National Coastal Program Dredging Policies

An Analysis of State, Territory, & Commonwealth Policies Related to Dredging & Dredged Material Management Volume I of II

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Prepared By: Jennifer L. Lukens Coastal Programs Division Office of Ocean & Coastal Resource Management National Ocean Service National Oceanic & Atmospheric Administration U.S. Department Of Commerce In 1972, Congress enacted the Coastal Zone Management Act (CZMA) to address increasing stresses on the nation's coastal areas. Administered by the National Oceanic & Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Ocean and Coastal Resource Management (OCRM), the CZMA created a partnership of federal and state governments to reduce conflicts over land and water uses in the coastal zone, protect fragile coastal resources, and provide for economic development. To this end, the CZMA seeks a balance between preservation and economic development, and promotes the sustainable use of the valuable resources of the nation's 95,000 miles of shoreline.

Under the CZMA partnership, the federal government and participating states share the responsibility for effectively managing coastal areas and resolving conflicts between competing uses. States and island territories are on the front line, developing and implementing coastal management programs which are designed to meet their individual needs, but also take into account the broader national interest in management of coastal resources. NOAA promotes and supports the joint federal-state interest in coastal management by: assisting states with development and implementation of programs; providing federal funds for implementing these programs; ensuring that state interests are represented at the federal level and that the federal interest is adequately represented at the state level; providing technical assistance; mediating disputes; and, participating in the development of national coastal land, water, and resource policy. This document is one in an OCRM series that provides a general analysis and state-by-state summary of coastal management program policies used to address coastal management issues in the United States.

EXECUTIVE SUMMARY

This technical document contains a comprehensive inventory of thirty-four coastal management program policies related to dredging, dredged material management, and beneficial use of dredged material. It is a baseline snapshot of where the nation's federally approved state, territory, commonwealth, and independent regulatory commission coastal management programs stand on dredging policies, individually and cumulatively. Specifically, it covers dredging policies in the following six categories:

- State Coordination Mechanisms & Permit Processing
- Economic Concerns
- Habitat, Sediment, & Water Quality
- Dredging Techniques & Best Management Practices
- Dredged Material Disposal
- Beneficial Uses of Dredged Material

Each coastal program's policies are summarized individually and then are compiled together for a national perspective. This national summary and analysis evaluates the extent and specificity of each policy category. It also recognizes individual programs that are particularly comprehensive in these policy areas and delineates where programs may need to improve their policy base.

Appendix A of this document is a reference digest of all of the 34 coastal programs': enforceable dredging polices and their supporting legal authorities; encouragement and non-enforceable policies; and, specific state programs or actions that implement these dredging policies. While this appendix is not to be used as a legal citation, it can be used as a research tool for understanding the legal underpinnings of a coastal program's permitting, review, and management of dredging activities.

This document will be used for assisting: the Office of Ocean and Coastal Resource Management in the development of a national policy related to dredging and the Coastal Zone Management Act (CZMA); states that are struggling with a particular policy issue that may want to learn from other state's experience and successes; the National Dredging Team in its efforts to improve dredging processes; and, federal agencies in planning for dredging activities and complying with CZMA federal consistency requirements.

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INTRODUCTION

• PURPOSE & APPLICABILITY OF THIS DOCUMENT.

The National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Ocean and Coastal Resource Management (OCRM), is responsible for providing policy analysis and technical assistance to state coastal management programs as directed by the Federal Coastal Zone Management Act of 1972 (CZMA). Specifically, the CZMA states that it is:

National policy to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and esthetic values as well as the needs for compatible economic development which programs should at least provide for...(D) priority consideration being given to coastal-dependent uses and orderly processes for siting of major facilities related to national defense, energy, fisheries development, recreation, ports and transportation..." 16 U.S.C. §1452. "The Secretary shall conduct a program of technical assistance and management-oriented research necessary to support the development and implementation of State coastal management program amendments under section 309, and appropriate to the furtherance of international cooperative efforts and technical assistance in coastal zone management. 16 U.S.C. §1456c.

In carrying out this legislative directive, OCRM's Coastal Programs Division (CPD), has developed this summary and analysis of the nation's coastal policies on dredging. OCRM has identified common dredging and dredged material management issues and analyzed how they are being addressed by coastal management programs. Each program's dredging policies have been summarized individually and then compared to one another for content and objectives.

This report contains information from 33 federally approved state, territory, and commonwealth coastal management programs and one independent coastal regulatory commission. For consistency and simplicity purposes of this report, when referring to all of the 34 programs included in this document, the term "state" or "state coastal management program" should be interpreted interchangeably as state, territory, commonwealth, and independent commission or state, territory, commonwealth, and independent commission coastal management program.

The goal of this effort is a comprehensive inventory of state coastal management program (CMP) policies related to dredging, dredged material management, and beneficial use of dredged material that can be used to analyze the gamut of existing dredging policies. It provides a baseline snapshot of all 34 coastal management programs' dredging policies and a national summary. This compilation of current dredging policies is to be used as a source of state policy citations and as an information tool for federal and state agencies charged with coastal resource protection and policy development related to dredging decision making. It identifies coastal programs with comprehensive dredging policies and outlines specific dredging efforts that are being implemented at the state level. This information will be of use to states that are struggling with similar dredging issues and may provide a foundation from which to approach these issues. Instead of having to "re-invent the wheel," states may be able to glean information from policies and/or coordination mechanisms used in other states. At the federal level, the data assembled in this document will be used by CPD in the development of national policy related to dredging and the CZMA.

This document will also be used by the National Dredging Team (NDT), to address recommendations made at the January 1999 Workshop on Dredged Material Management and State Coastal Management Programs held in New Orleans, Louisiana. The goals of this workshop were to: clarify dredging and coastal management requirements in terms of dredged material and beneficial uses; and, stimulate better communication among federal, state, and local agencies on these issues.¹ As recommended at the Workshop, this document identifies the enforceable and non-enforceable state policies applicable to dredging operations and the disposal and use of dredged materials so that the U.S. Army Corps of Engineers (ACE), and project sponsors of federal navigation projects will have a better understanding of applicable state requirements.

The NDT is an interagency working group that was developed as a result of President Clinton's recognition that, "The process for dredging and maintaining the Nation's ports sometimes does not work as well as it could."² The objectives of the NDT when it was formed were: "1) Promote greater certainty and predictability in the dredging project review process and dredged material management; and, 2) Facilitate effective long-term management strategies for addressing dredging and disposal needs at both the National and local levels."³ This document will assist the NDT in achieving these primary objectives by providing pertinent state dredging information and a better understanding of individual state review processes.

• BACKGROUND ON DREDGING IN THE UNITED STATES.

Most of the dredging projects that are undertaken in the U.S. are associated with federal navigation projects that are carried out by the ACE and cost shared with a local sponsor, most often the local port authority.⁴ The ACE in 1824, with the passage of the General Survey Act, was delegated the responsibility and authority for performing civil works projects. These projects included surveying and maintaining canals of national importance for commerce and military logistics. Today through the Water Resources Development Act biennial legislation, the ACE continues to be responsible for maintaining 25,000 miles of navigation channels throughout the U.S. for commerce and national security infrastructure and defense deployment. In the U.S. there are 400 major and minor ports that rely on these navigation channels. Annual maintenance performed by the ACE on these channels results in the removal of 300 million cubic yards of material per year, on average.⁵ An additional 100 million cubic yards of material is removed yearly by private entities.

The ACE not only performs dredging projects to deepen and maintain the U.S. navigational system but is also delegated the responsibility of permitting non-federal dredging activities under §404 of the Clean Water Act (CWA), §103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), and §10 of the River and Harbors Act (RHA).

Whether dredging is done to create new channels or to deepen or maintain existing channels and berths, the driving force behind a dredging project is navigation for recreation and more importantly commerce. Ports that may want to grow and expand their capabilities look to deepen the navigational channels that connect them to the sea so that deeper draft vessels carrying more cargo can make their way to them.⁶ These navigation channels are economic lifelines not only for individual ports but also for the local, regional, and national economies. Over 30 percent of the U.S. Gross Domestic Product is comprised of foreign trade, 95% of which passes through U.S. Ports.⁷ In 1996, ports contributed 74.8 billion dollars to the U.S. Gross Domestic Product and supported over 1.4 million jobs in the U.S.⁸ All of these factors make shipping and navigation a top priority for the U.S. government and private interests. The level of annual Congressional appropriations for federal maintenance and deepening projects is reflective of the importance of national security, economic growth, and competition in the global marketplace to the U.S.⁹

As port competitiveness grows in this new era of globalization, channel depths that will support larger vessels are sought by major ports. As the size of a vessel increases, the costs of transporting commodities decreases and those savings can be passed on to the consumer.¹⁰ However, as costs decrease with larger vessel capacity, there still remains the environmental impacts/costs of dredging, the costs associated with where to place additional quantities of dredged material, and the costs borne by the government and its non-federal co-sponsor in planning, engineering, design, and construction of these projects.

♦ DREDGING AND FEDERAL CONSISTENCY

Section 307 of the CZMA, provides states with federally approved coastal management programs, the authority to review all federal activities that affect any land or water use or natural resource of the coastal zone for consistency with state CMP enforceable policies. This federal consistency provision applies to all federally authorized navigation projects and to private dredging projects that require a CWA §404 or a RHA §10 ACE permit. Therefore, both large-scale federal projects and small-scale private projects alike, must address state coastal management policies in their project development, design and permitting processes. For more information on federal consistency, see: CZMA §307, 16 U.S.C. §1456; 15 C.F.R. Part 930; and, H.R. Conf. Rep. 964, 101st Cong., 2d Sess., 968-972.

♦ STATE ANALYSIS.

Nationally, the scope of coastal state dredging policies is wide-ranging, depending upon the size and amount of projects that occur in each individual state. To aid our analysis of the breadth and complexity of 34 individual CMP dredging policies, several general policy categories have been developed. The six categories include: 1) Coordination Mechanisms and Permit Processing; 2) Economic Concerns; 3) Habitat, Sediment, and Water Quality; 4) Dredging Techniques and Best Management Practices; 5) Dredged Material Disposal; and 6) Beneficial Use of Dredged Material. In the following sections of this report, the types of policies that fall under each one of these six policy categories will be described and states with specific and general policies in that category will be identified. Later in the report, each state program is summarized in its entirety in accordance with the six category format.

State coastal policies related to dredging and dredged material management are delineated in the policy language tables located in Appendix A. Please note that the column in the policy language table titled "Legal Authorities" indicates if we were able to determine that a policy is legally enforceable as defined in CZMA §304 (6a).¹¹ Those policies that have nothing in the Legal Authorities column or have "encouragement policy" denoted in the column, mean that they are non-enforceable policies.

This document is intended to be used as an informative guide to state coastal management programs' dredging policies and relevant state statute, regulation, and guidance language. It is important to note that it contains summaries only of each coastal state's programs related to dredging and that the policy language that is catalogued within it is only intended to be a synopsis:

✓ FOR THE ACTUAL POLICY LANGUAGE AND LEGAL AUTHORITY, PLEASE REFER TO THE DOCUMENTS THAT ARE CITED IN THE POLICY LANGUAGE TABLES FOR EACH STATE, LOCATED IN APPENDIX A ▼

DATA COLLECTION

• RESEARCH.

Information on each coastal state's dredging policies was collected in a consistent manner, using a template (located in Appendix B), that consisted of 30 detailed questions that were grouped according to subject matter (these subject matter groups resemble the aforementioned six policy categories that are used in this report). The information was collected using original program documents, state statutes and regulations, Internet web-pages, guidance or procedural documents, memorandums of understanding or similar instruments, routine program changes, and other informational documents published by state coastal management programs. Answers to the 30 template questions were pulled from these sources and compiled

in response format. Questions where information was unavailable in the preliminary data gathering stage were left unanswered.

As each individual state template was filled in, it was forwarded to the CPD coastal management specialist assigned to that state for review. Comments from the specialist were then incorporated into the template and forwarded to the state coastal program manager for their review and comment. State program manager comments were used to make corrections to and complete the information gathering process. Templates were then converted into a more readable summary format consisting of all six policy categories and state specific dredging issues.

Each state dredging summary was used to create a summary matrix table for all 34 programs.¹² This matrix lists the six policy categories discussed in the report and the specific types of policies that are included under each policy category heading. For example, for the policy category heading, Beneficial Uses of Dredged Material, there are two specific policies: 1) if the state has a policy on beneficial use; and, 2) if the state has a specific example or definition of what constitutes a beneficial use of dredged material. The matrix is designed to identify if each individual state has general or specific policies for that category, if new policies are currently being developed, or if no policies exist under that category heading. The difference between a specific, general, or developing policy is defined in Figure 1, Policy Definitions.

These definitions of specific, general, and developing policies have been developed by CPD as a mechanism to differentiate between types of policies or levels of ordinance. These definitions and subsequent classifications are subjective on the part of the author and are not intended as a means of evaluating a program's adequacy. They have been developed to help analyze and define the breadth of existing policy and break it down into understandable parts.

Figure 1. Policy Definitions

- 1. Specific policies Are enforceable and legally binding under state law (i.e. statue, regulation or memorandum of understanding). A specific policy clearly states the intent or objective of the policy and the means by which it should be implemented. A specific policy is explicit and generally free from ambiguity using policy language such as "shall" instead of "should." An example of a specific policy is: "Dredged material that contains contaminants of concern as identified by the State Toxics Commission that are over the acceptable limit set by the State Water Quality Standards shall not be deposited in underwater disposal areas." Specific policies are indicated by a "♦" symbol on the following policy summary matrix.
- 2. General policies Are either encouragement, non-enforceable policies, or policies that are enforceable that only describe the intent or objective of the policy and not the means by which it should be implemented. An example of a general policy is: "Dredged material that is found to be contaminated should not be disposed of in underwater disposal areas." General policies are indicated by a "*" symbol on the following policy summary matrix.
- 3. Policies being developed A policy category may be identified as under development if the state is in the process of developing one or more policies that fall under that particular policy category heading. Where the development symbol is used in conjunction with a general or a specific symbol, it indicates that the state is re-evaluating or updating policies that are already in place. If a policy is being developed, it is indicated by a "▲" symbol on the following policy summary matrix.

TABLE 1. State Policy Summary Matrix

		STA	TE	, C C	DMN	ION	WI	EAL	TH	, & '	ГEF	RI	ГOF	RIAI	L CC)AS	TAI	L MA	ANA	\GE	ME	NT	PR	OGI	RAN	1S								
POLICY CATEGORY	A L	A K	A S	B C D C	C A	C N M I	C T	D E	F L	G A	G U	H I	L A	M E	M D	M A	M I	M N	M S	N H	N J	N Y	N C	0 H	O R	P A	P R	R I	S C	T X	V I	V A	W A	W I
Coordination Mechanisims & Permit Processing																																		
Interagency Mechanism	6	6	6			6		6	6	6	6			6		6	6	6			6	6	6			6	6	6	6	6		6	6	
Joint Permit/Review Process	6		6												6				6	6		6	6		6	6	6					6		
DMM Plan/Program/Office					\Box \diamond		6	6						\diamond	6	\diamond	6	6	\diamond	6	6	6											6	
Economic Concerns																																		
Econ. & Env. Criteria						6	6					6	6					6											6					
Public Interest Statement																																		
Port/Maritime Statement								6													6				6	6								
Cost/Benefit Analysis																																		
Habitat, Sediment & Water Quality																																		
Circulation, Salinity & Mix. Zones		6	\diamond	60		6	6				6			6	6		6		6	6	6	6			6			6	6	6	6	6	6	6
Habitat Classification/Restriction	6		6					\Diamond				6			6											6			6	6	6		6	
Dredging Windows				6	6	6		6				6	6		6				6	6	6	6		6	6		6	6		6			6	
EPA/USACE Testing/Criteria				6			6			6		6			6											6								
StateTesting/Criteria								\diamond										\diamond																
Dredging Techniques & BMPs																																		
Dredging Techniques & BMPs						6	6	6							6		6	6						6		6			6	6				
Dredged Material Disposal										_							_																	
DMMP/LTMS					\Box \diamond			\diamond						\diamond	6	\diamond	6	6	\diamond		6	6								6		6	6	
Disposal Preferences				6		6				6							6	6			6		6	6	6			6		6	6	6	6	6
CDF Methods & Monitoring						6		6	6			6			6	6	6	6					6						6	6		6		
Solid/Hazardous Waste																																		
Beneficial Use																																		
Beneficial Use Policy	6			6	6	6	6		6	\diamond	6	6		6	6	6	6	6	6	6	6	6	6	6			6	6	6	6		6	6	6
Defintion/Example of Benef. Use				6									6			\diamond			6		6									6				

□ = Specific Policy/Policies
 ● = General Policy/Policies
 ◊ = Policy Being Developed

DISCUSSION & ANALYSIS OF DREDGING POLICIES

◆ POLICY CATEGORY I - COORDINATION MECHANISIMS & PERMIT PROCESSING.

In each of the following state summaries, the Coordination Mechanisms and Permit Processing policy category identifies how dredging activities are reviewed and permitted. As expected, no two states issue the same type of dredging permits. However, they all review private dredging projects that require a §404 CWA permit or a §10 RHA permit from the ACE and federal navigational dredging projects for federal consistency.

All states require that private dredging activities obtain §401 water quality certification, since it is a component of their approved program and a requirement of the CWA. The CWA and the ACE regulations (33 C.F.R. §336.1) require that federal dredging projects obtain a §401 certification, except in rare instances when Congress may grant a waiver for obtaining the §401certification (33 U.S.C. §1344(r)).

The types of permits required by a state for dredging and dredged material disposal activities run the gamut from dredge and fill permits, to state-owned subaqueous lands leases, to joint coastal permits. As with all approved coastal management programs, a federal consistency certification is required for all dredging and dredged material management activities that occur within the coastal zone that require a federal license or permit (i.e. §404 CWA and §10 RHA). A federal consistency determination is also required for all federal navigation maintenance and construction dredging activities. As outlined in the introduction, the federal consistency requirements for both private and federal dredging activities are always applicable and thus are considered to be a part of every state's dredging permitting requirements.

Most states have a formal interagency coordination mechanism or forum where federal and private dredging projects under review are discussed. Twenty-six of the 34 programs do use an established process via a Memorandum of Understanding, monthly interagency permit review meetings, or other permit interagency review and comment process, to coordinate among federal and state regulatory programs for this purpose. These 26 states include: AL, AK, AS, BCDC, CNMI, DE, FL, GA, GU, LA, ME, MA, MI, MN, NH, NJ, NY, NC, OH, PA, PR, RI, SC, TX, VA, and, WA.

Delaware holds monthly joint permit processing meetings to facilitate coordination among its networked agencies and where representatives from other state and federal resource agencies come together to discuss proposed projects. These meetings are not limited to dredging activities alone, but they do allow federal agencies such as the U.S. Fish & Wildlife Service, NOAA/National Marine Fisheries Service, ACE and the U.S. Environmental Protection Agency (EPA) to discuss specific dredging projects and related issues with the appropriate state resource agencies.

Another mechanism that is employed by states to facilitate coordinated review by various resource agencies is the creation of a joint permit application package where several state and federal permits are combined into one unified application or process. The New York Department of State which houses the New York Coastal Management Program, has compiled a joint application package for activities such as dredging and dredged material disposal that may require multiple authorizations related to wetland and waterfront development permits. This joint application package covers the permit application needs of the NY Department of State, ACE, NY Department of Environmental Conservation, State Office of Parks, Recreation, and Historic Preservation, Office of General Services, NY Power Authority, Adirondak Park Agency, and the NYS Thruway Authority/Canal Corporation.

Joint permits are a common mechanism for coordination as 13 of the 34 programs have some type of joint permit or permit review process (AL, AS, BCDC, FL, MD, MS, NH, NY, NC, OR, PA, PR, and, VA). In addition to agency coordination, a joint permit also provides a unified step for permit applicants. At least 13 states advertise pre-permit application consultations where permit applicants may be advised on permit

information requirements and specific testing methodologies. New Jersey and the Commonwealth of the Northern Mariana Islands, require a mandatory pre-application meeting prior to the actual submittal of a permit application. These meetings are used to discuss types of permits needed, sampling and testing protocols, and other information which must be submitted with the application package. To aid in the processing of dredging projects in New Jersey, a Dredging and Sediment Technology Office was created in 1998 that serves to coordinate all dredging related permit applications.

Some states may have a more detailed review process that is specifically tailored to dredging and dredged material management and planning in addition to interagency permit forums and joint permit application processes. Interagency permit forums and joint permit application processes usually only apply to private dredging projects. Whereas, dredged material management plans, programs, or offices (DMMPs, as they will be referred to), tend to focus on federal navigation projects and long-term harbor and channel management, planning, and permitting concerns. Generally, states that have a DMMP tend to have policies that are more specific versus general (see definitions of specific and general in the introduction) and cover the gamut of the other five policy categories in this report. At least 10 states have some type of DMMP (BCDC, CT, LA, MD, MI, MN, NH, NJ, NY, and WA) and five are in the process of developing a program or plan (CA, DE, ME, MA, and, MS). The specifics of these individual DMMPs are discussed further under the Dredged Material Disposal policy category.

◆ POLICY CATEGORY II - ECONOMIC CONCERNS.

The dredging information template that was prepared for each state included two specific questions related to economic concerns:

- 1. According to state policies (if they exist), during project review how should the economic benefits of a dredging project be weighed against the environmental costs of a project?
- 2. Is a cost/benefit analysis done? If so, who prepares it and who reviews it?

A review of each state's policies did not provide specific answers to both of these questions. The information that was collected does indicate that the intent of the states' dredging policies is coastal resource protection with the added factors of compatible and wise economic development. Policies that do address the dual concerns of economics and the environment were most often very general and non-specific.

In response to question number one, none of the 34 states contained a specific policy that outlined how the economic benefits of a dredging project are to be weighed against the environmental costs of a project. A few states do list criteria that should be used in making these types of decisions. Maryland and Delaware policies have the most specific criteria to be used in permit evaluations. In Delaware, activities occurring in wetlands are evaluated using the following factors: environmental impact; supporting facilities and their impact; effect on neighboring land uses; comprehensive plans for the general area; the economic impact of the activity in terms of jobs, taxes, and land area; and, aesthetic impact. Maryland lists similar, but not as detailed criteria for evaluating dredging projects where public funds are used including: the need for the project; the economic impacts of the project funds on existing public facilities; the beneficial impacts to the environment from the project; the potential adverse impacts to the environment from the project; and, the economic and environmental feasibility of transport for alternative uses of dredged material. These policies do not, however, describe how these evaluations will be prepared and how factors will be weighed against each other. Other states, including CNMI, MS, OR, and WA, do have environmental and economic criteria that are considered in permit evaluation. However, they are less specific than Maryland and Delaware policies.

The remaining states that have policies that include economic concerns are CT, HI, LA, MN, and SC. These states have more general policies, stating that economic benefits shall be considered against environmental concerns with little or no elaboration.

For some states, the primary criteria for project review is whether the project is in the "public interest." These states are: BCDC, DE, MD, MI, MS, NY, OR, RI, TX, and VA. Michigan uses 10 criteria to evaluate the public interest of a particular project which are similar in the level of comprehensiveness to the criteria used in Delaware and Maryland. The public interest factor is directly related to each state's individual application of the Public Trust Doctrine, which states that public trust waters (navigable waters), are held by the state in trust for the benefit of all of the people, and establishes the right of the public to fully enjoy them.¹³ The uses that are protected by the public trust doctrine include navigation and commerce, fishing, recreational use, environmental protection, and scenic beauty.¹⁴ Making permitting decisions using the principle of the public interest and the public trust does require that both economic and environmental criteria for current and future uses are considered. However, how these criteria may be ranked and compared remains to be defined in most cases.

Several states emphasize the importance of port/maritime commerce development and growth in their dredging policies. These states include: AL, CA, DE, MA, NJ, NY, OR, PA, and TX. In the case of New York, dredging that is done to maintain the economic viability of major ports is regarded as a public benefit. New Jersey, through its Dredging Project Facilitation Task Force, ranks dredging projects which are to receive state dredging bond monies based upon their economic benefit to the state and their potential to bring economic growth to maritime commerce. Along those same lines, Massachusetts has a policy that deepening or expansion of a channel that produces economic returns to maritime shipping and other maritime industries will be approved for state or federal funding if it meets this need along with marine environment policies.

In response to the second economic question in the dredging template survey, very few states have a policy with respect to review and preparation of cost/benefit analyses. Many states do, however, require an alternatives analysis, which may be the closest thing to a cost/benefit analysis. Cost/benefit analyses are not required by most state programs for private dredging projects with the exception of the Virgin Islands. All applications for major coastal zone management permits in the Virgin Islands must include an Environmental Assessment Report which includes a cost/benefit analysis prepared by the applicant. How this analysis should be reviewed is not delineated in policy language. Oregon requires that navigation and port projects that are seeking money from the State Marine Navigation Improvement Fund must submit a cost/benefit analysis which identifies the benefits of the project to the local community, the region, and the state as a whole.

◆ POLICY CATEGORY III - HABITAT, SEDIMENT, & WATER QUALITY.

This policy category is the most comprehensive out of the six identified in this report. It is comprehensive in that all 34 programs have policies related to habitat, sediment, or water quality issues. Section 307(f) of the CZMA, states that all coastal management programs developed pursuant to the CZMA shall incorporate the requirements of the Federal Water Pollution Control Act (33 U.S.C. 1251 et. seq.). This includes water quality standards that are used for state §401 water quality certification. All 34 programs indicated that state water quality standards were used for permit review.

Template questions asked states to identify specific policies related to mixing zones, hydrodynamic circulation patterns, and salinity changes. States that have policies which delineate mixing zones include: FL, GU, MD, MI, NJ, NY, OR, SC, and WA. American Samoa and the San Francisco Bay Conservation and Development Commission are in the midst of developing mixing zones. Nineteen of the 34 programs have policies that specifically restrict dredging and filling activities that would disrupt and/or modify current and circulation hydrodynamics and salinity regimes.

Many state policies have delineated areas that are of high habitat value and classified activities and uses in these areas as acceptable and non-acceptable. Louisiana has perhaps the most extensive listing of habitat/area categories (13), where dredging and filling activities are restricted, limited, and/or conditioned. Other states, such as Massachusetts, restrict dredging and disposal in areas listed under the Areas of Critical Environmental Concern Program and maintenance dredging activities in wetland areas must demonstrate that no less damaging alternative is available. Oregon has divided all estuarine areas into three categories: natural management units; conservation units; and, development management units. Dredging is highly restricted in natural and conservation management units which are preserved for natural and renewable resources. Dredging is allowed in development management units which consist mostly of existing navigational channels and facilities. In addition, dredging in salmonid habitat is restricted and project applications in these areas are the subject of much scrutiny. Remaining states that rank areas of habitat and restrict activities in them include: AL, AS, CA, CT, DE, FL, GU, HI, MD, MI, NC, PA, RI, SC, TX, VI, and WA.

Most states restrict dredging during times of fish spawning, nursery, feeding, and migration. States that specifically identify the use of dredging windows for habitat purposes include: BCDC, CA, CT, CNMI, DE, HI, LA, ME, MD, MA, MI, MN, MS, NH, NJ, NY, OH, OR, PA, PR, RI, SC, TX, VA, and WA. However, rarely do policies state specific time frames/dredging windows. These are usually set by the state's Division of Fish and Wildlife or comparable state resource agency and may be done on a case-by-case basis.

One of the primary goals of the Habitat, Sediment and Water Quality policy category questions was to identify to what level coastal states have developed sediment testing methodologies, analysis techniques, and concentration limits for the chemical composition of material to be dredged. Sediment testing can be expensive depending upon the parameters used, and time consuming in the data synthesis and analysis. Even after testing is completed and results are compiled, the question of what contaminants are of concern and what concentration levels present what levels of risk are rarely unanimous and unequivocal decisions. It is for these reasons that many states use uniform guidance developed by the EPA and the ACE. These documents include the EPA/ACE Testing Manual for the Evaluation of Dredged Sediment Proposed for Ocean Disposal (known as the Greenbook) and the ACE/EPA Inland Testing Manual. Unfortunately, since these technical documents were developed without specific geographic locations in mind, they may not be specific/comprehensive enough for certain areas. States that identified that they use ACE and EPA guidance for sediment testing and analysis include: BCDC, CA,CT, FL, GA, HI, ME, MD, MA, PA, and PR.

Nine states already have established or are in the process of developing state standards for sediment testing, analysis, and concentration limits (MI, NJ, NH, OR, RI, WA, WI, developing-MN and DE). As far as developing specific testing methodologies, Michigan has a Sediment Testing Procedure for Polychlorinated Biphenyls, Polynuclear Aromatic Hydrocarbons, and metals. This procedure is used if a project involves the removal of greater than 300 cubic yards of material and it is less than 95% sand. Washington was the first state to have a comprehensive program that established levels of contamination in marine sediments that are acceptable/not acceptable for unconfined in-water disposal and managed disposal sites. Sediment criteria have been developed for all of Puget Sound, Grays Harbor, Willapa Bay and the lower Columbia River.

Wisconsin has a comprehensive Contaminated Sediments Program that examines both dredging and associated contaminated sediments into its integrated effort for contaminated sediment management. The program's key elements include: evaluation and development of sediment quality assessment tools; development of site-specific sediment quality objectives; integration of sediment issues into regulatory programs; maintenance of a statewide sediment database; development of a statewide inventory of contaminated sites; development of a site ranking and prioritization system for remediation projects; and, investigating remedial and treatment technologies dealing with dredging, capping, in-situ and ex-situ treatment, and handling and disposal of sediments.

In the case of these eight states that have developed some type of protocol, methodology, or limits for sediment testing and handling, they all have done so using some type of a coordinated interagency effort.

During the preparation of this report, it was unmistakably clear that the programs with the most comprehensive and consistent sediment testing and review programs were those that used some type of interagency forum or mechanism to achieve their desired result, demonstrating the usefulness of such mechanisms for facilitating project coordination and review.

◆ POLICY CATEGORY IV - DREDGING TECHNIQUES & BEST MANAGEMENT PRACTICES.

States generally have not put preferred dredging techniques and or best management practices into their formal policy language. However, many states when issuing a permit or a federal consistency concurrence do require that certain techniques be used or practices be implemented. These requirements are usually done on a case-by-case basis since the nature of different dredging techniques and management practices is dependent upon the site hydrology, chemical composition of sediments, and what type of species may inhabit that area.

Fifteen programs do cite some type of preferred dredging method or protocol that should be implemented within their policy language or program document description (CT, CNMI, DE, FL, MD, MA, MI, MN, NJ, OH, PA, SC, TX, VA, and WA). However, the majority of these states' policies are very general and not specific. New Jersey has a technical manual, *Dredging Activities and Dredged Material*, that identifies specific types of dredging (hydraulic vs. mechanical) and the appropriate best management practices that are to be employed when using each one of those methods.

Virginia has developed a Shoreline Development Best Management Practices document for activities that encroach in, on, or over Virginia's tidal wetlands, coastal primary sand dunes and beaches, and submerged lands. This document reiterates policy statements made in the Subaqueous and Wetlands Guidelines with respect to dredging, dredged disposal, and beach nourishment. Specifically, this document covers: channel depth and design; species habitat protection; information required to be submitted with permit applications; deposition of dredged material; beach replenishment; upland and overboard disposal; and hydraulic and mechanical dredging techniques.

Washington has developed a specific policy on the use of hopper dredges in areas of Dungeness crab habitat. As specified in the Grays Harbor Crab Mitigation Memorandum of Agreement, a clam shell dredge is to be used in portions of the navigation channel where there is a higher crab abundance because entrainment induced mortality of crabs using a clamshell is less than 10%, as opposed to entrainment induced mortality from the use of a hopper dredge, which is over 90%.

Two states, New Jersey and Florida, place certain restrictions on "economic loading." Economic loading is a method of pumping dredged material with an extremely high water content, into the containment area of a hopper dredge, and allowing highly turbid water to over-flow over the holding area so that more consolidated material may be collected in the dredge containment area. This process results in a large turbidity plume from the dredge, which depending upon the water and sediment composition and quality may have negative short-term environmental impacts. This method is often preferred by the contractor performing the dredging because it saves time and money by increasing hopper dredge loads. Florida policy does require that hopper dredges may only be used when not filled beyond overflow (economic loading) while dredging hazardous or toxic sediments, or clay or silt. In New Jersey, a no-barge overflow permit condition is applied to dredging activities where the sediment is finer-grained and contaminated. A third state, Pennsylvania, does not have a written policy on economic loading, however when the ACE requested to perform economic loading in the Delaware River, Pennsylvania deemed it to be an unfavorable practice.

• POLICY CATEGORY V - DREDGED MATERIAL DISPOSAL.

Dredging to maintain navigable waterways remains a constant effort and the need to increase navigable water depths has accelerated over the years. The ability of existing disposal facilities to accommodate this material

has become increasingly limited. It is the states that have experienced this scenario first-hand that have responded by establishing working groups to address long-term dredged material management planning.

A good example of long-term dredged material management planning is the San Francisco Bay Conservation & Development Commission's (BCDC's) participation in the Long-Term Management Strategy (LTMS) for the San Francisco Bay. The main premise of the BCDC's founding legislation, the McAteer-Petris Act, was to prevent the haphazard filling of the Bay. All of the BCDC's policies that deal with dredged material disposal and filling specifically dictate that the placement of dredged material underwater in the Bay is limited/restricted and the use of non-tidal and open ocean dredged material disposal sites are preferred. In order to deal with the long-term needs of meeting this policy, the San Francisco Bay Dredging Act was passed which directed and funded the BCDC to develop a LTMS for dredging and disposal activities in the Bay area.

The goals of the LTMS are to: ensure maintenance of channels necessary for navigation as well as eliminate unnecessary dredging; facilitate environmentally sound disposal of dredged material; maximize use of dredging material as a resource; and, establish a cooperative framework for dredging permits. Development of the LTMS involved the participation of federal, state, and local resource agencies along with business, environmental, and scientific community representatives. The LTMS has led to a 50-year strategy for dredging and disposal management, the designation of a new deep-ocean disposal site, and a focus on maximizing beneficial use options. The LTMS Management Plan that will be used for regional dredging and disposal decision making is currently under preparation. The Management Plan will contain specific guidance for each of the LTMS agencies as to how decisions regarding dredging and disposal will be made.

Not all states have the same level of urgency for long-term planning or the funding to carry-out such a complex, comprehensive, and timely project as the BCDC was afforded. However, other states have been able to address this issue based upon their needs and resources with similar efforts. Louisiana is another state that developed a LTMS as a result of a statutory mandate. Louisiana's LTMS was designed to specifically address plans for all ten federally maintained navigational channels within Louisiana. In this case, the development of a LTMS was not driven by lack of disposal space, but by a significant need for wetland creation via the beneficial use of dredged material.

Other states with some type of dredged material management plan, program, office or working group include (states with a \triangle symbol indicates that they are under development): BCDC, CA \triangle , DE \triangle , LA, ME \triangle , MD, MA \triangle , MI, MN, MS \triangle , NY/NJ, TX, VA, and WA.

Fifteen states do specify placement preferences for dredged material. As indicated by Table 2, preferences are varied. This table does not reflect preferences for disposal based upon meeting specific criteria (i.e. chemical composition and grain size of material). It's purpose is to demonstrate the variety of state disposal preferences.

	Upland	Beneficial Use	Open-water	Nearshore/Intertidal Wetland & Estuarine
BCDC	1st preference	1st preference	2 nd preference	limited/restricted
CNMI	1st preference			
GA				contrary to public interest
MI	2 nd preference	1st preference	3 rd preference	
MN			prohibited, unless it provides habitat	
NJ		1st preference	conditionally acceptable	discouraged
NC	1 st preference	if material is suitable		not permitted
ОН	1 st preference	sand in littoral system	3 rd preference	2 nd preference (littoral system)
OR	encouraged		encouraged	not preferred
RI			1st preference	prohibited
ТХ	2 nd preference	1st preference		
VI	1st preference			
VA	1st preference			not permitted
WA			for habitat improvement	for habitat improvement
WI			restricted	

 TABLE 2.
 Selected state's preferred disposal options.

States were surveyed to see if they had policy requirements for the placement, dewatering, monitoring, and maintenance of upland confined disposal facilities (CDFs). Of the fifteen states with such requirements, New Jersey stood out as having the most detailed criteria. These requirements include: precautions for handling contaminated dredged material which include increased retention time through weir and dike design modifications; use of coagulants; ground water monitoring; and, measures to prevent biological uptake by vegetation and animals. Appropriate management techniques for CDFs are listed in New Jersey's *Dredging Activities and Dredged Material*, technical manual along with guidance on CDF design, construction, operation, closure, surface water discharges, and groundwater leachate.

Disposal of dredged material becomes more difficult and costly when the material to be dredged and disposed of is contaminated. The discussion in the Habitat, Sediment, and Water policy category highlighted the testing methodologies developed by EPA, ACE, and states to determine chemical composition and establishment of acceptable contaminant limits. What is interesting to note is the number of states that regulate dredged material as hazardous waste. Pennsylvania is perhaps the most stringent in their regulation. All dredged material is considered to be construction/demolition waste as defined under the Solid Waste Management Act and its regulations. A landfill permit is required prior to disposal and a general permit is required prior to beneficial use. Other states, such as CT, HI, ME, and NH, only require dredged material that has been tested and determined to be contaminated to be disposed of in accordance with solid and/or hazardous waste regulations.

Similar to the DMMPs discussed earlier, California has established a multi-agency Contaminated Sediments Task Force for the Los Angeles Basin. The Task Force's goal is to develop a long-term management plan for dredging and disposal of contaminated sediments in the Los Angeles area. Specifically, the Task Force deals with: the identification of the scope of the contaminated sediment problem; analysis of the likely contamination sources; identification of management and disposal alternatives for contaminated sediment; developing guidance for regulatory review with the objective of developing a well defined and consistent review process; and, identification of inputs of contaminants to coastal waters and ongoing regional efforts to reduce such inputs, with promotion of efforts that reduce inflows of contaminants. Massachusetts is currently developing a dredged material management plan that will identify and permit disposal alternatives with sufficient capacity to accept dredged material unsuitable for unconfined ocean disposal for the next twenty years, along with developing regulations to address contaminated dredge sediment management. In Washington, a planning effort is developing a long term multi-user disposal site (MUDS), where contaminated sediments can be properly disposed of. The MUDS study describes alternatives for safe and cost effective disposal of contaminated sediments.

