approach. The recommendations listed below are intended to enhance the planning process to facilitate/emphasize long-term planning for dredged material disposal and broader state-led regional, watershed, and transportation planning efforts.

❑Recommendation 1: Create and/or augment regional/local dredged material planning groups to aid in the development of regional dredged material management plans.

In March 1993, the Corps issued a new policy which requires a dredged material management plan for every Federal project. In many areas of the country, Corps-led efforts have generated comprehensive regional dredged material management planning efforts. Regional/local planning groups may use other cooperative efforts to broaden the scope of their activities and integrate dredged material management planning into broader watershed efforts. Examples of Federal efforts include the EPA's National Estuary Program (NEP) and the NOAA's work under the Coastal Zone Management Act (CZMA) to assist states with developing Special Area Management Plans (SAMPs). Other examples of cooperative dredged material planning efforts include the Puget Sound Dredged Disposal Analysis plan and the San Francisco/Oakland Long-Term Management Strategy plan.

The planning groups proposed by this recommendation will consist of Federal and state agencies and other affected stakeholders. The groups will ensure that dredged material management plans identify short-term and long-term disposal alternatives, consider methods to reduce dredging, and maximize beneficial use of dredged materials. Some of the responsibilities of the groups will include:

- Identifying incentives for agencies and the public to participate in dredged material management planning and informing both agencies and the public about the benefits of such a program;
- Promoting watershed planning efforts and providing public forums to educate the various stakeholders, in conjunction with comprehensive dredged material disposal planning efforts; and,
- Identifying funding sources for developing dredging plans. The plans will be cost-shared by the participating agencies both through direct funding and in-kind services.

❑**Recommendation 2: Identify the characteristics of successful Federal/state/local partnerships for use in developing dredged material management planning efforts**.

The EPA, the Corps, the NOAA, and the MARAD will develop a guide to assist with establishing dredged material management planning efforts. The information will be in the form of a program guide and include a series of case studies. The information will assist regional efforts recognizing that each port area is unique and, therefore, must develop a management plan tailored to meet its own needs. The guide will cover the following subjects:

- Early public involvement;
- Federal/state/local cost-sharing and coordination;
- Facilitation of multi-jurisdiction coordination;
- Coordination of regional planning efforts with ecosystem/watershed planning;
- Comprehensive site management,

  - selection of environmentally-sound sites,
  - baseline data collection,
  - permit compliance monitoring,
  - environmental monitoring,
  - feedback coordination;

- Funding sources/long term financial commitment,

  - local assistance for cost-sharing beneficial use projects,
  - user fees as adopted by law,
  - government funding options,
  - identification of cost savings; and

- Technical and policy issues related to dredged material management.

❑Recommendation 3: Develop public outreach and education programs to facilitate stakeholder involvement.

All agencies will immediately review their existing public participation programs. Each agency will develop education and outreach programs designed to encourage and facilitate public participation by:

- Building awareness of existing mechanisms for public involvement through basic education and outreach programs/materials that are created for different target groups (e.g., fishermen, conservation organizations, port interests).
- Communicating issues of human and environmental risk from contaminated sediments to non-technical audiences. The program will increase the public's understanding of the comprehensive testing to measure contamination and the implications of the test results, which drive many disposal decisions.
- Educating the public about the dredged material planning and evaluation process, and the impacts associated with dredged material disposal/beneficial use alternatives.

❑Recommendation 4: Provide guidance to relevant Agency field offices, state and local agencies, and the general public on opportunities for beneficial use of dredged material.

The Corps will review existing regulations and guidance and, as necessary, provide additional guidance to the field that requires considering beneficial use of dredged material at an early point in the planning process of both new navigation projects and operations and maintenance activities. Other agencies such as the EPA, the FWS, and the NMFS, will participate in the development of this guidance to ensure that appropriate agency roles and functions are designated for beneficial-use options such as wetland or other habitat creation.

Each resource agency has a role and commitment to promote beneficial use of dredged material. The Corps and the EPA will develop technical explanatory guidance for use by field personnel and the public on cost-sharing provisions affecting beneficial uses and potential sources and strategies for funding the incremental costs of beneficial uses. The FWS, NMFS, OCRM, and DOT will support and promote beneficial use of dredged material and will work with state and local constituency groups to identify potential non-Federal partners for beneficial-use projects.

❑Recommendation 5: Update guidance on disposal site monitoring requirements and procedures.

The EPA and the Corps will complete technical guidance to be used by their field offices in developing and implementing site management and monitoring plans. This guidance will improve the ability of the field offices to identify potential impacts of greatest concern, provide technical guidance and advice on monitoring tools and techniques, direct available resources for monitoring to issues of environmental significance, work to assure compliance with permit conditions, and promote consistency between sites and regions.

The guidance will encourage use of common data collection protocols and procedures to assure that site-specific monitoring plans are coordinated, and that data is transferred among Federal, state, and local agencies, and the public. This will minimize duplication of monitoring efforts and assure that relevant resource agencies and the public are kept informed about potential disposal impacts or lack thereof.

❑Recommendation 6: Ensure that dredged material management planners work with pollution control agencies to identify point and nonpoint sources of sediment and sediment pollution, and to implement watershed planning.