♦ POLICY CATEGORY VI - BENEFICIAL USES OF DREDGED MATERIAL.

Beneficial use is, in its simplest terms, using dredged material as a resource instead of treating it as a waste. Traditionally, dredged material has been viewed as a waste, being disposed of in facilities similar to landfills where solid and hazardous wastes are disposed of. At the same time, sand was effectively "mined" or dredged from off-shore borrow sites and placed on-shore for beach nourishment and erosion control practices. Beneficial use, or re-use as some may refer to it, is the practice of taking material dredged from a channel to maintain its depth or deepen it, and then using that material for another purpose, such as beach nourishment or wetlands creation.

As dredging activities have accelerated over recent years, so has the need for placement of dredged material. Necessity, being the mother of invention, has spurred the innovative use of dredged materials that go beyond strictly beach nourishment. New uses include: habitat development - wetlands creation, nesting islands, offshore reefs; aquaculture; use as fill - expanding or raising the height of a land base; construction aggregate; shoreline construction of banks, levees, and dikes; capping of landfills; and, replacement of eroded top soil.¹⁵ Limitations on the suitability of dredged material for beneficial use projects includes the chemical and physical composition of the material, the geographic location of the project, and transportation and processing costs.

The definition of beneficial use of dredged material varies from state to state, depending upon state specific issues and needs. Those states who actively use dredged material for beneficial uses tend to have a formal policy on beneficial use and an applicable definition. Louisiana has perhaps the most advanced beneficial use program in terms of need, intent, and coordination. Louisiana is losing its coastal wetlands at the rate of 25 to 35 square miles a year.¹⁶ To counterbalance that loss, statutory language dictates that material from dredging projects involving more than 500,000 cubic yards of material shall be used for the beneficial purposes of wetland protection, creation, enhancement, or combinations thereof (La. Rev. Stat. Ann. §213.30 H.(1)). Louisiana, as mentioned earlier, has LTMSs for all ten of its federally maintained navigation channels. These LTMSs include locations of suitable areas for beneficial use, the process for approval of placement, and processing of variances for beneficial use. The state also has a planning effort, *Coast 2050*, which includes long-term guidance on coastal restoration efforts. In this guidance, all nineteen coastal parishes (the equivalent of counties), indicated that the beneficial use of dredge material resulting from channel maintenance activities should be standard operating procedure.

Whereas Louisiana's definition of beneficial use is aimed at wetland creation/protection, Mississippi's coastal program defines beneficial uses (reusable resources) of dredged material to include beach replenishment, construction, sanitary landfill, and agricultural soil improvement. Mississippi does not have a statutory requirement for beneficial use, however the state does assert that dredged material is to be viewed as a potential reusable resource and that all disposal plans should include provisions for access to such resources.

New Jersey has an excellent technical manual on the, *Management and Regulation of Dredging Activities and Dredged Material*, which devotes an entire chapter to Use Alternatives for dredged material. It lists types of alternative uses (beach nourishment, habitat development, structural and non-structural fill, landfill cover, agricultural use, and capping open water disposal sites), and the authorities that regulate the uses, potential impacts/regulatory objectives, management process, and testing requirements. While New Jersey does not have a legislative beneficial use policy, the Department of Environmental Protection strongly supports beneficial use wherever possible as opposed to exclusive reliance on disposal facilities.¹⁷

Twenty-seven states were found to have some type of policy that deals with beneficial use (AL, BCDC, CA, CT, CNMI, FL, GU, HI, LA, MA, MD, ME, MI, MN, MS, NH, NJ, NY, NC, OH, PR, RI, SC, TX, VA, WA, WI). One state, Georgia is in the process of developing a policy. The majority of the states have general policies related to beneficial use. Most policies state that beneficial use is either preferred or encouraged when it is practicable or feasible based upon meeting certain criteria. For example, Texas has policies that list criteria that should be used in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits. They include: environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits; the proximity of the beneficial use site to the dredge site; and, the quantity and quality of the dredged material and its suitability for beneficial use.

Washington and Ohio have policies that state that material dredged from navigational channels should not be disposed of outside of the littoral system. In the case of Washington, they do not have any policies that discuss beneficial use per se, however, they encourage that sediments dredged from the mouth of the Columbia River should be disposed of so that the material remains in the longshore drift cell. Furthermore, the Washington Coastal Erosion Task Force has developed a short and long-range policy that dredged material should be managed as a resource and reused beneficially within the active littoral zone. In the case of Ohio, there is no definition of beneficial use. However, Ohio does advocate that sand and gravel be returned to the littoral zone down drift of the project site to reduce erosion by nourishing and restoring down drift beaches.

SUMMARY & CONCLUSION - WHERE TO FOCUS FUTURE EFFORTS

♦ LONG-TERM MANAGEMENT AND PLANNING

At the end of the dredging information template, states were asked to identify any complex or controversial issues related to dredging, dredged material management, and beneficial use of dredged material that the state was currently trying to address through policy development. The responses were varied, ranging from erosion and sand mining concerns, to permit review processes and frameworks, to information gathering and management issues. However, the most consistent issues identified were related to disposal and beneficial use. Even those states with organized coordination through DMMPs or those states that have dealt with long-term planning still were struggling to address disposal and beneficial use issues. It is true that DMMPs and LTMSs offer structured coordination and planning and the states with these types of efforts are typically more equipped to handle these big issues. However, it may be that these issues are too large and complex to be addressed in the short-term. Also, these two particular issues are only going to continue to grow as the desire to deepen navigation channels expands.

What may be most useful to states as they address these issues is not only a framework for coordination, but being trained in the skills that are essential to constructing a successful DMMP. These types of skills include facilitation, mediation, and consensus building. This type of training would assist in opening up the communication pathways among participants, allowing them to better understand different agencies' legislative mandates, performance measures, and long-term goals. These proper communication skills and subsequent understanding are needed for a local planning group to achieve a solid dredged material management plan. This is the type of technical assistance that could be most valuable to states as they address future planning issues.

♦ BENEFICIAL USE

Although 27 of the 34 coastal management programs have policies regarding beneficial use of dredged material, most of them were lacking in content, specificity, and enforceability. Most of these policies encourage beneficial use of dredged material as opposed to disposal; however, they do not outline the means by which a beneficial use project should be developed, or how it should be reviewed or implemented.

As the benefits of beneficial use are recognized, the ways that potential projects are developed and evaluated are important to the project's ultimate success, suitability and longevity. Therefore, specificity and direction in a beneficial use policy are the key to a beneficial use project being implemented in a coordinated and timely manner. Exactitude does not have to bring with it project limitations and inflexibility; a carefully constructed policy will allow state goals to be obtained without time lost over interpretation of an ambiguous policy.

To avoid conflicts, states need to work with project sponsors, ports, and the ACE to develop plans, procedures, and potential funding sources that will allow them to foresee and address state beneficial use requirements early in the process. It is recommended that states with no existing policy language on beneficial use make a concerted effort to develop a beneficial use policy. In addition, those states with limited policy language regarding beneficial use should further articulate their position on the beneficial use of dredged material.

From the information gathered in the preparation of this document, the greatest amount of beneficial use efforts to date seem to have been directed at beach nourishment activities associated with navigation projects. For further information on state coastal management program policies related to beach nourishment activities, please refer to CPD's coastal management program policy series document, *State, Territory, and Commonwealth Beach Nourishment Programs: A National Overview - March 2000.*

♦ ECONOMIC CONCERNS

Policies related to economic concerns are important when making decisions regarding a project's environmental costs and its economic benefits. At the least, states should attempt to develop a catalogue listing of criteria that are to be used when making such decisions. Perhaps on a higher level, these criteria could be value weighted according to state planning priorities and resources. The concept of scale should also be considered as local, regional, and national needs often have to be balanced and prioritized against each other. These criteria would not only be useful to permit decision-makers but would also serve the purpose of letting the applicant know specifically what criteria their project will be evaluated against.

An understanding of economic principles and cost/benefit analyses is critical and may be an area for supplemental training of coastal program staff to assist them in their review of large scale dredging projects. Guidance could be developed for valuing ecological benefits derived from beneficial use projects and putting a monetary price on that value so that it may be incorporated into project cost/benefit analyses. Until the true environmental costs and benefits can be incorporated into the cost/benefit analysis process, decision-makers will not have all of the information needed to choose the option that will result in the greatest, long-term public benefit.

UPDATING THIS DOCUMENT IN THE FUTURE

As state statutes, regulations, and policies are periodically modified or rescinded or new ones promulgated, it is important to recognize that the information contained in this document will eventually become outdated. Even as this summary is being written, changes to program policies are being made. Therefore, it is CPD's intention to keep track of dredging and dredged material management regulatory changes through state coastal management program Routine Program Changes and Program Amendments. This information would then be used to update state policies on a two-year cycle in order to keep this document accurate and useful. Progress throughout that two-year period could be evaluated, recommendations made, and action items listed in an update. As with any coastal process, the nature of dredging and the issues surrounding it do not remain static. Therefore, this document will need to keep pace with changes over time.

ENDNOTES

¹ National Academy of Public Administration. Dredged Material Management and State Coastal Management Programs: Lessons from a Workshop in New Orleans, Louisiana. January 1999.

- ⁴ The U.S. Army Corps of Engineers dredges 300 out of the 400 million cubic yards of material that is dredged every year to maintain over 25, 000 miles of federal navigation channels. National Academy of Public Administration. *Dredged Material Management and State Coastal Management Programs: Lessons from a Workshop in New Orleans, Louisiana.* January 1999. Pp. XI.
- ⁵ Ibid.
- ⁶ Channel depths of beyond 45 feet are required to accommodate the new line of Brobdingnagian ships which have the capacity to carry 6,000 twenty-foot containers. Thus, dramatically reducing transportation costs. Wilner, Frank N. *The Politics of Dredging*. Traffic World. Vol. 257, Issue 7. 02/15/99. Pp. 12.
- ⁷ U.S. Department of Transportation, Maritime Administration. *Report to the Secretary of Transportation. The Dredging Process in the United States: An Action Plan for Improvement.* December 1994. Pp.1
- ⁸ U.S. Public Port Facts. <u>Http://www.aapa-ports.org/portfacts.html</u>. 08/30/99.
- ⁹ U.S. Maritime Administration. A Report to Congress on the Status of Public Ports of the U.S. 1996-1997. <u>Http://www.marad.dot.gov/publications/index.html.</u> 8/30/99.
- ¹⁰ Herbich, John B. *Dredged Navigational Channels, Handbook of Coastal and Ocean Engineering Volume 3:*. Gulf Publishing Company, Houston, Texas. 1992. Pp. 50.
- ¹¹ The term "enforceable policy" means state policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a state exerts control over private and public land and water uses and natural resources in the coastal zone. 16 U.S.C. §1453(6a).
- ¹² Please note, there are 33 federally approved state coastal management programs. However, the State of California also has a separate federally approved CZMA program specifically for the San Francisco Bay, under the San Francisco Bay Conservation and Development Commission (BCDC). Thus, there are 34 separate coastal management programs discussed in the matrix and throughout the document.
- ¹³ Coastal States Organization. Putting the Public Trust Doctrine To Work, 2nd Edition. June 1997. Pp. 3.
- ¹⁴ Ibid. Pp. 169-175.
- ¹⁵ U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. *Identifying Planning and Financing Beneficial Use Projects Using Dredged Materials: Beneficial Use Manual Pre-Publication Copy.* January 21, 1999. Pp. 9-10.
- ¹⁶ Louisiana Coastal Restoration Web-Site. <u>Http://www.lacoast.gov</u>. 3/3/00.
- ¹⁷ State of New Jersey, Department of Environmental Protection. *The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Wetlands*. October 1997.

² U.S. Department of Transportation, Maritime Administration. *Report to the Secretary of Transportation. The Dredging Process in the United States: An Action Plan for Improvement.* December 1994. Pp. i.

³ Ibid. Pp. 3-4.

Dredging in Alabama

Coordination Mechanisms & Permit Processing. Coordination takes place during regularly scheduled meetings and daily correspondence between the Alabama Department of Economic & Community Affairs and the Alabama Department of Environmental Management (ADEM), the state agencies that are responsible for implementation the Alabama Coastal Area Management Program. Coordination between these agencies and other federal, state, and local agencies takes place at quarterly Technical Interagency Committee meetings. The purpose of these meetings is to discuss specific programs and shared goals related to the coastal area along with permitting issues. Joint permits for dredging and filling activities under §404 of the Federal Clean Water Act and federal consistency provisions under the Federal Coastal Zone Management Act are issued by the U.S. Army Corps of Engineers (ACE) and the ADEM.

Economic Concerns. The only policies Alabama has regarding economic concerns is the Alabama Coastal Area Management Program's (ACAMP) Coastal Resource Use Action Items which identify economic development as an action item. There is also a Port Development Policy Statement that states that the ACAMP will provide assistance within its means to facilitate a productive and environmentally responsible port operation within the coastal area.

Habitat, Sediment, & Water Quality. Return waters from dredge disposal sites are required to be of similar salinity as the receiving waters into which they run. Other policies state that the chemical constituency of dredged material and fill material shall be free of toxic pollutants in toxic amounts when it is to be placed on state water bottoms or in wetlands. The limits or type of chemical constituents are not identified in the policy language. Areas that are restricted in policy language from dredging and filling activities include oyster reefs and submersed grassbeds. Policies designed for the protection of endangered and threatened species are general, broad statements about protection and preservation of critical habitats of recognized endangered species.

Dredging Techniques & Best Management Practices. No specific techniques or best management practices are outlined in the policies. However, methods and techniques used during dredging must be such that reasonable assurance is provided that applicable water quality standards will be met.

Dredged Material Disposal. Disposal of dredged material is permitted in open state waters if it complies with the relevant provisions of the Alabama Administrative Code r. 335-8-1 et. seq. Dredged material shall not be placed in wetlands unless specifically permitted or authorized by the ADEM and receives federal consistency concurrence. Dredged material and fill material placed on water bottoms or wetlands must be free of toxic pollutants in toxic amounts. Dewatering effluent from CDFs must be of a similar salinity level to that of the receiving body of water.

Beneficial Use of Dredged Material. Dredging or filling of state water bottoms and wetlands may be permitted if the activity is related to beach nourishment, shoreline stabilization, marsh creation, restoration, enhancement projects, or other similar beneficial use. It is the policy of the Management Program to encourage the beneficial use of sand and sediment for beach nourishment purposes when dredging for ports, harbors, and waterways. The ACAMP is currently working with the ACE on the beneficial use of dredged material for beach nourishment.

State Specific Issues. The ACAMP did not identify any complex or controversial issues related to dredging or dredged material management.

Dredging in Alabama

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References:

- 1. Alabama Department of Environmental Management. *Coastal Area Management Program Rules and Regulations, Chapter 335-8-2 Provisions Related To Coastal Activities.* (amended effective date, April 16, 1995).
- 2. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management and, Alabama Coastal Area Board. *The Alabama Coastal Area Management Program and Final Environmental Impact Statement August 1979.*
- 3. Alabama Department of Economic and Community Affairs, Science Technology and Energy Division, Coastal Programs Office. *Alabama Coastal Area Management Plan January 1999*.
- 4. Phillip Hinesley, Manager, Alabama Coastal Programs Office. Comments on the Alabama Draft Dredging Template. 10/13/99.

Dredging in Alaska

Coordination Mechanisms & Permit Processing. A coastal project questionnaire (CPQ) is filled out for all projects which are in or will affect Alaska's coastal resources to determine which, if any state or federal approvals or permits are required. If federal or state permits are required, the project must be reviewed for federal consistency. Reviews of projects are put into three categories: A - categorical approval, projects deemed not to have a significant impact on coastal resources; B- general concurrence determination, projects which are deemed consistent with the incorporation of standard permit conditions; and C - permits that require an individual Alaska Coastal Management Program consistency review. Permit review time periods vary dependent upon the type of permit and issuing agency. All C list projects are reviewed for federal consistency within 50 days. Permit issuance, with minor exceptions, occurs within 5 days of the consistency certification. The Division of Governmental Coordination (DGC) within the Office of Management and Budget is responsible for coordination of consistency reviews.

The DGC will provide pre-application assistance to potential applicants for a state permit by explaining the CPQ and the consistency review process. The DGC will also identify persons to contact in other state or federal agencies and will attempt to regularly inform each coastal resource district of proposed projects. All projects are public noticed according to the Alaska Administrative Code Title 6, Section 50.100(b), and may be published as a joint notice with other state and federal agencies. The agency coordinating the review may hold a public hearing if deemed necessary.

Alaska has many local programs that must meet or exceed the Coastal Management Program Standards set forth in the Alaska Administrative Code Title 6, Chapter 80. These standards are used in the review and approval of local coastal programs. For the purposes of this document, there are too many local programs in Alaska to incorporate all of their individual standards pursuant to dredging activities. Therefore only the state-wide approval standards are identified.

Economic Concerns. Alaska does not have any policies that identify how the environmental costs of a project should be weighed against the economic benefits.

Habitat, Sediment, & Water Quality. There are no specific policies that outline the level of chemical and/or biomonitoring data needed to make dredging permitting decisions. However, under the Standards of the Alaska Coastal Management Program for estuaries and wetlands and tideflats habitats, there is the statement that these habitats must be managed so as to avoid the discharge of toxic wastes and substances. Policies also dictate that rivers, lakes, streams, wetlands, tidelands, and estuary habitats all be managed so as to assure adequate water flow and natural circulation. Offshore habitat areas must be managed as a fisheries conservation zone and rivers, lakes, and streams must be managed to protect important fish or wildlife habitat and natural flow.

Dredging Techniques & Best Management Practices. No policies were found that identified preferred dredging techniques and/or best management practices.

Dredged Material Disposal. The placement of dredged or fill material into coastal waters must at a minimum, comply with the standards contained in, *33 CFR parts 320-323*.

Beneficial Use of Dredged Material. No policies were found that define beneficial use or the state's policies towards the beneficial use of dredged material.

State Specific Issues. The Alaska Coastal Management Program did not identify any complex or controversial issues related to dredging; as dredging activities are rare in much of the state.

Dredging in Alaska

Alaska Dredging Contact Information:

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References:

- 1. U.S. Department of Commerce, Office of Coastal Zone Management and State of Alaska, Office of Coastal Management. *State of Alaska Coastal Management Program and Final Environmental Impact Statement 1979.*
- 2. Alaska Department of Fish and Game, Habitat and Restoration Division. *The Alaska Coastal Management Program Handbook 1994.*
- 3. Alaska Administrative Code tit. 6, §80 et. seq. Downloaded from <u>Http://www.legis.state.ak.us</u>. 9/8/99.
- 4. Gabrielle LaRoche, Coastal Program Coordinator, Division of Governmental Coordination. Comments on the Dredging in Alaska state summary. 2/9/00.

Coordination Mechanisms & Permit Processing. The American Samoa Coastal Management Act of 1990 dictates that the Department of Commerce, American Samoa Coastal Management Program (ASCMP), will serve as the clearinghouse for the land use permit system that integrates all the permitting requirements of each of the territorial agencies concerned with environmental management (this includes federal consistency certifications which are only issued after a land use permit has been approved). This system is known as the Project Notification and Review System (PNRS). The PNRS allows for pre-application consultations and scoping meetings for major projects in order to provide guidance for project applicants. Dredging activities require a major PNRS permit and are public noticed and scheduled for a public hearing with the PNRS board. Territorial agencies on the board include: ASCMP, Department of Marine & Wildlife Resources, American Samoa Environmental Protection Agency, Historic Preservation Office, Department of Public Works, Department of Parks and Recreation, American Samoa Power Authority, and the Department of Health. A land use permit is required before issuance of any other federal or local permit. Section 401 water quality certification is required for activities that fall under §404 U.S. Army Corps of Engineers (ACE) permits for dredging and filling activities.

Economic Concerns. The ASCMP has no policies related to economic concerns and how the environmental costs are weighed against the economic benefits of a project. A cost/benefit analysis is not required to be prepared for dredging projects.

Habitat, Sediment, & Water Quality. Territorial water quality standards are used as the standards of the ASCMP and land use permit applications. Currently, new water quality standards are under development which will address mixing zones. Activities that will have an adverse impact upon natural drainage patterns are prohibited. Activities in wetlands must not interfere with adequate water flow, nutrients, oxygen levels, and hydrological processes.

The discharge of toxic substances is prohibited in wetlands. What these substances are is not defined. Criteria for land use permit approval includes that the accumulation of toxins, carcinogens, or pathogens which threaten the welfare of humans, aquatic or terrestrial organisms will not occur.

Policies for land use permits include that living marine resources and their habitats be protected from degradation, coral reefs should be protected and restored, disruption or burial of marine of bottom communities should not occur, and that critical habitats should be protected which are essential to the productivity of plant and animal species that are threatened and or endangered. Coral reefs and other submerged lands shall not be dredged unless there is a public need and all other alternatives have been exhausted.

Dredging Techniques & Best Management Practices. The ASCMP has no policies that identify preferred dredging techniques or best management practices.

Dredged Material Disposal. The ASCMP has no policies that deal specifically with the chemical composition or placement of dredged material.

Beneficial Use of Dredged Material. The ASCMP has no policies regarding the beneficial use of dredged material.

State Specific Issues. The ASCMP has identified the practice of sand mining, which is culturally acceptable, as an issue that has caused serious erosion problems. Currently, compliance and enforcement problems are being addressed through revisions to the Administrative Rules and the enforcement and monitoring manual.

American Samoa Dredging Contact Information:

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References:

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and American Samoa Development Planning Office. *Final Environmental Impact Statement and Proposed Coastal Management Program for the Territory of American Samoa 1980.*
- 2. American Samoa Coastal Management Program Administrative Code §26.0201 et. seq.
- 3. American Samoa Coastal Management Act of 1990 American Samoa Code Annotated § 24.0501 et. seq.
- 4. Gene Brighouse-Failauga, Acting Coastal Program Manager, American Samoa Coastal Management Program. Comments on the American Samoa Draft Dredging Template. 12/2/99.

Dredging in California

Coordination Mechanisms & Permit Processing. This summary of *Dredging in California,* covers the entire state with the exception of the San Francisco Bay Area. For information on dredging in the San Francisco Bay Area and the Bay Conservation and Development Commission (BCDC), please refer to the summary, *Dredging in San Francisco Bay.*

A federal consistency concurrence is required for dredging projects that require §404/§10 permits from the U.S. Army Corps of Engineers (ACE) and for federal dredging activities. The policies that are used for federal consistency reviews of dredging projects are found in Chapter 3 of the *California Coastal Act of 1976 Cal. Pub. Res. Code* §30230-30237 (1999). The agency responsible for the implementation of the *California Coastal Act* is the California Coastal Commission.

Other reviews and permits issued by the California Coastal Commission relevant to dredging include review and approval of port master plans for the Ports of Hueneme, Long Beach, Los Angeles, and for the San Diego Unified Port District (*Chapter 8 of The California Coastal Act*). The California Coastal Commission also is charged with issuing coastal development permits for all new development on tidelands, submerged lands, and public trust lands. "Development", as defined by the *California Coastal Act of 1976 Cal. Pub. Res. Code §30106 (1999)*, includes dredging and disposal of dredged material on land or under water. All projects reviewed undergo a public hearing. Staff recommendations on projects are made available for review prior to the hearing.

Other permits issued by the state for dredging activities include §401 water quality certification by the state Water Resources Control Board (which may be delegated to Regional Water Quality Control Boards).

The California Coastal Commission's web-page covers various aspects of the Commission's activities. It has a direct link to the *California Coastal Act*, where Chapter 3 of the Act outlines the Commission's federal consistency policies. There is a link to a separate federal consistency page that includes information related to legal/regulatory underpinnings, federal consistency documents, a publication-guide to federal consistency provisions, and current deadlines for federal consistency determination submissions.

In October 1997, legislation was passed (*Cal. Water Code* §13396.9) directing the California Coastal Commission and the Los Angeles Regional Water Quality Control Board to establish a multi-agency Contaminated Sediments Task Force for the Los Angeles Basin. The Task Force's goal being to develop a long-term management plan for dredging and disposal of contaminated sediments in the Los Angeles area. The Task Force is bound by a Memorandum Of Understanding (MOU) between the collaborating federal and state agencies to develop a long-term management plan consisting of five strategy development committees: Upland Disposal and Beneficial Re-Use; Aquatic Disposal and Dredge Operations; Watershed Management and Source Reduction; Implementation; and, Sediment Screening Threshold. Goals of the Task Force include: identification of the scope of the contaminated sediment problem; analysis of the likely contamination sources; identification of management and disposal alternatives for contaminated sediment; develop guidance for regulatory review with the objective of developing a well defined and consistent review process; and, identification of inputs of contaminants to coastal waters and ongoing regional efforts to reduce such inputs, with promotion of efforts that reduce inflows of contaminants. The Task Force is required to conduct not less than one annual public workshop to review the status of the long-term management plan and to promote public participation. An interim Dredged Material Management Plan has been developed for use until the completion of the Final Management Plan scheduled for January 1, 2003.¹ The Los Angeles Basin Contaminated Sediments Task Force's Implementation subcommittee is currently working on a permit streamlining process.²

¹ Los Angeles Basin Contaminated Sediment Task Force. *Contaminated Sediment Long Term Management Strategy: Action Plan.* <u>Http://ww.ceres.ca.gov/coastalcomm/sediment/action.html</u>. 6/17/99.

² Los Angeles Basin Contaminated Sediments Task Force. *Summary of Meeting on May 18, 1999.* Http://www.ceres.ca.gov/coastalcomm/sediment/5-99sum.html

<u>Http://www.ceres.ca.gov/coastalcomm/sediment/5-99sum.html.</u>

Dredging in California

Economic Concerns. According to the *California Coastal Act of 1976 Cal. Pub. Res. Code* §30705(*d*), the Commission must consider and balance the socioeconomic and environmental factors of a dredging project for port related development. Also, *Cal. Pub. Res. Code* §30701, declares that ports are the primary economic and coastal resources of the State of California. Located in the same chapter on ports, *Cal. Pub. Res. Code* §30703, says that the commercial fishing industry is important to the State of California, and ports shall not eliminate or reduce existing commercial fishing harbor space unless the demand for commercial fishing facilities no longer exists or adequate alternative space has been provided. Also, in this same section, it dictates that proposed recreational boating facilities, to the extent that it is feasible, not interfere with the needs of the commercial fishing industry. Section *30234.5*, states that the economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Habitat, Sediment, & Water Quality. According to the *California Coastal Act of 1976 Cal. Pub. Res. Code* §30705(c), Bottom sediments or sediment elutriate shall be analyzed for toxicants using chemical, physical, and biological testing prior to dredging. The Coastal Commission uses EPA Greenbook standards for the collection of sediment chemical and biological data.

Another agency responsible for reviewing dredging with respect to water quality concerns is the State Water Quality Control Board. They are responsible for developing a program that identifies and characterizes toxic hot spots in sediments and also for adopting sediment quality objectives. This Board is also responsible for issuing §401 water quality certification for dredging projects. The legislative authority for the Water Quality Control Board is found in the *Cal. Water Code* §113390 - 13396.9.

Los Angeles Basin Contaminated Sediments Task Force as of May 1999, was in the process of goal and objective setting for the development of sediment screening thresholds.³

The *Cal. Pub. Res. Code* §30706(*b*), states that the disposal of dredge spoils shall minimize reductions of the volume, surface area, or circulation of water. The *Cal. Pub. Res. Code* §30233(*b*), states that dredging and spoils disposal shall be planned and carried out to avoid significant disruption to water circulation. No other information regarding hydrodynamic circulation patterns or salinity levels was found.

Dredging windows are determined based upon past permit action precedence, set by the Department of Fish and Game. The activity of mineral extraction, including sand for restoring beaches is not allowed in environmentally sensitive areas. The definition of environmentally sensitive areas includes any area in which plant or animal life (threatened and endangered) or their habitats are either rare or especially valuable. Environmentally sensitive habitat areas are to be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

Dredging Techniques & Best Management Practices. The policies found in the California Coastal Act do not identify any preferred dredging techniques or best management practices.

Dredged Material Disposal. Port master plans that are subject to review and certification by the Coastal Commission do not include plans for dredged material management. However, the Los Angeles Basin Contaminated Sediments Task Force is addressing in detail the development of a long-term dredged material management plan for the Los Angeles area.

Dredged material disposal options or restrictions for contaminated material are currently being developed by the strategy development committees of the Los Angeles Basin Contaminated Sediments Task Force.

The *California Coastal Act's* (*Cal. Pub. Res. Code* §30705(c), §30706(b)) policies regarding ports outline that disposal of dredge spoils seaward of the mean high tide line shall minimize harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, and sand transport systems.

³ Ibid.

Dredging in California

Water quality standards must be met to deposit spoils in open coastal water sites and must be designed to minimize adverse impacts on marine organisms and in confined coastal waters, the spoil must be isolated and contained.

Beneficial Use of Dredged Material. There are policy statements in the *California Coastal Act* that dictate that dredge spoils that are suitable for beach replenishment should be transported to the appropriate beaches, and that all port developments (the regulatory definition of development includes dredging) should provide for other beneficial uses consistent with the public trust, recreation and wildlife habitat uses. *Cal. Pub. Res. Code* §30708(d), §30233(a).

State Specific Issues. The California Coastal Commission did not identify any complex or controversial issues related to dredging.

California Dredging Contact Information:

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References:

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and California Coastal Commission. *State of California Coastal Management Program and Final Environmental Impact Statement August 1977.*
- 2. California Coastal Act (1999). <u>Http://ceres.ca.gov/coastalcomm/ccatc.html</u>. 6/15/99.
- 3. Rebecca Roth, Federal Programs Manager, California Coastal Commission. Verbal comments on the California Draft Dredging Template. 1/14/00.

Coordination Mechanisms & Permit Processing. For dredging activities that occur in Connecticut's coastal zone, there are two types of permits that may be required: structures, dredging, and fill; and, tidal wetlands. Both of these permits are administered by the Office of Long Island Sound Programs (OLISP), the same agency that administers the federally approved coastal management program. Average processing time for these permits ranges from 90-180 days. Applicants for structures, dredging, and fill and tidal wetlands permits may be eligible for the expedited certificate of permission (COP) process if their proposed project meets the eligibility criteria, primarily maintenance of a state permitted previous activity. A COP is normally processed within 45 days from receipt; if necessary the review period may be extended another 45 days. A decision to grant or deny the application must be made no later than 90 days from the receipt of the COP application.

If the activity requires a §404 permit from the U.S. Army Corps of Engineers (ACE), a §401 water quality certification, administered by the Inland Water Resources Division for non-tidal projects and the Office of Long Island Sound Programs for tidal/coastal projects which certifies compliance with federal and state water quality standards will need to be obtained. Upland disposal of contaminated dredged sediments at a licensed waste facility in Connecticut requires a special waste permit from the Department of Environmental Protection's (DEP) Bureau of Waste Management. Issuance of this permit takes up to 65 days.

The Connecticut DEP has an on-line environmental permit users guide that gives a brief review of the permitting program, authorizing statutes, regulations, activities that apply to the permit, required permit application and documentation, fees, review and processing methods, requirements for public participation, average processing time, and contact addresses and phone numbers. Potential applicants are also encouraged to contact the DEP prior to applying to schedule a pre-application meeting to ensure all data requirements, especially joint state/federal sediment sampling needs, will be sufficiently met.

Public participation for the structure, dredging, or filling permit and the tidal wetlands permit consists of the applicant publishing a Notice of Application. Subsequently, a second public notice is published by the Commissioner of the Department stating the tentative determination to grant or deny after the application has been reviewed. Tidal wetland permits mandate a hearing unless a Notice of Intent to Waive the hearing is published. A hearing must be held if 25 individuals request a hearing in response to the notice. There is no mandatory hearing required for structures and dredging applications; these are held at the Commissioner's discretion. However, all substantive comments to the Department following a Notice of Tentative Determination to Approve must be addressed by the applicant to the Department's satisfaction, and may result in modifications to any permit that may be issued.

Economic Concerns. Under the Intergovernmental Coordination of Planning and Regulatory Activities section of the Connecticut coastal policies, there is a statement that coordination is necessary to insure maximum protection of coastal resources while minimizing conflicts and disruption of economic development. Also, under the Coastal Land and Water Resources section of the coastal policies, it delineates that there should be a balance between the need for economic growth of the state and the use of the land with the need to protect the environment and ecology for the people of the state.

Habitat, Sediment, & Water Quality. Connecticut Water Quality Standards, revised in April 1997, contain policies that specifically apply to evaluations of the suitability of dredged sediments for open water disposal, in particular Surface Water Quality Standards #13 and #26. These policies do not provide specific numerical or biological standards; rather they specify that adverse long-term effects are to be avoided. In addition, the federal guidance is used on assessing the results of sediment testing.

Dredging permits are generally issued with a three-year work period in which to complete the authorized work and do not allow for repetitive dredging of an area once the entire project has been dredged. Redredging or maintenance dredging of an area would require a new permit, including new sediment testing of the sediments to be dredged. However, dredging permits with upland disposal have occasionally been written to allow annual maintenance dredging of a specified project area for a period up to five years.

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Some form of chemical testing is usually necessary unless the material is beach sand or gravel. Sediment sampling plans are developed jointly by DEP-OLISP and the ACE (with the concurrence of the Environmental Protection Agency and the National Marine Fisheries Service), based on project information provided by the applicant. Sediment proposed for open water disposal should be tested following the guidance of the 1998 Corps/EPA Inland Testing Manual, and the 1991 Corps/EPA Testing Manual for the Evaluation of Dredged Sediments Proposed for Ocean Disposal. Sediments proposed for upland disposal will be compared against the numerical standards listed in the remediation standards regulations for guidance in determining sediment suitability for a particular disposal location.

A recent study on Dredged Sediment Management in Long Island Sound was prepared for the Connecticut DEP-OLISP. This study looks at the current management approach to dredging and dredged material management by the States of Connecticut and New York along with the ACE. This study covers Connecticut's process for reviewing structure, dredging, and fill permits. In this process the applicant submits a sediment sampling and testing protocol that has been reviewed by the ACE to the OLISP for their approval. The results are then reviewed during the technical review portion of the permitting process. The technical review of sediments is based on reference levels, surface water quality standards, available sediment quality screening values (ERMs, ERLs, PELs, TEL, AVS, and SEMs) and professional experience.⁴

There are coastal management policy statements for dredging, filling, and disposal activities that dictate that these activities must meet water quality standards. The anti-degradation policies of the Connecticut Water Quality Standards recognize the Commissioner's right to establish mixing zones. All projects must be evaluated for their adverse impacts to Coastal Waters Circulation Patterns. Adverse impacts include degradation of existing circulation patterns of coastal waters through the significant patterns of tidal exchange or flushing rates, freshwater inputs or existing basin characteristics and channel contours. Filling in Coastal Embayments must not restrict or alter tidal circulation or flushing.

Resource Use Guidelines for Freshwater Wetlands and Water Courses states that activities will be consistent if they are timed so as to avoid critical anadromous fish runs. Resource Use Guidelines for Shellfish Concentration Areas and for Coastal Waters and Estuarine Embayments where maintenance and enhancement dredging is to take place, state that dredging must be staged so as to avoid impacts to shellfish or finfish populations during critical breeding periods. Time frames restricting dredging are imposed by DEP-OLISP on structures and dredging permits or water quality certifications for direct federal actions upon the recommendation of the DEP Marine Fisheries Division. Typical no-dredging windows are: February 1-April 15, inclusive, for winter flounder; April 1- June 15, inclusive for anadromous fisheries; and, June 1-September 30, inclusive, for spawning shellfish.

All dredging, filling, and disposal activities will be evaluated based upon the adverse impacts to wildlife, finfish, and shellfish habitat. These impacts include degradation from significant alteration of the composition of habitats, migration patterns, spawning, distribution, breeding or other population characteristics. Significant impacts on contiguous shellfish concentration areas from dredging in Shellfish Concentration Areas and in Coastal Waters and Estuarine Embayments is not consistent with coastal policies. Sensitive coastal resource areas such as shellfish areas, intertidal flats, important finfish habitats and major eelgrass flats should be avoided when dredging in Coastal Waters and Estuarine Embayments.

Dredging Techniques & Best Management Practices. In several policy statements for dredging, filling, and disposal it is required that best available technologies be used to reduce controllable sedimentation. Because of the tight confines found in many Connecticut marinas and boat basins, combined with a lack of suitable upland areas for dewatering, dredging is almost universally conducted by a clam shell bucket dredge that loads material onto a bottom-dump scow for open water disposal. Hydraulic dredging is used at several facilities that have existing upland disposal sites for dewatering and final disposal, and the ACE has used trailing arm hopper dredges for shoals in the Connecticut River federal navigation project.

⁴ Carey, D.A. 1998. *Long Island Sound Dredged Material Management Approach*. A Study report Prepared for State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program, Hartford, CT. pp.3-18.

Dredged Material Disposal. Connecticut's policies for Dredging and Dredged Material Disposal Planning under the Governmental Processes section states that a long-range planning program for maintenance and enhancement of federally maintained navigation channels that will effectively plan for environmentally sound dredging and disposal of dredged materials will be initiated.

Currently, the 1980 Long Island Sound Dredged Material Management Interim Plan provides the general plan for dredged material management. However, the EPA and ACE are currently in the process of preparing an Environmental Impact Statement (EIS) to support designation of disposal sites in Long Island Sound pursuant to the Marine Protection Resources and Sanctuaries Act (MPRSA), which will require development of site management plans for any disposal sites designated in the Sound.

Creation of wetlands from viable intertidal flats is not encouraged and is disallowed. Connecticut does not support trading one existing, viable resource for another. Disposal of dredged sediments in coastal waters and estuarine embayments may be consistent with coastal policies if the material meets certain composition criteria and is being used for habitat restoration purposes, such as filling old borrow pits.

Three of the four disposal sites currently in use in Long Island Sound were identified in the 1980 Interim Plan and the fourth was designated by the EPA after a 1982 EIS was completed identifying the current Western Long Island Sound Disposal Area as an appropriate open water disposal site.

Upland disposal at sites other than a licensed waste disposal facility requires that the sediments meet remediation standards regulations.

No coastal policies were found that dictate disposal options or restrictions for dredged material deemed contaminated. However, there are several policies that restrict filling with and disposal of material in resource areas if it is not clean and free of chemical, biological, or man-made pollutants which are likely to adversely affect water quality or violate state water quality standards. Upland disposal of contaminated dredged sediments at a licensed waste facility in Connecticut requires a special waste permit from the DEP Bureau of Waste Management. Sediments unsuitable for unconfined open water disposal may be disposed of at one of two open water sites and capped by sediment suitable for open water disposal.

Filling and disposal policies emphasize that best available sedimentation and erosion control techniques be used during placement to minimize sediment loads and prevent disturbances to water quality into surrounding resource areas. Dewatering of sediment from a confined disposal facility (CDF) or a temporary dewatering site may require a temporary discharge authorization from the DEP Water Bureau that will set discharge limitations and specify monitoring requirements. In addition, siting of a CDF requires that the effluent entering the groundwater through percolation meets the groundwater protection criteria for the proposed site. Sediments must be stabilized by vegetation or some other cover as soon a possible following dewatering.

The 1980 Interim Plan for Dredged Material Management in Long Island Sound that is currently being used for dredging decision making in Long Island Sound, lists several underwater disposal site management practices: disposal is restricted within 200m of a disposal buoy except for point-dumping and controlled area dumping to minimize height of mounds; relocate buoy to create pockets for subsequent disposal and prevent slumping of high deposits; the ACE is responsible for the management, coordination, and record-keeping; capping is allowed on a case by case basis; disposal activities are to be consolidated within short time periods to maximize containment; seasonal restrictions will be used to limit impacts on shellfish and finfish; legal proceedings will be initiated for violations of permit conditions; and, the Interim Plan should be dynamic and incorporate new information and innovations.⁵ The ACE provides specific disposal coordinates at the four underwater disposal sites. An independent disposal inspector must witness every disposal of dredged sediment and verify the disposal coordinates. These requirements, including the use of capping, as

⁵ Ibid. p.3-35

appropriate, to sequester sediments unsuitable for unconfined open water disposal, are part of every dredging permit issued by the DEP-OLISP.

The Connecticut Water Quality Standards, and the Structures and Dredging Act all specify no long-term impacts to water quality or marine organisms may result from dredging and disposal. As a result, if sediment is contaminated and poses the potential of unacceptable impacts to benthic habitats, and can not be adequately managed by capping, it would not be authorized for disposal in Long Island Sound.

Beneficial Use of Dredged Material. Filling and disposal of dredged material may be consistent with coastal policies if the material meets certain size and composition criteria and it is used as part of beach nourishment, habitat restoration, tidal wetland creation, dune management, or as part of an erosion control project.

Dredged sediments are considered a resource to be utilized for beneficial uses whenever practical. Sediments consistent with all applicable statutes can be disposed of on uplands adjacent to where they were dredged. Other disposal options include land fill cover and capping of sediments at open water disposal sites. Tidal wetland restoration of existing degraded wetlands is preferred over creation of new wetlands in localities not previously supporting wetland vegetation. Wetland creation at the expense of viable intertidal habitat is discouraged. Restoration of bluffs with dredged material or any other material is not encouraged, rather stabilization of the bluff face through vegetation, reduction in slope angle and control of runoff are the norm.

While the state does not currently have a beneficial use definition with respect to dredged sediments, any use that considers the material as a useful resource will be considered. The Waste Management Bureau of the DEP is currently formulating policies for beneficial use of contaminated dredged sediments with the assistance of OLISP.

There are sediment grain size and chemical composition criteria for material to be used in beneficial use projects. If OLISP becomes aware of a specific need for sediment, such as for beach nourishment, capping of other dredged sediments, or restoration of an old underwater borrow pit, that specific option will be explored. In many cases, however, the logistics and/or the project timing will make reuse of the sediment problematic. Nonetheless, attempts to match up suitable dredging projects with sites needing sediment are continuously undertaken on a case-by-case basis.

State Specific Issues. Other state statues/regulations that are related to dredging include the Soil Erosion and Sediment Control Act which required the establishment of Soil and Erosion Control Guidelines. These Guidelines are to be made available to municipalities and to the public in order to reduce the amount of sediments entering water bodies and wetlands. The Inland Wetland and Watercourses Act established requirements for permitting activities affecting inland wetlands and water courses, including prevention of damage due to siltation.

The OLISP has been selected to receive a Coastal Services Center Fellow for two years. The fellow will assist in the development of a Sediment Quality Information Database that will track and analyze sediment testing data from dredging projects in Long Island Sound. Also, the DEP-OLISP is reviewing the EIS process currently underway by the ACE and the EPA to designate dredged material disposal sites in Long Island Sound pursuant to §103 of the MPRSA. Long Island Sound is currently the sole estuarine waterbody in the country subject to the provisions of the Clean Water Act and the MPRSA for all federal projects and nonfederal projects disposing in excess of 25,000 cubic yards of sediment in the Sound. This singular distinction has resulted in much confusion and acrimony among regulators, the regulated community, and environmental groups. Until completion of the EIS, DEP-OLISP will evaluate the appropriateness of the development of a comprehensive Long Island Sound Dredged Material Management Plan.

Water quality certification was recently granted to the U.S. Coast Guard in New Haven, CT for the dredging of their boat basin and the disposal of the sediments in a historical borrow pit in Morris Cove approximately
Dredging in Connecticut

¹/₂ mile from the Coast Guard facility. This disposal represents a cooperative effort among state and federal resource and regulatory agencies to restore fisheries and shellfish habitat lost when the pit was mined in the 1950's for interstate highway construction. Post disposal monitoring of the disposed sediments will confirm the expected stability of the sediment in the almost 40 foot deep pit. Pending a review of the potential impacts to hydrodynamics as a result of filling the pit, it is expected that selected dredged sediment disposal operations in the area will utilize this pit in the future. It is estimated that approximately 1.2 million cubic yards of sediment will be necessary to fill the pit level with the adjoining harbor bottom.

A proposed maintenance dredging of the federal navigation channel on the lower Connecticut River by the ACE may provide a source of sand for sediment starved beaches in the Town of Westbrook, along the coast near the mouth of the river. The Town of Westbrook and a local beach association could use up to 50,000 cubic yards of sand to restore badly eroded beaches which will protect homes, roads, and recreational beaches. The decision to use the sediment from the Connecticut River will depend on the sediment quality as well as the cost to the non-federal participants that will be required to pay for the additional transportation and placement of the sand.

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- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and Connecticut Coastal Management Program, Connecticut Department of Environmental Protection. *State of Connecticut Coastal Management Program and Final Environmental Impact Statement 1980.*
- 2. Carey, D.A. 1998. *Long Island Sound Dredged Material Management Approach*. A Study report Prepared for State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program, Hartford, CT.
- 3. Office of Long Island Sound Programs. *Semi-Annual and Final Performance Report (NA870Z0228), July 30, 1999.*
- 4. Connecticut Department of Environmental Protection 401 Water Quality Certification. <u>Http://dep.state.ct.us/pal/IWRDfact/401wqc.htm</u>. 6/14/99.
- 5. Connecticut Department of Environmental Protection Special Wastes or Asbestos Disposal Authorization. <u>Http://dep.state.ct.us/pao/WEEDfact/specasbs.htm</u>. 6/14/99.
- 6. Connecticut Department of Environmental Protection User's Guide to Environmental Permits. <u>Http://dep.state.ct.us/pao/userguid.htm</u>. 6/14/99.
- 7. State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program's *Reference Guide to Coastal Policies and Definitions.* 06/15/98.
- 8. George Wisker, Environmental Analyst III, Office of Long Island Sound Programs. Comments on the Connecticut Draft Dredging Template. 1/18/00.

Dredging in Delaware

Coordination Mechanisms & Permit Processing. If a dredging or filling activity is to be conducted in state regulated wetlands, a wetlands permit is required from the Division of Water Resources' Wetlands & Subaqueous Lands Section. If the activity is to be conducted in state owned subaqueous lands, a Subaqueous Lands Lease will be required also. Section 401 water quality certification is also issued by the Division of Water Resources for dredging and filling activities.

The State of Delaware has a monthly Joint Permit Processing meeting where representatives from the EPA, U.S. Army Corps of Engineers (ACE), U.S. Fish & Wildlife Service, National Marine Fisheries Service, State Historic Preservation Office, and from all five divisions within the Department of Natural Resources and Environmental Control (DNREC) including the Coastal Program, meet to review permit applications and provide pre-permit application guidance to interested permit applicants. The state also has a Development Advisory Service that provides permit guidance and comments to applicants proposing private, commercial, and industrial development in Delaware. In addition, there is a confidential, non-regulatory service that provides information on permitting and pollution prevention practices to businesses that may need environmental permits as part of their operations.

Applications for wetlands permits, subaqueous lands leases, and federal consistency certifications are all put on public notice in a newspaper with state-wide circulation. Public meetings and hearings may be held dependent upon the complexity and controversial nature of the individual project.

Economic Concerns. There are several factors that must be considered when reviewing permit applications for activities in wetlands, they include: environmental impact; the supporting facilities and their impact; effect on neighboring land uses; comprehensive plans for the general area; the economic impact of the activity in terms of jobs, taxes, and land area; and, aesthetic impact. When reviewing activities occurring on subaqueous lands, the public interest must be considered in terms of the potential economic value of the public interest of the land. Other than these two generalized policies related to economics and dredging, Delaware does not have any policies regarding preparation and review of cost/benefit analyses for dredging projects.

Habitat, Sediment, & Water Quality. Dredging is prohibited in nursery areas, shellfish beds, and submerged aquatic vegetation beds. The degree to which dredging and filling activities may adversely impact shellfish beds and finfish activity is considered when issuing subaqueous lands leases. Delaware uses policies on *Seasonal Restrictions for Dredging Blasting and Overboard Disposal in the Mainstem of the Delaware River*, issued by the Delaware Basin Fish & Wildlife Management Cooperative, as guidance on "dredging windows" for important marine species' critical migration and spawning periods in the Delaware River and Bay. Delaware is currently involved in a project with the National Ocean Service's Special Projects Office to identify areas of essential fish habitat along Atlantic Coast which should be avoided when dredging for borrow sand during beach nourishment projects.

Currently, Delaware uses its state Water Quality Standards as the basis for permitting dredging activities. Delaware is also in the midst of developing a State-wide Dredging Policy Framework which will specifically develop a consistent approach to sediment and water quality testing and monitoring activities for dredging projects (see discussion under State Specific Issues section).

Dredging Techniques & Best Management Practices. A permit to dredge through wetlands will not be issued if the slope of the channel rises more than 1:3 vertically to horizontally, preventing slope stabilization. All materials that are hydraulically dredged must be transported to the approved disposal area by pipeline. If a scow is used for transport to an approved enclosed basin or for dumping, the material must be rehandled by a hydraulic dredge to the approved disposal area and pumped into it so that there will be no loss of material into the body of water. Dredging of channels, cleaning marinas or other subaqueous areas by using propeller wash from boats is prohibited.

Dredged Material Disposal. There are several polices for the construction and placement of material in upland confined disposal facilities. Spoil and fill areas are to be properly diked to contain material and prevent its entrance into surface waters. Temporary structures may be constructed within the approved

Dredging in Delaware

disposal areas to control dredge effluent. For bermed disposal areas, a minimum freeboard of two feet, measured vertically from the retained materials and water to the top of the adjacent confining embankment, shall be maintained at all times. Dredged materials within the disposal area should be distributed so that full drainage without ponding will occur. Water quality will be monitored through the project and if water quality standards are not met, the activity will be suspended until they will be reached. Borrowing from the outer slopes of existing embankments or hydraulic placing of perimeter embankments is not permitted.

Currently, Delaware has no policies that designate disposal area locations, outline requirements for underwater disposal, or list requirements for disposal of contaminated material. However, the State of Delaware is developing a State-wide Dredging Policy Framework that will address dredged material management through identification of disposal options (see discussion under State Specific Issues).

Beneficial Use of Dredged Material. The State of Delaware has no definition or specific review process for the beneficial use of dredged material. However, two beneficial use projects are scheduled to be implemented as a part of the Delaware River and Bay Main Channel Deepening Project. The first beneficial use project is the Kelly Island project, which will create a wetland habitat on the Bay, bordered by a large sand beach in an area that has experienced severe erosion over the past 10 years. The second project will use clean sand from the lower portion of the bay for beach nourishment. These two projects were reviewed using the federal consistency review and coordination process.

State Specific Issues. Currently, the State of Delaware, with the Coastal Program as the lead, is in the process of developing a State-wide Dredging Policy Framework. There are six main goals that this project will address: 1) Provide clear guidance and early coordination between regulatory agencies and applicants; 2) Evaluate project justification based on economic and environmental impacts; 3) Identify data requirements and maximize the use of existing information; 4) Identify preferred dredging types and disposal options, including beneficial uses; 5) Provide consistent approach to testing and monitoring activities; and 6) Provide education and public outreach regarding dredging activities in state waters. Throughout the Department of Natural Resources and Environmental Control, there are thirteen employees that are working on the Statewide Dredging Policy Framework along with other federal, state, and local government agencies and a wide range of stakeholders. This Dredging Policy Framework is scheduled to be completed in Fall 2000.

Delaware Dredging Contact Information:

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Email: scooksey@state.de.us Email: jereid@state.de.us

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and Delaware Coastal Management Program. *Delaware Coastal Management Program and Final Environmental Impact Statement July 1979.*
- 2. Delaware Coastal Management Program. Updated Delaware Coastal Management Program Final May 1999.
- 3. Sarah Cooksey, Administrator, Delaware Coastal Programs. Comments on Draft Delaware Dredging Template. 10/27/99.

Dredging in Florida

Coordination Mechanisms & Permit Processing. In 1995, Florida Statute §161.055 was passed which consolidated the processing of coastal construction permits, environmental resource permits, wetland resource (dredge & fill) permits, and sovereign submerged lands authorizations into one joint coastal permit (JCP). The JCP is issued by the Department of Environmental Protection's (DEP), Office of Beaches and Coastal Systems. A copy of this JCP application is forwarded to the U.S. Army Corps of Engineers (ACE) for processing of a §404 permit for non-federal projects. A JCP is required for activities that include beach restoration, erosion control, maintenance of inlets and inlet-related structures, and dredging of navigation channels with beach disposal of dredged materials. A sole environmental resource permit (ERP), is required for ACE deep-water port and intra-coastal waterway construction projects and maintenance dredging that does not involve beach/nearshore disposal of dredged material. The ERP is issued by the DEP through its district offices or by four of the five Water Management Districts. There is one exception to the issuance of the ERP, and that is in the Water Management District of the panhandle of the State of Florida. In the panhandle, a wetland resource permit is required instead of a ERP for all dredge and fill activities.⁶

Current legislative authority does provide for a special 25 year permit for maintenance dredging of deepwater ports. According to the DEP Bureau of Submerged Lands and Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

The State Clearinghouse is used as the coordination mechanism for the federal consistency process and serves as the single point of contact for interagency review. If an analogous state permit is required, the state accepts the completed state permit application in lieu of the consistency certification. However, the issuance of an analogous state permit in no way signifies federal consistency concurrence with the project, unless the project is being reviewed only under that specific licensing and permitting consistency category.

Economic Concerns. Information outlining how the economic benefits of a dredging project should be weighed against the environmental costs of a project was not found.

Habitat, Sediment, & Water Quality. Policies for the dredge and fill permit dictate that a permit will not be issued unless the applicant has provided the DEP with reasonable assurance based on plans, test results, or other information that the dredging or filling will not violate water quality standards. All permits that are issued must not be contrary to the public interest. Policies dictate that monitoring of water and sediment quality or aquatic resources may be required to supplement permit information. All sampling, laboratory analysis, and data collection shall be in accordance with the methodology set forth in the following documents: The DEP Deepwater Ports Maintenance Dredging and Disposal Manual; The U.S. EPA and ACE Technical Report on Criteria for Dredged and Fill Material, Procedures for Handling and Chemical Analysis of Sediment and Water Samples (May 1981); and, The U.S. EPA Methods of Chemical Analysis for Water and Waste.

Mixing zones shall be determined based upon: presence of grass beds, live reefs, oyster and clam beds, or other productive marine and estuarine habitats; physical and chemical characteristics of the materials to be dredged; anticipated frequency of maintenance dredging or discharge from disposal areas; and ambient water quality. Mixing zone time periods shall be based upon anticipated settling times.

Dredging and filling activities are restricted in Class II and III type waters that have been approved for shellfish harvesting, due to their value and importance as sites of commercial shellfish harvesting and as a nursery area for fish and shellfish. Maintenance dredging activities may be permitted by the DEP in these areas. Any activity in outstanding Florida Waters must be clearly demonstrated that it is in the public interest.

Dredging Techniques & Best Management Practices. Management practices that must be followed for different methods of dredging are as follows: Hydraulic Dredging may be used when pumping rates do not

⁶ Information from this paragraph taken from the Florida DEP web-site. Beaches and Coastal Systems. <u>Http://www.dep.state.fl.us/beach/envpermt.htm</u>. 2/18/00.

Dredging in Florida

exceed the settling time of the disposal area, all pipelines are under observation and free from breaks and leaks, and dredging operations are coordinated with disposal site operation to achieve disposal site management; hopper dredges may be used when not filled beyond overflow while dredging hazardous or toxic sediments, or clay or silt; clam bucket dredges may be used when operational procedures specified and enforced by the permittee provide assurance that the bucket will be employed in a manner which minimizes re-suspension of sediments; side casting dredges may be used in inlets or seaward channel reaches where uncontaminated sands are to be dredged and there is no adjacent marine or estuarine natural resource which would be adversely impacted by the operation; and, silt screens may be used in specialized settings to protect a specific marine or estuarine resource.

Dredged Material Disposal. Long-term plans for dredging and dredged material management shall include: projections of volumes of dredged material; an assessment of existing and anticipated dredged material disposal capabilities; assessment of methods for maximizing service life of disposal areas; assessment of environmental protection needs and methods; identification and assessment of dredging and disposal alternatives to meet needs; and proposed strategies for long term management of maintenance dredged material, including control of mosquito propagation.

Open water disposal is permitted only when there is no other available method of disposal and procedures are submitted to the department which will adequately protect the disposal area and areas in the vicinity of the disposal area from significant damage.

Regulations state that when sediments are contaminated and the effluent cannot be treated, confined disposal areas where no discharge takes place may be used. When sediments are not contaminated, discharge weirs located to minimize impact of effluent discharges may be used when: weirs are monitored continuously during dredging; weirs will facilitate aeration of effluent; and, ponding depth is maintained during pumping operations at maximum depth consistent with dike safety. Qualified personnel shall be used for monitoring of the disposal site and band or dike stabilization or re-vegetation may be used for disposal areas in or abutting waters of the state to prevent escape or erosion of the dredged material from the site.

Beneficial Use of Dredged Material. In the *Florida Coastal Management Program and Final Environmental Impact Statement*, it indicates that when dredged material is suitable, the Department of Natural Resources (now the DEP) may direct that dredged spoil be used for beach renourishment. Florida Statute §161.088 specifically states that, "The Legislature make provisions for beach restoration and renourishment projects... and that these projects are in the public interest." It also declares that, "Beach restoration and renourishment projects shall be funded in a manner that encourages all cost-saving strategies, fosters regional coordination of projects, improves the performance of projects, and provides long-term solutions." The State of Florida has established an Ecosystem Management and Restoration Trust Fund that provides funding for beach preservation, restoration and nourishment. \$30 million was appropriated from this trust fund for fiscal year 1999-2000.

State Specific Issues. Florida did not identify any complex or controversial issues related to dredging or dredged material management.

Dredging in Florida

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Martin Seeling, Environmental Administrator Department of Environmental Protection Beaches and Coastal Systems Mail Station #310 Tallahassee, FL 32399 850-487-4471, ext. 104 Internet: <u>Http://www. dep.state.fl.us/beach/</u> Email: Martin.Seeling@dep.state.fl.us

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Ralph Cantral, Executive Director Florida Coastal Management Program Department of Community Affairs Sadowski Building, Suite 320 2555 Shumard Blvd. Tallahassee, Florida 32399 850-922-5438 Fax: 850-921-0781 Internet: <u>Http://www.dca.state.fl.us/ffcm/</u>

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and State of Florida, Department of Environmental Regulation, Office of Coastal Management. *The Florida Coastal Management Program and Final Environmental Impact Statement August 1981.*
- Florida Administrative Code 62-45, 62-312, and 62C-22. Downloaded from <u>Http://www.dep.state.fl.us/ogc/documents/rules/mainrule.htm</u>. 9/15/99.
- 3. Florida Department of Community Affairs. *The Routine Program Change 1997 Florida Statues: Request for Concurrence.*
- 4. Heidi Recksiek, Florida Coastal Management Program. Comments on Dredging in Florida. 2/8/00.
- 5. Lauren Milligan, DEP- Beaches and Coastal Systems. Verbal comments on *Dredging in Florida*. 2/18/00.

Dredging in Georgia

Coordination Mechanisms & Permit Processing. A coastal marshlands permit is needed for dredging and filling activities. Prior to receiving a marshlands permit, a §401 water quality certification must be obtained for the project. The Coastal Resources Division sponsors regular interagency meetings to foster coordination and cooperation. The Division serves as a clearinghouse for information and to ensure that all relevant state permits are issued prior to implementation of federal activities.

There is limited information available on the federal consistency process in the Program Document. However, guidance on submitting a consistency determination is available. Pre-permit application consultations are available if requested by the applicant.

Public notice of federal consistency review is done through a joint public notice for federal permit projects, this notice must meet the requirements of the Georgia Administrative Procedures Act. If no joint public notice is issued, a public notice must be issued pursuant to the requirements of the Georgia Administrative Procedures Act.

Economic Concerns. The State of Georgia has no policies that require that a cost/benefit analysis be prepared for dredging projects. The U.S. Army Corps of Engineers (ACE) or the project applicant may prepare a cost/benefit analysis as part of their federal consistency application.

Habitat, Sediment, & Water Quality. Dredged materials are tested for contaminants based upon the ACE and the Environmental Protection Agency's, *Inland Testing Manual*. This guidance recommends an initial assessment of existing contaminant information and a tiered testing approach which can include chemical and/or biological testing.

One of the factors considered in the permit application review process is the public's interest. This includes: maintaining the natural flow of navigational water within the affected areas of the project; prevention of shoaling of channels; and, avoidance of creating stagnant water areas.

The Georgia Coastal Marshlands Protection Act mandates that all permitted activities be in full compliance with the Georgia Endangered Wildlife Act. In addition, permit applications under review will be evaluated for their potential to unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, wildlife or other resources.

Dredging Techniques & Best Management Practices. The Georgia Coastal Management Program has no policies on dredging techniques or best management practices.

Dredged Material Disposal. Currently, the state does not have a long-term plan for dredged material management. Authority for determining where dredged material disposal can occur is given to Local Assurers. The Local Assurers are as follows: Savannah Harbor - Chatham County Board of Commissioners; Port of Brunswick - Glynn County Board of Commissioners; and, Atlantic Intracoastal Waterway - Georgia Department of Transportation.

Dredged materials from the Savannah River and Harbor are placed in a large sediment basin on the back river, materials from the Port of Brunswick are placed at an approved off shore deep water disposal site and at a storage area on Andrews Island, and materials from the Atlantic Intracoastal Waterway are placed at 83 dredged material disposal sites along the waterway (these sites are not diked). There is a policy statement in the Coastal Marshlands Protection Act that says that deposition of dredge spoil is considered to be contrary to the public interest and should be weighed in permit decision making. Georgia has no other policies that specifically deal with disposal of contaminated material, requirements for disposal in upland confined disposal facilities, and underwater disposal sites.

Beneficial Use of Dredged Material. Georgia has no policies on beneficial use of dredged material. However, the development of a policy is underway. **State Specific Issues.** Georgia did not identify any complex or controversial issues related to dredging or dredged material management.

Georgia Dredging Contact Information:

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- 1. National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management and, Georgia Department of Natural Resources, Coastal Resources Division. *State of Georgia Coastal Management Program and Final Environmental Impact Statement - December 1997.*
- 2. Georgia Coastal Marshlands Protection Act. Ga. Code Ann. §12-5-320 et.seq.
- 3. Kelie Matrangos, Georgia Coastal Zone Management Program. Comments on the Draft Georgia Dredging Template. 10/19/99.

Dredging in Guam

Coordination Mechanisms & Permit Processing. The Guam Land Use Commission (GLUC) is empowered to grant subdivision approvals, zone changes, conditional uses and variances from land use laws and regulation as well as seashore reserve & wetland permits. The reserves includes that land and water extending seaward to the ten fathom contour (including all islands within the Government's jurisdiction, except Cabras Island and those villages where residences have been constructed before 1974) and extending inland to the nearest point of either: 1) a distance on the horizontal plane of 10 meters (32.8) from the mean high water mark; or, 2) from the mean high water mark to the inland edge of the nearest public right-of-way.

All applications within the seashore reserve & wetlands area are reviewed by the GLUC and by the application review committee (ARC). Applicants shall demonstrate that the development will not have any substantial adverse environmental effect; that the development is consistent with the objectives of Guam Seashore Protection Act and the imposed conditions are assured. Proposed development on wetlands must comply with the standards for development and conservation of wetland areas, as stated in the rules and regulations.

The administration of local land use laws and regulations rests primarily with the Department of Land Management and its Director. The technical review process is performed by the ARC which is composed of representatives from each of the following agencies: Department of Land Management (as Chairperson), Bureau of Planning, Department of Public Works, Guam Environmental Protection Agency, Department of Agriculture, Guam Waterworks Authority, Department of Parks and Recreation, and the Guam Power Authority. The ARC provides technical recommendations to the GLUC for final consideration in deciding on an applicant's request. This review process usually requires three to four months time, unless complexities of a project or inadequacies of a submittal require additional reviews. The GLUC and ARC meetings are open to the public. It is necessary for an applicant or their representative to appear before the GLUC and/or ARC as scheduled, to present the request along with the necessary supporting data and documents. On proposed developments on wetlands, a GLUC wetlands permit must be approved by GLUC and an Environmental Impact Assessment or Environmental Impact Assessment (Short Form) or Finding of No Significant Impact (FONSI) may be required. Upon obtaining GLUC approval and prior to construction, the applicant must obtain a building permit from the Department of Public Works.

If a request is denied by GLUC, the applicant may submit an appeal to the Superior Court of Guam within 15 days after the filing of the commission's decision with the Department of Land Management and the Department of Public Works.

Dredging projects within the seashore reserve and a number of federal permits, most of which are identified in the Federal Clean Water Act, for construction, fill, dredging, and discharges to Waters of the United States and Territorial Waters require Guam Environmental Protection Agency §401 water quality certifications (WQC). All federal permits for work in marine waters, rivers, streams and wetlands require §401 WQC and federal consistency review. No specific areas are identified as being restricted from dredging.

A U.S. Army Corps of Engineers (ACE) permit is required to perform work in, on, over or under all tidal waters. Permits are required for dredging in all tidal waters and in some wetlands. Also, the permanent or temporary placement or discharge of dredged or fill materials into all tidal and non-tidal waters and adjacent wetlands requires a permit. The ACE permit review process includes reviews by interested local agencies and organizations and involves a public hearing. The ACE will not issue a permit until all applicable Guam regulations have been satisfied. In some cases, however, the ACE may issue "provisional" permits before required local approvals such as the Guam Coastal Management Program consistency statement or §401 water quality certification have been issued. These "provisional" permits make it clear that the permit is not valid until these approvals have been issued or waived. Review time may be reduced by simultaneous processing. If there are no objections to the proposed activity, a permit may be issued within three months after the completed application is submitted.

Economic Concerns. Engineering Evaluation/Cost Analysis is used as a process in choosing alternatives for waste clean-up and site restoration decisions by the U.S. Military on Guam. The selection of alternatives

Dredging in Guam

during the Environmental Impact Assessment/Statement process required for dredging in Guam may be based on economic benefits versus environmental costs. If cost/benefit analysis is done, it would be prepared by the applicant and reviewed by the appropriate permitting agency.

Habitat, Sediment, & Water Quality. Existing Guam Water Quality Standards note levels of pollution that are prohibited, indicating the levels of monitoring needed. Mixing zone requirements and changes in circulation patterns and salinity are also detailed in the Guam Water Quality Standards. Guam Water Quality Standards establish three zones for marine waters. In Zone M-1, highest quality is maintained and no zones of mixing are allowed. In Zone M-2, propagation and survival of organisms and whole body contact recreation are maintained. In Zone M-3, shipping, boating, berthing and marinas can occur, while allowing for protection of aquatic life, aesthetic enjoyment and compatible recreation with limited body contact.

Under the Wetlands Rules and Regulations, there is a policy that states that the flow of water within or into wetlands shall not be altered by blocking or channelizing rivers or tidal flow, unless a wetland permit is issued by the Commission. During Guam's review of permit applications for proposed dredging, any possible accidental taking of organisms are considered, and best management practices to prevent such accidental takings may be included in permit conditions on a case-by-case basis.

The Guam Coastal Management Program (GCMP), has funded a study to identify and evaluate pollutants in the sediments of four primary boat harboring and maintenance areas, which was followed by an evaluation in 1999 of heavy metals, PCBs, and PAHs in marine organisms sampled in these harbors. Methodologies used in this study followed latest USEPA protocols and those sampling and analytical methods recommended by the National Oceanic & Atmospheric Administration's National Status and Trends Program for Marine Environmental Quality. Based on this precedence, these methodologies are expected to be applied in future sediment sampling. These studies may result in drafting of legislation or regulations to control releases of these identified contaminants in 2000, if necessary. Methodologies for treatment or disposal of dredge spoils from these study areas will be proposed in 2000. Unfortunately, the Inner Apra Harbor site used by the U.S. Navy for major ship repairs during the last four decades was not included in the GCMP harbor sites. It is assumed to have the worst sediment contamination on Guam, while it is scheduled for maintenance dredging in 2000.

Dredging Techniques & Best Management Practices. Guam does not have any preferred dredging techniques or best management practices in their local policies but follows the Federal Guidelines for U.S. Federal permits and other relevant U.S. agency regulations.

Dredged Material Disposal. The GCMP does not have a long term plan for dredged material management. However, methodologies for treatment or disposal of dredge spoils from the aforementioned sediment harbor study will be proposed in 2000.

Locations for the placement of dredged material are decided on a case-by-case basis. To economize, clean sediments are often placed in closest fill sites, if environmental impacts are minimal. Land fill cover is always needed and may be investigated as a future use for dredge spoils. Currently, no guidelines exist for underwater disposal areas, but if proposed, they would be controlled through the existing permitting and Environmental Impact Assessment review. The GCMP sediment study may consider restrictions on underwater disposal, where only federal restrictions currently apply. The sediment study will also consider disposal options and restrictions and confined disposal facilities.

Beneficial Use of Dredged Material. Past decisions on local permits have set precedents to make beneficial use of dredged materials, such as building the Agana Sewage Treatment Plan site from materials dredged at the adjacent Agana Boat Basin. There is no local definition of beneficial use of dredged materials. However, beneficial use projects are evaluated on a case-by-case basis through the existing permitting and Environmental Impact Assessment review systems.

Dredging in Guam

State Specific Issues. Issues identified by Guam include the assessment of possibly contaminated sediments before dredging occurs on Navy submerged sites. The limited resources and disposal areas on the Island of Guam, frequent typhoons, and very clean pristine environments and coral reefs of Guam are issues that must be addressed with respect to dredging.

The I Tano'-ta Land Use Plan and associated zoning code and regulations were passed into law in April of 1998 and were implemented for approximately one month in 1999 before they were retracted for amendments in June 1999. Presently, the Plan has not been implemented and it is unknown if the Plan will ever be implemented. However, the Land Use Plan does define dredging seaward of the mean high water line as development, which requires a major level land use development permit.

The Seashore Protection Plan, mandated by Guam law, is currently under development as is a Guam Wetlands Conservation and Management Plan. The Guam Water Quality Studies are undergoing a triennial revision in 2000, including proposed additions to further address dredging.

Guam Dredging Contact Information:

Administrator, Guam Coastal Management Program Bureau of Planning, Government of Guam PO Box 2950 Agana, Guam 96910 617-472-4201 Fax: 617-477-1812 Email: gcmp@mail.gov.gu

- 1. Guam Coastal Management Program. Guam Coastal Management Program and Final Environmental Impact Statement - Amendments to Volumes 1 & 2 of 2. September 1994.
- 2. Guam Territorial Seashore Protection Act of 1974.
- 3. Guam Territorial Land Use Commission Wetlands Rules & Regulations.
- 4. Guam Coastal Management Program. Guidebook to Development Requirements on Guam. Reprinted 1997.
- 5. Guam Environmental Protection Agency. Comments on the Draft Guam Dredging Template. 1/14/00.

Dredging in Hawaii

Coordination Mechanisms & Permit Processing. Special management area permits are required for development activities (including dredging and filling activities) in areas designated as special management areas by the four county governments in Hawaii. Coastal management program (CMP) policies are considered in the review of these permits. Other state permits that may be needed for dredging and filling activities include: conservation district use permit issued by the Department of Land and Natural Resources, which is required for dredging activities in the state Conservation District which includes all ocean waters and submerged lands (180 day review); revocable permit for use of State Lands which is issued by the Department of State Lands for temporary occupancy and use of state-owned property, which encompasses most submerged lands and harbors (issued for one year terms); and, §401 water quality certification issued by the Department of Health.

Both verbal and printed federal consistency guidance (the *Hawaii CZM Program Federal Consistency Procedures Guide*) is available to applicants. Information about the Hawaii CMP, including its policies and contact information for federal consistency applications and guidance documents is available on their web-page. The Hawaii CMP often coordinates pre-permit application consultation with other state and federal agencies. At the county level, pre-application review is also available.

The public participation requirements for federal consistency are met using the *Environmental Notice*, a semimonthly publication of the State Office of Environmental Quality Control for public noticing. Public hearings are held for all development activities requiring a special management areas permit and they are also held for conservation district use permits and §401 water quality certifications.

Economic Concerns. A program objective related to economics is; to provide public or private facilities and improvement important to the state's economy in suitable locations. Policies state that the location and expansion of coastal dependent developments should be done in areas that are designated for that purpose and only permitted outside of those areas when the development is important to the state's economy. When reviewing the use and development of marine and coastal resources, the project must be ecologically and environmentally sound and economically beneficial. These economic policies are considered in federal consistency review but there are no policies that specifically state how the economic benefits of a dredging project should be weighed against the environmental costs in making permitting decisions.

Habitat, Sediment, & Water Quality. There are no state policies or guidelines that address the chemical composition of material to be dredged. However, there are policies that state that water quality standards should be met and activities that will adversely affect water quality are to be minimized. Water Quality Standards place use restrictions in certain areas based on water quality concerns.

There are no specific time periods listed in which dredging activities are restricted. However, individual permits for dredging may specify time periods when dredging activity may not occur due to habitat concerns. It is unlawful to take any endangered or threatened species. Therefore, a dredging activity could be prohibited if it has the potential to harass or harm an endangered or threatened species. In Marine Life Conservation Districts, taking or altering any rock, coral, sand or other geological feature is prohibited, except by permit for scientific, education or public purpose. In Natural Reserve Areas, dredging activities are also prohibited except by permit.

Dredging Techniques & Best Management Practices. Avoidance of habitat areas and critical time periods (e.g. whale season) and monitoring during work are common mitigation practices that may be required by individual permits. There are no specific state policies that identify preferred dredging techniques and best management practices.

Dredged Material Disposal. Upland disposal areas are primarily approved landfill sites. State Water Quality Standards are used to regulate return flow from upland confined disposal facility dewatering and may require a NPDES permit. Ocean disposal is regulated by U.S. Environmental Protection Agency (EPA) and dredged material is only placed at EPA approved ocean disposal sites. The Hawaii Ocean Resources Management Plan does have a policy that requires monitoring before, during, and after construction of

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coastal developments (including dredging and filling) in order to understand the cumulative impacts of developments on reefs, anchialine pools, and other natural resources.

Contaminated dredged material disposal options and restrictions are based upon state solid and hazardous waste statues and regulations administered by the Department of Health.

Beneficial Use of Dredged Material. Sand renourishment projects are encouraged in the Hawaiian Ocean Resources Management Plan as mitigation for erosion and there is a CZM policy that encourages developing new shoreline recreation opportunities through artificial beaches. These policies encouraging beach nourishment are not specific to the sand source or the purpose for which the sand is obtained. Policies require that sand removed from clearing stream mouths, drainage pipes, canals, and from cleaning of the shoreline area, shall be placed on adjacent areas unless the placement would result in significant turbidity. There are no CZM policies that define beneficial uses of dredged material.

State Specific Issues. The Coastal Lands Program of the Department of Land and Natural Resources has published the Hawaii Coastal Erosion Management Plan, 1999, which recommends beneficial use projects form beach nourishment. Hawaii did not identify any specific complex or controversial issues related to dredging.

Hawaii Dredging Contact Information:

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- 1. Office of the Governor, Office of State Planning. Hawaii Coastal Zone Management Program 1990.
- U.S. Department Of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean 2. and Coastal Resource Management and Hawaii Department of Planning and Economic Development. State of Hawaii Coastal Management Program and Draft Environmental Impact Statement - 1978.
- 3. Hawaii Ocean & Marine Resources Council. Hawaii Ocean Resources Management Plan. January 1991.
- Hawaii Coastal Zone Management Act of 1977 as amended. Hawaii Revised Statutes §205A-2 4.
- 5. Hawaii Coastal Zone Management Program. Http://www.hawaii.gov/dbedt/czm. 8/9/99.
- 6. David W. Blane, Director, Office of Planning. Comments on Hawaii Draft Dredging Template. 11/4/99.