The EPA, the Corps, and other dredged material managers must work with watershed planners to ensure that upstream sources of sediment and sediment pollution are controlled. Over the long term, controlling both upstream pollution and erosion will reduce problems associated with contaminated sediments, dredging, and disposal. Dredged material managers must become more involved in watershed planning to emphasize the importance of point and non-point source pollution controls to reduce harbor and channel sediment contamination.

In a number of areas in the United States, pollution control planning is done on an estuary-wide or watershed basis (e.g., the New York-New Jersey Harbor NEP). Port planning activities must be coordinated with these efforts to ensure that such regional plans consider and provide for the pollutant controls necessary to reduce sediment contamination. Additionally, existing efforts such as the Section 6217 Coastal Nonpoint Pollution Control Program, and revision and reauthorization of the Clean Water Act (CWA), as proposed by the Administration, will strengthen watershed planning efforts and further improve pollution controls.

❑Recommendation 7: Review the Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies (P&G) to determine whether changes are needed to better integrate the economic and environmental objectives of National Economic Development (NED) and Environmental Quality (EQ).

The existing P&G provides flexibility to incorporate environmental features into both new work and maintenance dredging projects. The Corps has issued guidance that provides for the formulation and implementation of projects for the environmentally beneficial use of dredged material; the Group believes that these

efforts should continue. Concurrent with these ongoing actions, the Group supports the Administration's initiatives to examine the P&G to determine whether changes are needed to better measure and integrate the dual objectives of NED and EQ. The National Dredging Issues Team (described in Section 5.2) will coordinate with these efforts to ensure that the review includes consideration of dredging and beneficial use of dredged materials.

❑**Recommendation 8: Revise the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to ensure that the planning process outlined in the legislation provides for linkages with plans which address dredging issues.**

The MARAD/DOT will suggest changes during the reauthorization of ISTEA in 1997 which ensure that: 1) Metropolitan Planning Organizations (MPOs) consider waterside infrastructure requirements as well as landside needs when developing transportation plans; 2) a balance is sought between the mobility needs of freight and people; and, 3) local port development plans are considered in the preparation of regional and statewide transportation planning efforts.

The MPOs are the primary planning mechanism available to coordinate transportation needs and project prioritization within a state or region. Under the revised legislation, the MPOs will more fully consider the importance of moving freight/cargo and the roles that ports and water transportation routes play in doing so. The long-term coastal and dredging planning in an area would thus be linked to long-term intermodal transportation planning for access to ports on both the land side and the water side. Other structures may also exist at the state level which can be linked to the dredging process.

5.2 Enhancing Coordination and Communication in the Dredging Project Development and Review Process

Problem Statement. While the existing dredging approval process works well for the majority of projects, for many projects the process may take too long and can be unpredictable. Contributing factors include inadequate communication with permit applicants on requirements, as well as inadequate coordination with the public regarding specific dredging/dredged material disposal projects. The project development and review process is a multi-disciplinary and multi-agency process involving a wide range of often competing interests and stakeholders. Open communications and early coordination are essential in this process. When coordination efforts fail, relationships among agencies may become adversarial, which further impedes (and raises the costs of) the review process. Mechanisms for resolving conflicts are imperfect and may cause disputes to fester for too long, alienating the participants. Decisions about O&M dredging also are impacted by these factors, specifically information sharing, inadequate communication with the public, and inadequate planning for dredged material disposal management.

Recommendations: The existing administrative procedures for developing and reviewing projects and reaching dredged material disposal decisions is basically sound, but aspects of that process require improvement. Most of these problems can be solved through early and vigorous stakeholder participation, improved and coordinated dredging policies and planning, and greatly expanded information sharing. The following recommendations have been proposed to address these problems in the dredging process.

❑Recommendation 9: Establish a National Dredging Issues Team and Regional Dredging Issues Teams.

The Corps and EPA will establish or use existing teams to promote national and regional consistency on dredging issues and provide a forum for conflict resolution and information exchange early in the process. The teams will provide a mechanism for timely resolution of conflicts by involving all agencies, and maximizing interagency coordination. The National and Regional Dredging Issues Teams will not supersede the authority of any of the agencies involved in the dredging project review process. Rather the teams are intended to provide a forum for conflict resolution by mutual agreement. These teams will consist of appropriate agency decision makers and technical experts.

The National Dredging Issues Team will be chaired by EPA and the Corps and will include representatives from the DOC, the DOI, and the DOT. The national team will have two roles: 1) to review policies and procedures associated with the dredging process, including implementation of this action plan, and to develop guidance for interaction with the Regional Dredging Issues Teams; and 2) to oversee the resolution of issues elevated from the Regional Dredging Team level.

The Regional Dredging Issues Teams will include representatives from the appropriate resource agencies. The teams will resolve local-level issues that arise during the permitting process, dredged material disposal management and planning, and new navigation project planning. The regional teams will review overall regional dredging issues and specific projects as necessary to improve coordination and resolve controversies; assure that necessary local agreements are completed and implemented; serve as a forum for information exchange among and provide guidance to local/regional dredged material planning groups (identified in Section 5.1) on the development of long-term dredged material management plans; and refer interagency policy, technical, and institutional issues to the national team for resolution, on a timely basis. Issues and conflicts associated with specific projects that cannot be resolved by the regional teams also may be elevated to the national team.