Dredging in Louisiana

Coordination Mechanisms & Permit Processing. The statutory authority for regulation of dredging and dredged material management in Louisiana is the Louisiana State and Local Coastal Resources Management Act of 1978. *La. Rev. Stat. Ann.* §49:214.21 et seq. Under this Act, a coastal use permit (CUP) is required for dredge and fill projects located within the coastal zone. A CUP in most cases, takes the place of a federal consistency review of federal licenses and permits. However, activities that are exempt from a CUP are required to undergo a federal consistency review by the Louisiana Coastal Resources Program (LCRP). In addition, if a project is subject to a §404 U.S. Army Corps of Engineers (ACE) permit, it must receive a §401 water quality certification from the Louisiana Department Of Environmental Quality's (DEQ) Water Pollution Control Divisions.

Applicants for CUPs are advised that pre-application meetings are available, and that they are recommended for large scale projects. The Coastal Management Division (CMD) staff are available to assist applicants in the preparation of CUPs and consistency determinations. There is a *Coastal User's Guide to the Louisiana Coastal Resources Program*, that outlines the structure of the CMD, the procedures for obtaining a CUP, and a compilation of the program's regulatory guidelines. These guidelines are available on the Internet at http://www.dnr.state.la.us/crm/coastmgt/cup/cup.ssi. For large scale federal navigation projects as well as other major civil works, a Memorandum of Understanding (MOU) between the New Orleans District of the ACE, and the Department of Natural Resources (DNR), was signed in 1995, which specifies the procedures, content, and timing of consistency determination submission and review.

There is an extensive coordination network that exists for permitted projects and projects that undergo federal consistency review. This coordination network relies on mechanisms such as memorandums of agreement, regulations, and policies. Agencies that participate in this formal coordination are DNR, DEQ, State Lands Office, Department of Health & Hospitals, ACE, U.S. Fish & Wildlife Service, National Marine Fisheries Service, and the U.S. Environmental Protection Agency. The DNR, ACE, and the DEQ have a joint agreement for the noticing and processing of CUPs as part of the comprehensive coordination process. Federal consistency determinations are noticed weekly in the official state journal for comment from federal and state regulatory agencies, parish governments, and the general public. Public meetings are held when deemed necessary.

Economic Concerns. Information that is to be used for evaluating a project includes the environmental costs (impacts) and the economic need and extent of impacts on the economy. Louisiana's policies do not prescribe any method for weighing these costs and benefits, and do not require that a cost/benefit analysis be done. Any cost/benefit analyses that are prepared in conjunction with a project are usually undertaken by the ACE for federal navigation projects. Cost/benefit analyses are reviewed as part of the federal consistency process by the CMD.

Habitat, Sediment, & Water Quality. Pre-project testing of sediments may be required in order to obtain information necessary to make permitting decisions. The development of testing requirements is done in coordination with the DEQ. LCRP guidelines do state that activities should prevent the release of pollutants or toxic substances into the environment and that all activities should avoid significant detrimental discharges of suspended solids into coastal waters, including turbidity from dredging. However, the LCRP guidelines to not contain specific criteria for acceptable sediment contaminant levels. The CMD relies on the DEQ §401 water quality review for sediment and water quality concerns. Information related to the project's potential impacts to existing water regimes including flow, circulation, quality, quantity, and salinity are required prior to making permitting decisions.

There are several policies that restrict or condition dredging and filling (including definitions of surface alterations and linear facilities) activities in critical wildlife and vegetation areas, barrier islands and beaches, isolated cheniers, isolated natural ridges or levees, wildlife and aquatic species breeding or spawning areas, important migratory routes, wetland and estuarine areas, areas of high biological productivity, irreplaceable resource areas, beaches, tidal passes, and protective reefs. The CMD defers to the experts in the Department of Wildlife & Fisheries and the U.S. Fish & Wildlife Service to establish dredging window time

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frames designed to protect mollusk harvesting, fisheries, migratory waterfowl, and other avifauna from inappropriately timed dredging and/or deposition activities.

Dredging Techniques & Best Management Practices. The LCRP policies do not identify preferred dredging techniques or best management practices.

Dredged Material Disposal. The state has developed draft long-term management strategies(LTMS) plans for all ten federally maintained navigation channels within Louisiana. These plans were mandated by *La. Rev. Stat. Ann.* §49:214.32 F. The required content of the LTMS plans, development process, and rules for implementation are dictated by this statute. The LTMS plans include location of suitable areas for beneficial use, the process for approval of placement, processing of variances for beneficial use, and all other items mandated in the statute. The LCRP policies provide a generalized list of spoil deposition requirements for beneficial use, disposal methods, areas not acceptable for disposal, and disposal area design and construction.

Beneficial Use of Dredged Material. Beneficial use of dredged material resources is a legislated mandate under the state's coastal program; it is required for permitted activities as well as activities that fall under state consistency provisions. It is preferred that dredged material be placed for beneficial use in shallow water areas without submerged aquatic vegetation where vegetated wetland previously existed. The result of this placement is subarial expression of land which can be vegetated either by planting and/or natural succession. Wetland protection, creation, and enhancement along with channel bank stabilization are all considered beneficial uses of dredged material. There is not an established pre-project review process for evaluating beneficial use projects. However, the state relies on the applicant's alternatives analyses of beneficial use projects submitted as part of the consistency determination as the basis for their review. The state also relies on annual ACE dredging conferences to comment on the need for beneficial use in general as well as the specific plans for each channel.

In Louisiana on an annual basis, 60-90 million cubic yards of material are removed from federally maintained navigation channels. To date, approximately 7500 acres of vegetated wetlands have been created by beneficial placement of dredged material resources. The New Orleans District of the ACE has documented much of this beneficial use through its Beneficial Use Monitoring Program.

Aside from the LTMS plans, the state's *Coast 2050*, planning effort includes long-term guidance on coastal restoration efforts. In this guidance, all nineteen coastal parishes indicated that beneficial use of dredge material resources resulting from channel maintenance activities should be standard operating procedure.

State Specific Issues. The state has expressed concern regarding the following issues:

1) The issue of the federal standard vis-à-vis the federal coastal zone management act and whether or not state requirements pursuant to that act constitute "applicable environmental statutes" for purposes of consistency determinations and requirements.

2) Section 204 funding - Why is this authority not funded at a higher level? Why is there so much red tape in trying to get 204 funding?

3) The overall concept of the federal standard. It needs to be modified so that the environmental gains resulting from beneficial use can be calculated into a cost benefit for a dredging and/or maintenance project. There needs to be a realization and accounting for the fact that environmentally sound practices of beneficial use should be part of and paid for during maintenance events.

Dredging in Louisiana

Louisiana Dredging Contact Information:

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Coastal Management Division Department of Natural Resources PO Box 44487 625 North Fourth Street Baton Rouge, LA 70802 Fax: 225-342-9439 Internet: <u>Http://www.savelawetlands.org/cmdpage.html</u>

- 1. Louisiana Department of Natural Resources, Coastal Management Division. A Coastal User's Guide to the Louisiana Coastal Resources Program.
- 2. U.S. Department Of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management, and Louisiana Department of Natural Resources, Coastal Resources Program. *Final Environmental Impact Statement and the Louisiana Coastal Resources Program.* 1980.
- 3. Louisiana Department Of Natural Resources. <u>Http://www.dnr.state.la.us.</u> 07/12/99.
- 4. Louisiana Coastal Management Division. <u>Http://www.savelawetlands.org/cmdpage.html.</u> 07/12/99.
- 5. Gregory J. DuCote, Program Manager Coastal Management Division. Comments on Draft Louisiana Dredging Information Template. 09/13/99.

Dredging in Maine

Coordination Mechanisms & Permit Processing. A Maine Natural Resources Protection Act (NRPA) permit is required for dredging and filling activities. State §401 water quality certification and federal consistency concurrence are issued concurrently with a NRPA permit if the activity requires a U.S. Army Corps of Engineers (ACE) §404 permit. State law mandates that permit processing time periods be set on permit applications. Time periods range from a minimum of 14 days for permit by rule applications and with a maximum of 120 days for more complex applications. Maintenance activities that are being permitted in an area that has been disturbed within the past ten years and involves dredging of less than 50,000 cubic yards, may only require a permit-by-rule permit instead of an individual NRPA permit. In addition to a NRPA permit, a submerged lands lease may be required if the activity is located on submerged land owned by the state. Also, if dredged material is to be disposed of in an upland area, it will be subject to the Maine solid waste management regulations. The Maine Coastal Program, being a networked program serves to coordinate among all of the state agencies that regulate dredging and filling activities. There is also an informal group that meets to discuss dredging issues which includes representation from the Department of Transportation, Department of Environmental Protection (DEP), Marine Resources, State Planning Office, and the Maine Geological Survey.

There is permit application information available on the DEP's web-site. There are two particular pages that contain Issue Profiles, one for Applications to Dredge or to Dispose of Dredged Material in Coastal Waters and the other for the NRPA permit. These profiles are quite detailed, providing information on the application process, requirements for different types of activities, testing procedures, and regulatory contact information. On these pages it does suggest that the applicant contact the Department for a pre-application meeting for new dredging or use of a non-designated disposal site. For projects that will be undertaken by a federal agency, a pre-application, pre-submission, and public informational meetings are required. For private, non-federal dredging activities that require a NRPA permit, the applicant is responsible for noticing the project in the local newspaper in the areas adjacent to the activities of dredging, transport, and disposal. If the disposal is to occur at an offshore site, the proposed route of the barge must go under the headline "Notice to Fishermen."

Economic Concerns. The State of Maine has no policies regarding how a dredging project's economic benefits should be weighed against its environmental costs. There are no requirements that a cost/benefit analysis be prepared for project applications.

Habitat, Sediment, & Water Quality. The NRPA does require that applications for dredge spoil disposal include information on the collection and testing of spoils in accordance with a Department approved protocol. Testing is required to be in accordance with the U.S. Environmental Protection Agency (EPA) and ACE joint publication, *Evaluation of Dredged Material Proposed for Ocean Disposal - 1991.* Another publication that is used is, *Guidance for Performing Tests on Dredged Material to be Disposed of in Open Waters.* If preliminary testing indicates the possibility of adverse environmental effects from dredging or disposal, additional biological testing may be required. Existing sediment data may be available, but if it is more than three years old, the area may have to be retested. All new dredging projects and disposal in areas not previously approved by the EPA must complete this sediment testing.

Permit requirements for activities falling under the NRPA include, that the applicant must demonstrate that the activity will not unreasonably interfere with the natural flow of any surface or subsurface waters. As a rule of thumb, dredging and disposal projects should coincide with the time of year that will minimize impacts on marine resources. In most cases, dredging should be undertaken during the time period of November 1st and April 15th in order to avoid anadramous fish runs, shellfish spawning and lobster migration activities. There are no specific policies that restrict dredging in geographic locations for habitat and water quality concerns. However, these types of permit restrictions can be made on a case-by-case basis.

Dredging Techniques & Best Management Practices. There are no policies that specifically state preferred dredging techniques or best management practices. However recommendations on techniques and best management practices are made to permit applicants on a case-by-case basis.

Dredging in Maine

Dredged Material Disposal. The State of Maine does not have a long-term plan for dredged material management. However, in the Maine Coastal Plan (1998-2000) on Ocean Resources, it states that Maine is in the process of finding alternative uses for dredged material and designating new disposal sites. Currently, there are three EPA approved open water ocean disposal sites that are designated for use, they are offshore at: Portland, Rockland, and Cape Arundel. Maine views ocean disposal as the best alternative for disposal of dredged material for which there is no beneficial use and that meets EPA/ACE ocean disposal criteria. Dredged materials that are to be placed in upland disposal facilities must meet regulatory limits for hazardous waste or have a concentration of 50mg/kg or less dry weight for PCBs. If the material does not meet these standards, then disposal must be done in accordance with hazardous waste regulations.

Beneficial Use of Dredged Material. Beneficial use of dredged material is preferred because the options for disposal of dredged material in Maine are limited. In preparing the alternatives analysis that is required as part of the NRPA permitting process, the applicant must explore the beneficial use of dredged material or other alternative disposal options before considering offshore disposal. Alternative options for the disposal of dredged material are listed as: use in construction projects; beach nourishment; and, habitat creation or enhancement.

State Specific Issues. Maine has identified mitigation and compensation requirements for federal ACE dredging and filling activities as an area of complexity and/or controversy that needs to be addressed. Another document relevant to dredging that is not mentioned above is the Normandeau Associates' *Dredged Material Management Study for Coastal Maine and New Hampshire*. This study identifies and describes historical uses and volumes for all federal navigation projects and disposal areas in the region.

Maine Dredging Contact Information:

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Maine Coastal Program Maine State Planning Office State House Station 38 Augusta, ME 04333 Fax: 207-287-8059 Internet: <u>Http://www.state.me.us/spo/mcp/mcp.htm</u>

- 1. U.S. Department of Commerce. *Maine's Coastal Program and Final Environmental Impact Statement August 1978.*
- Maine Department of Environmental Protection. Issue Profile: Applications to Dredge or to Dispose of Dredged Material in Coastal Waters. <u>Http://janus.state.me.us/dep/blwq/docstand/fsdredg.htm.</u> 8/16/99.
- 3. Maine Department of Environmental Protection. Issue Profile: Natural Resources Protection Act. <u>Http://janus.state.me.us/dep/blwq/docstand/ip%2Dnrpa.htm.</u> 11/12/99.
- 4. Maine Revised Statutes Annotated §480 et.seq.
- 5. Code of Maine Rules §06-096-310
- 6. Code of Maine Rules §06-096-410
- 7. Todd Burrowes, Policy Development Specialist, Maine Coastal Program. Verbal communication/comments on the Draft Maine Dredging Template. 11/8/99.

Coordination Mechanisms & Permit Processing. Dredging projects that require a U.S. Army Corps of Engineers (ACE) §404/10 permit must obtain a federal consistency certification, a state tidal wetlands permit/license, and §401 water quality certification. All dredging activities requiring state tidal wetlands authorization are coordinated with the ACE through a joint permit application process. The ACE Maryland State programmatic general permit process has established standard operating procedures for coordination on all permit review/decisions. Federal agencies are exempt from obtaining a state tidal wetlands permit or license however, they must be reviewed for federal consistency and a §401 water quality certification.

The Maryland Department of the Environment (MDE) offers an on-line Business Guide to Environmental Permits and Approvals. This Guide lists all the types of environmental permits that there are and offers a short description including, purpose, authority, requirements, application process, standard turnaround time, term of permit, fees, other approvals, and department contacts. Activities permitted are listed underneath of the permit description as opposed to listing activities and then corresponding permits. Staff in the Tidal Wetlands Division routinely meet with prospective applicants (when requested) to discuss projects and guide them through the project review process.

Federal consistency public participation requirements are met for review of federal consistency projects. In addition, there is a Coastal and Watershed Resources Advisory Committee (CWRAC) that is made up of citizens, government agencies, academic institutions, businesses and industry that advises the Secretary of the Department of Natural Resources on coastal zone management program policy issues. The CWRAC holds six general meetings, five regional public meetings, and forty subcommittee meetings a year. All other state environmental permit applications (including tidal wetlands licenses/permits) may be advertised for public comment and an informational hearing may also be held dependent upon the nature of the project.

Economic Concerns. Dredging projects where public funds are to be used must be evaluated using several criteria. These criteria include: the need for the project; the economic impacts of the project funds on existing public facilities; the beneficial impacts to the environment from the project; and, the potential adverse impacts to the environment from the project. Also, when reviewing alternative uses of dredged material, the economic and environmental feasibility of transport will be considered. Tidal wetlands regulations outline permit review criteria which include economic, ecological, develop-mental, recreational, and aesthetic values of tidal wetlands. The review of deep-water ports by the State of Maryland includes environmental factors along with economic, social, and cultural factors.

Although a cost/benefit analysis may not be required specifically, an alternatives analyses required by the state provides information on the project's benefits versus the costs and is an important consideration in the decision-making process.

Habitat, Sediment, & Water Quality. No specific levels of chemical data are outlined for dredging permitting decisions, but it is stated in several policies that placement of contaminated dredged material is restricted. Contaminated material can not be placed in open water outside of the Baltimore Harbor as defined by state statute. This defines contaminated material as anything west of the North Point-Rock Point Line and requires that it be contained if placed outside of the North Point-Rock Point Line in the Patapsco River.

Sediment testing is required for all material dredged from contaminated areas. By State law, all material dredged from Baltimore harbor south to the mouth of Patapsco River is considered contaminated and must be disposed of at the Hart/Miller Island containment facility or other Maryland Department of the Environment approved disposal facilities. Maryland Port Authority (MPA) requires sediment testing as part of the Hart/Miller Island placement application process. Sediment test results are reviewed on a case by case basis. The Inland Testing Manual is currently being used by the ACE and other federal agencies for sediment testing and evaluation in the analysis of a potential open water placement option.

Tidal wetlands regulations require an applicant proposing over board disposal of dredged material into open water to submit test results of the physical and chemical parameters of the material including metals,

organics, oil and grease, nutrients, bacteria, and toxic compounds and their potential short and long-term release into the water column.

Acceptable mixing zones for meeting water quality standards are defined in Maryland's water quality regulations. Mixing zones are set by MDE on a case-by-case basis for placement sites. Dredging and filling for non-water dependent uses must not alter current patterns. A project's potential to adversely effect hydrodynamic circulation patterns and salinity is evaluated in a permit/license application for dredging in tidal wetlands.

Time-frames for protecting fish, shellfish, submerged aquatic vegetation, and other living resources are contained within the state's tidal wetland regulations and are imposed, as applicable, on all proposed dredging projects. Dredging windows have been established to account for anadramous fish spawning, oysters, and other critical life stages as well as incorporating potential recreational fisheries windows. Dredging within 500 yards of shellfish areas and submerged aquatic vegetation may be prohibited during certain time periods throughout the year.

The Philadelphia District of the ACE uses a hopper on a limited basis, but is required to have an observer on board for potential Short Nose Sturgeon incidental takes. The ACE has also been required to have an observer on board for clamshell dredging for Short Nose Sturgeon observation. These issues are coordinated by the ACE and MDE through the §401 permit process. Hydraulic dredging is not being performed on mainstem Chesapeake Bay channels due to concerns related to sturgeon incidental intakes.

Areas restricted/conditioned from dredging activities due to habitat and water quality concerns are tidal and non-tidal wetlands and oyster bars and clam beds. The state is required to consult the National Marine Fisheries Service for conservation recommendations on Essential Fish Habitat if a project is funded by federal monies.

Dredging Techniques & Best Management Practices. The proposed dredging technique is a consideration in the evaluation process. Dredging windows may vary depending on the type of dredging proposed. Currently in the Chesapeake Bay, the Baltimore District of the ACE does not perform or contract for hopper dredging and economic loading of hopper dredges is not allowed. Most of the federal dredging is now performed using a clamshell dredge.

Every dredging project in Maryland is screened and reviewed for impacts to rare, threatened or endangered species. Any potential impact must be addressed before the project is approved. Also, an equipment observer is required to monitor accidental sturgeon takes.

Dredged Material Disposal. Maryland's policies dictate that a method of choosing acceptable disposal sites is necessary and that further selection and development of potential containment sites for the Baltimore Harbor is required.

The Maryland Department of Transportation (MDOT) and the ACE are the leads for identification and acquisition of suitable dredged material disposal sites for Baltimore Harbor and its approach channels. The MDE is responsible for evaluating theses sites for federal consistency. On the MDE web-page there is information on the Governor's Strategic Plan for Dredged Material Management. This Strategic Plan from 1996, lays out a series of placement options for dredged material management. This plan applies to dredged material generated from federal maintenance channels leading to the Port of Baltimore. It is a "rolling" plan that projects dredging needs and placement options for the next 20 years.

The Maryland Coastal Bays Region Comprehensive Management Plan includes directives to develop a long range management plan for dredging related issues. This plan will address a wide range of issues including improving coordination of dredging activities and promoting beneficial use options where applicable.

No other policies dictate preferences for dredged material placement. However, some specific state regulations outline disposal/use options and guidelines: 1) material dredged from the Baltimore Harbor shall not be disposed of in unconfined open water sites; 2) the filling in of wetlands to create fast lands is considered contrary to public interest; 3) the Maryland Critical Area Law requires that dredging in the Critical Area be conducted with the least disturbance to water quality and area habitats and outlines where the dredge materials may be placed within the buffer; and, 4) the use of the Deep Trough for placement of material is prohibited by state law as is the creation of a new upland contained facility within 5 miles of the current Hart-Miller Island facility.

Dredged material that contains designated hazardous substances shall not be disposed of in any way that would lethally or sublethally affect terrestrial or aquatic ecosystems. This material is required to be placed in a contained disposal facility with stringent sediment and water quality limits on the discharge so as to not violate water quality standards. Hart-Miller Island or other MDE approved upland disposal facilities may be used for this contaminated material. Disposal at Hart Miller Island is required for meeting long-term disposal needs. Hart-Miller Island has a state pollution discharge elimination system permit which limits and requires monitoring of effluent discharge from the facility. The site policy is: inflow between 1st October and 31st March; and, crust management from 1st April through September 30th.

Continued intensive monitoring of large dredging projects is required, particularly those where material is disposed in open water. For projects that use public funds, there must be measures such as monitoring, maintenance, and replacement that might minimize potential adverse environmental effects and maximize potential beneficial environmental effects.

State tidal wetlands regulations outline upland and open water placement, engineering and design criteria, dewatering, monitoring and maintenance requirements. State tidal wetlands regulations require that confined disposal areas are not to be located within Critical Areas buffers unless approved by the state. Tidal wetlands regulations require that permit applicants for disposal in open water submit information on measures to preserve or enhance the values of the disposal site, physical and chemical test results of material to be dredged, bathymeteric survey, hydrodynamic study, and a monitoring program including a survey of post-depositional benthos community recolonization.

Beneficial Use of Dredged Material. State policy dealing with beneficial use states that the economic and environmental feasibility of alternative uses of dredged material must be determined as part of the development of a long-term dredged material disposal plan. State regulation also states that dredge material may be used for marsh and beach nourishment projects if certain parameters on grain size suitability and organic content are met. The state encourages the beneficial use of dredged material if the material is suitable and the environmental benefits outweigh the impacts.

Beneficial use is not defined by the state. Two types of methods of dealing with dredged material are mentioned; transport to inland reclamation sites, or use in production of lightweight aggregates. Current efforts including the EPA Chesapeake Bay Program beneficial use draft plan and the Navigation and Dredging Advisory Group will help to further define beneficial use and other dredging issues in the Coastal Bays region.

Beneficial use projects go through the same review processes as do dredging projects. The Poplar Island restoration project had a very extensive pre, during, and post monitoring framework established by federal and state regulatory agencies so that this dredged material wetland restoration project could take place. This monitoring framework covers sediment quality, wetland re-vegetation, water quality, benthics, fisheries, wetlands use by fish and wildlife, and shellfish bed sedimentation.⁷

⁷ Project Elements: Poplar Island Restoration Project Monitoring Framework. <u>Http://www.</u> <u>Chesapeakebay.net/poplar/text/framework.htm.</u> 07/15/99.

State Specific Issues. The MPA through its Harbor Development section, manages dredging issues in the northern portion of the Chesapeake Bay as it relates to Baltimore Harbor. This group works with partners from other state and federal agencies to manage dredging related issues in the northern Bay through the Dredging Needs and Placement Options Program (DNPOP). DNPOP also has a citizens advisory committee to address the concerns of and inform the general public. The efforts to develop a dredge management plan for the Coastal Bays area along the Atlantic coast has recently been initiated by the Navigation and Dredging Advisory Group. Other efforts include work by the Environmental Protection Agency's Chesapeake Bay Program along with their state partners in the development of a management plan for the beneficial use of dredge material for the Chesapeake Bay.

Specific beneficial use projects in Maryland include the Poplar Island Restoration Project and the Eastern Neck National Wildlife Refuge on the eastern shore of Maryland. Other beneficial use projects have been conducted with the Corps of Engineers at a variety of locations throughout the state including work on the Anacostia River, and Slaughter Creek.

Maryland Dredging Contact Information:

Gwynne Schultz, Director Cornelia Pasche Wikar, Coastal Hazards Planner Coastal Zone Management Program Department of Natural Resources Tawes State Office Building, E-2 580 Taylor Avenue Annapolis, MD 21401 410-260-8730 Fax: 410-260-8739 Internet: <u>Http://www.dnr.md.state.md.us</u> Email: gschultz@dnr.state.md.us Email: cpaschewikar@dnr.state.md.us

- 1. Office of Coastal Zone Management, National Oceanic & Atmospheric Administration, Department of Commerce, and Department of Natural Resources, Energy and Coastal Zone Administration. *State of Maryland Coastal Management Program and Final Environmental Impact Statement.* August 1978.
- 2. Maryland Department of the Environment. *Draft State of Maryland Coastal Zone Management Program.* August 1998.
- 3. Maryland Department of the Environment. <u>Http://www.mde.state.md.us</u> 7/15/99.
- 4. *Project Elements: Poplar Island Restoration Project Monitoring Framework.* <u>Http://www.chesapeakebay.net/poplar/text/framework.htm.</u> 7/15/99.
- 5. Cornelia Pasche Wikar, Coastal Hazards Planner, Maryland Coastal Zone Management Division. Comments on Draft Maryland Dredging Template. 11/8/99.
- 6. Elder Ghigiarelli, Jr., Wetlands & Waterways Program, Maryland Department of the Environment. Comments on Draft Maryland Dredging Template. 11/3/99.

Coordination Mechanisms & Permit Processing. The Massachusetts Department of Environmental Protection's (DEP) Bureau of Resource Protection, Wetland and Waterways Program administers two permitting programs for dredging activities. The first program is the §401 water quality certification program that controls project activities and limits physical and chemical impacts to those permitted under the state water quality standards. Processing time for a §401 water quality certification takes approximately 120 days, depending upon the scale of the project. The second permit administered by the DEP is the waterways permit pursuant to Chapter 91 of the Massachusetts General Laws. This permit is issued to control impacts to navigation, public access, and appropriate use of tidelands held in the public trust. Processing time for a waterways permit takes approximately 120 days, depending on the scale of the project. The DEP has an online permitting guidance document that provides information on permitting agencies and timelines for processing.⁸ Aside from the permits issued by the DEP, an order of conditions, pursuant to the state Wetlands Protection Act, is issued by local Conservation Commissions and certifies that proposed activities have appropriately avoided significant resource areas, that unavoidable impacts have been minimized, and that mitigation, if necessary, has been designed appropriately. The time for processing an order of conditions is approximately 60 days, depending upon the scale of the project. Federal consistency certification is issued by the Massachusetts Coastal Zone Management (MCZM) Program and information on federal consistency procedures, timelines, and a listing of the program policies and principles is located at the MCZM web-page at http://www.magnet.state.ma.us/czm/czm.htm.

MCZM facilitates both formal and informal coordination of the state and federal permitting agencies. The level of coordination is related to the scale or complexity of the proposed activity. MCZM holds monthly pre-application meetings for the Department of Environmental Management, the state agency responsible for maintaining the Commonwealth's public waterways. Pre-application meetings are arranged on an ad hoc basis for private applicants. Aside from public noticing of projects, public participation is supplemented in regional Citizen Advisory Councils and in the Statewide Coastal Resources Advisory Board (CRAB).

The DEP is currently developing new dredging and dredged material management policy and regulations which at the time of this writing, are estimated to be completed within one year.

Economic Concerns. The *MCZM Coastal Policies* states that if deepening or expansion of a channel produces economic returns to maritime shipping and other maritime industries, it may be approved for state or federal funding if it meets this need along with other listed criteria. Public maintenance projects are reviewed qualitatively for need and improvement projects must demonstrate need. The level of economic analysis is commensurate with the scale of the project. Private maintenance projects are presumed to be justified and private improvement projects must demonstrate need.

Habitat, Sediment, & Water Quality. In the *MCZM Coastal Policies* under Port Polices, it indicates that contaminated sediments are the primary focus of the Commonwealth of Massachusetts' management efforts. The MCZM and the DEP are currently pursuing policy and regulatory revisions for contaminated sediments because the existing regulatory structure is outdated.

Testing procedures for evaluating the sediments to be dredged for potential impacts on disposal site environments are determined by the DEP guidelines and regulations, and by the *Evaluation of Dredged Material Proposed for Ocean Disposal* (testing manual), *Guidance for Performing Tests on Dredged Material to be Disposed of in Open Waters*, and by the *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S.-Testing Manual* for disposal in Clean Water Act §404 waters. DEP determines acceptable impacts based on sediment chemistry and/or biology, ambient environmental conditions, and the particulars of the proposed activity.

In the *MCZM Coastal Policies* under Port Polices, it dictates that dredging or dredged material disposal projects should not cause any degradation of water quality which would violate water quality standards. It also states that these projects shall not cause a permanent change in circulation patterns which will result in changing the flushing rate, ambient salinity, temperature, and turbidity levels.

⁸ DEP Permitting A Catalog and Users Manual. Http://www.state.ma.us/dep/files/permits/intromg.htm.

Dredging window time-frames are determined on a case by case basis by the DEP and the Division of Marine Fisheries. Generally dredging is restricted in streams with anadramous fish runs between March 15th and June 15th. Generally, in areas of winter flounder spawning habitat dredging should not occur in January through March

Dredging and dredged material disposal is restricted at areas listed under the Areas of Critical Environmental Concern Program, listed under the Protected Areas Policy #1. Maintenance dredging in areas subject to the Wetlands Protection Act (particularly submerged aquatic vegetation and intertidal areas) must demonstrate that no less damaging alternative is available. Improvement dredging in these areas it typically prohibited.

Dredging Techniques & Best Management Practices. Dredging of contaminated sediments is to be undertaken with tight sealing bucket dredges or other appropriate equipment that minimizes the suspension of materials into the water column.

Dredged Material Disposal. The MCZM program along with the U.S. Army Corps of Engineers (ACE) and other agencies charged with oversight of dredging projects, are developing a state-wide Dredged Material Management Plan that will identify and permit disposal alternatives with sufficient capacity to accept dredged material unsuitable for unconfined ocean disposal for the next twenty years. Currently, the first of two phases of the project, an inventory and analysis of existing conditions has been completed. As of this writing, phase two of the project is underway and the Management Plan is scheduled to be completed within the next two years.

According to the aforementioned Dredged Material Management Plan as contaminated dredged material is unsuitable for ocean disposal, other upland and confined disposal methods are being evaluated. The *MCZM Coastal Policies* on dredged material disposal prohibit aquatic disposal of contaminated sediments. Capping of contaminated sediments in underwater areas has also been prohibited by the Environmental Protection Agency until a demonstration project shows that this procedure would sequester contaminants from the aquatic environment successfully As of this writing, DEP regulations are currently being developed to address contaminated dredged sediment management. Monitoring of all disposal sites may be required and the state designated Cape Cod Bay disposal site will be managed and monitored by the DEP and the Disposal site Advisory Committee which is chaired by the MCZM.

Beneficial Use of Dredged Material. The *MCZM Coastal Policies* on Ports state that clean sandy dredged material should be used for beach nourishment, if a suitable nourishment site can be identified. If clean sandy material is found in a publicly funded project, it must be used for nourishment. Private projects should use material for nourishment if handling costs can be justified.

The *MCZM Coastal Policies* also state that where practicable, landside or aquatic beneficial re-use of dredged material should be favored over aquatic disposal.

Currently, there is no formal definition of beneficial use; however, one is being developed as part of DEP's regulations and policy for dredging and dredged material management. The *MCZM Coastal Policies* does state that alternative methods of dredged material disposal should be explored on a project by project basis, such as marsh creation, fill, or used as construction material aggregate. An analysis of the potential beneficial use of material is required before material will be permitted for upland disposal The MCZM has no established review process for evaluating beneficial use projects, however the ACE informally assesses beneficial use opportunities as a component of the permitting process under the Ocean Dumping Act.

State Specific Issues. As the MCZM is working with local, state, and federal partners to develop the aforementioned Dredged Material Management Plan, two full time employees are dedicated to its development.

Massachusetts Dredging Contact Information:

Tom Skinner, Director Deerin Babb-Brott, Dredging Coordinator Office of Coastal Zone Management Executive Office of Environmental Affairs 100 Cambridge Street Boston, MA 02202 Fax: 617-626-1240 Phone: 617-626-1201 Phone: 617-626-1207 Email: tskinner@state.ma.us

- 1. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management. *Massachusetts Coastal Zone Management Program and Final Environmental Impact Statement-1978.*
- 2. Massachusetts Coastal Zone Management Program Coastal Policies Effective Date: March 11, 1997. <u>Http://www.magnet.state.ma.us/czm/policies.htm.</u> 6/23/99.
- 3. Massachusetts Department of Environmental Protection. <u>Http://www.state.ma.us/dep/files/permits/intromg.htm</u>. 6/23/99.
- 4. Susan Snow-Cotter, Assistant Director, Massachusetts Office of Coastal Zone Management. Comments on Draft Massachusetts Dredging Template. 9/8/99.

Dredging in Michigan

Coordination Mechanisms & Permit Processing. Dredging and filling activities require either a submerged lands, inland lakes and streams, shorelands or wetlands permit, dependent upon where the activity is to take place. Permit review time periods can range from 20 to 90 days and a public hearing may be held. Staff from the submerged lands program, shorelands management program, and the coastal program consult with each other on a daily basis for review of permit applications.

Permitting information for wetlands permits is available on the Department of Environmental Quality (DEQ), Division of Land and Water Management's web-page.⁹ There are summaries of the other permitting programs, but only the detailed wetlands permit application package is available for downloading. Permit applicants may request a pre-project consultation. Public hearings are held for new dredging projects in contaminated areas. Hearings on other dredging projects may be requested in writing.

Economic Concerns. There are several policies that specifically state that the benefits of a project must be balanced against the reasonably foreseeable detriments of the activity in order to determine the public interest in the project. There is a list of 10 criteria that should be used by the permit reviewer to determine the public's interest in the project; this list includes economic value to both public and private entities. See Appendix A, State Policy Language Tables - *1994 Michigan Public Acts 324.30311(2).*

Habitat, Sediment, & Water Quality. Michigan has recently passed a Sediment Testing Procedure that is to be used for dredging projects. If a project involves the removal of greater than 300 cubic yards and is less than 95% sand, the bottom sediments must be tested for metals, Polychlorinated Biphenyls (PCBs), and Polynuclear Aromatic Hydrocarbons (PNAs), in order to determine if the material is considered to be a solid waste. If the material to be dredged is determined to be solid waste it must be disposed of in a Type II or Type III licensed landfill. If material is determined to be inert, it may be placed outside of a licensed landfill.

Testing is required for suspected contaminated dredged material, under the Sediment Testing Procedure referred to above. Methodologies and contamination limits have been determined by the DEQ's Surface Water Quality Division and Waste Management Division, under Part 115 of the Natural Resources and Environmental Protection Act (NREPA), and administrative rules which contain regulatory authority for solid waste management.

The DEQ's Surface Water Quality Division develops policy and permitting guidelines for mixing zones. Policies do outline that filling, dredging, and placement of spoils on bottomlands shall be done in a manner that will cause the least disruption to littoral drift and longshore processes.

Dredging windows have been established for certain waterbodies in the state and allowed dredging times are specified on permits issued for these waterbodies. Additional timing requirements may be incorporated into permits based on comments provided by the Department of Natural Resources, Fisheries or Wildlife Divisions. With the designation of environmental areas under the Shorelands Rules, areas of fish spawning, nursery, feeding, protection and migration are restricted from dredging and filling activities without a permit from the department or local governmental agency.

Dredging Techniques & Best Management Practices. Dredging techniques are specific to each project and permit. The DEQ requires the least-impacting alternative, using best available technology. Requirements for preventing accidental takings of certain species are permit-specific. Protection measures have been required to be maintained during a dredging project in order to prevent harm to listed species. For example, the installation of concrete barriers around a dredging site was required to prevent the state threatened Easter Fox Snake, known to be at the location, from entering the dredging activity area.

Dredged Material Disposal. The U.S. Army Corps of Engineers (ACE) has developed a long-term management plan for each harbor, which addresses dredging and dredged material management. The ACE is currently developing a plan for underwater disposal of dredged material. The U.S. Environmental Protection

⁹ Wetland Permits. <u>Http://www.deq.state.mi.us/lwm/grt_lakes/setlands/permit.html.</u> 09/23/99.

Dredging in Michigan

Agency and the DEQ have been, and will continue to be involved in the review process. The plan is expected to be finalized sometime in 2000.

The state's preferred disposal options, in order of preference are : beneficial use and beach nourishment; upland disposal; and, open water disposal. The Solid Waste Management section of the NREPA (Part 115), and the Sediment Testing Procedure set guidelines for dealing with contaminated dredged material.

As specified in a dredging permit, suspended solids monitoring may be required during discharge of dredged material. Limits that are allowed depend upon the receiving waters.

Beneficial Use of Dredged Material. The state prefers beneficial use and beach nourishment over disposal of dredged material. ACE dredging projects have resulted in the placement of 300,000 cubic yards of clean sandy material onto Michigan state beaches in 1999.

Beneficial use of dredged material in Michigan usually means beach nourishment. However, if the material is slightly contaminated, it may be used as daily cover at a landfill. Clean material may be used as fill for construction sites that do not involve wetlands or floodplains.

State Specific Issues. Open water disposal of slightly contaminated sediments is a controversial issue that the ACE is addressing. The ACE is currently developing a rigorous procedure for evaluating sediment and disposing of it so that it does not contaminate the receiving waterbody.

Michigan Dredging Contact Information:

Catherine J. Cunningham, Chief Email: cunningc@state.mi.us Coastal Program Unit Land & Water Management Division Department of Environmental Quality Hollister Bldg., Box 30458 Lansing, MI 48909-7958 517-373-1950 Fax: 517-335-3451 Internet: <u>Http://www.deq.state.mi.us/lwm/</u>

- 1. Michigan Natural Resources and Environmental Protection Act. (1994). Mich. Pub. Acts Parts 301, 303, 323, 325.
- 2. Mich. Admin. Code r. 281.23, 322.1008, 322.1011, 281.814.
- 3. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and Michigan Coastal Management Program, Division of Land Resource Programs, Michigan Department of Natural Resources. *State of Michigan Coastal Management Program and Final Environmental Impact Statement July 1978.*
- 4. Catherine J. Cunningham, Chief, Coastal Program Unit. Comments on the Michigan Draft Dredging Template. 1/27/00.

Dredging in Minnesota

Coordination Mechanisms & Permit Processing. A federal consistency concurrence is required for dredging projects that require a §404 U.S. Army Corps of Engineers (ACE) permit. Dredging activities also require a state protected waters permit for work in the beds and a §401 water quality certification.