❑Recommendation 10: Schedule pre-application meetings among the Corps, the applicant, the EPA, other interested Federal agencies and relevant state agencies for dredging projects that are potentially controversial or that may involve significant environmental issues.

The Corps will schedule the meetings as necessary. Pre-application meetings can ensure that, by the time the project is ready for public notice, the applicant has submitted a complete and technically adequate application. This can occur because the pre-application meetings will provide a prospective applicant with an indication of the completeness of the project application, an indication of what anticipated environmental and health impacts are of most concern, an understanding of testing requirements for contaminated sediments, and mitigation concepts that could aid planning and expedite application reviews. The pre-application process is intended to help applicants identify the information needed by the Agencies to complete the review process. However, *even if a pre-application meeting is held* an applicant may be required to submit additional information to complete the permit evaluation or to meet other statutory requirements (e.g., NEPA).

In addition, if testing indicates that disposal may result in adverse impacts and/or that the dredged material should be specially managed (e.g. capped) and the results were not available and not provided in the original public notice for the project, the Corps will issue a second public notice. This supplemental public notice will improve coordination among Federal, state, and local agencies, and the concerned public, and provide the Corps with useful data on comments that specifically address potential contaminant-related impacts and management strategies to address them.

❑Recommendation 11: Develop and distribute a permit application checklist which identifies the information required from the applicant.

In coordination with appropriate resource agencies, the Corps will develop the checklist with a twofold function: to determine what information is needed to make up a "complete" application and to highlight areas of concern. The checklist will provide permit applicants with a means to conduct a preliminary evaluation of the completeness of their own applications, which in turn will result in more complete and technically adequate applications. The checklist will also facilitate the Corps' review of applications as the applications will be more consistent and predictable. Developing a checklist with input from multiple agencies will also provide agencies with a common vehicle for evaluating applications and communicating with each other. Ideally, the checklist will be used to consolidate information and, therefore, reduce the administrative burden. This document will also provide examples of how key information and testing results will be presented. This will promote consistency and clearly communicate the Federal government's expectations from private permit applicants.

❑Recommendation 12: Develop or revise the procedures for coordinating inter- agency review at the regional level to define the process by which various Federal parties coordinate on dredging projects.

Federal Agency field offices involved in the dredging project review process will develop or revise, as appropriate, local procedures to establish clear obligations and responsibilities, including the exchange of information, analytical standards for evaluating dredging proposals, and obligations for timely responses. The local procedures will also establish the roles and responsibilities of the Regional Dredging Issues Teams and define procedures for communicating and resolving interagency disagreements which may arise during the process. This should include identifying agency decision makers for dredging issues to minimize the potential for duplicative or inconsistent comments from the agencies. In addition, the local procedures will encourage the Regional Dredging Issues Teams to coordinate with local dredged material management planning groups. These procedures could be completed under the umbrella of existing CWA 404(q) MOAs or through development of MOAs specific to dredged material disposal.

❑Recommendation 13: Establish a national MOA to clarify roles and coordination mechanisms between the EPA and the Corps.

The EPA and the Corps will develop the MOA which will address dispute resolution, disposal site monitoring responsibilities, permit review roles, enforcement, and coordination to address sampling and testing plans in a timely fashion. Implementation of this MOA will help the two agencies more efficiently execute their responsibilities for dredged material management.

5.3 Addressing Scientific Uncertainties About Dredged Material

Problem Statement: Dredging results in large volumes of material that must be disposed in an environmentally-sound manner. As emphasized earlier, decisions about dredged material management must be made early in the planning process as uncertainty and controversy over dredged material disposal can result in delays and inefficiencies in developing and maintaining the nation's ports.

While the existing testing regime takes the complexities of sediment chemistry and the environmental conditions specific to each disposal site into account, and provides much information about the effects of dredged material disposal on the environment, uncertainties in scientific evaluations will always exist. The goal is not only to minimize the uncertainties associated with assessment tools but also to understand those uncertainties so they can be considered when making risk-management decisions. The dredging process is not alone in its effort to determine how to address scientific uncertainty and use it in risk management; it is an area being addressed by every regulatory program.

Some ecological and human-health effects are relatively easy to measure and evaluate (e.g., observed mortality of laboratory test animals); other effects are more difficult to evaluate (e.g., bioaccumulation of contaminants in test animal tissues). Risk managers must accurately assess a wide range of acute, sublethal, and chronic effects data to make the most practicable decisions that adequately

protect ecosystems and human health. This work is complicated by testing endpoints which range from reproductive and growth inhibition to endocrine disruption and genotoxicity, and by the understanding that bioaccumulative compounds might not necessarily have "safe" levels.

Regulatory authorities such as the EPA are now combining assessment tools to make risk-based evaluations and management decisions. However, the risk assessment process itself is more complicated and less intuitive to many in the regulated community who are accustomed to using single-number criteria for decision making. Risk assessment tools require calculations, data, and assumptions that are used in an iterative manner.

Risk assessment methods and risk management guidance for protecting human health and the environment, and for making regulatory determinations, are being developed by EPA under the Risk Assessment Framework. As the guidance develops, dredged material managers should continue to base their site-specific decisions on information gathered from the variety of assessment tools available to them.

Recommendations: Risk assessment and risk management methodologies can provide a comprehensive approach to evaluating dredged material and available disposal options. EPA and the Corps should work with the Risk Assessment Framework and risk management guidance to determine how they are best applied to the dredging program.

The following three recommendations will improve our understanding of the scientific uncertainties surrounding dredged material management planning and allow us to incorporate uncertainty analysis into these decisions.

❑Recommendation 14: Clarify and improve the guidance used to evaluate bioaccum ulation of contaminants from dredged materials.

The EPA and the Corps will evaluate the dredging program under the Risk Assessment Framework and other risk management guidance to develop a technical framework for the dredging program to assess potential human health and ecological risks associated with bioaccumulation. The EPA and the Corps will gather and organize available information and research so that decision makers can access and use the material when developing dredged material management plans. The emphasis will be on providing permit reviewers with practical and useable field guidance that can be used to interpret the environmental significance of laboratory bioaccumulation data.

❑Recommendation 15: Identify the practical barriers to managing contaminated sediments and ways to overcome the barriers.

The Corps and the EPA will publish guidance identifying technical, operational, institutional, and regulatory barriers to managing contaminated sediments and proposing environmentally appropriate "best practices" to overcome those barriers, including use of confined disposal facilities, subaqueous isolation (i.e., capping) and decontamination and other state-of-the-art technologies. The Corps and the EPA will capitalize on a number of existing Federal efforts to manage contaminated sediments (e.g., ARCS, SITES, NY/NJ Harbor demonstration projects, and the National Academy of Sciences Study, *Management and Remediation of Contaminated Marine Sediment*).

❑Recommendation 16: Identify means to reduce the volume of material which must be dredged.

The Corps and the EPA will continue to coordinate with other Federal agencies, particularly the U.S. Coast Guard, MARAD, and the private sector on reducing the need for dredging. For example, at a predominantly export port, inbound channel lanes can be shallower than outbound lanes, and at multi-channel ports, improved vessel-traffic control might be used to restrict, or prioritize, deep channel use to deep-draft vessels during certain tidal periods. State-of-the-art marine engineering technologies (such as use of ship simulators to assist in channel design and NOAA's real-time reporting of water-level measurements to maximize use of existing channel depths) can also be used to reduce dredging needs. The Corps and EPA will follow-up with appropriate technical guidance for use by their field offices and ports.

5.4 Funding Federal Dredged Material Disposal Projects Consistently and Efficiently

Problem Statement. There is no consistent policy on requiring cost-sharing for the use of open- water, upland, and confined disposal facilities. Federal and non-Federal cost-sharing responsibilities for dredged material disposal vary from project to project, region to region, and port to port depending on when the project was authorized. For example:

- The RHA of 1970 authorized the Corps to construct, operate, and maintain confined disposal facilities in the Great Lakes and their connecting channels, with local interests generally bearing no costs. In contrast, navigation projects authorized since 1986 require the non-Federal sponsor to provide upland and confined disposal facilities.
- As a general rule, open-water disposal costs are either cost shared (new projects) or borne by the Federal government (maintenance) while land and diking costs for upland and confined disposal costs are largely non-Federal burdens. This inconsistency creates a strong economic incentive for a non-Federal sponsor to urge use of open water disposal sites (which are "free" to the non-Federal sponsor) instead of upland and nearshore sites which must be paid for by the sponsor.

In addition to these complications, some of the Federal resource agencies which implement dredging and dredged material management programs and policies are facing significant staff and financial resource constraints. These agencies need to access a reliable, available funding base to implement dredging programs and policies. A particular problem is resources for managing ocean disposal sites. Some believe that the Harbor Maintenance Trust Fund (HMTF), which provides funds to maintain deep-draft Federal channels and harbors, provides such a resource base.

While the Corps does use the fund for this purpose, it can only do so within budgetary ceilings. Although the HMTF shows a "surplus" of about $300 million (in part due to the absence of authorizing legislation for NOAA to receive $45.5 million per year from the Trust Fund), this surplus is currently factored into the calculation of the Federal budget deficit and, under the strict requirements of the Administration's and the Congress' expenditure limits, expenditures of HMTF monies are limited by mandatory budget ceilings. Therefore, any additional expenditures from the HMTF must be offset by spending cuts in other programs.

Recommendations: Consistent funding and development of dredging projects will result in: increased efficiency and increased predictability of the dredging project review process; and, increased beneficial use of dredged material. The following recommendations are proposed.

❑**Recommendation 17: Revise WRDA to establish consistent Federal-local sponsor cost sharing, across all dredged material disposal methods**.

The Corps will recommend to the Administration changes to the appropriate legislation. Current cost sharing formulas for both new navigation projects and maintenance dredging provide for Federal cost sharing (new projects) and Federal funding (maintenance) when open-water disposal is used, but generally require local sponsors to pay all costs for land and diking when upland and confined disposal facilities are used. This inconsistency creates an incentive for open-water disposal and discourages more costly projects where beneficial uses of dredged materials produce environmental benefits. This recommendation would reduce inconsistencies. A more coherent policy will provide for more uniform Federal participation in all disposal alternatives.