The Minnesota Department of Natural Resources (DNR) has a Permit Application Workbook that guides applicants through the permit application process for projects occurring in protected waters. Located in Appendix E of the Minnesota's Lake Superior Coastal Program Document, there is a checklist of all Minnesota's program policies which identifies the appropriate state agencies that enforce the individual statutes and regulations and issue applicable permits for purposes of federal consistency. Public notice of all federal consistency projects are published in the Department of Natural Resources' Regional Environmental Log and in the Environmental Quality Board's publication, *The Monitor*.

In Minnesota, the Duluth-Superior Metropolitan Interstate Committee's, Harbor Technical Advisory Committee has been established to provide an interstate forum for the discussion and formulation of recommendations regarding harbor and dredging related issues relevant to the Duluth-Superior Harbor. The Harbor Technical Advisory Committee holds at least four annual meetings. In addition, the DNR has its own Harbor Team, which is comprised of members throughout the different divisions of the DNR. The Chair of the Harbor Team is a member of the Harbor Technical Advisory Committee, representing the DNR.

Economic Concerns. The legislative policy section located under policy H.2., Minnesota Environmental Policy Act (MEPA), dictates that, *"The environmental impact statement shall also analyze those economic, employment and sociological effects that cannot be avoided should the action be implemented."*

Habitat, Sediment, & Water Quality. The Minnesota Pollution Control Agency (MPCA) sets levels of acceptable contaminants for its §401water quality standards and is currently in the process of developing sediment quality guidelines. Once these sediment guidelines are established they will be used to determine if the material to be dredged is contaminated. The MPCA has already identified certain "Areas of Concern" that have contaminated sediment issues (Minnesota Slip and the St. Louis River Area). A remedial action plan (RAP) has been prepared for each of these sites by: 1) assessing the severity and extent of the contamination; 2) developing and implementing a plan for restoring beneficial uses; and, 3) evaluating the success of remedial measures. Each of these RAPs has been developed by the government with the cooperation of local stakeholders.

The State of Minnesota has fisheries guidelines for water projects, developed by the Division of Fish and Wildlife; which outlines the types of waterbodies and time of year that work is not allowed to take place.

Dredging Techniques & Best Management Practices. The protected waters/work in the beds permit program has a list of "Special Provisions" that may be added to permits for ensuring best management practices and/or preferred techniques.

Dredged Material Disposal. The Duluth-Superior Harbor is the most significant shipping port in the region, therefore it has been identified in the Minnesota's Lake Superior Coastal Program's document as a "Special Program and Management Area" under the Development/Economic Revitalization Plans' section for port development plans. A memorandum of understanding (MOU) has been signed by the city of Duluth, Seaway Port Authority of Duluth, and the Minnesota's Department of Natural Resources (the agency that houses Minnesota's Lake Superior Coastal Program) binding all of theses agencies to the Duluth Comprehensive Port Plan. This Port Plan outlines designated natural resources protection areas, designated dredged material disposal sites, a mitigation procedure, an inventory of wetlands within the harbor, a map of harbor front maps dedicated for harbor dependent land uses, an inventory of mitigation sites, the MOU with plan goals and objectives, and establishes a format for periodic review.¹⁰

¹⁰ Minnesota's Lake Superior Coastal Program and Final Environmental Impact Statement - May 1999. Pp. V 4-7.

Dredging in Minnesota

The Detroit District of the ACE, in 1997 conducted a draft Dredged Material Management Plan Study and Environmental Impact Statement for the Duluth-Superior Harbor. The intent of the study was to identify options for disposal areas for the Harbor for the next 20 years. This Study reviewed 23 disposal site alternatives and recommended several of those alternatives go through the full review process to become the identified areas for placement for the 20 year management plan.

The Dredged Material Management Plan was finalized in 1998 with a combination of three management methods for the 20-year plan: beach nourishment, continued use of the Erie pier confined disposal facility, and placing dredged material in the five deep holes within Duluth Harbor. This management plan was chosen using the Federal Standard, or Base Plan, which dictates that the most economically feasible and environmentally sound solution be selected. The State of Minnesota has expressed to the ACE that the use of the deep holes in the Duluth Harbor is not preferred and is inconsistent with Minnesota state policies and authorities. Instead, the DNR prefers that the material be used to create/enhance habitat at the 21st Avenue West and Hearding Island sites in the project area.

Currently, the ACE will proceed using the Base Plan for dredged material management. However, if filling of the deep holes is to be eliminated and habitat creation/enhancement takes its place, the additional costs will have to be paid for by the project's non-federal sponsor and not the ACE.

The legislative policy section of policy C.3. Ground Water Protection, may be applicable to the placement of contaminated dredged material in confined upland disposal areas with respect to the potential for leaching of contaminants into adjacent ground water resources. *"It is the goal of the state that ground water is maintained in its natural condition, free from any degradation caused by human activities… However, where prevention is practicable, it is intended that it is achieved. Where it is not currently practicable, the development of methods and technology that will make prevention practicable is encouraged."*

The State of Minnesota has prohibited open water disposal, with the exception that dredged material may be placed underwater if it is for the purposes of providing habitat enhancement and or creation.

Beneficial Use of Dredged Material. The Minnesota DNR supports the beneficial use of dredged material.

State Specific Issues. The State of Minnesota has identified the Duluth-Superior Harbor Dredged Material Management Plan as a controversial issue. The chosen methods of disposal in the Management Plan are inconsistent with the state's regulatory authorities. If the state wants to see that the preferred method of disposal is selected for implementation they must pay the additional cost of this method (see discussion under the Dredged Material Disposal section).

Minnesota Dredging Contact Information:

Mike Peloquin, Area Hydrologist Email: mike.peloquin@dnr.state.mn.us Minnesota Department of Natural Resources - Waters 1568 Highway 2 Two Harbors, MN 55616 218-834-6621 Fax: 218-834-6639 Internet: Http://www.nos.noaa.gov/czm/mnczm

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Ocean and Coastal Resource Management and Minnesota Department of Natural Resources-Waters, Minnesota's Lake Superior Coastal Program and Final Environmental Impact Statement May 1999.
- 2. Mike Peloquin, Area Hydrologist, Minnesota Department of Natural Resources Waters. Comments on the Minnesota Draft Dredging Template. 1/15/00 and 2/4/00.

Dredging in Mississippi

Coordination Mechanisms & Permit Processing. A joint Department of Marine Resources/U.S. Army Corps of Engineers (DMR/ACE) coastal wetlands permit and a Department of Environmental Quality §401 water quality certification are needed for dredging and filling projects. There is a formal policy coordination section in *Chapter 8, Rules, Regulations, Guidelines, and Procedures of the 1988 Mississippi Coastal Program,* which discusses the procedures for notification and agency review and coordination. Within this document, there is an application procedure section that contains information on how to apply for a wetlands permit, what type of information is required, and how the application will be processed including public notices, hearings, and objections. The DMR publishes a public notice within 60 days of receiving a completed application. The notice is published once a week for at least three consecutive weeks in at least one newspaper, the last notice shall be made not more than seven days prior to such date. A public hearing may be held if there is a written objection asking for a hearing and the Director determines a need for one. This hearing shall be held within 20 days after the objection is raised and it shall be publicly noticed.

Economic Concerns. Permit applications for presently non-existing work must include an estimate of project cost, project purpose, completion date, and a description of any public benefit to be derived from the proposed project. These factors are used to weigh the economic and social benefits of a project against environmental costs. An Interagency Review Committee comprised of state and federal resource management agencies evaluates proposed project activities against the public policy of wetlands and natural resource protection. If there are no objections, projects are presented to the Commission on Marine Resources for a decision on issuance of a joint DMR/ACE permit.

Habitat, Sediment, & Water Quality. Guidelines for channels and access canals state that access canals shall be designed to insure adequate flushing and that designs shall not alter significantly tidal circulation patterns or change salinity regimes. Guidelines also state that the construction of channels and access canals shall be conducted with respect to schedules that minimize interference with fish and shellfish migration and spawning. Channels and canals shall be aligned to avoid shellfish beds and areas of submerged and emergent vegetation. Dredged materials shall be managed in a manner that minimizes turbidity and dispersal of dredge materials.

Dredging Techniques & Best Management Practices. Mississippi's coastal policies do not identify any preferred dredging techniques and/or best management practices.

Dredged Material Disposal. The DMR is currently working with the ACE towards developing a comprehensive dredge material management plan (DMMP) for a maintenance dredging and beach renourishment program (excluding authorized federal projects) in coastal waters.

Guidelines state that permanent upland disposal sites and deep water disposal sites designated "S4" sites shall be used in preference over coastal wetlands for the disposal of dredged material. Coastal Program policies do dictate that the construction of disposal area dikes must be immediately stabilized to minimize erosion and dike failure. They also requires that out-falls shall be positioned to empty back into the dredged area. New spoil disposal proposals shall include a maintenance plan for the shorter of fifty years or the life of the project. Dredged materials that are toxic and highly organic shall be disposed of in a manner that prevents their harmful release into the environment. Current projects utilize the U.S. Environmental Protection Agency and the ACE's policies and guidelines for the disposal of contaminated material.

Beneficial Use of Dredged Material. All dredged material is to be viewed as a potential reusable resource and all disposal plans should include provisions for access to such resources. Examples of beneficial uses (reusable resource) of dredged material defined by the coastal program include: beach replenishment, construction, sanitary landfill, and agricultural soil improvement.

State Specific Issues. Currently, there is pending legislation in the State Legislature with respect to managing non-federal dredging projects in Mississippi.

Mississippi Dredging Contact Information:

Steve Oivanki, Chief Email: soivanki@datasync.com Mississippi Coastal Program Mississippi Department of Marine Resources 1141 Bayview Avenue, Suite 101 Biloxi, MS 39530 228-374-5000 Fax: 228-374-5008 Internet: <u>Http://www2.datasync.com/dmr/</u>

- 1. Mississippi Department of Wildlife Conservation, Bureau of Marine Resources and U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management. *Mississippi Coastal Program Chapter 8 and Mississippi Coastal Wetlands Protection Law, Rules, Regulations, Guidelines, and Procedures.* October 1998.
- 2. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management and Mississippi Department of Wildlife Conservation, Bureau of Marine Resources. *Mississippi Coastal Program Third Printing* October 1983.
- 3. Michael Moxey, Mississippi Department of Marine Resources. Comments on Dredging in Mississippi state summary. 2/1/00.

Coordination Mechanisms & Permit Processing. The state Wetlands Bureau issues excavating and dredging permits for dredging and filling activities in the waters and wetlands of the state. The Water Supply and Pollution Control Division also issues joint permits with the Wetlands Bureau for dredging activities in coastal waters. Projects may be classified into major or minor projects depending upon their nature, size, and scope. Minor projects have an expedited permit review process. Other state permits issued for dredging and filling activities include, §401 water quality certification issued by the Surface Water Quality Board, and federal consistency concurrence issued by the Office of State Planning, New Hampshire Coastal Program. Also, dredged materials need to have a waste determination performed; if the material is deemed hazardous, it requires disposal at an authorized/permitted solid waste facility.

Information pertaining to wetland permits and federal consistency certifications is found on the New Hampshire Coastal Program and Wetlands Bureau web-pages. The Wetlands Bureau has links to statutes and rules along with permitting information and the Coastal Program's site has a down-loadable federal consistency guidance document available in adobe acrobat format.¹¹ The Council on Resources and Development (CORD), provides a pre-permit application consultation for applicants conducting dredging projects.

The Fill and Dredge in Wetlands statute states that the department shall provide a reasonable opportunity for public comment on proposals and shall hold a public hearing for projects with significant impact on resources or that are of substantial public interest. Public hearings may be held for projects that are undergoing federal consistency review and wetland permit review.

The New Hampshire State Port Authority (NHSPA) is the lead agency responsible for coordination of coastal dredging projects. The NHSPA is charged with planning for the maintenance and development of the ports, harbors, and navigable tidal rives of the state. In addition, the CORD has established a inter-agency working group called the Dredged Management Task Force, to develop policies, rules, and guidelines for dredging projects in New Hampshire's coastal waters. The Task Force meets monthly and assists the NHSPA in meeting its responsibilities related to coordination among state agencies in New Hampshire. The Task Force also facilitates the permit review process for dredging projects. These formalized coordination mechanisms may allow for certain dredging projects to be "fast-tracked" if necessary.

Economic Concerns. The NHSPA is charged with, "Planning for the maintenance and development of the ports, harbors, and navigable tidal rivers of the state in order to foster and stimulate commerce and the shipment of freight through the state's ports...¹² However, there are no state policies that dictate how the economic benefits of a dredging project should be weighed against the environmental costs. Located in the Wetlands Bureau Administrative Rules, there are detailed criteria that are to be used when evaluating a project for a permit. None of these criteria include economic benefits, they primarily deal with environmental costs.

Habitat, Sediment, & Water Quality. New Hampshire has developed a uniform set of sediment sampling and testing protocols for dredging projects. This testing protocol includes: grain size analysis; tier I testing of metals, organics, and PAHs; and, a priority pollutant scan. Which type of testing is needed and how many samples will be required are also detailed in the protocol.

There is only one policy found in the Administrative Rules that states that dredging shall not disturb contaminated layers of sediment, unless specifically identified and permitted with protective conditions. Contamination would be determined using the sediment testing protocol.

Permit review criteria include: the extent to which a project may redirect or reflect currents or wave energy; the impact of a project's runoff on salinity levels in tidal environments; how projects can be designed to ensure that there is no disruption of tidal flushing, ebb, and flow; and, project impacts to rare or special

¹¹ New Hampshire Wetlands Bureau. <u>Http://www.des.state.nh.us/wetlands.</u> 10/13/99. And, New Hampshire Coastal Program. <u>Http://www.state.nh.us/coastal.</u> 10/13/99.

¹² New Hampshire Coastal Program and the Dredge Management Task Force, Council on Resources and Development. *Dredging in New Hampshire: A Review of Projects, State Permit Procedure, and Future Coastal Dredging Needs.* January 1999. Pp. 20, Section 7.1.

concern species, threatened and endangered species, species at the extremities of their ranges, migratory fish and wildlife, and natural communities.

Dredging projects are conditioned with time limits on when activities can occur in order to avoid impacts to spawning, fishery migrations and to decrease the degradation of water quality. Policies that list specific approval conditions for dredging projects state that dredging in tidal waters shall be done between November 15th and March 15th and shall not be permitted during a fish migration or larval setting stage of shellfish. Policies for dredging in freshwater lakes, ponds, streams, brooks, or rivers dictate that projects shall be done as not to impede fish migrations or interfere with spawning areas for fish.

No specific geographical areas were identified as being restricted from dredging activities due to habitat and water quality concerns. However, restrictions due to habitat concerns may be made on a project by project basis.

Dredging Techniques & Best Management Practices. New Hampshire policies do not identify any preferred dredging techniques or best management practices.

Dredged Material Disposal. The NHSPA along with the Department of Resources and Economic Development are directed by statute to plan for the maintenance and development of the ports, harbors, and navigable tidal rivers of the State of New Hampshire while also cooperating with any agencies of the federal government. The NHSPA is directed to assess the existing dredge permitting process and identify ways to improve it. This involves implementing a process that will ensure that projects are completed in a timely and efficient manner, that this process allows for agency coordination and compliance with other laws and regulations, and that projects will be consistent with the Coastal Zone Management Program. As mentioned earlier, these mandates are carried out by the NHSPA and the Dredge Material Task Force. The Task Force does not set policy per se, but serves to facilitate policy development amongst the relevant agencies. Currently, New Hampshire does not have a long-term dredged material management/disposal plan. However, the need for such a plan is recognized by the Task Force.

Policies state that dredge spoils shall be disposed of out of the areas under the jurisdiction of the department unless other disposition is specifically permitted. New Hampshire has not disposed of contaminated sediments under water and has no plans to allow it in the near future. Dredged materials that are deemed to be hazardous by a Waste Management Bureau determination, are required to be disposed of at an upland facility that is authorized to receive solid waste.

Beneficial Use of Dredged Material. The New Hampshire policy on Dredging and Dredged Spoil Disposal encourages beach renourishment and wildlife habitat restoration as a means of dredge disposal whenever compatible.

New Hampshire does not have a formal definition of beneficial use; beneficial uses are determined as projects arise. New Hampshire's Dredge Report does list beneficial use projects as part of its listing of project disposal areas.

State Specific Issues. New Hampshire did not identify any complex or controversial issues related to dredging and dredged material management. However, in a January 1999 report on Dredging in New Hampshire, it lists several recommendations. They are as follows: continue monthly meetings of the Dredge Management Task Force; create a position for a Dredge Coordinator under the NHSPA; determine long-range dredging needs and budget forecasts; perform a hydrodynamic modeling study of the Hampton-Seabrook Harbor; develop a sediment sampling and testing protocol (completed); and, develop a dredged material disposal management plan for New Hampshire.

New Hampshire Dredging Contact Information:

David Hartman, Coastal Program Manager Office of State Planning 2 ½ Beacon Street Concord, NH 03301 603-271-2155 Fax: 603-271-1728 Internet: <u>Http://webster.state.nh.us/coastal</u>

- 1. New Hampshire Code of Administrative Rules WT 100-800.
- 2. New Hampshire Revised Statutes Annotated §482-A and §271-A.
- 3. New Hampshire Coastal Program, Office of State Planning and Dredged Management Task Force, Council on Resources and Development. *Dredging in New Hampshire: A Review of Projects, State Permit Procedure, and Future Coastal Dredging Needs.* January 1999.
- 4. Baczynski, Bob New Hampshire Department of Environmental Services. *Water Quality/Sediment Sampling Protocol.*
- 5. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management and New Hampshire Office of State Planning. *New Hampshire Coastal Program Ocean and Harbor Segment and Final Environmental Impact Statement*. April 1982.
- 6. New Hampshire Wetlands Bureau. <u>Http://www.des.state.nh.us/wetlands.</u> 10/13/99.
- 7. New Hampshire Coastal Program. <u>Http://www.state.nh.us/coastal.</u> 10/13/99.
- 8. Marcia A. Brown Thunberg, Attorney, New Hampshire Coastal Program. Comments on the Draft New Hampshire Dredging Template. 1/13/00.

Coordination Mechanisms & Permit Processing. The New Jersey Department of Environmental Protection (NJDEP) is responsible for the evaluation and permitting of all dredging-related activities. Permits that may be required for dredging activities and disposal activities include three types of permits that fall under the "coastal permits" for New Jersey, the Coastal Areas Facility Review Act, the Wetlands Act of 1970, and the Waterfront Development Law. A §401 water quality certification is needed for permits that require a §404 U.S. Army Corps of Engineers (ACE) permit and a §10 permit for the Rivers and Harbors Act for dredging and filling activities. Coordination of all dredging related permit applications (including federal consistency) is done by the NJDEP's Office of Dredging and Sediment Technology (a new office established in the Spring of 1998).

Pre-application discussions with the Office of Dredging and Sediment Technology are required prior to the actual submittal of a permit application to discuss types of permits needed, sampling and testing protocols, and other information which must be submitted with the application package. Necessary background information requirements for this pre-application discussion are listed in the technical manual, *Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters*.

Economic Concerns. The New Jersey Department of Transportation's Office of Maritime Resources website has several publications on-line in adobe acrobat format related to dredging activities in New Jersey. One of these publications is the Policy and Procedures of the Dredging Project Facilitation Task Force. It is the purpose of this Task Force to assist appropriate state agencies and the legislature in establishing priorities for the use of monies from a state dredging bond issue for dredging projects in accordance with their economic benefit to the state and their potential to bring economic growth to maritime commerce.¹³ There are no other policies that specifically outline how an individual project's economic benefits should be weighed against its environmental costs.

Habitat, Sediment, & Water Quality. There are policies in the Coastal Zone Management Rules and Regulations (*NJ Admin. Code 7:7E*) that state that the Department may require pre-dredging chemical and physical analysis of sediments to be dredged if contamination is suspected or dredging in areas prone to contamination. The specific types of testing are not delineated in these policies. However, in the technical guidance manual on dredging it lists the proper sampling methodology to be used and what types sediment testing will be required based upon the various dredged material management alternatives chosen for the project. The technical manual also lists chemical level criteria for ground water, soil cleanup, and surface water (for all areas except the Delaware River).

Development in mapped coastal wetlands (including dredging and filling activities) is prohibited unless it will result in minimum feasible alteration or impairment of natural tidal circulation. Use of dredged materials for beach nourishment must not result in unacceptable shoaling in downdrift inlets and navigation channels.

Seasonal restrictions aimed at preventing entrainment and mortality of aquatic organisms may be placed in areas of blue crab winter hibernation areas, known spawning, nursery, or wintering areas of endangered shortnose sturgeon and/or winter flounder, and wintering areas of adult Atlantic or shortnose sturgeon, striped bass and/or white perch. Seasonal and dimensional limitations and prohibitions may be imposed on new dredging activities in shellfish habitat, endangered/threatened wildlife or vegetation species habitat, finfish migratory pathways, marine fish and fisheries habitat, and wintering areas for finfish or blue crabs. These restrictions are to prevent reduction of ambient dissolved oxygen below critical levels, the increase of turbidity, or the resuspension of toxic substances above critical levels. NPDES mixing zone requirements may be used to develop permit limits for discharges from confined upland disposal facilities if the discharge itself does not meet State Water Quality Standards. For new dredging projects (deepening), modeling is normally undertaken to determine potential salinity changes.

Dredging Techniques & Best Management Practices. Deployment of silt curtains may be required for maintenance dredging that uses mechanical dredges such as clamshell bucket, dragline, grab, orange peel, or

¹³ NJ Commerce - Publications, Dredging Project Facilitation Task Force - Policy and Procedures. <u>Http://www.state.nj.us/commerce/omrpubs.htm</u>. 07/29/99.

ladders if site conditions are conducive. If silt curtains are unable to be used, closed water tight buckets or lateral digging buckets may be used. Closed clamshell buckets may be required if the sediments to be dredged are contaminated at levels warranting concern and when a no-barge-overflow permit condition is in effect.¹⁴

For hydraulic dredging, operational procedures, such as removal of cutterhead, flushing of pipeline sections prior to disconnection, and limitations on depths of successive cuts may be required. Hydraulic dredging is preferable when an acceptable upland confined disposal facility is available within pumping distance of the dredging area.¹⁵ Historically, industry and the ACE have primarily used clamshell dredge and barge transport in New York Harbor and hydraulic dredging in the Delaware River.

For dredging activities in areas where sediments are finer-grained and contaminated, a no-barge-overflow permit condition will be required to limit unnecessary dispersal of sediments. Other best management practices that are referenced in the New Jersey technical manual include shunting (pumping free water in a barge to the bottom of the water column at the dredging site to reduce turbidity in the upper water column), hiring of certified inspectors, the use of split-hull barges for open water disposal methods, solid hull barges for upland placement, slower bucket lift speeds, and use of a dredged material pumping system to minimize resuspension of sediments at the site and reduce dewatering discharges from confined disposal facilities.¹⁶

Dredged Material Disposal. The State of New Jersey has no formal dredged material management plan. There is however, a joint dredged material management plan for the Port of New York and New Jersey. This plan was initiated by the N.Y. District of the ACE whose policies charge them with preparing a long-term plan for maintaining federal navigation channels.¹⁷ Also, in 1996, the states of New York and New Jersey signed a bi-state dredged material management plan which laid the foundation for interstate cooperation when dealing with dredged material from New York Harbor.

Disposal is prohibited in lakes, ponds, reservoirs, tidal guts, man-made harbors, and medium rivers, creeks, and streams. Disposal is discouraged in open bays, semi-enclosed and backbays where the water depth is less than six feet. Disposal of dredged material in other "Special Areas" as defined in the N.J. Coastal Zone Management Rules and Regulations is limited to conditions. Disposal in the ocean and bays deeper than six feet is conditionally acceptable if it conforms with USEPA and ACE §404 (b)(1) guidelines. Beneficial reuse of dredged material is preferred over other disposal methods. Areas identified for disposal in the Technical Manual include 6 federally authorized ocean disposal sites and two sites identified by the state for intracoastal dredging (Great Sound and Great Bay).

Restrictions for placement of dredged material that is not clean are found for most "Special Areas." Precautions for handling contaminated dredged material will be imposed including, increased retention time in upland confined disposal facilities (CDFs) through weir and dike design modifications, use of coagulants, ground water monitoring, and measures to prevent biological uptake by vegetation and animals. Appropriate management techniques for upland CDFs that are continuously and intermittently operated are listed in the technical manual. Guidance on CDFs is offered on the design, construction, operation, closure, surface water discharges from the CDF, and ground water discharges. In addition, a ground water protection plan may be required dependent upon the type of CDF and the quality of the material being placed. Policies dictate that dredge material disposal must not disturb or degrade ground water quality when it is placed. Disposal at an open water site requires a demonstration that no practicable alternative site exists. Placement requirements for underwater disposal of contaminated sediments in Subaqueous Disposal Pits are found in

¹⁴ State of New Jersey, Department of Environmental Protection. *The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters.* October 1997. Pp.14

¹⁵ Ibid. Pp.15

¹⁶ Ibid. Pp.16

¹⁷ U.S. Army Corps of Engineers New York District - Dredged Material Management Plan for the Port of NY & NJ.

<u>Http://www.nan.usace.army.mil/business/prjlinks/dmmp/</u>. 07/29/99.
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the technical manual. The requirements include strict navigation adherence for disposal activities, capping with clean material, and use of precision bathymetry.

Beneficial Use of Dredged Material. Perhaps the single most important policy concerning dredging in New Jersey is that dredged material is not considered to be a solid waste. The technical manual devotes an entire chapter to Use Alternatives for dredged material. It states that dredged material should be considered as a resource and used wherever possible. The manual discusses in detail, options such as beach nourishment, habitat development, wetlands creation, structural and non-structural fill, landfill cover, agricultural use, and capping of open water disposal sites. Regulatory authorities, permitting requirements, testing requirements, and potential impacts and regulatory objectives are discussed for each of the alternative use options.

The use of uncontaminated dredged material for landscape restoration, enhancement of farming areas, creation of recreation-oriented landfill sites, beach protection, land reclamation, marsh creation, capping of contaminated dredged material, and creation of new wildlife habitats is encouraged. Uncontaminated dredged material that is 75 percent sand or greater is encouraged for beach nourishment. Filling using clean sediment of suitable particle size and composition is acceptable for beach nourishment.

The technical manual has a detailed Acceptable Use Determination process that is followed for any project that will process or transfer dredged material or products containing dredged material. This guidance on the process includes information on the appropriate legal authorities, the application process, operating conditions, and limitations and compliance.

State Specific Issues. Currently, the New York Harbor navigation study being prepared by the ACE is under development. Offices with in the state that are designed to handle dredging projects include the Office of Dredging and Sediment Technology in the NJDEP with 5-6 full-time employees dedicated to dredging and the Office of Maritime Resources in the NJ Department of Transportation (formally located in the NJ Commerce Department) which has 10 full-time employees dedicated to dredging.

New Jersey Dredging Contact Information:

Lawrence Baier, Chief Office of Dredging and Sediment Technology NJ Department of Environmental Protection PO Box 028 Trenton, NJ 08625 Phone: 609-292-8838 Email: lbaier@dep.state.nj.us Internet: Http://www.state.nj.us/dep/landuse/coast/coast.html

- 1. State of New Jersey, Department of Environmental Protection. *The Management and Regulation of Dredging Activities and Dredged Material In New Jersey's Tidal Waters.* October 1997.
- 2. NJ Commerce Publications, Dredging Project Facilitation Task Force Policy & Procedures. <u>Http://www.state.nj.us/commerce/omrpubs.htm.</u>7/29/99.
- 3. U.S. Army Corps of Engineers New York District Dredged Material Management Plan for the Port of NY & NJ. <u>Http://nan.usace.army.mil/business/prjlinks/dmmp/.</u> 7/29/99.
- 4. New Jersey Coastal Zone Management Rules and Regulations. NJ Administrative Code 7:7E(Supp. -5/17/99).
- 5. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and State of New Jersey Department of Environmental Protection, Division of Marine Services, Office of Coastal Zone Management. New Jersey Coastal Management Program Bay and Ocean Shore Segment and Final Environmental Impact Statement August 1978.
- 6. Larry Schmidt, Director, Office of Coastal Planning & Program Coordination. Comments on the New Jersey Draft Dredging Template. 11/05/99.

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Coordination Mechanisms & Permit Processing. Federal consistency decisions are made by the New York State (NYS) Department of State, Division of Coastal Resources. A Clean Water Act §401 water quality certification from the NYS Department of Environmental Conservation (DEC) is needed for dredge and fill permits which are also subject to authorization by the U.S. Army Corps of Engineers (ACE) under §404 of the Clean Water Act. The NYS Uniform Procedures Act (UPA), (Article 70, NYS Environmental Conservation Law, N.Y. Comp. Codes R. & Regs. tit.6 §621) establishes time frames for minor and major activities subject to authorization by the NYS DEC. Dredging, filling, and excavation in navigable waters, freshwater wetlands, and tidal wetlands, generally require authorization under Articles 5, 24, and 25 of the NYS Environmental Conservation Law. For dredging activities authorized, funded, or undertaken by state agencies in New York's coastal area, the state agency proposing the action is required to determine its consistency with the policies in N.Y. Comp. Codes R. & Regs. tit.19, §600, and in conformance with Article 42 of the Executive Law. Consistency of proposed dredging projects which occur on state owned lands underwater are also coordinated with the NYS Office of General Services under the authority of the NYS Public Lands Law. Federal and state consistency is also coordinated with the NYS Office of Parks, Recreation, and Historic Preservation regarding historical/cultural issues.

Federally authorized dredging projects, proposed for areas within the state's coastal zone and a municipality's approved Local Waterfront Revitalization Program, are subject to consistency with the locally specific policies contained in that program. As an amendment to the state's coastal management program, an approved Local Waterfront Revitalization Program may include local policies that pertain to proposed dredging activities in addition to state coastal management program (CMP) dredging policies. Local Waterfront Revitalization Programs may also offer specific guidance and recommend specific projects which, when implemented, further the overall intent of the state's CMP and the federal Coastal Zone Management Act (CZMA).

The NYS Department of State, together with the ACE, NYS DEC, the State Office of Parks, Recreation, and Historic Preservation, Office of General Services, the New York Power Authority, the Adirondak Park Agency, and the NYS Thruway Authority/Canal Corporation, has compiled and released a joint application package for wetland and waterfront development permits. The application "kit" is intended to serve one-stop permit application needs for activities which may require multiple authorizations for activities related to waterway and waterfront development and eliminate applicant-initiated inter-agency coordination. Regulated activities, including dredging, and all potentially involved agencies are identified. The application coordination effort is similar to, and in part uses, the existing "joint application for permit" employed by the NYS DEC and regional districts of the ACE for §401/404 permits.

The Division of Coastal Resources has federal consistency application guidance, down-loadable consistency assessment forms, and all of its 44 program policies available on its web-site. The DEC has a web-page dedicated to permitting information also. This web-page includes information on how to file for a permit, review time frames, and listings of permits and applicable regulations. Applicants may request a pre-application conference with DEC staff.

Environmental permits deemed major projects under the UPA are subject to being noticed in the local newspaper and in the *Environmental Notice Bulletin*. A public hearing may also be held, depending upon the project. Projects deemed minor activities are also subject to publication in the *Environmental Notice Bulletin*. Activities subject to consistency review are noticed in the State Register. The public notices are also posted on the Department of State, Division of Coastal Resources web-page.

Economic Concerns. The policies found in the New York program document offer the following regarding the economics of dredging projects: "Proposed major actions in the coastal area must give full consideration to economic along with social and environmental interests;" and, "Dredging to maintain the economic viability of major ports will be regarded as a public benefit."

Federal NEPA and state Environmental Quality Review Act (SEQRA, N.Y. Comp. Codes R. & Regs. tit. 6, §617) regulations include requirements for assessing public need and benefits, "Including social and

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economic considerations." Cost/benefits analysis responsibilities fall to project sponsors. This information is considered by the Department of State during the consistency review process.

Habitat, Sediment, & Water Quality. The NYS CMP policies 7 and 8, deal with the protection of fish and wildlife and their habitats and require consistency based, in part, on biological, physical, and chemical parameters to be considered which could be potentially impacted by a project. NYS Environmental Conservation Law addresses hazardous wastes and bio-accumulative toxins which may substantially affect human health and the environment, in addition to national standards for toxic limits. NYS CMP policy 30 requires conformance to state and federal water quality criteria.

NYS CMP policy 7 identifies dredging and dredged material disposal as activities which could adversely affect designated coastal fish and wildlife habitats and the resources which inhabit those areas through changes in substrate composition, the possible release of contaminants stored in sediments, the removal of aquatic vegetation changes in circulation patterns, changes in transport mechanisms, or the shoaling of littoral areas. As part of its §401 water quality certification review, DEC may require information on the chemical composition of sediments.

The NYS DEC, as part of the §401 certification process, describes acceptable water quality mixing zone standards. Policy 7 dictates that water uses shall not be undertaken if they destroy or impair the viability of an area as a habitat. The parameters for evaluation include: chemical factors such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxic and hazardous materials); physical factors such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth, morphology, substrate type, vegetation, structure erosion, and sedimentation rates; and, biological factors such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rate, behavioral patterns, and migratory patterns. Each state-designated significant coastal fish and wildlife habitat narrative contains (case agreement) specific restrictive windows for when dredging activities would be injurious to species inhabiting the area. The NYS DEC establishes dredging windows to protect individual aquatic species.

NYS CMP policies do not establish specific time periods over which maintenance dredging activities may occur. State-designated significant coastal fish and wildlife habitat documentation does however, establish times when dredging should or should not occur within any year. Concurrence for federal permit actions runs for the life of the federal permit. Major project modifications to any existing permit may require additional consistency review. NYS DEC issued §401 water quality certifications may extend over a 5 to 10 year period for maintenance dredging.

Dredging Techniques & Best Management Practices. There are no preferred dredging techniques or best management practices identified in New York's CMP policies.

Dredged Material Disposal. The Division of Coastal Resources' web-page has a link *to Coastal Issues: Dredging*¹⁸ One of the issues discussed on this web-page is the New York/New Jersey Bi-State Dredging Plan. This plan, developed in 1996, facilitates interstate cooperation in dredging and dredged material management for New York Harbor. The discussion about the plan suggests that alternative management techniques to disposal in permitted landfills licensed for contaminated material should be investigated. The plan is currently being implemented by the States of New York and New Jersey.

The Division of Coastal Resources is also participating in the development of the Dredged Material Management Plan (DMMP) for the Port of New York and New Jersey with the New York District of the ACE. The plan, required by the ACE policy (EC-1165-2-200), is currently (December 1999) in the NEPA draft environmental impact statement phase. The DMMP addresses dredged material management in two phases, from 2000-2010 and 2011-2040. The DMMP for NY Harbor will recommend that dredged material be beneficially reused whenever feasible, and sediment reduction measures will be implemented as "preferred

¹⁸ Coastal Issues: Dredging. <u>Http://www.dos.state.ny.us/cstl/dredged.html</u>. 07/06/99.

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options." The environmental impact statement for Long Island Sound will assess the appropriateness of open-water disposal in that water body.

Beneficial Use of Dredged Material. NYS CMP policy 35 requires that dredging and dredged material disposal occur in compliance with NYS dredging permit requirements. Beneficial Use Determinations (BUD) are permitted under solid waste regulations and subject to review prior to permit issuance and subject to criteria established under the Environmental Conservation Law. Dredging and dredged material placement proposals are generally reviewed under CZMA federal consistency provisions by the Department of State. Preferences may be made for beneficial use type and location. The *Coastal Issues: Dredging* web-page discusses beneficial use in terms of traditional uses such as beach nourishment and explores other options such as use as engineering fill and wetland and wildlife habitat enhancement/creation. NYS DEC regulations governing solid waste management provide for the issuance of beneficial use permits and research and development permits for the reuse of dredged material. The NY Harbor DMMP prefers the option of beneficial reuse of dredged material.

State Specific Issues. New York has considered regulatory revision and policy development for the alternative placement of dredged material (i.e. beneficial use). New York has also promoted the identification and development of alternative uses for dredged material as a refined, salable end-product (e.g. roadway asphalt manufacture).

There are several FTEs in different state agencies (Department of State, DEC, NYS Thruway Authority/Canal Corporation, Department of Transportation, Empire State Development Corporation) working on dredging-related issues. The NYS DEC hosts New York State's dredging team. In addition, two projects related to dredged material management funded by the NYS Department of State Environmental Protection Fund (EPF) grant went to the New York City Brooklyn Navy Yard for development of a confined disposal facility and to the Town of Sandy Creek for dredged material management.

New York Dredging Contact Information:

George Stafford, Director Division of Coastal Resources New York Department of State 41 State Street Albany, NY 12231 518-473-2459 Fax: 518-473-2464 Email: gstaffor@dos.state.ny.us Internet: <u>Http://www.dos.state.ny.us/cstl/cstlwww.html</u>

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and New York Department of State. *Final Environmental Impact Statement and the New York Coastal Management Program August 1982.*
- 2. Division of Coastal Resources. <u>Http://www.dos.state.ny.us/cstl/cstlwww.html</u>. 07/07/99.
- 3. Regulatory Information Permits. <u><u>Http://www.dec.state.ny.us/website/dcs/permits_level2.html</u>. 07/07/99.</u>
- 4. Vance A. Barr, New York Department of State, Division of Coastal Resources. Comments on New York Draft Dredging Template. 1/3/00.

Coordination Mechanisms & Permit Processing. Through the state's Coastal Area Management Act (CAMA) there are several different types of permits issued dependent upon the project location, scope, and size. This permit system is based upon defined "Areas of Environmental Concern" (AEC) which include four distinct areas within the coastal zone; estuarine system, ocean hazard system, public water system, and natural and cultural resource areas.¹⁹ If a dredge and fill activity is to take place in one of these AECs a CAMA major development permit is most often required. A CAMA permit application also serves as an application for a state permit to excavate and/or fill, an easement in lands covered by water, a water quality certification, and also as a federal consistency application. Also, the CAMA permit serves as the application for the U.S. Army Corps of Engineers (ACE) §404/10 permits, making for a less complicated application process and a more coordinated review by federal and state regulatory agencies. Permit and federal consistency action involving dredging are listed in the monthly permits/consistency report circulated to interested parties. A Memorandum of Understanding between the ACE and the state covers the review of emergency dredging projects.