❑**Recommendation 18: Study the feasibility of a fee for open-water disposal for non- Federal dredging projects.**

The EPA will study the need for and feasibility of imposing a user fee on the open-water disposal of dredged material to cover the cost of disposal site management. At a minimum, such a fee should cover the cost of ocean disposal site management. The WRDA 92 mandated that management plans be developed for each disposal site; however, to date no appropriations have been made to develop or implement such plans. These plans are to include, among

other things, a baseline study; a monitoring program; consideration of anticipated site use and closure data (if applicable), and the need for post-closure site management; and, a schedule for review and revision of the plan.

Because dredged material management should be consistent between ocean and inland waters, the study will look at the need for and feasibility of a user fee applying to all aquatic disposal sites, not just ocean sites. In addition, those entities most impacted by the fee, and the size of the fee will be examined. The feasibility of using fees only at the site where they were collected will be evaluated as part of this process.

The 18 recommendations listed above represent practical and productive improvements to the dredging process. Exhibit 1 presents a summary table listing each recommendation. Each of the recommendations will be implemented by the Federal agencies which participated in the Group.

6.0 Conclusion

The Dredging Process in the United States:

The recommendations presented in this Action Plan will demonstrably improve the regulations and planning procedures which currently govern dredging and dredged material disposal projects in the United States. Existing regulatory, procedural, and philosophical obstructions to the dredging process can be overcome with methodical identification and resolution of specific problem elements. The recommendations will result in improvements in agency communication, gains in scientific research, equitable project funding, and new outreach activities for non-agency groups and individuals. This will measurably change how essential dredging projects are planned and conducted.

Changes to the organization and prioritization of national and regional dredging policies and practices may be ultimately required to resolve some of the more problematic dredging sites and controversies. However, codifying new legislation and realigning agency missions and resources are certain to be difficult and time consuming. It is far more timely and efficient to address key impediments within the existing regulations and agency framework.

The Federal Agencies which participated in the Group that developed this paper are committed to implementing each of the above recommendations and operating a dredging process that is efficient and predictable, and fosters both economic growth and environmental protection for the Nation.

Summary List of Recommendations

Exhibit 1: Summary Listing of Recommendations				
Rec. No.	**Recommendation**	**Lead Agency**	**Time Frame**	**Page No.**
Strengthening Planning Mechanisms for Dredging and Dredged Material Management				
1	Create and/or augment regional/local dredged material planning groups to aid in the development of regional dredged material management plans.	Corps	Short Term	8
2	Identify the characteristics of successful Federal/state/local partnerships for use in developing dredged material management planning efforts.	Corps, EPA, NOAA MARAD	Short Term	9
3	Develop public outreach and education programs to facilitate stakeholder involvement.	All Agencies	Short Term	9
4	Provide guidance to relevant Agency field offices, state and local agencies, and the general public on opportunities for beneficial use of dredged material.	Corps, EPA	Short Term	10
5	Update guidance on disposal site monitoring requirements and procedures.	EPA, Corps	Short Term	10
6	Ensure that dredged material management planners work with pollution control agencies to identify point and nonpoint sources of sediment and sediment pollution and to implement watershed planning.	EPA, Corps	Sh ort Term	10
7	Review the Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies (P&G) to determine whether changes are needed to better integrate the economic and environm ental objectives of National Economic Development (NED) and Environmental Quality (EQ)	Corps	Long Term	11
8	Revise the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to ensure that the planning process outlined in the legislation provides for linkages with plans which address dredging issues.	MARAD	Long Term	11

Enhancing Coordination and Communication in the Dredging Project Approval Process				
9	Establish a National Dredging Issues Team and Regional Dredging Issues Teams.	Corps, EPA	Short Term	12
10	Schedule pre-application meetings among the Corps, the applicant, the EPA, other interested Federal agencies and relevant state agencies for dredging projects that are potentially controversial or that may involve significant environmental issues.	Corps	Short Term	13
11	Develop and distribute a permit application checklist which identifies the information required from the applicant.	Corps	Short Term	13
12	Develop or revise the procedures for coordinating interagency review at the regional level to define the process by which various Federal parties coordinate on dredging projects.	Corps, EPA, FWS NOAA	Short Term	14
13	Establish a national MOA to clarify roles and coordination mechanisms between the EPA and the Corps.	EPA, Corps	Short Term	14
Addressing Scientific Uncertainties About Dredged Material				
14	Clarify and improve the guidance used to evaluate bioaccumulation of contaminants from dredged materials.	EPA, Corps	Short Term	15
15	Identify the practical barriers to managing contaminated sediments and ways to overcome the barriers.	Corps, EPA	Short Term	16
16	Identify means to reduce the volume of material which must be dredged.	Corps, EPA	Short Term	16
Funding Dredging Projects Consistently and Efficiently				
17	Revise WRDA to establish consistent Federal-local sponsor cost sharing, across all dredged material disposal methods.	Corps	LongTerm	17
18	Study the feasibility of a fee for open-water disposal for non-Federal dredging projects.	EPA	Long Term	17

Short Term:

Immediately implementable under existing regulations.

Long Term:

Requires regulatory or legislative change.