There is a detailed guide available to project applicants on the CAMA permitting process along with an online Environmental Permit Information Center for all state environmental permits, including the Division of Coastal Management. The on-line Information Center provides permit information, down-loadable applications and permitting contacts. In the Coastal Management Division, there are three program review coordinators that work extensively with dredging and eight to ten field staff that work on site visits and field reports.

CAMA permits are public noticed in local papers. Also, public notice and participation are required as a part of developing local land use plans outlined in the Coastal Management Land Use Planning Guidelines (N.C. Admin. Code tit.15A, r. 7B.0215).

Economic Concerns. North Carolina has no policies on how a project's economic benefits should be weighed against its environmental costs during permit decision making. Economic benefits and environmental costs are balanced during the development of regulations and may be considered through variance and appeal proceedings before the Coastal Resource Commission.

Habitat, Sediment, & Water Quality. As part of the CAMA permitting process the Department of Environment and Natural Resources' Water Quality Section reviews projects to ensure that they meet state water quality standards for §401 water quality certification.

Areas restricted from dredging activities include primary nursery habitats, shellfish areas, submerged aquatic vegetation beds, and significant areas of regularly or irregularly flooded coastal wetlands. No development is allowed in any AEC which would have a substantial likelihood of causing pollution in an area in which shellfishing is an existing use to the extent that such waters would be officially closed to the taking of shellfish. Before a permit is issued the applicant must demonstrate that dredging will be timed so that it will have minimum adverse significant affects on life cycles of estuarine and ocean resources.

Dredging Techniques & Best Management Practices. The Coastal Management Division has no policies on preferred dredging techniques and best management practices.

Dredged Material Disposal. The state has no policies on long-term dredged material management plans. Although there is a policy with regards to marinas that states that, marinas which require dredging must provide acceptable areas for disposal needs for future maintenance. There are several policies under the specific uses sections of navigation, dredging, and marinas that dictate where material should and should not be placed. Spoil materials should be placed on confined high ground landward of flooded wetlands, placed on non-wetland areas, on remnant spoil piles, and if the material is suitable it can be placed on the beach for renourishment purposes. Disposal of spoils on regularly flooded wetlands is not permitted.

¹⁹ Division of Coastal Management, North Carolina Department of Environment and Natural Resources. A Guide to Protecting Coastal Resources Through the CAMA Permit Program.

Policies that deal with upland disposal and CDFs dictate that all spoil material must be stabilized to prevent entry of sediments into adjacent water bodies or marshes, the effluent from CDFs shall be contained by a pipe or similar device to aid in discharge waterward of emergent vegetation, water control structures must be installed at intakes for effluent pipes, and when possible, effluent should be discharged into the same area that has been dredged. Underwater disposal sites are only allowed where material is clean and will not adversely affect shellfish or submerged aquatic vegetation resources.

Beneficial Use of Dredged Material. Policies on beneficial use of dredged material state that material from excavation or maintenance of navigation channels be used in a beneficial way whenever practicable and also encourages research on the beneficial uses of dredged material. There is no formal review process specifically for evaluating beneficial use projects. However, if dredged material is to be used for beach nourishment, the material must first be dewatered and be of acceptable grain size. Direct placement on the beach from dredge or dragline during maintenance excavation is not allowed on estuarine shorelines.

State Specific Issues. North Carolina's Coastal Management Division did not identify any complex or controversial issues related to dredging.

North Carolina Dredging Contact Information:

Donna Moffitt, Director Department of Environment & Natural Resources Division of Coastal Management 1638 Mail Service Center Raleigh, NC 27699-1638 919-733-2293 Fax: 919-733-1495 Email: donna.moffitt@ncmail.net Internet: <u>Http://dcm2.enr.state.nc.us/MAIN_PAGE.HTM</u>

- 1. Division of Coastal Management, North Carolina Department of Environment and Natural Resources. *A Guide to Protecting Coastal Resources Through the CAMA Permit Program.*
- 2. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management and North Carolina Coastal Management program, North Carolina Department of Natural Resources and Community Development. *State of North Carolina Coastal Management Program and Final Environmental Impact Statement 1978.*
- 3. CAMA and the North Carolina Division of Coastal Management. <u>Http://dcm2.enr.state.nc.us/MAIN_PAGE.HTM</u> 7/9/99.
- North Carolina Administrative Code Title 15A-Department of Environment, Health, and Natural Resources, Chapter 7 Coastal Management. Http://dcm2/enr.state.nc.us/Rules&Permits/Rules/ rules/TOC.htm 7/9/99.
- 5. Steve Benton, North Carolina Division of Coastal Management. Comments on North Carolina Draft Dredging Template. 11/16/99.

Coordination Mechanisms & Permit Processing. A coastal resources management (CRM) permit is required for all activities occurring in areas of particular concern (APCs) and for major siting projects located inside and outside of APCs but within the Program's management area. The CRM permit certifies that a project is consistent with the goals and policies of the Coastal Resources Management Office (CRMO) and also all applicable rules and regulations administered by the agencies responsible for CRM implementation. The CRMO has formal coordination with the U.S. Army Corps of Engineers (ACE), the National Marine Fisheries Service, the Historic Preservation Board, and the U.S. Department of Fish & Wildlife. A CRM permit decision is required to be issued within 60 days of receipt of a complete application. A §401 water quality certification is also required for dredging and filling projects being undertaken by a federal agency or projects that require a federal license/permit. §401 certifications are issued by the Division of Environmental Quality (DEQ).

Permit applications and federal consistency guidance are described in detail in the CRMO regulations. Moreover, a detailed procedure guide for achieving federal consistency is available from the CRMO which was published in December 1987. A pre-application consultation process is a mandatory element of the CRM major siting permitting process.

Economic Concerns. The CRMO major siting permitting process requires a description of the direct and cumulative environmental and socioeconomic effects and characteristics including income and employment, education, infrastructure, law enforcement, fire protection and medical facilities. A formal cost/benefit analysis is not required, but could be used as part of the permit evaluation process.

Habitat, Sediment, & Water Quality. DEQ Water Quality Standards are used to make dredging permitting decisions. Time frames for maintenance dredging permits are generally limited to five years and are usually consistent with the time frame specified in the ACE permit or §401 water quality certification.

There are CRM policies that state that the accumulation of toxins associated with a project is considered to be an adverse impact. Standards for projects located in Lagoon and Reef and Wetland and Mangrove APCs require that the discharge of toxic wastes be avoided and/or prohibited. CRM policies contain standards for project review that require that a project will not disrupt hydrological processes, will have adequate water flow, nutrient and oxygen levels, and natural circulation patterns.

The dredging window time frame for a project would generally be limited by the time frame specified on the ACE permit and §401certification for large projects. The CRM permit would require all activities to cease (a "shut-down period") during critical coral reef spawning and fisheries events. Standards for Lagoon and Reef ACPs do state that living marine resources, particularly fishery resources shall be managed so as to maintain optimum sustainable yields.

Dredging Techniques & Best Management Practices. There are no Commonwealth policies or guidelines for preferred dredging techniques. However, cutterhead suction dredging is the preferred methodology when feasible. Also, best management practices for dredging activities include the use of silt screens, restricting dredging to periods of calm water, and review of dredging methodology.

Dredged Material Disposal. Upland sites are preferred for disposal of dredged material when the material has been found free of contaminants. Dewatering methodology includes the use of multiple settlement areas, channelization, silt screens, sediment traps and other applicable methods. Dewatering activities may not take place in areas which have the potential to effect groundwater resources.

Disposal options for contaminated material are governed by the U.S. Environmental Protection Agency and the placement of contaminated dredged material in underwater disposal areas is governed by the DEQ's Water Quality Standards.

Beneficial Use of Dredged Material. The Commonwealth does not have a formal policy for the beneficial use of dredged material. However, if the fill is found to be free of contaminants, it may be used for upland

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fill projects. The "highest" priority use category for Shoreline APCs includes activities related to the prevention of beach erosion through non-structural means, this could be interpreted to include beach nourishment activities. If dredging activities include the excavation of sediments suitable for beach nourishment projects this material would be stock piled for future use. Most borrow sites for beach nourishment projects are located on upland.

State Specific Issues. The Commonwealth of the Northern Mariana Islands did not identify any complex or controversial issues related to dredging or dredged material management.

Northern Mariana Islands Dredging Contact Information:

Peter Barlas, Acting Director Email: crm.pbarlas@saipan.com Commonwealth of the Northern Mariana Islands Coastal Resources Management Office Office of the Governor 2nd Floor, Morgen Building San Jose Saipan, Mariana Islands 96950 670-234-6623 Fax: 670-234-0007

- 1. Office of Coastal Zone Management, National Oceanic and Atmospheric Administration and Coastal Resources Management Office, Office of Planning and Budged Affairs. *Final Environmental Impact Statement and Proposed Coastal Resources Management Program for the Commonwealth of the Northern Mariana Islands 1980.*
- 2. Office of Coastal Resources Management Rules & Regulations of 1990. Section 9 Standards for CRM Permit Issuance, Section 11 Standards for Determination of a Major Siting.
- 3. Peter Barlas, Acting Director, Coastal Resources Management Office. Comments on the Draft Northern Mariana Islands Dredging Template. 1/18/00.

Dredging in Ohio

Coordination Mechanisms & Permit Processing. A §401 water quality certification is needed for dredge and fill activities that require a federal licenses or permits such as a §404/§10 permit from the U.S. Army Corps of Engineers (ACE). Issuance of a §401 water quality certification can take from 60 to 180 days from the submission of a complete application. Extraction of sand and gravel or other mineral resources from or under the bed of Lake Erie for commercial purposes requires a permit or lease from the Division of Geological Survey (DGS). Projects that will place dredged material or fill on submerged lands, require a submerged lands lease from the Ohio Department of Natural Resources (ODNR). Ohio's coastal management program document states that the ODNR's Division of Real Estate and Land Management, Coastal Management Program (CMP), is responsible for coordination among resource agencies and is responsible for conducting federal consistency reviews. There are several Memorandums of Understanding between the CMP and other state and federal agencies that ensure a mechanism for networking and consistency review. Early coordination meetings and "pre-application consultation" are available for permit applicants.

On the Ohio CMP's web-page there is information on the consolidated application that is used to apply for submerged lands leases and for federal consistency certifications.²⁰ From this web-page, applicants can download using Adobe Acrobat, the consolidated permit application and instruction package. This web-page also has contact information. There is a detailed description of the §401 water quality certification process located on the Ohio Environmental Protection Agency's (EPA) Division of Surface Water web-page.²¹ From this web-page the applicant may download a §401 application along with pre-application guidelines. Applicants are recommended to involve the Ohio EPA early in the planning process before any plans are finalized.

Public notices of applications for federal permits or licenses and consistency applications are coordinated through an intergovernmental review process. Comments are directed to the federal agency and then forwarded to the CMP. Additional public participation will be provided if deemed necessary.

Economic Concerns. The State of Ohio does not have any policies that state how the environmental costs should be weighed against the economic benefits of a dredging project.

Habitat, Sediment, & Water Quality. There are no policies that outline the level of chemical and/or biomonitoring data needed to make dredging permitting decisions. However, there is a policy that states that the Director may prior to the issuance of a §401 water quality certificate, require that the applicant perform various environmental quality tests including, but not limited to, chemical analyses of water, sediment or fill material, and bioassays. The only policy statements made in reference to acceptable contaminant levels are that, dredging projects must meet water quality standards to obtain a §401 water quality certification. ODNR's Division of Wildlife has established dredging windows for fish spawning. The DGS does request that textural analysis of channel sediment to project depth be performed in order to determine if dredged sediment is texturally suited for nearshore disposal.

Dredging Techniques & Best Management Practices. The use of shallow draft vessels capable of placing sandy sediment in shallow nearshore waters is preferred.

Dredged Material Disposal. With regard to management of sand dredged during maintenance of channels along Lake Erie, the DGS has advocated for more than 30 years that sandy sediments dredged from a channel be returned to the littoral system, down drift of the channel. Nearshore or shoreline disposal nourishes beaches and mitigates some of the adverse impacts on the littoral system and shore down drift of the channel arising from the impoundment of coarse-grained littoral sediment in the channel or up-drift of jetties protecting the channel. Maps identifying areas of waterways likely to contain sandy sediment, maps showing locations for sampling, standards for sampling, standards for nearshore/shoreline disposal sites, and maps

²⁰ ODNR's Coastal Permits and Lease Application. <u>Http://www.dnr.state.oh.us/odnr/relm/coastal/conapp.htm.</u>09/07/99.

²¹ Section 401 Water Quality Certification Application Form. <u>Http://chagrin.epa.state.oh.us/programs/401/401app.html.</u>09/07/99.

Dredging in Ohio

of nearshore disposal sites down drift of the major harbors were developed to facilitate evaluation of sediment for disposal in the littoral system.

DGS requests that samples be collected for textural analysis as part of the application process to obtain a §10/404 permit to construct or maintain a channel. In cooperation with the ACE, DGS identifies sample locations and reviews the results of textural analysis to determine if any of the sediment is suited, based upon texture, for nearshore/shoreline disposal. After review of the textural data, DGS makes recommendation to the ACE regarding suitability of the sediment and location of a disposal site. Typically coordination with the applicant occurs in advance of or concurrent with the application process

Marina channels should be sampled to project depth to determine if sediment is suitable for nearshore/shoreline disposal. If sand content is greater than 80%, sediment is deemed suitable for nearshore/shoreline disposal. Sandy sediment should be returned to the littoral system, down-drift of the channel from which it is dredged and in water depths no greater than that from which it is dredged.

The CMP has developed general priorities for the location of dredge disposal sites. Evaluation of all projects depends upon the specific characteristics of the situation and the site. Areas for the disposal of dredged material determined not suitable for open-lake disposal, in order of their relative priority are: 1) upland sites; and, 2) nearshore confined sites.²² CMP policy statements indicate that such in-water disposal sites should be confined. Open water disposal options should be examined to ensure that natural resources and beneficial uses of Lake Erie are adequately protected. In-water disposal of contaminated dredged sediments has eliminated large areas of open water and submerged lands and underwater resources and remains a concern.

Beneficial Use of Dredged Material. The State of Ohio does not have a definition of beneficial use; however, it does advocate that sand and gravel be returned to the littoral zone down drift of a project to reduce erosion by nourishing and restoring beaches down drift of the project site. The CMP uses a integrated management approach to fully explore upland and in-lake sediment reuse options as opposed to open lake disposal options.

State Specific Issues. The issue of open water disposal of sand is one that Ohio identified as being controversial. Open-lake deepwater disposal of sand and gravel dredged from navigation channels removes sand from the littoral system contributing to long-term degradation of the Ohio coastal zone. Natural replenishment or replacement of sand removed from the littoral system as a byproduct of channel maintenance may take years to decades. Despite more than 25 years of encouraging appropriate sand management measures and adopting this philosophy in OCMP policies 17 and 37, the OCMP has found the open-lake disposal of sand resources in federal maintenance dredging projects to be a continued problem. The OCMP needs to improve the application of its consistency authority and ultimately, the federal government needs to adopt littoral zone disposal of dredged sand material as an important environmental benefit in its calculation of the Federal Standard for disposal methods (i.e. selecting the least cost, environmentally acceptable disposal alternative).

Examples of the many beneficial use projects are presented below. Most of the beneficial use projects have been at private, and to a limited extent state, facilities.

- Most private marinas sidecast sand to the downdrift shoreline. Among the numerous examples along the lakeshore, the bypassing at Mentor Harbor has had the most dramatic effect on the downdrift shoreline. Sand dredged from the marina channel at Geneva State Park is placed in the nearshore east of the marina.
- A permanent hydraulic bypass system was installed at a marina near Huron.
- Sand dredged during construction and maintenance of West Harbor was placed in the nearshore at East Harbor State Park.

²² U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management and Ohio Department of Natural Resources. *State of Ohio Coastal Management Program and Final Environmental Impact Statement*. March 1997. Part II 5-75.

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- Manufactured soil was made using sediment from the CDF at Toledo.
- Sand from Conneaut Harbor will be placed along the shoreline downdrift (east) of Conneaut. A preliminary project (40,000 cubic yards) will be conducted in 2000, followed by a larger scale project (1 million cubic yards) in 2002. Much of the credit for this project should be given to the initiative of the Pennsylvania CMP who felt that open-lake disposal of the sand dredged from Conneaut, located near the Ohio-Pennsylvania state line, would contribute to further erosion of the Pennsylvania shore and would therefore be inconsistent with the Pennsylvania CMP.
- The ACE is working on a project to use sediment dredged from channels at Sandusky to create a wetland along the Conrail tracks in Sandusky Bay.

Ohio Dredging Contact Information:

Mike Colvin, Administrator Email: mike.colvin@dnr.state.oh.us Division of Real Estate and Land Management 1952 Belcher Drive, C-4 Columbus, Ohio 43224 614-265-6413 Fax: 614-267-2981 Internet: Http://www.dnr.state.oh.us/odnr/relm/coastal/cmp.htm

- 1. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management and Ohio Department of Natural Resources. *State of Ohio Coastal Management Program and Final Environmental Impact Statement*. March 1997.
- ODNR's Coastal Permits and Lease Application. <u>Http://www.dnr.state.oh.us/odnr/relm/coastal/conapp.htm.</u>09/07/99.
- 3. Section 401 Water Quality Certification Application Form. <u>Http://chagrin.epa.state.oh.us/programs/401/401app.html.</u> 09/07/99
- 4. Ohio Administrative Code §3745-1, 3745-2, 3745-32, 1506.11,1505.07, 1505.99, 1501-6-03
- 5. Ohio Revised Code Annotated §611.03, 6505.07
- 6. Don Guy, Ohio Division of Geological Survey. Comments on the Draft Ohio Dredging Template. 2/7/00.

Dredging in Oregon

Coordination Mechanisms & Permit Processing. A permit is required by Oregon's removal-fill law for projects that remove or fill 50 cubic yards or more of material in waters of the state, or for projects of any size located in State Scenic Waterways and in essential indigenous anadramous salmonid habitat areas. This program is administered by the Oregon Division of State Lands (DSL). Removal-fill permit review time takes up to 90 days. The DSL and the U.S. Army Corps of Engineers (ACE) have a joint permit application for projects that fall under §404 and state removal-fill permitting. The Division of Land Conservation and Development (DLCD) which houses the Coastal Management Program (CMP), strives to issue joint CZM public notices with the ACE and the DSL. Coordination among these agencies is informal for the most part. The DLCD Statewide Planning Goals & Guidelines are considered to be the CMP's enforceable policies (but not the only enforceable policies applicable to dredging, i.e. local comprehensive plans and land use regulations). Other permits that may be required for dredging activities include, §401 water quality certification, ocean shores permit, and access permits (if dredged material is to be hauled on state highways to reach a disposal site). These permitting programs run by state agencies other than the DLCD, are part of the Coastal Management Program through the incorporation of their implementing legislation.

There is an important distinction between how the state reviews federal dredging projects and non-federal dredging projects. The DSL generally does not require permits for federal dredging /disposal projects, both deepening and maintenance work. DSL refers to this as the navigational servitude exemption which is articulated in the DSL rules. Therefore, the Removal-Fill law does not apply to the Federal Government acting in its capacity of navigational servitude. OAR 141-85-020(3). This means that, for ACE and EPA projects, coastal zone review is the only coordination mechanism.

Information on federal consistency and removal-fill permits is available on the CMP web-page and on the Oregon Division of State Lands web-page.²³ Each of these sites offer brief descriptions of uses that are regulated along with printable permit applications and links to statutes and administrative rules for permit applicants. Pre-permit application meetings are available upon request and depending upon the type of project, the state may encourage pre-permit meetings.

Economic Concerns. The removal-fill statute states that when determining if a permit should be issued the following should be considered: public need and the social, economic, or other public benefits likely to result from the fill. All of these factors, including the environmental consequences of the project are to be considered in the evaluation. The dredge/fill test required under Goal 16 and local estuary management programs does require a demonstration that the project will provide substantial public benefit. Also, the inventory/effects evaluation requirement under the Territorial Sea Plan (for ocean activities) requires consideration of commercial and recreational fishing industries, transportation modes, time schedules, and port concerns.

Navigation and port projects that are seeking money from the State Marine Navigation Improvement Fund must submit a cost/benefit analysis which identifies the benefits of the project to the local community, the region, and the state as a whole. Other than the Marine Navigation Improvement Fund, cost/benefit analyses are not formally required by the removal-fill statute.

Habitat, Sediment, & Water Quality. The Statewide Planning Goals for the DLCD do not contain any policies that outline the level of chemical and/or biomonitoring data needed to make dredging permitting decisions. However, Goal 6 ensures that all waste and process discharges from future development shall not threaten to violate applicable state or federal environmental quality statutes (i.e. water quality standards). The Dredge Material Evaluation Framework (DMEF) created for the Portland Harbor Sediment Management Plan is used by the Department of Environmental Quality to determine sediment suitability for disposal. The DMEF consists of a three tiered approach of evaluating historic sediment data and information, methods for determining if additional sediment sampling is needed, and outlining additional physical, chemical, and biological testing requirements that may be needed. The DMEF was prepared by the ACE, the DEQ, the

²³ Oregon Division of State Lands. <u>Http://statelands.dsl.state.or.us/</u>. 12/2/99.

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Environmental Protection Agency, and the State of Washington's Department of Ecology and Department of Natural Resources.

The removal-fill rules do dictate that a permit will not be issued unless it is determined that the project will be consistent with water quality and toxic effluent standards of the State of Oregon. The evaluation of projects that are being considered for a removal-fill permit does include the effects of hydraulic characteristics on water circulation, tidal fluctuation, current patterns, and flood hazards.

Timing guidelines are established by the Oregon Department of Fish and Wildlife for important game fish as well as endangered and threatened species. Guidelines are set to protect fish species during vulnerable life stages such as during spawining, migration, and rearing periods. The timing windows are generally required as a condition of state approvals as a way to minimize impacts to aquatic habitats.

According to the DLCD Statewide Planning Goal for Estuarine Resources, estuarine areas are divided into three categories: natural management units; conservation management units; and, development management units. Dredging is highly restricted in natural and conservation management units which are to be preserved for natural and renewable resources. Navigational channels and existing facilities are generally classified as development management units where dredging is allowed. The Ocean Resources Goal requires that local governments identify and protect areas of important biological habitat, including kelp and other algae beds, seagrass beds, rock reef areas, areas of important fish, shellfish and invertebrate concentration, feeding areas, spawning areas, nurseries, and migration routes. Under the removal-fill law, dredging in designated essential salmonid habitat is restricted and project applications in these areas are the subject of much scrutiny.

Dredging Techniques & Best Management Practices. Some local plans do outline preferred dredging techniques and methodologies, but there are none found in the DLCD Statewide Planning Goals.

Dredged Material Disposal. There are no policies that dictate that a statewide long-term dredged material management plan be prepared. The Statewide Planning Goal 16, Estuarine Resources, states that local programs must include specific sites and procedures for disposal and stock-pilling of dredged materials. Disposal of dredged material in uplands or in ocean waters is encouraged and disposal in intertidal or tidal marsh estuarine areas is not preferred unless part of an approved fill project. Areas that are identified for dredged material disposal are to be protected from new uses and activities which might prevent their ultimate use for dredged material disposal. Statewide Planning Goal 19, Ocean Resources, directs federal, state, and local governments to provide for suitable sites and practices for the open seas discharge of dredged materials. According to the aforementioned DMEF, contaminated sediments that are unsuitable for in-water unconfined disposal will be evaluated for suitability of disposal in upland or in-water confined disposal locations.

Beneficial Use of Dredged Material. Beach nourishment has been performed by the ACE at a few sites in Oregon. However, there are no state policies on the beneficial use of dredged material.

State Specific Issues. The Oregon CMP has identified the following complex issues that they are currently trying to address: 1) The assessment of impacts from ocean disposal over time, specifically thin vs. point dumping disposal and the short and long-term impacts to benthos, invertebrates, and fish; 2) Selecting new or revised ocean disposal sites with very limited scientific information; 3) Understanding the potential impacts of dredging and disposal in Oregon's estuaries on aquatic species, particularly salmonids; 4) To have a better understanding of how watershed management might affect downstream sedimentation and subsequent dredging needs; and, 5) Addressing impacts to navigational safety at existing ocean disposal sites.

Dredging in Oregon

Oregon Dredging Contact Information:

Christine Valentine, Coastal Agency Coordinator DLCD, 635 Capitol Street NE, Suite 150 Salem, OR 97301-2540 Phone: 503-373-0050 Fax: 503-378-5518 Email: christine.valentine@state.or.us Internet: <u>Http://www.lcd.state.or.us/coast/ocmphome.htm.</u>

- 1. Oregon Land Conservation and Development Commission. Oregon Coastal Management Program 1976.
- 2. Department of Land Conservation and Development. Oregon's Coastal Management Program 1988.
- 3. Department of Land Conservation and Development. *Oregon's Statewide Planning Goals & Guidelines.* 1996 Edition. <u>Http://darkwing.uoregon.edu/~pppm/landuse/Intro.html.</u> 8/11/99.
- 4. Oregon Administrative Rules Division of State Land Division 85 Removal and Fill Permits, Division 17 Classifying Oregon Estuaries.
- 5. Oregon State Archives: Oregon Administrative Rules Division 27 Marine Navigation Improvement Fund. <u>Http://arcweb.sos.state.or.us/rules/OARS 100/OAR 123/123 27.html.</u> 8/13/99.
- 6. Portland Harbor Sediment Management Plan. <u>Http://www.deq.state.or.us/wmc/cleanup/portlandharbor/portlandharbor.htm.</u> 12/2/99.
- 7. Oregon Department of Environmental Quality. <u>Http://www.deq.state.or.us.</u>
- 8. Christine Valentine, Coastal Agency Coordinator, Department of Land Conservation and Development. Comments on the Oregon Draft Dredging Template. 11/22/99.

Coordination Mechanisms & Permit Processing. Generally, a §401 water quality certification and a water obstruction and encroachment permit are needed for dredging projects. Water quality certifications regulate impacts to water quality and water obstructions and encroachment permits regulate activities which change, expand, or diminish the course, current, or cross section of a watercourse, floodway, or body of water. These permits are issued by the six regional offices within the Department of Environmental Protection (DEP). The Pennsylvania Coastal Zone Management Program (CZMP), located in the central office, is a networked coastal program and relies on existing state permit requirements/regulations. CZMP reviews these state permit applications and provides comments back to the issuing agencies. CZMP federal consistency is given once all state permits have been issued. CZMP policies require that dredging and spoil disposal will be regulated to protect against obstruction to navigation, reduction in flood flow capacity, damages to the public interest, and impacts to fish and wildlife habitats.

Applications for water obstructions and encroachment permits, including dredge and fill activities are reviewed by the Regional Soils and Waterways Section permitting staff. Water obstructions and encroachments must comply with Pennsylvania's Clean Streams Law which requires that all earth moving activities must have an erosion and sedimentation (E & S) control plan. Actual dredging activities do not require an E & S control plan. However, construction and maintenance of a dredge disposal dike does require an E& S plan. By administrative decision, DEP has concluded that the only pollution threat from water obstructions and encroachments is from sediment pollution during construction. Therefore, in most cases, the §401 water quality certification is issued based on the applicant's documentation that an adequate or approved E & S control plan has been developed and will be implemented during construction.

Although dredging is regulated as a physical encroachment, dredged material is defined as a solid waste. Dredge material is sometimes used or disposed of as clean fill. Dredging of contaminated sediments, however, requires a coordinated review by DEP's Water Quality and Waste Management Programs to address concerns related to resuspension of pollutants, impacts on water quality parameters, and proper disposal of waste material. Water quality evaluates potential for discharge of pollutants and considers the impacts of the activity based on the classification of the body of water, water quality standards and the Commonwealth 's anti-degradation program. Waste Management reviews the types and concentrations of pollutants to assure disposal in a properly designed and approved site. The decision to issue or deny the commonwealth's applicable water obstruction and encroachment, water quality or waste management permits provides the basis and vehicle for granting or §401 water quality certification.

For private dredging activities, a joint permit application (one application submitted for both state and federal permits) must be submitted to a DEP regional office to apply for the state issued §401 certification and encroachment permit, and federally issued U.S. Army Corps of Engineers' (ACE) §10 and §404 permits.

Under DEP's Money-Back Guarantee Permit Review Program, the regional offices have up to 130 days to issue these two state permits (provided a permit application is accurate and complete when first submitted). These two state permits are issued concurrently. A consistency determination is given thereafter, but no later than six months after receipt of a complete application. These state permits are valid in perpetuity.

Under the Commonwealth's Dam Safety and Encroachments Act, federal agencies are exempted from obtaining a water obstructions and encroachment permit; however, a §401 certification, and CZM consistency determination are required. DEP has up to 1 year to issue a §401 certification and up to 45 days to concur with a federal consistency certification. Maintenance dredging (in addition to the initial deepening projects) will require additional §401 and CZM consistency requests.

There is a great deal of informal coordination amongst federal and state agencies to discuss application completeness, need for additional information, water quality and environmental impacts, spoil testing requirements, disposal location, and if the use of the ACE/Pennsylvania state programmatic general permit is applicable. DEP's joint permit application contains both general and specific information as well as fact sheets concerning the joint permit process, required information, and state agency contacts, addresses and phone numbers. Anyone who is unfamiliar with DEP's permitting process, or has large-scale projects

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planned may request a pre-application conference with a regional DEP office before completing a permit application. ACE districts are invited to participate.

On a more formal level, CZM sponsors the Urban Waterfront Action Group (UWAG), a one stop permit shopping forum for projects proposed in the Delaware Estuary Coastal Zone. DEP's Division of Waterways, Wetlands and Erosion Control (central office) holds a monthly Environmental Review Committee meeting to discuss project impacts upon the environment.

There is an on-line permit information system for the Pennsylvania DEP located at <u>http://:www.dep.state.pa.us/dep/fix/permits</u>. This web-page provides a detailed overview with contacts, processing times, other approvals needed, public comment / participation, and fees. Permit review procedures and federal consistency guidance for the CZMP are included in Chapter 4 of the *Commonwealth of Pennsylvania Coastal Zone Management Program Guidance Document-March 31,1999.* This document is downloadable in zipped format from the DEP web-page. However, most consistency guidance is provided by the CZMP over the telephone when the project is discussed with the applicant.

Applications for §401 certifications and state encroachment permits are published in the *Pennsylvania Bulletin*, the official state gazette. The public has 30 days to provide comments on the project. If warranted, a public meeting may be held. Additionally, the ACE solicits comments through their public notice. In addition, there are encouragement policies for public involvement and participation for CZMP programs and projects (policies 10.1, 10.2, 10.3).

Economic Concerns. Pennsylvania does not have any policies that specifically deal with the economics of a dredging project. There are however, three encouragement policies that support port development and planning in order to supplement economic stability and growth. Since dredging is a key component of maintaining and improving a port's capabilities, these economic factors may be incorporated into a project's review, even though they are not enforceable policies. Title 25 Pa. Code §105 (regulations for water obstructions and encroachment permits) contain permit application review criteria for a dredging project's impacts upon the environment.

In addition, possibly Title 25 Pa. Code § 95.1 contains requirements that apply to any discharge of pollutants proposed in High Quality or Exceptional Value waters. In the case of High Quality Waters, if the proposed discharge will not maintain or enhance existing water quality, it must be affirmatively demonstrated by the proposed discharger that the discharge is justified as a result of necessary economic or social development which is or significant public value.

Habitat, Sediment, & Water Quality. Pennsylvania CZMP polices state that coastal waters shall not contain substances that would be harmful to the water uses or to human, animal, or aquatic life.

Title 25 Pa. Code §93 promulgated under the Pennsylvania Clean Streams Law, sets forth water quality standards for the waters of the Commonwealth, including wetlands. These standards are based upon water uses which are to be protected and will be considered by DEP in its regulation of discharges. Where interstate or international agencies under an interstate compact or international agreement establish water quality standards regulations applicable to the waters of the commonwealth, including wetlands, more stringent than those in this title, the more stringent apply.

Title 25 Pa. Code §16 (Water Quality Toxics Management Strategy). This section contains water quality criteria (numerical in-stream limits for parameters or stream conditions) for Federal Clean Water Act section 307(a) priority pollutants and other toxic substances that need to be maintained or attained to prevent or eliminate pollution, and protect the water uses listed in aforementioned Title 25 Pa. Code §93.

Presently, DEP considers dredge material as construction/demolition waste as defined under the Solid Waste Management Act and its regulations. A landfill permit is required prior to disposal and a general permit is

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required prior to beneficial use. The general permit program is well established with permitting procedures and policies that include description and characterization of chemical and physical properties of the waste, testing and analysis, limits to be met, and a demonstration that the beneficial use will not harm or impact human health or the environment. DEP requires the Environmental Protection Agency's SW-846 methodologies to be used in reviewing and approving general permits.

In the Delaware Estuary Coastal Zone Title 25, Pa. Code §16 (Water Quality Toxics Management Strategy) covers chemical parameters for testing of core samples and requirements for disposal of dredged material. The parameters include metals, volatile organics, semivolatile organics, pesticides, TPH, pH, and PCBs. The applicant is also requested to perform the Toxicity Characteristic Leaching Procedure (TCLP) and Modified Elutriate Test.

DEP does not have a regulatory mixing zone per se for meeting water quality criteria. The point of compliance is established by the criteria compliance times for each criterion, involving mixing with the receiving stream at the appropriate design flow. Criteria, effluent limitations and treatment requirements are determined and applied as prescribed in Title 25 Pa. Code §93, 16 and 95.

The Pennsylvania Fish and Boat commission requires that no work is to be performed in Lake Erie tributary streams from March 1st to June 15th and September 1st to December 31st in order to protect stocked and spawning fish. The main stem of the Delaware River is broken down into various ranges for dredging windows. Generally, no hydraulic dredging is allowed from March 1st to August 31st and no bucket dredging is allowed from March 1st to November 30th.

Dredging is restricted in Special Protection Waters (High Quality or Exceptional Value Waters) classified under Title 25 Pa. Code §93.

Dredging Techniques & Best Management Practices. Hydraulic dredging is recommended instead of mechanical dredging whenever feasible. DEP has no written policy on economic loading. However, the Philadelphia COE has requested to perform economic loading in the Delaware River and DEP's response deemed it to be an unfavorable method, indicating that other alternative methods should be used instead.

Dredged Material Disposal. Under the CZMP Actions section of Policy #2.1 for dredging, it does state that, "The CZMP will explore measures to resolve the problem of determining proper means for disposal of spoils resulting from vital channel dredging activities in coastal ports."

The Act of March 14, 1956, Act Number 385 (P.L. 1271) states that the Commonwealth of Pennsylvania has agreed to furnish spoil disposal areas in Pennsylvania, to the ACE for maintenance dredging of the Delaware River between Allegheny Avenue, in Philadelphia Pennsylvania, and Trenton Marine Terminal, in Trenton, New Jersey.

A 10 year Spoil Disposal Agreement between the Commonwealth of Pennsylvania and Waste Management of Pennsylvania, Inc. was signed on December 28, 1992, in which a spoil disposal area would be provided by Waste Management, Inc. to the Commonwealth for use by the ACE, as set forth in the Act of March 14, 1956.

As a result of the Act of March 14, 1956, and the 10 year Spoil Disposal Agreement between Commonwealth of Pennsylvania and Waste Management of Pennsylvania, Inc., dredge material removed from the Delaware River during maintenance dredging is used by Waste Management, Inc. as daily cover at their landfill in Falls Township, Pennsylvania.

Prior to dredging from Presque Isle Bay (Area of Concern), any material proposed for disposal in the ACE's Erie Confined Disposal Facility must be sampled and tested in situ, in accordance with a "Sample Collection and Testing Protocol. Samples being processed by approved laboratories will implement the "Standard

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Elutriate Test" in accordance with the ACE's Inland Testing Manual and the document "Ecological Evaluation of Proposed Discharge of Dredged or Fill Material into Navigable Waters" as authorized in Rules and Regulations, Transportation for Dumping of Material into Ocean Waters, Title 40, Chapter H, Part 22, Section 7.61(c), Federal Register, Volume 38, No 198, 15 October 1973.

The Pennsylvania DEP does participate in the Great Lakes Dredging Team. The Great Lakes Dredging Team has prepared guidance documents on contaminated sediments, dredged material management, testing and evaluation, and soil erosion and sedimentation. Guidance on confined disposal facilities (CDFs) may be used by the DEP. Other CDF requirements may be addressed in the §401 Water Quality Certifications issued to the ACE and others using the Fort Mifflin Confined Disposal Facility. These include requirements to sample the discharge for specific parameters during the discharge from the facility to the Delaware Estuary, and submit results to DEP.

Beneficial Use of Dredged Material. Pennsylvania has no policies concerning beneficial use of dredged material. Beneficial use projects are entertained on a case-by-case basis.

The Solid Waste Management Act, as amended, defines beneficial use as, "Use or reuse of residual waste for commercial, industrial or governmental purposes, if the use doesn't harm or threaten public health, safety, welfare or the environment, or the use or reuse of processed municipal waste for any purpose, if the use does not harm or threaten public health, safety, welfare or the environment."

State Specific Issues. Pennsylvania has identified two issues related to dredging that are complex and/or controversial: 1) participation in a TMDL determination by the Delaware River Basin Commission for two VOCs, and chronic and acute toxicity; and, 2) the proposed deepening of the Delaware River Navigation Channel by the Philadelphia ACE. DEP is not attempting to address either of these two issues independently, but is taking part as a member of the Delaware River Basin Commission and its Toxics Advisory Committee, as it considers these issues.

Currently, the DEP is in the process of redefining fill ("clean fill" under current Solid Waste regulations) including materials that qualify as fill. The draft policy on fill that is under preparation includes dredge material if it is not contaminated.