Appendix A

The Dredging Process in the United States:

Primary Federal Statutes Governing Dredging

Clean Water Act (CWA)
The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Under Section 404 of the CWA the Corps authorizes discharges of dredged or fill material in waters of the U.S. through a permit program. (The Corps also conducts discharge activities in conjunction with its civil works program.) The Section 404(b)(1) Guidelines are the substantive criteria by which proposed dredged material discharge actions are evaluated . EPA also maintains general environmental oversight, including Section 404(c) permit veto authority if there will be an "unacceptable adverse effect." Under Section 401, proposed discharges of dredged or fill material must comply with applicable State water quality standards.

Coastal Zone Management Act (CZMA)
The CZMA establishes a Federal-state partnership to provide for the comprehensive management of coastal resources. States develop management programs based on enforceable policies and mechanisms to balance resource protection and coastal development needs. The Federal consistency provisions require that all Federal activities (including direct Federal actions, private activities requiring Federal licenses or permits, and Federal financial assistance to state and local governments) be consistent with the enforceable policies of a state´s Federally-approved coastal management program. At the Federal level, the CZMA is administered by the OCRM within NOAA´s National Ocean Service.

Endangered Species Act (ESA)
The ESA states that all Federal departments and agencies shall seek to conserve threatened and endangered species and shall use their authorities to further the purposes of the ESA. In addition, all Federal departments and agencies must ensure that activities they fund, authorize, or carry out do not jeopardize the continued existence of threatened or endangered species or adversely modify or destroy designated critical habitat. The act is administered by the FWS and the NMFS and requires the agencies to formally evaluate proposals for Federal actions, including the issuance of permits for port dredging and dredged material disposal, that may affect species listed as threatened or endangered.

Fish and Wildlife Coordination Act (FWCA)
The purpose of the FWCA is to recognize the "vital contribution of our wildlife resources to the Nation." Under this act, Federal agencies proposing actions, including issuance of permits, which will affect any body of water, must consult with the FWS, the NMFS, and the affected state´s fish and wildlife management agency. Review agencies determine the possible damage to fish and wildlife resources by the proposed activity, and develop means and measures that should be adopted to prevent the loss or damage to fish and wildlife resources. The Corps is required to give full consideration to the review agencies' viewpoints (including those of the public) before making permit decisions.

Marine Protection, Research, and Sanctuaries Act (MPRSA)
Under Title I of the MPRSA (also known as the Ocean Dumping Act), ocean dumping permits may be issued if the proposed dumping will not "unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. Under Title I, the Corps is the permit issuing authority for authorizing the transportation of dredged material for the purpose of ocean dumping and is directed to use EPA-developed environmental impact criteria in its permit decisions. Title I further provides that the Corps determinations to issue a permit are subject to EPA review and concurrence, and that the Corps is to utilize, to the maximum extent feasible, disposal sites which have been designated by the EPA rather than designating them on a case-by-case basis. A separate title of the MPRSA (Title III) establishes the national marine sanctuaries program, which is implemented by NOAA.

Merchant Marine Act of 1920
This law empowers MARAD to investigate causes of congestion at ports; to investigate the practicability and advantage of harbor, river, and port improvements in connection with foreign and coastwise trade; and to investigate any other matter which may tend to promote use by vessels of ports. If MARAD's recommendations concern areas within the purview of the Interstate Commerce Commission (ICC), the Secretary of Transportation may submit such findings to the ICC.

National Environmental Policy Act (NEPA)
NEPA is the national charter for protection of the environment which requires a full consideration of the environmental consequences of major Federal actions. This is accomplished through the use of either an environmental impact statement or an environmental assessment. These documents provide a vehicle for the government to assess before the fact the effects of a potential action and provides an avenue for the public to review and comment on Federal agency projects and their potential expected environmental impacts.

Rivers and Harbors Act (RHA) of 1899
The original purpose of the RHA was to establish the Federal interest in

interstate navigation. Section 10 of the Act requires approval from the Corps prior to placing obstructions. or excavating and/or depositing materials in navigable waters.

Water Resources Development Acts (WRDA)

Dredging projects are authorized by Congress through the WRDAs, which are reauthorized biennially. WRDA 86 introduced cost sharing for construction projects whereby the local sponsor pays between 20 and 60 percent of the construction cost based on the depth of the navigation channel. For projects over 45 feet in depth, the local sponsor must also pay 50 percent of the incremental cost of maintenance. Maintenance dredging of channels is Federally funded, with Corps' expenditures reimbursable through the Harbor Maintenance Tax. Cost-sharing in these situations generally takes the form of the non-Federal sponsor providing lands, easements, right-of-way and disposal areas (other than open water) for the maintenance dredging. WRDAs also contain provisions for beneficial use of dredged material such as beach nourishment (WRDA 86) and the protection, restoration and creation of aquatic habitat (WRDA 92) and for environmental dredging to remove, as part of operation and maintenance of a navigation project, contaminated sediments outside the boundaries of and adjacent to the navigation channel (WRDA 90).

Appendix B

Methodology

The recommendations presented in this report are the culmination of a year long process conducted and managed by the Interagency Working Group on the Dredging Process. This section provides a more detailed description of that process.

The bulk of the analysis was conducted by a Working Committee composed of a multi-disciplinary team of senior staff from the participating agencies. First, the Group collected information on the existing dredging process. To gather input from the public, the Group held a series of public outreach meetings in the beginning of 1994. Over 500 participants attended the regional outreach sessions in ten important port cities (Boston, MA; Chicago, IL; Hoboken, NJ; Houston, TX; Los Angeles, CA; New Orleans, LA; Oakland, CA; Portland, OR; Savannah, GA; and St. Louis, MO) and Washington, DC. The participants included representatives of ports, environmental interests, recreational boaters, fishing groups, maritime unions, and business. Following the outreach meetings, the Group identified options for improving the dredging process.