Despite lacking a beneficial use policy, the commonwealth has had several beneficial use projects take place in the last several years. 1) In 1999, the Pennsylvania CZM Program required the Buffalo District ACE to place approximately 40,000 cubic yards of material dredged (maintenance) from the Municipal Pier of Conneaut Harbor, Ohio, along the Ohio shoreline of Lake Erie. It is expected that this dredge material will be carried downdrift by the Lake's littoral drift system and replenish Pennsylvania's eroding beaches. 2) State encroachment permit E51-141 and ACE permit 199500912-15 both issued in 1995 to the City of Philadelphia, Division of Aviation. The Division of Aviation was permitted to perform maintenance dredging of the ACE's Delaware River Federal Navigation Channel, and use the approximately 2.2 million cubic yards of material dredged to construct their proposed Runway 8-26 at the Philadelphia International Airport. 3) State encroachment permit E25-585 and COE permit 199900813 both issued in July, 1999 to Presque Isle State Park. The state park was permitted to remove and maintain dredging of accumulated sand (approximately 60,000 cubic yards) located within Thompson Bay in Presque Isle State Park, and place it along 2,500 linear feet of Beach Number 10 for beach replenishment.

Pennsylvania Dredging Contact Information:

Lawrence J. Toth, Environmental Planner E. James Tabor, Chief E. James Tabor, Chief Coastal Zone Management Section Bureau of Watershed Conservation Department of Environmental Protection PO Box 8555 400 Market Street, 10th Floor Harrisburg, PA 17105-8555 717-787-5259 Fax: 717-787-9549 Internet: <u>Http://www.dep.state.pa.us/dep/DEPUTATE/Watermgt/WC/subjects/czmp.htm</u>

- 1. Pennsylvania Coastal Zone Management Program, Department of Environmental Protection. Commonwealth of Pennsylvania Coastal Zone Management Program Guidance Document (includes routine program changes to 1996). March 31, 1999.
- 2. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and Coastal Zone Management Branch, Office of Resources Management, *Pennsylvania Department of Environmental Resources. Commonwealth of Pennsylvania Coastal Zone Management Program and Final Environmental Impact Statement - August 1980.*
- 3. Pennsylvania Department of Environmental Protection Permits Guide. <u>http://:www.dep.state.pa.us/dep/fix/permits</u>. 6/22/99.
- 4. Pennsylvania Coastal Management Program. <u>Http://www.dep.state.pa.us/dep/DEPUTATE/Watermgt/WC/subjects/czmp.htm.</u> 6/22/99.
- 5. Lawrence Toth, Environmental Planner, PA Coastal Zone Management Section. Comments on Pennsylvania Draft Dredging Template. 1/24/00.

Dredging in Puerto Rico

Coordination Mechanisms & Permit Processing. Permits for dredging and filling are issued by the U.S. Army Corps of Engineers (ACE). The Puerto Rico Planning Board does however, have the authority to deny an endorsement of a permit pursuant to the Islandwide Land Use Plan criteria for diking, filling, dredging, and deposit of dredged sediments. Other permits related to dredging and filling activities include the Department of Natural and Environmental Resources' (DNER) permit for the extraction of the earth's crust materials for extractions that occur underneath of the water table and the Environmental Quality Board's (EQB), Erosion and Sedimentation Control Plan.

There is both formal and informal coordination among federal and state agencies with monthly and annual interagency meetings where applicants may receive a pre-application consultation. Last year, a joint permit application process was established between the Planning Board, DNER, EQB, and the ACE for activities which may alter or affect water resources including wetlands, within Puerto Rico. DNER receives all applications and distributes them to the other agencies. Each agency has 20 days after receiving the application to acknowledge receipt, notify the applicant of the appropriate application number and of the status and completeness of the application.

Economic Concerns. From the Islandwide Land Use Plan, it is clear that the environmental costs of a dredging project are highly weighed during the review of a project. Disruption of natural resources should be minimized and dredging should be avoided when dredged materials are highly polluted.

Habitat, Sediment, & Water Quality. The U.S. Environmental Protection Agency (EPA), standards are used for sediment and water quality sampling. Policies do state that where sediments are highly contaminated, dredging shall be avoided to the maximum extent practicable.

Information regarding recommended dredging window time-frames for permits is obtained from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Special protection consideration when permitting dredging projects is given to the Natural Reserves and Special Planning Areas.

Dredging Techniques & Best Management Practices. Preferred or restricted dredging techniques or methodologies were not found, they are determined on a case-by-case basis. However, the design and location of a dredging project must take into consideration factors such as existing water depths, water circulation, and siltation patterns in an effort to control sedimentation.

Dredged Material Disposal. Dredged material that meets EPA criteria may be deposited at open water sites designated to minimize potential adverse impacts on marine organisms, or in fill sites specifically authorized by the DNER. Dredged material shall not be transported from coastal waters to mangrove wetlands, estuarine, or freshwater areas for disposal.

Dredged material that will exceed water quality criteria must be placed on dry land in a manner that prevents pollution of marine, underground or surface water. Disposal of dredged material on land is rare because upland areas for disposal are scarce. If land disposal is infeasible or environmentally unacceptable, it may be deposited at deep ocean sites that are approved by the EPA.

Beneficial Use of Dredged Material. Beneficial use of dredged material is preferred.

State Specific Issues. Puerto Rico did not identify any complex or controversial issues related to dredging or dredged material management.

Puerto Rico Dredging Contact Information:

Damaris Delgado, Director Email: prczmp@caribe.net Bureau of Reserves, Refuges, and Coastal Resources Department of Natural and Environmental Resources Pda. 3-1/2, Munoz Rivera Avenue Puerta de Tierra PO Box 9066600 San Juan, Puerto Rico 00906-6600 787-721-7593 Fax: 787-721-7591

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and Commonwealth of Puerto Rico, Department of Natural Resources, Puerto Rico Planning Board. *Puerto Rico Coastal Management Program and Final Environmental Impact Statement.* 1979.
- 2. Assessment of Elements of the Puerto Rico Coastal Zone Management Program and Strategy for Inducing Recommended Program Changes. 1992.
- 3. Damaris Delgado, Director, Bureau of Reserves, Refuges, and Coastal Resources. Comments on Dredging in Puerto Rico. 2/25/00.

Dredging in Rhode Island

Coordination Mechanisms & Permit Processing. The Rhode Island Coastal Resources Management Council (CRMC) is the lead state agency for all dredging activities and issues. The CRMC serves to coordinate between the Army Corps of Engineers (ACE) and the Rhode Island Department of Environmental Management (DEM). The CRMC leads a Dredging Advisory committee that has two immediate purposes: 1) assist with the ACE maintenance dredging project of the Providence River; and 2) advise the CRMC on the development of a dredged material management plan. The DEM must classify materials to be dredged before any CRMC action can take place. An assent from the CRMC is needed along with a §401 water quality certification for dredging projects. Pre-application meetings are encouraged. Guidance is provided on how to apply for an assent, which regulations are applicable, and what type of assent is needed for the project. A dredging permit application package has been developed that also contains a water quality certification application. A public hearing must be held within 30 days of filing an application for a permit with the CRMC for a dredging activity.

Economic Concerns. Rhode Island has no policies that dictate how the economic benefits of a dredging project should be weighed against the environmental costs. There is however, a policy for the filling of tidal waters that states that, the Council should weigh the public benefit to be served by the proposal to fill tidal waters against the loss or degradation of the affected public resource(s). The CRMC authorizing legislation states that it is in the interest of the state to have a general maintenance dredging policy to avoid adverse impacts on the economy of the state. The CRMC may use the expertise of the University of Rhode Island or the Economic Development Commission for review or preparation of cost/benefit analyses. However, there are no policies that require that an analysis be prepared.

Habitat, Sediment, & Water Quality. All materials to be dredged for either open water or upland disposal must be classified by the DEM based upon an approved analysis process prior to the CRMC acting on an application for dredging or disposal of dredged material. This classification system is based upon contaminant levels. All water quality and sediment analysis is conducted and reviewed through the DEM prior to CRMC action. The results of monitoring programs required by dredging policies must be made public.

As part of applying for a CRMC category B assent, the applicant must demonstrate that the activity will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation. The standards that are set for dredging activities includes that the bottoms of dredged areas shall slope downwards into the waterway so as to maximize tidal flushing. Standards for dredged materials that are being used in the creation of wetlands, aquatic habitat or islands state that the project must be subject to sufficient tidal action to provide adequate flushing.

The applicant in applying for dredging activities to the CRMC, shall limit dredging and disposal to specific times of the year in order to minimize impacts on fish and shellfish unless they can demonstrate that the impacts will not be significant or controlled by other measures. Dredging window guidelines are supplied by the DEM's Division of Fish and Wildlife.

Dredging for navigational purposes is not permitted in Type 1 waters and only maintenance dredging may be permitted in Type 2 waters. Type 1 waters include: water areas that are within or adjacent to the boundaries of designated wildlife refuges and conservation areas; water areas that have retained natural habitat or maintain scenic values of unique or unusual significance; and/or, water areas that are particularly unsuitable for structures due to their exposure to severe wave action, flooding, and erosion. Type 2 waters include waters in areas with high scenic value that support low-intensity recreational and residential uses. These areas include seasonal mooring areas where good water quality and fish and wildlife habitat are maintained. ²⁴

Dredging Techniques & Best Management Practices. There are no preferred or restricted dredging techniques or methodologies identified in the CRMC policies. There are standards for dredging activities

²⁴ State of Rhode Island Coastal Resources Management Program, As Amended - Original Edition June 1996. Section 200.1,200.2.

Dredging in Rhode Island

that state that dredging shall be planned so as to avoid undermining adjacent shoreline protection facilities and/or coastal features, but these standards do not identify how this can be achieved.

Dredged Material Disposal. Section 24-23-1 of the Rhode Island General Laws, states that the CRMC is designated as the lead state agency for purposes of dredging in tidal waters and as such shall have the following duties and responsibilities: 1) coordinate the interest of the state with regard to dredging; 2) formulate and adopt a state policy with regard to dredging which integrates those interests; 3) cooperate with, negotiate, and to enter into agreements on behalf of the state with the federal government and with other public bodies and private parties with regard to dredging; 4) act as the initial and primary point of contact for all applications to the state for dredging projects in tidal waters; 5) develop, prepare, adopt pursuant to §46-23-11, implement, and maintain a comprehensive plan for dredge material management; and, 6) cooperate and coordinate with the departments of Environmental Management, Transportation, Administration, and Health and the Economic Development Corporation in the conduct of these duties and responsibilities. Currently, the CRMC is in the developmental stages of a dredged material management plan.

The CRMC favors offshore open-water disposal for large volumes of dredged materials, providing that environmental impacts are minimized. Disposal of dredged materials on or adjacent to coastal wetlands in Type 1 and 2 waters is prohibited. Disposal is also prohibited on coastal wetlands that are designated for preservation and adjacent to Type 3, 4, 5, and 6 waters.

Applicants must demonstrate that dredged materials from a marine source that are to be disposed of at an upland site will not release pollutants that could cause significant threats to groundwater or cause other environmental harm. For polluted dredged material that is to be disposed of in open water, clean, course-grained materials must be deposited to cap the spoil mound and minimize the release of any potential contaminants to the water column. The cap shall have a minimum thickness of six inches.

Standards for the placement of dredged material at upland sites include: dewatering must occur behind a berm or bulkhead of sufficient height to contain the material; and, after dewatering, the material must be vegetated or otherwise stabilized and grading must be done to prevent surface ponding. When materials are placed behind a wall or bulkhead the project must be engineered to resist the pressure of the material and must have a filtering device so as not allow any fines to escape.

Standards for open water disposal include: material may not be placed on prime fishing grounds; materials must be dumped solely within the confines of an approved site; hydrographic conditions must allow for minimal re-suspension of materials; and, an environmental monitoring program including physical and biological conditions must be carried out for at least one year.

Beneficial Use of Dredged Material. The CRMC has an encouragement policy to use innovative nearshore methods of dredged materials disposal. Types of innovative nearshore methods of dredged materials disposal are listed as: creation of wetlands, shellfish habitat, and beach nourishment in suitable areas. Standards for using dredged materials in the creation of wetlands, aquatic habitat, or islands include: the area must be sheltered from extensive wave action but have good tidal flushing; materials must be pumped into a confined area that will permit sediment consolidation and prevent erosion; and, a physical and biological environmental monitoring program must be conducted for at least one year. Standards for beach nourishment using dredged material include: the materials must be predominantly clean sands that have a compatible grain size as the area to be renourished and the materials must be placed on the down-drift side of any inlet. The South Shore Restoration Project plans to use sand and sediment from flood tidal deltas to nourish nearby beaches.

State Specific Issues. Rhode Island did not identify any complex or controversial issues related to dredging.

Rhode Island Dredging Contact Information:

Grover Fugate, Executive Director Coastal Resources Management Council Stedman Office Building 4808 Tower Hill Road Wakefield, RI 02879 401-222-2476 Fax: 401-222-3922 Email: ricrmc@crmc.coxatwork.com

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management. *State of Rhode Island Coastal Management Program and Final Environmental Impact Statement* 1978.
- 2. Rhode Island Coastal Resources Management Council. *The State of Rhode Island: Coastal Resources Management Program As Amended.* Three-Ring Original Edition June 1996.
- 3. Rhode Island General Laws §46-23.
- 4. Jeffery Willis, Supervising Environmental Planner, CRMC. Comments on Draft Rhode Island Dredging Information Template. 11/15/99.

Coordination Mechanisms & Permit Processing. The statutory authority for dredging and filling activities in the San Francisco Bay area is the McAteer-Petris Act. The San Francisco Bay Plan was developed pursuant to the McAteer-Petris Act and contains standards for development of the Bay and shoreline, including standards for dredging activities. The San Francisco Bay Conservation & Development Commission (BCDC) is the agency charged with implementation of the McAteer-Petris Act and the San Francisco Bay Plan. The BCDC issues three types of permits for dredging and filling activities: 1) A region-wide permit that is issued for routine maintenance work requiring authorization only from the Executive Director and no Commission review or public hearing; 2) An administrative permit that is issued for activities that qualify as a minor repair or improvement. This permit does not require a public hearing and vote by the Commission; and, 3) A major permit that is issued for work that is more extensive than a minor repair or improvement. This permit requires a mandatory public hearing and Commission review. Permits that may be issued by other agencies for dredging and filling activities include: California State Lands Commission permit/lease; Department of Fish and Game streambed alteration agreements; and, the San Francisco and Central Valley Regional Water Quality Control Boards §401 water quality certifications.

A pilot project has been established to consolidate the dredging permit review process in the San Francisco Bay. The Dredged Material Management Office (DMMO) was created to provide a consolidated permit application and central review process for agencies with jurisdiction over dredging and disposal projects in the San Francisco Bay. Agencies that are part of the DMMO include: BCDC, State Lands Commission, U.S. Army Corps of Engineers (ACE), U.S. Environmental Protection Agency (EPA), and the San Francisco Regional Water Quality Control Board (RWQCB). A Memorandum of Understanding signed by the participating agencies outlines the phased implementation of the pilot DMMO. The DMMO is currently in its third pilot phase and is scheduled to be formalized in the near future.

The BCDC provides written guidance to project applicants on how to apply for project approval, application instructions, abbreviated regionwide permit instructions, and instructions for preparing the consolidated dredging-dredged material reuse/disposal application for the DMMO. BCDC staff is also available for prepermit and federal consistency application review on all project types.

Economic Concerns. The San Francisco Bay Plan does not have any policies that outline how the economic benefits of a project should be weighed against the environmental costs. The Bay Plan dredging policy outlines what criteria are necessary for a dredging project to be authorized, they include: a demonstration by the applicant that the dredging is needed to serve a water-oriented need or other important public purpose (this "need" could be an economic one;, that water quality requirements will be met; and, that important fisheries and Bay natural resources will be protected. There are statements made in the Bay Plan, that state that the Bay is of primary importance to the entire economy of the Bay Area. However, there are no policies affiliated with it. There are no requirements that a cost/benefit analysis be prepared for a project. However, permits can only be issued if public benefits outweigh the detriments; what the proper ratio is or how costs and benefits are weighed are not addressed.

Habitat, Sediment, & Water Quality. There are no BCDC policies which specifically address testing methodologies or contaminant levels, except that material must meet requirements of the Regional Water Quality Control Board. The Inland Testing Manual, Green Book, and RWQCB guidance supply the general chemical and biological testing methodologies for dredging projects. There are no BCDC policies that address the use of mixing zones, however the DMMO is currently reviewing the mixing zone model currently used in the San Francisco Bay to determine its suitability/accuracy.

Policies in the Bay Plan state that filling and diking that reduce surface area and water volume are only allowed when there is substantial public benefit and that water circulation in the Bay should be maintained and improved. Dredged material disposal at aquatic sites should be carefully managed to ensure that the amount and timing of disposal does not create navigational hazards, adversely affect Bay currents, or natural resources of the Bay.

Dredging in San Francisco Bay

As part of the Long Term Management Strategy (LTMS) for Dredged Material Disposal (see the following section on Dredged Material Disposal), the LTMS agencies consulted with the U.S. Fish & Wildlife Service, National Marine Fisheries Service, and the California Department of Fish & Game to develop dredging and disposal biological "windows" for the protection of federal and state endangered species. Areas that are restricted from dredging due to habitat concerns are identified in this "window" guidance. Areas that may be restricted from dredging due to water quality concerns are identified by the RWQCB and the State Department of Toxics on a site-by-site basis.

Dredging Techniques & Best Management Practices. There are no state policies or guidelines indicating preferred dredging techniques or equipment. Equipment restrictions, dredging and/or disposal timing restrictions, use of silt curtains, or other appropriate permit conditions can be used to prevent impacts to species/habitats.

Dredged Material Disposal. The development of a LTMS for Dredged Material Disposal began in 1991 with the passage of the San Francisco Bay Dredging Act in the State Legislature. The LTMS was initiated to develop a plan for improving the management of dredging and disposal activities in the San Francisco Bay Area. Goals of the LTMS are to: 1) ensure maintenance of channels necessary for navigation as well as eliminate unnecessary dredging; 2) facilitate environmentally sound disposal of dredged material; 3) maximize use of dredged material as a resource; and, 4) establish a cooperative framework for dredging permits. The Final Policy Environmental Impact Statement/Programmatic Impact Report for the LTMS identified the strategy for managing dredging and disposal activities in the Bay for the next fifty years. This strategy emphasizes reducing dredged material disposal in the Bay, maximizing beneficial use at upland sites, and the remainder of the material being disposed of in federal deep-ocean disposal sites. A detailed policy and regulatory strategy for implementing the LTMS for dredging and disposal activities will be presented in the LTMS Management Plan, which is currently under preparation. The Management Plan will serve as the regional decision-making framework for dredging and disposal activities in the future and contain specific guidance for each of the LTMS agencies as to how decisions regarding these activities will be made. The LTMS Management Plan will also include proposed San Francisco Bay and Basin Plan amendments necessary to implement the LTMS program.

Policies in the San Francisco Bay Plan state that disposal or the use of beneficial dredged material outside of the Bay is preferred over in-Bay disposal if feasible. As part of the LTMS over 100 upland sites were analyzed for their potential as beneficial use sites and only four sites were identified in the Bay that would maximize dispersion.

The main premise of the BCDC's founding legislation was to prevent the haphazard filling of the Bay. All of the policies that deal with dredged material disposal and filling specifically dictate that the placement of dredged material underwater in the Bay is limited/restricted and the use of non-tidal and open ocean dredged material disposal sites are preferred. The policies specifically state that alternative funding sources should be sought in order to help pay for the transport of dredged material to open water sites in the ocean as opposed to Bay underwater disposal.

Appropriate water quality authorization must be obtained by the RWQCB prior to disposal of dredged material in aquatic sites. Aquatic disposal is limited to federally designated disposal sites and specific limitations are placed on sites for management purposes. Capping is not used at the in-Bay disposal sites and material that is deemed not suitable for aquatic disposal (due to contaminants) is generally limited to disposal at landfills. RWQCB polices are also applicable for runoff from upland CDFs.

Beneficial Use of Dredged Material. As denoted above, beneficial use of dredged material is preferred over disposal at in-Bay sites. Policy statements dictate that disposal projects should maximize the use of dredged material as a resource, and that new marshes should be created through carefully placed lifts of dredged spoils. Beneficial use is defined in the *San Francisco Bay Plan (1969 as amended)*, in the following way, "Creating, enhancing, or restoring tidal and managed wetlands, creating and maintaining levees and dikes, providing cover and sealing material for sanitary landfills, and filling at approved construction projects." *Part*

Dredging in San Francisco Bay

IV-Development of the Bay and Shoreline: Dredging #4. Currently, review of beneficial use projects is done though the BCDC permit and federal consistency process. In addition, these projects will be subject to the DMMOs pre-project, multi-agency review process. To date, beneficial use project review has occurred on a case-by-case basis. Planning for large beneficial use projects has included a detailed analysis of sediment composition needs, environmental documentation regarding project impacts and benefits, and calculation of created and impacted habitat areas by type.

State Specific Issues. As indicated by the BCDC, the following issues are controversial or are issues that remain to be addressed: in-Bay beneficial use projects for habitat or contaminant remediation; reduction of in-Bay disposal through LTMS; and, limited upland disposal and beneficial reuse alternatives.

Other on-going programs related to dredged material management in which the BCDC is either directly or indirectly involved with include: Dredged Material Reuse Project; CALFED Bay/Delta Program; Regional Habitat Goals Project; Hamilton Restoration Group; San Francisco Estuary Project; and the BCDCs North Bay Program.

San Francisco Bay Conservation & Development Commission Dredging Contact Information:

Steve Goldbeck, Coastal Program Manager Email: steveg@bcdc.ca.gov Jaime Michaels, Coastal Program Analyst S.F. Bay Conservation and Development Commission 50 California Street, Suite 2600 San Francisco, CA 94111 415-352-3600 Fax: 415-352-3606 Internet: <u>Http://ceres.ca.gov/bcdc/</u>

- 1. San Francisco Bay Plan (1969 as amended) at <u>Http://ceres.ca.gov/bcdc/commlib/bayplan/1d1_TOC.htm.</u> 06/18/99.
- 2. San Francisco Bay Conservation & Development Commission's web-page Http://ceres.ca.gov/bcdc/06/18/99.
- 3. McAteer-Petris Act. Cal. Gov't Code §66650
- 4. Jaime Michaels, Coastal Program Analyst, San Francisco Bay Conservation and Development Commission. Comments on Draft BCDC Dredging Template 09/30/99.

Coordination Mechanisms & Permit Processing. Critical areas permits are required for dredge and fill activities that take place in critical areas (tidelands, coastal waters, and the beach/dune system). Federal consistency review automatically takes place through an internal notification process when applying for a critical areas permit. There is formal coordination of permit review between the state and federal agencies and they will occasionally issue a joint public notice together. Critical areas permit applications which include federal consistency review may be put on public notice for 15 to 30 days dependent upon the activity. For projects that require both a federal consistency concurrence and a §401 water quality certification, a single "state certification" is issued for the project by the Department of Health and Environmental Control's (DHEC) Office of Ocean and Coastal Resource Management (OCRM).

An interagency meeting is held on the first Thursday of every month. Representatives of state and federal resources agencies, including OCRM, routinely attend this meeting. This meeting provides permit applicants with an opportunity to present project plans in their early stages. There is contact information and brief permit descriptions available on the DHEC's web-page for permit applicants. Permit applications may be downloaded into adobe acrobat format, but there is no detailed information on permit processes, timelines, and requirements.

Economic Concerns. There are no state policies that specifically require cost/benefit analyses. The general guidance policies for review of all projects in critical areas dictates that that the extent of the economic benefits should be compared with the benefits from preserving an area in an unaltered state. Recommendations for dredged material disposal state that, prior to major dredging projects, the economic and environmental feasibility for alternative use of dredged material should be studied.

Habitat, Sediment, & Water Quality. Recommendations on dredged material disposal do state that the physical and chemical characteristics of dredged spoil must be determined in order to decide appropriate disposal options. The §401 water quality certification process which is performed by the DHEC' Bureau of Water, contains provisions that relate to chemical and biological monitoring, sediment contamination and mixing zones. There are many polices that restrict or prohibit projects which may obstruct the natural flow of navigable water, hinder flushing capabilities, reduce water circulation, currents, mixing, or salinity.

A time restriction for maintenance dredging in marinas allows dredging only during the months of December 1st through March 1st. Dredging windows are generally restricted by permit conditions to the period between November 1st and March 1st to match with periods of decreased biological activity and to occur outside of sea turtle nesting. Policies state that dredging and filling activities should be restricted in nursery areas and shellfish grounds during periods of migration, spawning, and early development of important sport and commercial species. Resource policies state that dredging that is scheduled to occur in a shellfish area, should be performed only during the closed shellfish season.

Dredging Techniques & Best Management Practices. Only hydraulic dredging is permitted to be used unless the dredged material is being placed in a hopper for offshore disposal or if the applicant can demonstrate that hydraulic dredging is infeasible in a site-specific application. Agitation dredging is prohibited.

Dredged Material Disposal. The State of South Carolina does not have a long-term plan for dredged material management. Upland disposal is the preferred method of disposal over disposal in wetlands. Open water disposal may be considered as an alternative to upland disposal. It is preferred that existing disposal sites be used to the fullest extent, even if that means that the embankments are raised to increase the capacity. Dredging plans that include schedules and disposal sites are required in marina permit applications. Policies state that toxic and highly organic dredged materials are to be disposed of in diked, imperviously lined, highland area CDFs. Other requirements for CDFs include, vegetating surrounding dikes to minimize erosion and positioning dewatering outfalls so that they empty into non-wetland areas. Policies restrict the disposal of contaminated material in wetland areas, mudflats, on submerged vegetation, oyster reefs, or tidal guts. Contaminated materials may be permitted for disposal in open water ocean dumping sites when

Dredging in South Carolina

maximum safety has been demonstrated after review by state and federal agencies. All open water disposal sites must be approved by the EPA.

Dredged materials that contain hazardous levels of toxic materials must be disposed of with extraordinary caution. Disposal of these materials in open water ocean dumping sites will only be permitted after maximum safety has been demonstrated after thorough review by the DHEC and other appropriate state and federal agencies.

Beneficial Use of Dredged Material. There are several policies that recommend that dredged material be used for alternative uses. There is no definition of beneficial use but there are several examples of alternative uses of dredged material: fill material for residential, commercial, or industrial; spoil shells for stimulation of oyster production and dike construction; and, beach renourishment.

State Specific Issues. The state has identified open water disposal as an issue that has become complex and/or controversial. Currently, existing marina facilities are requesting open water disposal due to a lack of upland disposal areas. Previously used disposal areas have been used for facility expansion and have been built on. OCRM would like to pursue a pilot project on open water disposal in order to make a scientifically backed regulation decision on this issue.

South Carolina Dredging Contact Information:

Chris Brooks, Deputy Commissioner Email: brookscl@chastn86.dhec.state.sc.us Richard Chinnis, Director Regulatory Programs Division Email: chinnira@chastn86.dhec.state.sc.us Office of Ocean & Coastal Resource Management SC Department of Health & Environmental Control 1362 McMillian Avenue, Suite 400 Charleston, SC 29405 843-744-5838 Fax: 843-744-5847 Internet: <u>Http://www.state.sc.us/dhec/eqc/ocrm/index.html</u>

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management and South Carolina Coastal Council. *State of South Carolina Coastal Management Program and Final Environmental Impact Statement 1979.*
- 2. South Carolina Code of Regulations Chapter 30, Coastal Division. (effective 9/25/98).
- 3. Richard Chinnis, Director Regulatory Programs Division, Office of Ocean & Coastal Resource Management. Comments on the South Carolina Draft Dredging Template. 11/29/99.

Dredging in Texas

Coordination Mechanisms & Permit Processing. The types of permits and certifications (other than federal consistency) required for dredging and filling activities in Texas may include: certification of a federal permit for the discharge of dredged or fill material and §401 water quality certification (Texas Natural Resource Conservation Committee and the Railroad Commission); mineral leases, coastal easement, coastal lease, and navigation district lease (School Land Board); acquisition of a site for the placement of disposal of dredged material from the expansion, relocation, or alteration of the Gulf Intracoastal Waterway (Texas Department of Transportation); and, geophysical/geochemical permit and wetlands mitigation bank approval (General Land Office).

For federal development projects, an ad hoc Interagency Coordination Group may be formed to advise the federal agency on the consistency of a project with the Texas Coastal Management Program (TCMP) goals and policies. This group may be made up of state and federal natural resource agencies with jurisdiction over the project.

State and federal resources agencies (U.S. Fish & Wildlife Service, National Marine Fisheries Service, U.S. Environmental Protection Agency, Texas Parks & Wildlife Department, Texas Natural Resource Conservation Committee, and the General Land Office) meet biweekly with the Galveston District of the U.S. Army Corps of Engineers (ACE) to review applications for ACE §404 permits. At this meeting, agencies have the opportunity to comment on proposed projects early in the process.

There is a Permitting Assistance Group (PAG) that provides a preliminary review of proposed federal consistency projects to identify and resolve any contentious issues before an action is proposed. The PAG also will help facilitate upon request, pre-application assistance for any applicant. This assistance includes outlining what permits and supporting information are needed.

The TCMP publishes notices for consistency certifications and rules in the Texas Register for a minimum of 30 days. The Coastal Coordination Council (CCC) holds quarterly public meetings for public comment and may hold special public hearings for particular projects. The Executive Committee of the CCC also holds quarterly meetings during which public participation is solicited. There are separate public participation requirements for other state permitting agencies.

Economic Concerns. Texas policy statements related to economics include: dredging projects that should be prohibited based upon practicable alternatives, lack of minimization, and potential degradation to critical areas, may be permitted if the overriding importance to the public and national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways are demonstrated; and, development (including dredging and filling) shall not be authorized if significant degradation of critical areas will occur, this includes adverse effects to human health, aquatic life, other wildlife, ecosystem diversity and productivity, and recreational, aesthetic, or economic values.

The ACE conducts a cost/benefit analysis of identified beneficial use alternatives during preparation of consistency determination documents for maintenance dredging of federal navigation channels. The consistency determination documents are then reviewed by the member agencies of the CCC.

Habitat, Sediment, & Water Quality. Dredging activities are expected to adhere to the Texas Surface Water Quality Standards enforced by the Texas Natural Resources Conservation Commission.

There are policies that state that dredged material must comply with applicable standards for sediment toxicity. These standards however, are not listed within the policy citation. Testing methodologies are also not identified in policy citations.

No specific mixing zones were established for meeting water quality standards. However, surface water quality standards must be met after dilution and dispersion have been taken into consideration. Policies also state that project discharges should be located and designed to minimize the extent of any plume and otherwise control dispersion of material.

Dredging policies include techniques to minimize adverse effects. These techniques include locating and designing projects to avoid adverse disruption of water inundation patterns, water circulation, erosion and accretion processes and other hydrodynamic processes. The manner in which material is disposed of and placed should avoid changes in water current and circulation patterns that would interfere with the movement of animals. Projects should be located as to ensure adequate flushing and avoid stagnant pockets.

Policies state that adverse effects on animal populations can be minimized by, timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods. However, the policies do not specify what these time periods are. Policies also state that dredging or the discharge of dredged or fill material into critical areas shall not be authorized if these activities will jeopardize the continued existence of species listed as endangered or threatened or will result in the destruction or adverse modification to critical habitats under the Endangered Species Act.

Areas that are restricted from dredging activities are not identified. However, policies do state that to avoid adverse effects on plant and animal populations, sites having unique habitat or other values including habitat of endangered species should be avoided.

Dredging Techniques & Best Management Practices. There are policies that list ways to minimize adverse effects which include: using appropriate equipment, machinery, and operation techniques; having personnel on site to supervise; and, use of temporary and permanent access roads and channel spanning structures to avoid disruption of water flows, fluctuating water levels, and circulation and faunal movement. These policies are very general in that they state what techniques or methods should accomplish, but they do not list the specific or preferred ways to accomplish these goals.

The ACE and other state and federal resource agencies coordinate maintenance dredging project schedules to minimize potential impacts during bird nesting and endangered sea turtle migration periods.

Dredged Material Disposal. The state itself does not have a long-term plan for dredged material management. However, for all ACE maintenance dredging projects, a long-term maintenance plan that is consistent with the TCMP is required. There is a Memorandum of Agreement between the ACE and the TCMP that identifies long-term maintenance dredging plans for individual projects.

Policies indicate that if dredged material cannot be used beneficially, preference for disposal is in contained upland sites that are above mean high water. It is preferred that previously disturbed existing contained disposal areas be used before other undisturbed upland contained disposal areas are used. If upland options are not feasible, preference is then for contained sites in areas of low productivity below mean high water. Open-water and deep water disposal should be considered as alternatives to the two aforementioned contained disposal methods if they are deemed infeasible and after consultation with concerned agencies.

Policy guidelines for minimization of adverse effects from placement of contaminated material include: disposal that maintains physiochemical conditions and reduces the potency and availability of pollutants; limiting the solid, liquid, and gaseous components of material discharged; adding treatment substances to the discharged material; and, adding chemical flocculants to enhance deposition of suspended particulates in confined disposal areas. Other policies that deal with contaminated dredged material include the use of lined containment areas to reduce leaching and capping in-place of contaminated materials.

Other guidelines for confined upland disposal facilities include: containment levees and sediment basins should be designed, constructed, and maintained to resist breaches, erosion, slumping or leaching; these areas should properly contain discharged material in order to prevent point and nonpoint source pollution; and, the timing of the discharge from these areas should be done so as to minimize adverse effects from unusually high water flows, wind, wave, and tidal action.

Dredging in Texas

Beneficial Use of Dredged Material. Beneficial use of dredged material is encouraged and preferred over disposal when certain criteria are met. If the costs of beneficial use of dredged material are reasonably comparable to the cost of disposal in a non-beneficial manner, the material shall be used beneficially. Dredged material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result.

Types of beneficial use defined in policies include: shoreline protection; creation/enhancement of recreational areas and public beaches; benefits to the sediment budget or littoral system; improvement or maintenance of terrestrial or aquatic wildlife habitat including the construction of marshlands, coastal wetland, or other critical areas; benefits to benthic communities or aquatic vegetation; creation of wildlife management areas, parks, airports, or other public facilities; capping of landfills or other waste disposal areas; filling of private property or upgrade of agricultural land, if cost-effective public beneficial uses are not available; and, remediation of past adverse impacts on the coastal zone.

Policies do list criteria that should be used in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits. These criteria include: environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits; the proximity of the beneficial use site to the dredge site; and the quantity and quality of the dredged material and its suitability for beneficial use.

The Texas General Land Office instituted the Coastal Erosion Planning and Response Program under the state's Coastal Erosion Planning and Response Act (CEPRA), in September 1999. The focus of this program is to identify critical erosion areas and assist local sponsors with funding and expertise to address eroding areas. Many of the CEPRA projects involve the beneficial use of dredged material from federal navigation projects.

State Specific Issues. An interagency coordination team composed of the ACE and state and federal resources agencies is currently working to identify and evaluate the optimal dredged material placement alternative for materials dredged from the environmentally sensitive Laguna Madre. The Laugna Madre is a shallow, hypersaline lagoon extending from Corpus Christi Bay to Port Isabel. This issue was identified by the TCMP as being complex and/or controversial.

Texas documents related to dredging and dredged material management include:

- 1. <u>Rules and Guidance Regarding the Dredging and Dredged Material Disposal and Placement</u> <u>Requirements of the Texas Coastal Management Program</u>. Texas Coastal Coordination Council. June, 1997.
- 2. <u>Developing a Methodology for Monitoring the Impact of Dredging Activities on Coastal Wetland</u> <u>Resources</u>. Texas General Land Office. June, 1997
- 3. <u>Evaluation of Marsh Creation and Restoration Projects and Their Potential for Large-Scale Application</u>, <u>Galveston-Trinity Bay System</u>. University of Texas at Austin Bureau of Economic Geology and the Texas General Land Office. August, 1998.

Specific beneficial use projects completed to date in Texas include:

- Galveston Island Seawall beach nourishment
- South Padre Island beach nourishment
- Corpus Christi North Beach nourishment
- Shamrock Island marsh and bird habitat restoration
- Rollover Pass beach nourishment
- Sundown Bay bird island restoration
- San Jose Island beach nourishment
- Houston-Galveston Navigation Channel new work beneficial uses: -Bolivar Marsh

-East Bay bird island -Demonstration Marsh

Specific beneficial use projects planned in Texas include:

- Surfside Beach nourishment
- Hall's Lake shoreline protection and marsh restoration
- Bessie Heights Marsh restoration
- Rose City Marsh restoration
- East Matagorda Bay Gulf Intracoastal Waterway shoreline protection and restoration
- West Galveston Island beach nourishment
- Bolivar Peninsula beach nourishment
- McFaddin Ridge beach nourishment and dune restoration
- Texas Point beach nourishment and marsh restoration
- Pleasure Island bay shoreline protection
- Highway 87 beach nourishment
- Sydney Island habitat restoration
- North Padre Island Seawall beach nourishment
- Redfish Bay shoreline protection
- Sargent Beach nourishment
- Galveston Island Seawall beach renourishment
- South Padre Island beach renourishment
- Corpus Christi Bay beach renourishment
- Rollover Pass beach renourishment
- San Jose Island beach renourishment
- Long Point Marsh restoration
- Houston-Galveston Navigation Channel new work beneficial uses: -Redfish Island marsh and bird habitat restoration
 - -Atkinson Island Marsh creation
 - -Mid-Bay Marsh creation
 - -Goat Island restoration

Texas Dredging Contact Information:

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- 1. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management and State of Texas, Coastal Coordination Council. *Texas Coastal Management Program and Final Environmental Impact Statement*. August 1996.
- 2. Bill Worsham, Director, Coastal Projects Division. Comments on the Texas Draft Dredging Template. 2/10/00.

Coordination Mechanisms & Permit Processing. A coastal zone permit is issued by the Commissioner for minor permits and is issued by the Coastal Zone Management Commission if it is a major permit, for all new development (including dredging and filling activities) within the first tier of the coastal zone. The time frame for review of a major coastal zone permit is 90 days and 60 days for a minor one. A U.S. Army Corps of Engineers (ACE) §404 permit is also required for dredging activities. The Division of Coastal Zone Management provides a pre-application process for all coastal zone management (CZM)major permit applications. Currently, the Division is developing federal consistency guidelines for the Virgin Islands Coastal Zone Management Program. Public hearings are held for all major CZM permits and the ACE is required to hold a public hearing before granting a permit for work in the waters of the territory.