A written report, the May 1994 *Options Paper*, describing these options was circulated. The Executive Summary of this report can be found in Appendix C. A second round of outreach meetings was held to collect reactions and comments on the options in the beginning of the summer of 1994. Simultaneously, the Group consulted with experts in the dredging process to build the Group´s understanding of the problems within the process as well as successful regional models that are being used around the nation.

The feedback provided by the public detailed their existing problems with the dredging process as well as the methods that could be used to improve the dredging process. Specifically, the problems identified contributed to the development of the problem statements discussed in Section 5.0. And, the methods to improve the dredging process, including examples of successes within the dredging process, contributed to the development of the recommendations.

Using the development guidelines listed below, the Group eliminated redundant or unworkable options and refined others, before developing recommendations. Then, in consideration of the findings and principles discussed in Section 4.0, the Group developed recommendations. For some options several recommendations were developed. For other options only one recommendation was developed.

- Each recommendation must have a realistic time frame for implementation.
- Recommendations must be developed with input from all relevant constituencies.
- Recommendations must not interfere with the mission and/or mandate of any Federal Agency.
- Recommendations must be focused, doable, and practical. Responsibility for each recommendation should be assigned to specific agencies or groups where possible.
- Recommendations should emphasize prevention to avoid the cost of the cure.
- Recommendations must acknowledge the staffing and budget constraints facing the agencies.*

For the final report, the recommendations were organized into four areas: planning, project review process, scientific uncertainties, and funding. Each of these areas as well as the recommendations that address them are discussed in detail in Section 5.0.

Table B.2 shows the continuity between the options in the May 1994 *Options Paper* and the recommendations presented in the Action Plan. The table relates the originally proposed option to the final recommendation. Each option *did not* result in a specific recommendation. Rather, the concepts proposed in most of the options were captured in the final recommendations. Finally, those options which did not meet the guidelines described earlier were considered redundant or unworkable by the Group and were not incorporated into the final recommendations.

Table B.2: Relationship between options and recommendations	
May 1994 Option	**Relevant Recommendation**
1.1	9,10,11,12
1.2	2
1.3	1
1.4	3
1.5	10
1.6	9
2.1	1
2.2	2
2.3	1
2.4	1
2.5	1
3.1	14
3.2	4
3.3	6,15
3.4	3
3.5	3
4.1	Statement of National Policy
4.2	No Recommendation
4.3	9
4.4	9
4.5	No Recommendation
5.1	No Recommendation
5.2	No Recommendation
5.3	17
5.4	7
5.5	7
5.6	17,18
5.7	1,2
5.8	No Recommendation

*Agency budget caps are dictated by the Budget Enforcement Act of 1990 and reaffirmed by the Omnibus Budget Reconciliation Act of 1993. These financial constraints prevent use of the "surplus" in the HMTF, independent of

Congressional budgetary approval. Further, Executive Order 12837 of February 10, 1993, mandates real reductions in Federal agencies´ administrative costs -- a 14% reduction in administrative expenses is required by Fiscal Year 1997. In addition, Executive Order 12839 of February 10, 1993, *Reduction of 100,000 Federal Positions* makes it clear that agencies must meet their regulatory obligations with reduced staff.

Appendix C
Executive Summary of May 1994 Options Paper

Ports are a vital link to domestic and international trade in peace time and of strategic importance during a national defense emergency. In order for the port system and vessel operations to function in a safe and efficient manner, timely and effective dredging and dredged material disposal are necessary. It has become increasingly difficult for the Federal Government and for deep-draft port facility owners to proceed with these essential dredging operations in a timely and cost-effective way, consistent with administrative and environmental requirements for a number of reasons.

The Clinton Administration is working to improve the dredging and disposal process. In the fall of 1993, the Interagency Working Group on the Dredging Process (Group) was founded to examine the current dredging and disposal process and identify mechanisms for improvement. As part of their efforts, the Group conducted a series of public outreach meetings to gather information about the problems and potential solutions with the dredging process. The first round of outreach meetings, held in January and February 1994, resulted in the identification of issues, problems, and potential solutions associated with the dredging process. These concerns were expressed on both a national and a region-specific level.

Based on the results of the public outreach meetings, the Group identified five issue areas and special considerations which could be used to resolve some of the problems associated with port development and the dredging process. A spectrum of resolution options formulated by the Group have been categorized into these five issue areas:

Issue Area	Special Considerations
1. Federal Interagency and External Coordination	How can Federal, State and local agencies, and non-governmental interests, including the public, improve their overall working relationships regarding the review of dredging proposals (defined as a Federal permit or civil works navigation dredging proposal)?
2. Proactive Local Planning and Coordination	Can effective advanced planning mechanisms be developed to adequately address dredging and

	dredged material disposal projects and greater State, local, and public participation?
3. Dredged Material Disposal	What mechanisms are needed and how can responsible parties better plan for and more effectively manage dredged material disposal decisions?
4. Dredging Policy	What is an appropriate national policy with respect to dredging? At what level of government should these decisions be made and what mechanisms need to be developed to implement and coordinate these decisions?
5. Funding and Project Development	Should policy and procedural changes be adopted for funding the development, improvement, and maintenance of deep draft navigation channels and harbors, including the disposal of dredged material? What is the national interest in federally funding dredging projects? What criteria should be used for funding port activities?

The second round of outreach sessions will focus on these options to elicit comments from interested parties. The second round of meetings will provide a forum to discuss these options and to identify any other options or issues which may have been missed. The results of the second round of meetings will help the Group select a combination of possible options which can provide for more uniform guidance while allowing flexibility for local problems. The rest of this executive summary provides the list of resolution options.

A listing of each of the 28 resolution options follows. A more complete discussion of the Group and its mission, important background information and the resolution options can be found in the Group´s options paper.

Problem Resolution Options
Federal Agency and External Coordination
1.1 Make Better Use of Existing Coordination Mechanisms within the Regulatory Process
1.2 Define Characteristics of a Successful Interdisciplinary, Public/Private Task Force on Dredging to Guide the Formation of Such Groups at a Local Level
1.3 Create National and Regional Dredging Process Review Teams
1.4 Develop an Educational Program to Build Awareness of Existing Mechanisms for Public Involvement

1.5 Conduct Internal Reviews of Agency Guidance
Proactive Local Planning and Coordination
2.1 Enhance Federally-led Efforts to Ensure the Development of Long-Term Management Strategies
2.2 Support State Efforts to Develop Long-Term Port Management Plans
2.3 Establish Advisory Working Groups for Each Major Port Area to Participate in Dredged Material Management Planning
2.4 Use Watershed Planning Provisions Under 1994 CWA Amendments to Develop Watershed-based Dredging Plans
2.5 Use the Planning Process of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 to Assure Linkages with Plans Which Address Dredging Issues
Dredged Material Disposal
3.1 Enhance Research and Monitoring Activities to Improve Dredged Material Disposal Decision Making
3.2 Seek Alternatives to Open-Water Disposal for Contaminated Sediments
3.3 Increase Efforts to Identify and Control Sources of Pollution
3.4 Enhance Research and Demonstration of Decontamination Technologies
3.5 Provide for More Effective Education and Communication with the Public on the Risks and Impacts Associated with Disposal of Dredged Material
Dredging Policy
4.1 Develop Principles to Guide the Federal Decision Making Process
4.2 Support a Federally-driven Decision Making Process Which Determines Priority Ports According to Defense, Commerce, and Environmental Criteria
4.3 Integrate Federal/State/Local Interests Under a Regional Governance System with Decision Making Authority
4.4 Support a Federal Program with Locally-driven Decision Making Mechanisms 4.5 Allow Market Driven Decision Making for Ports to Determine Needs for Dredging
Funding and Project Development
5.1 Transfer the lead responsibility for project implementation from the Federal government to non-Federal sponsors and establish a dedicated source of funding for navigation projects which distributes Federal funds to navigation project sponsors as grants
5.2 Authorize the Corps to Approve and Fund Projects with Only Programmatic Congressional Approval and Appropriations
5.3 Establish Non-Federal, Local Sponsor Cost Sharing Requirements for Maintenance Dredging
5.4 Revise the Federal Principles and Guidelines for Decision Making to Reflect the Dual Objectives of National Economic Development and

Environmental Quality
5.5 Establish a Decision Making Framework for Determining Which Projects to Fund and How to Dispose of Dredged Material
5.6 Establish Consistent Cost Sharing Requirements for all Disposal Options Including Open Water, Upland, and Confined Disposal
5.7 Direct an Interagency Working Group to Look at What the Appropriate Cost-Sharing Should Be when Federally-Approved State Requirements are Imposed and Whether Legislative Changes are Needed
5.8 Use the Harbor Maintenance Trust Fund to Support Activities such as Regional Management Studies, Beneficial Uses of Dredged Materials, Confined Disposal Facilities, and Remediation and Disposal Technologies

Appendix D
Acronyms

AAPA American Association of Port Authorities

Corps Army Corps of Engineers, DOD

CWA Clean Water Act

CZMA Coastal Zone Management Act

DOC U.S. Department of Commerce

DOI U.S. Department of the Interior

DOT U.S. Department of Transportation

EPA Environmental Protection Agency

EQ Environmental Quality

FWS Fish and Wildlife Service

Group The Interagency Working Group on the Dredging Process (For a description of the Group, please see Section 1.0 of this report.)

HMTF Harbor Maintenance Trust Fund

ISTEA Intermodal Surface Transportation Efficiency Act

LTMS Long Term Management Strategies

MARAD Maritime Administration, DOT

MOA Memorandum of Agreement

MPRSA Marine Protection, Research and Sanctuaries Act

NED National Economic Development Plan

NEPA National Environmental Policy Act

NGOs Non-Government Organizations

NMFS National Marine Fisheries Service, DOC

NOAA National Oceanic and Atmospheric Administration, DOC

NOS National Ocean Service, NOAA

OCRM Office of Ocean and Coastal Resource Management, NOS, NOAA

P&G Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies

RHA Rivers and Harbors Act

SQC Sediment Quality Criteria

WRDA Water Resources Development Act