Economic Concerns. The Division of Coastal Zone Management requires an Environmental Assessment Report (EAR) for all major CZM permits. The EAR includes a cost/benefit analysis that is prepared by the applicant. The EAR addresses economic concerns and has a market analysis study section.

Habitat, Sediment, & Water Quality. Environmental policies state that activities in or adjacent to complexes of marine resource systems of unique productivity, should be designed and carried out so as to minimize adverse effects on water quality. Dredging is not allowed in turtle nesting areas and in Marine Reserves. Dredging is allowed near sea grass sites only if there is a Restoration Mitigation Plan prepared. Water quality standards must be met for all projects. It must be assured that dredging will cause minimal adverse affects to water circulation. The disposal of dredge material must be conducted at an upland site with a dewatering area. The discharge from this area must meet water quality standards.

Overall, dredging is discouraged in the territory and only maintenance dredging is permitted. If maintenance dredging is permitted, activities in areas adjacent to endangered species will be sited and designed to prevent impacts which would degrade such areas. Complexes of marine resource systems of unique productivity, including reefs, marine meadows, salt ponds, mangroves and other natural systems must be protected in the event of dredging or disposal of dredged material.

Dredging Techniques & Best Management Practices. There are no policies that outline preferred techniques or best management practices because dredging is not a common practice in the territory.

Dredged Material Disposal. The territory does not have a long-term dredging plan because dredging is discouraged.

Beneficial Use of Dredged Material. There are no policies specific to the beneficial use of dredged material because dredging is not a common practice in the territory.

State Specific Issues. The territory has indicated that enacting legislation that would discourage dredging except for maintenance activities, is preferable.

Virgin Islands Dredging Contact Information:

Nora Santana, Assistant Director, Virgin Islands Division of Coastal Zone Management Department of Planning and Natural Resources 6003 Annas Hope Christiansted, St. Croix U.S. Virgin Islands, 00820-4433 340-773-3450 Fax: 340-773-3343

- 1. U.S. Department of Commerce, National Oceanic & Atmospheric Administration, Office of Coastal Zone Management. *The Virgin Islands Coastal Management Program and Final Environmental Impact Statement 1979.*
- 2. Virgin Islands Coastal Zone Management Act of 1978. 12 V.I. Code Ann. tit. 12 § 906 et.seq.
- 3. Julita K. de Leon, Esq., CZM Legal Counsel. Comments on Draft Virgin Islands Dredging Template. 12/9/99.
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Coordination Mechanisms & Permit Processing. A permit (subaqueous or tidal wetlands) from the Marine Resources Commission is required for dredging and filling activities that take place on subaqueous lands and wetlands. To apply for either one of these permits a joint federal/state/local application is needed. Applications receive independent yet concurrent review by local wetland boards, the Virginia Marine Resources Commission (VMRC), the Department of Environmental Quality(DEQ), and the U.S. Army Corps of Engineers (ACE).²⁵ For the joint permit application, there is a brief summary and contact information for permit applicants on the VMRC's web-page. Any project that requires a §404 permit from the ACE for the discharge of dredge material or fill in a waterway or wetland needs to also obtain a Virginia water protection permit (formerly called a §401 water quality certification). This permit can be applied for using the joint application. Information found on the DEQ's web-site includes who must apply for a Virginia water protection permit, legal authorities, fees, term, and the application process.

The state and federal resource agencies do meet on a regular basis to discuss coordination of projects under review. In addition, the ACE holds quarterly meetings in which other state and federal resources agencies meet to discuss dredged material management, specifically for federal projects.

Economic Concerns. There are policies that state that the public interest should be weighed in project review. In addition, the VMRC while making its permitting decisions, shall preserve and prevent despoliation and destruction of wetlands while accommodating for necessary economic development in a manner consistent with wetlands preservation. Also, limitations for dredging windows will be judiciously applied in order to prevent undue economic burdens to applicants and/or their contractors. All of these policies however, do not outline how the economic benefits of a dredging project should be weighed against the environmental costs of a project. Nor do they identify if a cost/benefit analysis is to be prepared and reviewed as part of the permit decision-making process.

Habitat, Sediment, & Water Quality. Virginia's policies do not identify acceptable levels of contaminants or testing protocols. The policies only state that material composed of anything other than clean sand is undesirable for overboard disposal, that fill to be placed upon wetlands is not to contain contaminants, and that the chemical nature of dredge material to is to be considered when being placed in upland disposal areas. The only policies related to sediment testing are the borings that must be analyzed in order to get a clear picture of the vertical and horizontal limit of sand deposits in the dredging area. The policy of the State Water Control Board is to minimize alteration in the quantity or quality of the natural flow of water that nourishes wetlands, and to protect wetlands from adverse dredging or filling practices. Guidelines state that dredging depth is to be controlled at not more than 1ft. deeper than natural channel depths (for small craft channels) or deeper than the nearest natural channel which may cause stagnation. Overdredging for advance maintenance purposes is not to exceed two feet over authorized depth.

Under the regulations for criteria for the placement of sandy dredged material along the beaches, it states that consideration will be given to the project's potential impacts to finfish, shellfish, turtle and avian species and their critical time periods for spawning, nesting, and nursery functions. The Guidelines for Subaqueous Lands and Wetlands outline dredging window timeframes for protection of fish, clam, oyster, and crab migration and spawning periods. These guidelines also discourage dredging in shellfish areas, submerged aquatic vegetation beds, and in other highly productive areas.

Wetlands of primary ecological significance shall not be altered so that the ecological systems in the wetlands are unreasonably disturbed.

Dredging Techniques & Best Management Practices. The VMRC has developed a Shoreline Development BMP's document that lists best management practices for shoreline development activities which encroach in, on, or over Virginia's tidal wetlands, coastal primary sand dunes and beaches, and submerged lands. This document re-iterates policy statements made in the Subaqueous and Wetlands Guidelines with respect to dredging, dredge disposal, and beach nourishment. Specifically, this document

²⁵ Virginia Marine Resource Commission. <u>Http://www.state.va.us/mrc/page3a.htm.</u> 8/30/99.

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covers: channel depth and design; species habitat protection; information required to be submitted with permit applications; deposition of dredged material; beach replenishment; upland and overboard disposal; and, hydraulic and mechanical dredging techniques.

Dredged Material Disposal. VMRC Wetlands Guidelines state that upland disposal is preferred and that disposal should not occur in wetlands, unless in certain cases thin layer application is done. VMRC Subaqueous Guidelines state that disposal must be in a disposal area that is acceptable to the Commission and that overboard disposal is usually not permitted unless material is uncontaminated. The Wetlands Guidelines do list requirements for upland confined disposal facilities such as dike construction, volume/capacity, dewatering time, and spillway location. For overboard (underwater) disposal, the Subaqueous Guidelines require that disposal areas are shaped so as to reduce scour and sedimentation and that the bottom where the material is to be placed is devoid of commercially important marine species. Only uncontaminated and granular (sand) material is allowed for overboard disposal.

There are policies under the statute for the Virginia Port Authority that discuss placement of dredged material.²⁶ The Craney Island Disposal site is not to be expanded northward or westward or beyond its present capacity, nor are state funds allowed to be used for an expansion in either direction. However, the Commonwealth and the Port Authority are authorized to expend state funds for a feasibility study and environmental impact study for the potential expansion of Craney Island Disposal site to the east for the creation of an additional marine terminal. The Port Authority along with the ACE are directed to locate, establish, and use ocean disposal areas for ocean-suitable dredged materials from Hampton Roads Harbor. Priority use of Craney Island shall be given to material dredged from the Southern Branch of Elizabeth River. The Virginia Port Authority is directed to dispose of material that is unsuitable for ocean disposal in the Craney Island upland disposal site.

Beneficial Use of Dredged Material. There are regulations that outline criteria for the beneficial use of sandy dredged material in beach nourishment projects but there is no definition of beneficial use. These criteria include what is to be considered in a dredging permit application, the parameters for sediment composition and grain size testing, a structured review process, project size, the need and interest of the political subdivision of the candidate site for nourishment, and the project's design and engineering. Guidelines state that overboard disposal of silty material may be used to create marsh and overboard disposal of clean sandy material may be used for beach replenishment.

The Virginia Port Authority is directed to investigate and consider the cost and availability of beneficial uses of dredged material. When an environmentally acceptable beneficial use is available and economically feasible, beneficial use should be pursued. All suitable dredged material should be used on eroding beaches to the maximum extent practicable.

State Specific Issues. Virginia did not identify any state specific issues in their review of the dredging information template for Virginia.

²⁶ The Virginia Port Authority Statue is not incorporated as part of the Virginia Coastal Management Program and does not constitute a Coastal Management Program Policy. The statute is incorporated as part of this document due to its pertinent subject matter.

Dredging in Virginia

Virginia Dredging Contact Information

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Tony Watkinson, Deputy Chief Habitat Management Marine Resources Commission 2600 Washington Avenue P.O. Box 756 Newport News, Virginia 23607 Phone: 757-247-2200 Fax: 757-247-80622 Internet: <u>Http://www.state.va.us/coastal/programinfo.html</u>

References:

- 1. Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and Council on the Environment, Commonwealth of Virginia. *Virginia Coastal Resources Management Program and Final Environmental Impact Statement July 1985and May 1994 Reprint.*
- 2. Title 28.2 Virginia Code Annotated Chapter 12 and 13.
- 3. Title 62.1 Virginia Code Annotated Chapter 10
- 4. Title 4 Virginia Administrative Code §20-400-10 et seq.
- 5. Title 9 Virginia Administrative Code §25-380-10,20
- 6. Department of Wetlands Ecology, Virginia Institute of Marine Science, College of William and Mary and Habitat Management Division, Virginia Marine Resources Commission. *Wetlands Guidelines.* Reprinted September 1993.
- 7. Virginia Marine Resources Commission. *Subaqueous Guidelines.* Revised march 1986, Reprinted September 1993.
- 8. Virginia Marine Resource Commission. <u>Http://www.state.va.us/mrc/</u>. 8/30/99.
- 9. Tony Watkinson, Deputy Chief, Marine Resources Commission. Comments on Virginia Draft Dredging Template. 11/3/99.

Coordination Mechanisms & Permit Processing. Federal consistency reviews are conducted by the Washington Department of Ecology's Shorelands and Environmental Assistance Program which is charged with implementation of the Washington Shoreline Management Act. The Shoreline Management Act requires local governments to develop Shoreline Master Programs which regulate and permit shoreline activities. Certification under §401 of the Clean Water Act is considered a state permit, administered by the Washington Department of Ecology (WDOE), and required of any dredging activity that results in a discharge of dredged material to waters of the state, including wetlands. The review/process period is variable, extending 30-to-60 days for projects that are non-controversial renewals (maintenance) or have undergone considerable pre-application processing. More typical, however, and especially true for new projects, is a review/process time frame of 6 months up to one year.

Review/permit approval of dredging projects is a multiple-step process involving, at a minimum: (1) Dredged Material Management Program (sediment evaluation, disposal options, dredging plans, etc); (2) local government (environment impact assessment, shoreline permits and mitigation if applicable); (3) Department of Fisheries and Wildlife (HPA permit, including mitigation if applicable); (4) Department of Natural Resources (approval and disposal fee for in-water disposal of clean dredged material); (5) local health department/sanitary landfill (approval for disposal of dredged material that failed in-water disposal criteria; and (6) Department of Ecology (§401 certification and coastal zone management federal consistency concurrence).

Many of the WDOE policies relating to dredging/disposal activities are formalized as "Guidelines" in Washington Administrative Code (WAC) §173-16, which is currently undergoing revision as proposed WAC §173-26. The Guidelines are incorporated into local government Shoreline Master Programs, which become one of the enforceable provisions pertaining to dredging/disposal activities. There are extensive public participation requirements outlined by the Guidelines when a local government is developing a Shoreline Master Program that will ultimately regulate dredging activities and projects. The guidelines are *aurently under revision* and anticipated to be adopted in July 2000. The adoption policies will eliminate §173-16 and replace the guidelines as §173-26. This will change all of Washington's citations in Appendix A, State Policy Language Tables.

The day-to-day review and approval of dredging activities or projects in Washington State is managed under policies/guidelines established by a coordinated state/federal consortium designated as the Dredged Material Management Program or DMMP. The DMMP consists of representatives from two state agencies (WDOE and Department of Natural Resources) and two federal agencies (U.S. Army Corps of Engineers (ACE) and Environmental Protection Agency).

The policies/guidelines under which the DMMP manages dredging activities are contained in guidance manuals specific to discrete water bodies, e.g., Puget Sound, Grays Harbor/Willapa Bay, and the lower Columbia River. These manuals are available for viewing on web sites maintained by the Seattle and Portland ACE District offices. A user manual titled the, "Dredged Material Evaluation and Disposal Procedures" manual is also posted on the Seattle District web site and is currently undergoing a revision. Certain issues or problems encountered by DMMP relating to policies/guidelines are often presented at annual review meetings convened for the benefit of interested public and stakeholders. The outcome or decision by the DMMP pertaining to such issues/problems are contained in the summary document prepared following the annual review meeting, and thereby become incorporated as new or revised policy/guidance. Both formal and informal coordination of dredging activities is carried out as an integral element of the DMMP.

The DMMP includes at least one staff person at each ACE District office who provides guidance for preproject applicants and those already in the process of approval. The DMMP representatives from the other three agencies also serve to assist applicants but the preference is to funnel all such requests through the centralized ACE office. For additional pre-application assistance, the regulatory branch of the ACE convenes "pre-application meetings" for applicants that so request such a meeting to facilitate early review and comment on a proposed dredging activity.

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WDOE has one full-time employee (FTE) devoted to working on dredging/disposal projects and issues statewide. WDOE's FTE is a member of the DMMP (Seattle District) and the Regional Dredging Team (Portland District).

In 1995, the Environmental Permit Assistance Act was passed to help citizens comply with environmental permitting requirements. The Permit Assistance Center (PAC) provides assistance and information on environmental permitting to businesses, the public, and other government agencies. The PAC works with federal, state, and local permitting agencies to facilitate timely and coordinated project permitting. There is an on-line permit assistance center that provides printable permit applications, applicable statues and regulations, and permit contact information.²⁷

A joint aquatic resources permit application (JARPA), can be used to apply for hydraulic project approvals, shoreline management permits, approvals to exceed water quality standards, water quality certifications, and ACE §404 and §10 permits.

Economic Concerns. Washington does not have any policies that specifically state how economic benefits of a project should be weighed against environmental costs. However, Shoreline Management Guidelines for Ocean Management state that, "Detrimental effects on air and water quality, tourism, recreation, fishing, aquaculture, navigation, transportation, public infrastructure, public services, and community culture should be considered in avoiding and minimizing adverse social and economic impacts."

Habitat, Sediment, & Water Quality. Policies outlined in the Shoreline Management Act state that dredging or filling should not cause water quality problems. [For sediment cleanups and the control of point-source discharges affecting sediments, the Sediment Management Standards Rule clearly articulates sediment quality chemical criteria levels (no effects and minor adverse effects levels) that are applicable to Puget Sound marine sediments.²⁸] The Sediment Management Standards Rule provides guidelines for sediment testing methodologies, analysis, Sediment Impact Zone levels, and other sediment quality chemical criteria levels.

Washington State was the first state in the nation to have a [comprehensive] program that established levels of contamination in marine sediments acceptable/not acceptable for unconfined in-water disposal at designated and managed disposal sites. Those criteria are contained in the Sediment Evaluation Manuals and accessible via the ACE's web-sites. Sediment criteria have been developed for all of Puget Sound, Grays Harbor and Willapa Bay and most recently, for the lower Columbia River. The latter criteria for marine/freshwater were developed in partnership with the Oregon Department of Environmental Quality. For some dredging projects (in historically contaminated locations), the sediments to be left after dredging are compared to Washington State Sediment Quality Standards promulgated under WAC §173-204.

Dredging activities that require ACE §404 permits must receive §401 water quality certification from the Department of Ecology in addition to shoreline permits and federal consistency. Mixing or dilution zones may be authorized for dredging/disposal activities as provided for and specified in the state Water Quality Standards, WAC 173-201A, revised 11/18/97. The standards provide for a modification to the standards to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest, even though such activities may result in a temporary reduction of water quality conditions below the criteria established in the standards.

From the state perspective, the work periods allowed for dredging are specified in the hydraulic project approval permit issued by the Department of Fish and Wildlife (WDFW). Existing work windows are being re-evaluated in light of recent Endangered Species Act listings of salmon, steelhead and bull trout in Washington. Two policies regarding ocean uses (including dredging) and ocean disposal both dictate that these activities should prevent, avoid and minimize impacts to critical and sensitive habitats, habitat areas of endangered or threatened species, breeding or spawning areas, and migration areas. The WDFW strongly

²⁷ <u>Http://www.wa.gov/ecology/sea/pac/index.html</u>

²⁸ Sediment Quality Chemical Criteria. <u>Http://www.wa.gov:80/ecology.sea.smu/sqs.htm.</u> 6/30/99.

discourages or will deny dredging activities in such critical habitats as eelgrass beds, smelt spawning beds, and geoduck beds etc.

Dredging Techniques & Best Management Practices. The preference for dredging equipment, as a matter of policy, is specified on the basis of individual project reviews, but in a few instances is more formalized, such as is contained in the Grays Harbor Crab Mitigation Memorandum of Agreement. In this case, a clam shell dredge (instead of a hopper dredge) has been used more to dredge portions of the navigation channel in Grays Harbor where there is a higher crab abundance. The mortality of adult Dungeness crabs caused by entrainment in a hopper dredge is over 90%, versus less then 10% for that of a clamshell dredge.

The states of Washington and Oregon have been working with the Portland District ACE in their effort to fabricate a device (an excluder) to attach to the head of a hopper dredge that will push aside (exclude) Dungeness crabs from being sucked up in the dredge's cutter head. To date, the excluder has had limited success. The ACE conducts annual "real time" monitoring to determine the occurrence and density of Dungeness crabs found in the outer reaches of the Grays Harbor navigation channel. This information is used to help determine the optimum time to conduct hopper dredging to best avoid peak crab abundance, whenever schedules allow.

Dredged Material Disposal. The Washington Shoreline Management Act Guidelines for Development of Master Programs dictates that local coastal governments develop master programs for shoreline planning, management, protection, and public access. These master plans must include long-range plans for the disposal and use of dredged material on land and in water. Under the policies for in-water disposal only sites that have approval by the DMMP (WDOE, WDNR, EPA, and the ACE) should be used.

The DMMP provides for the long-term capacity needed for disposal of "clean" sediments. In-water disposal is the most cost effective disposal option and, at some sites, has the secondary effect of making the disposal site cleaner then surrounding sediments. Currently, there are guidelines for the monitoring of disposal sites for cleaner sediments in Puget Sound.²⁹

A planning effort referred to as the MUDS study (a consortium of state and federal agencies) is at the planning stage of developing a long term multi-user disposal site (MUDS) where contaminated sediments can be properly disposed of. The programmatic environmental impact statement (PEIS) that deals with the MUDS study was released in October 1999 and describes alternatives for safe and cost-effective disposal of contaminated sediments.

Beneficial Use of Dredged Material. There are no specific state policies that deal with beneficial use except for the following two general policy statements embodied in the state's shoreline master programs. (1) The deposition of spoils in water should only be allowed for habitat improvement. (2) Ocean disposal sites for which the primary purpose is habitat enhancement may be located in a wider variety of habitats, but the general intent of the guidelines should still be met.

WDOE has stated preferences for the disposal of dredged material in some cases, especially as it relates to beneficial uses. For example, WDOE encourages that sediments dredged from the mouth of the Columbia River should be disposed of so that the material remains in the longshore drift cell.

The Washington Coastal Erosion Task Force has developed short and long-range policy recommendations on coastal processes. The following are three examples:

- 1. Dredged material should be managed as a resource and reused beneficially within the active littoral zone.
- 2. Scientific studies of coastal processes along the southwest coast of Washington should examine the influence of the Columbia River system. Such studies should include an analysis of the effects and

²⁹ The Puget Sound Confined Disposal Site Study: Background and History. <u>Http://www.wa.gov/ecology/sea/smu/muds/FS_Hist.htm.</u>

Dredging in Washington

opportunities for mitigation of past interventions in coastal processes. Interventions include those related to navigation projects and the effects of hard structures on high-energy shorelines.

3. Long-term scientific monitoring should be a high priority to assess the condition of southwest Washington ocean beaches, and the impacts and performance of past and proposed interventions to the system.

It is Ecology's position that beneficial uses be a primary consideration for all dredging projects involving suitable dredged material. In one case, the Seattle District ACE agreed (in a mitigation agreement included with a §401 certification) to using dredged material to keep a 2,000-foot extension to an existing revetment completely covered with sand for the life of the project (i.e. for a minimum of 50 years).

State Specific Issues.

The southwestern coast of Washington State is experiencing increasing erosion to the extent that some upland development is now at risk. From the state perspective, this problem results in a greater need to use all suitable dredged material for a beneficial purpose. However, such use is often more expensive and not one the ACE can easily accommodate under existing federal authorities. An example of an immediate need is the substantial erosion occurring at Fort Canby State Park (Benson Beach), located adjacent to the north jetty of the Columbia River. The severity of erosion (30 feet in one year) has triggered the need to examine the feasibility of a demonstration project, in partnership with the ACE, to use dredged material to nourish the beach.

Washington Dredging/Disposal Contact :

Richard Vining, Dredging Specialist Email: rvin461@ecy.wa.gov Shorelands & Environmental Assistance Program Washington Department of Ecology PO Box 47703 Olympia, WA 98504-7703 Phone: 360-407-6944 Fax: 360-407-6904 Internet: Http://www.wa.gov:80/ecology/pie/98overvu/98aosea.html

References:

- 1. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management. *State of Washington Coastal Zone Management Program and Final Environmental Impact Statement 1976.*
- Shoreline Management Act Guidelines for Development of Master Programs. Wash. Admin. Code §173-16 et.seq. (Last Update 4/24/91). Downloaded from the WA Department of Ecology web-page <u>Http://www.wa.gov/ecology/leg/wac 17316.htm.</u> 06/30/99.
- 3. Permit Assistance Center. <u>Http://www.wa.gov/ecology/sea/pac/index.html</u>
- 4. Sediment Quality Chemical Criteria. <u>Http://www.wa.gov:80/ecology.sea.smu/sqs.htm.</u>6/30/99.
- 5. The Puget Sound Confined Disposal Site Study: Background and History. <u>Http://www.wa.gov/ecology/sea/smu/muds/FS_Hist.htm.</u> 06/30/99.
- 6. SEDQUAL Database and GIS Analysis Tool. <u>Http://www.wa.gov/ecology/sea.smu/sedqualfirst.htm.</u> 06/30/99.
- 7. Joe Witczak, Washington Department of Ecology. Comments on the Washington Draft Dredging Template. 01/11/00.
- 8. Washington Coastal Erosion Task Force Report 03/01/99

Dredging in Wisconsin

Coordination Mechanisms & Permit Processing. A waterway permit from the Wisconsin Department of Natural Resources (WDNR) must be obtained for the removal of material from beds of navigable waters in Wisconsin. Development activities in shorelands and wetlands are regulated by local governments through permits and zoning requirements. If the dredging or filling activity requires a U.S. Army Corps of Engineers (ACE) §404 permit, a state §401 water quality certification is needed along with federal consistency certification. There is a comprehensive web-page run by the WDNR that outlines activities that are regulated by the WDNR. Permits needed for certain activities are listed along with statue and regulation citations and WDNR contact names and phone numbers. A pre-application is encouraged prior to anyone seeking a formal application for removing material from the beds of waterways.

The Wisconsin Coastal Management Program is a networked program with a Coastal Management Council that has representation from state agencies, local governments, tribal governments, the university system, and the public. It is the duty of the Council to oversee program operations and activities. Coordination between state and local government is outlined as an important issue in the Coastal Management Program's policies in order to facilitate effective development and use of state and local resources in meeting citizen needs.

The State of Wisconsin has several polices that deal with public participation. Aside from noticing projects, state and local meetings are noticed and open to the public; the public may examine records; a public hearing will be held with six or more requests for one; and, there are members of the public that are on the aforementioned Coastal Management Council.

Economic Concerns. The Wisconsin Coastal Management Program has no policies that deal specifically with cost/benefit analysis preparation and review of dredging projects.

Habitat, Sediment, & Water Quality. Chapter 347 of the Wisconsin Administrative Code outlines sediment sampling and analysis methodologies and monitoring protocols and disposal criteria for dredging projects that require a removal of bed materials permit. This details when sediment sampling is needed and ensures that sufficient samples are collected to describe the chemical, physical and biological properties for the sediments to be dredged. Sediment sampling and analysis requirements are determined using information from the pre-application package. Things looked at when determining the appropriate sampling methods and analyses are: potential routes of contaminant introduction; results from previous testing in the area to be dredged; point and non-point sources of contaminants in the area; and, natural deposits of minerals.

The WDNR does have a Contaminated Sediment Program that incorporates dredging and associated contaminated sediments into its integrated effort for contaminated sediment management. The Program's key elements include: evaluation and development of sediment quality assessment tools; development of site-specific sediment quality objectives; integration of sediment issues into regulatory programs; maintenance of a statewide sediment database; development of a statewide inventory of contaminated sites; development of a site ranking and prioritization system for remediation projects; and, investigating remedial and treatment technologies dealing with dredging, capping, in-situ and ex-situ treatment, and handling and disposal of sediments.

Dredging, filling, and removing materials from the bed of navigable waters and enlarging the course of a navigable water or creating an artificial canal is not allowed if it materially obstructs navigation or reduces effectively flood flow capacity. Dredging and filling or enlarging the course of a navigable water or constructing an artificial waterway shall not be allowed if it is deleterious to fish or game habitat. The WDNR shall use its regulatory authority to minimize adverse changes in the quality or quantity of the flow of waters that support wetlands.

Dredging Techniques & Best Management Practices. The Wisconsin Coastal Management Program has no preferred dredging techniques or best management practices listed in their policies. However, the WDNR may enter into a Memorandum of Understanding with the ACE that includes required dredged disposal methods, specific equipment, and policies.

Dredging in Wisconsin

Dredged Material Disposal. Disposal of dredged spoil in the waters of the state is restricted. There is a Memorandum of Understanding between the WDNR and the ACE that does outline the dredging and disposal practices for projects occurring on the Mississippi River, the St. Croix River, and the Black River. If the chemical composition of dredged material exceeds criteria for solid waste disposal (found in the Administrative Code of Regulations NR 500), the applicant must demonstrate that the disposal will have minimum effects on the environment.

Beneficial Use of Dredged Material. It is WDNR policy to encourage reuse of dredged material. Beneficial use is not defined in the Coastal Policies. The only type of beneficial use mentioned in the Coastal Policies was beach nourishment, and it was not categorized as beneficial use but as a disposal option. No established pre-project review process exists for evaluating beneficial use projects. However, there is a policy that outlines requirements for beach nourishment projects. The material to be used for nourishment must be no more than 15% silt plus clay and must be similar in color to the material on the beach to be nourished.

State Specific Issues. The Wisconsin Coastal Management Program did not identify any complex or controversial issues related to dredging or dredged material management.

Wisconsin Dredging Contact Information.

Dea Larsen-Converse, Chief Email: dea.k Michael J. Friis, Program & Planning Analyst Email: mich Wisconsin Coastal Management Program Division of Housing and Intergovernmental Relations Department of Administration P.O. Box 7868 101 East Wilson Street, 6th Floor Madison, WI 53707-7868 Phone: 608-267-7988 Fax: 608-267-6931 Internet: Http://www.doa.state.wi.us/dhir/boir/coastal.htm

Email: dea.larsenconverse@doa.state.wi.us Email: michael.friis@doa.state.wi.us

References:

- 1. Wisconsin Department of Administration, Division of Energy & Intergovernmental Affairs, Wisconsin Coastal Management Program: A Strategic Vision for the Great Lakes June 1999.
- 2. Wisconsin Department of Natural Resources Waterway & Wetland Permits. <u>Http://www.dnr.state.wi.us/org/water/fhp/waterway/dredging.htm.</u> 6/11/99.
- Wisconsin's Contaminated Sediment Program. <u>Http://www.dnr.state.wi.us/org/water/wm/wqs/sediment/index.htm</u>. 6/11/99.
- 4. Wisconsin Statutes §30.20, 30.202
- 5. Wisconsin Administrative Code §NR 347 et. seq.
- 6. Dea Larson-Converse, Chief, Wisconsin Coastal Management Program. Comments on Wisconsin Draft Dredging Template. 10/15/99.

National Coastal Program Dredging Policies

An Analysis of State, Territory, & Commonwealth Policies Related to Dredging & Dredged Material Management APPENDICES - Volume II of II

APRIL 2000 OCRM/CPD Coastal Management Program Policy Series Technical Document 00-02

Prepared By: Jennifer L. Lukens Coastal Programs Division Office of Ocean & Coastal Resource Management National Ocean Service National Oceanic & Atmospheric Administration U.S. Department Of Commerce

APPENDIX-A

State, Territory, & Commonwealth Policy Language Tables

This appendix is intended to be used as an informative guide. Please note that it only contains summaries of each coastal state's dredging policies and relevant state statue, regulation, and guidance language. *The policy language that is catalogued within this appendix should not be used as an accurate legal reference.* For accurate legal language, please refer to the documents cited in the "Legal Authorities" column of the policy tables.

Policy Title/Number	Program/Action	Policy Summary ¹	Legal Authorities
ADEM Rules & Regulations	Federal Consistency	Dredging and/or filling of state water bottoms or in adjacent	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		wetlands may be permitted or certified for compliance with the	
Dredging and/or Filling (1)(a)		CMP provided that: the activity is a water dependent use; a	
		regional benefit, related to beach nourishment, shoreline	
		stabilization or marsh creation, restoration or enhancement	
		project; or, elimination of dead-end canals or boatslips	
		exhibiting poor water quality or other similar beneficial use.	
ADEM Rules & Regulations	Federal Consistency	Dredging and/or filling of state waterbottoms or in adjacent	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		wetlands may be permitted or certified for compliance with the	
Dredging and/or Filling (1)(b)		CMP provided that: there will be no dredging or filling in close	
		proximity to existing natural oyster reefs, except in association	
		with the approved creation or enhancement of oyster reefs or	
		artificial fish attracting structures.	
ADEM Rules & Regulations	Federal Consistency	Dredging and/or filling of state waterbottoms or in adjacent	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		wetlands may be permitted or certified for compliance with the	
Dredging and/or Filling (1)(c)		CMP provided that: there will be no dredging or filling in close	
		proximity to existing submersed grassbeds.	
ADEM Rules & Regulations	Federal Consistency	Dredging and/or filling of state waterbottoms or in adjacent	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		wetlands may be permitted or certified for compliance with the	
Dredging and/or Filling (1)(d)		CMP provided that: dredging, filling or trenching methods and	
		techniques are such that reasonable assurance is provided that	
		applicable water quality standards will be met	
ADEM Rules & Regulations	Federal Consistency	Dredging and/or filling of state waterbottoms or in adjacent	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		wetlands may be permitted or certified for compliance with the	
Dredging and/or Filling (1)(e)		CMP provided that: no alternative is feasible and the adverse	
		impacts to coastal resources have been reduced to the greatest	
		extent practicable.	

¹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
ADEM Rules & Regulations	Federal Consistency	Dredging, filling, or trenching resulting in a temporary	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		disturbance may be permitted or certified to be in compliance	
Dredging and/or Filling (2)		with the CMP provided that all areas are returned to pre-	
		project elevations and that all wetland areas are revegetated and	
		the requirements set forth in 335-8-202(1) are met.	
ADEM Rules & Regulations	Federal Consistency	Dredging or filling of non-adjacent wetlands may be permitted	Ala. Admin. Code r. 335-8-202
Chapter 335-8-202		or certified provided that: no alternatives are feasible, the	
Dredging and/or Filling (3)		adverse impacts have been reduced to the greatest extent	
		possible, and the non-adjacent wetlands have a limited	
		functional value.	
ADEM Rules & Regulations	Federal Consistency	For projects impacting wetlands, mitigation must be	Ala. Admin. Code r. 335-8-202
Chapter 555-6-202 Dredging and (or Filling (4)		undertaken unless the Departments determines that it is	
ADEM Deles 9. Descriptions	Endered Consistences	unnecessary.	
ADEM Rules & Regulations Chapter 225 8 2 02	Federal Consistency	Any fill material placed on state water bottoms of in wetlands shall be free of toyic pollutents in toyic amounts and shall be	Ala. Admin. Code f. 335-8-202
Chapter 555-6-202 Dredging and /or Filling (5)		devoid of sludge and /or solid waste	
ADEM Pulse & Degulations	Enderal Consistency	Dredge meterial shall not be placed in wetlands uplace	Ala Admin Cada y 225 8 9 09
ADEM Rules & Regulations Chapter 225 8 2 02	Federal Consistency	Dreuge inaterial shall not be placed in wellands diffess specifically permitted or outborized by the Department	Ala. Autiliii. Coue 1. 555-6-202
Dradging and for Filling (6)		specifically permitted of authorized by the Department.	
ADEM Pulos & Pogulations	Fadaral Consistancy	The disposal of dradge material into open state waters may be	Ala Admin Codo r 335 8 2 02
Chapter 335-8-2- 02	rederat Consistency	nermitted or certified provided that it complies with the	Ala. Autilii. Code 1. 555-6-202
Dredging and/or Filling (7)		relevant provisions of this Administrative Code	
ADFM Rules & Regulations	Federal Consistency	The salinity of return waters from dredge disposal sites shall be	Ala Admin Code r 335-8-2-02
Chanter 335-8-2- 02	r cuciai consistency	similar to that of the receiving waters and reasonable assurance	
Dredging and/or Filling (8)		provided that applicable water quality standards will be met	
Alabama Coastal Area Management Plan	Federal Consistency	It is the policy of the Management Program to encourage those	Encouragement Policy
III – Resources of the Coastal Area		activities that influence or affect the displacement of beach	
Beach & Dune Systems		quality sands, to place those sands back into the littoral	
······································		systems.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Alabama Coastal Area Management Plan	Federal Consistency	It is the policy of the Alabama Coastal Area Management	Encouragement Policy
III – Impacts to the Coastal Area Natural		Program to: encourage the development of a comprehensive	
Hazards & Hazards Mitigation Erosion		shoreline management plan on statewide and local levels to	
		reduce and manage erosion; encourage beach sand bypass	
		systems in dredged areas, canals, and channels, or in areas	
		where hardened shoreline stabilization structures exist;	
		encourage the development of strategies and plans that work	
		within the littoral system and that meet coastal infrastructure	
		needs; and, encourage the beneficial use of sand and sediment	
		for beach nourishment purposes when dredging for ports,	
		harbors, and waterways.	
Alabama Coastal Area Management Plan	Federal Consistency	It is the policy of the Alabama Coastal Area Management Plan	Encouragement Policy
III – Impacts to the Coastal Area		to encourage mining operations, and directly related	
Resource Use - Mining and Mineral		development engaged in the extraction and/or processing of	
Resource Extraction		construction sand, industrial sand, gravel, and other minerals to	
		avoid hydrologically sensitive areas, including oyster reefs,	
		submerged grassbeds and other productive shallow water areas,	
		with the exception of those activities related to beach	
		nourishment and shoreline stabilization.	

Alaska Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²	Legal Authorities
Standards of the Alaska CMP	Federal Consistency	The placement of structures and the discharge of dredged or	Alaska Admin. Code tit. 6, §80.040
6 Alaska Admin. Code 80.040(b) Coastal Development		the standards contained in 33 CFR Parts 320-323.	
Standards of the Alaska CMP 6 Alaska Admin Code 80 130(a)	Federal Consistency	Habitats in the coastal area which are subject to the Alaska	Alaska Admin. Code tit. 6, §80.130
Habitats		rocky islands and seacliffs; exposed high energy coasts; rivers, streams, and lakes; and important upland habitat.	
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(b) Habitats	Federal Consistency	The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources.	Alaska Admin. Code tit. 6, §80.130
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(c)(1) Habitats	Federal Consistency	In addition to the standard contained in (b) of this section, the following standards apply to the management of the following habitats: (1) offshore areas must be managed as a fisheries conservation zone so as to maintain or enhance the state's sport, commercial, and subsistence fishery.	Alaska Admin. Code tit. 6, §80.130
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(c)(2) Habitats	Federal Consistency	Habitats in the coastal area which are subject to the Alaska CMP include: (2) estuaries must be managed so as to assure adequate water flow, natural circulation patterns, nutrients, and oxygen levels, and avoid the discharge of toxic wastes, silt, and destruction of productive habitat.	Alaska Admin. Code tit. 6, §80.130
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(c)(3) Habitats	Federal Consistency	Habitats in the coastal area which are subject to the Alaska CMP include: (3) wetlands and tideflats must be managed so as to assure adequate water flow, nutrients, and oxygen levels and avoid adverse effects on natural drainage patterns, the destruction of important habitat, and the discharge of toxic substances.	Alaska Admin. Code tit. 6, §80.130

² This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(c)(7) Habitats	Federal Consistency	Habitats in the coastal area which are subject to the Alaska CMP include: (7) rivers, lakes, and streams must be managed to protect natural vegetation, water quality, important fish or wildlife habitat and natural water flow.	Alaska Admin. Code tit. 6, §80.130
Standards of the Alaska CMP 6 Alaska Admin. Code 80.130(d) Habitats	Federal Consistency	Uses and activities in the coastal area which will not conform to the standards contained in (b) and (c) of this section may be allowed by the district or appropriate state agency if the following are established: there is a significant public need for the proposed use or activity; there is no feasible prudent alternative which would conform to the standards in (b) and (c) of this section; all feasible and prudent steps to maximize conformance with the standards in (b) and (c) of this section will be taken.	Alaska Admin. Code tit. 6, §80.130
Standards of the Alaska CMP 6 Alaska Admin. Code 80.140 Air, Land, and Water Quality	Federal Consistency	Notwithstanding any other provision of this chapter, the statutes pertaining to and the regulations and procedures of the Alaska Department of Environmental Conservation with respect to the protection of air, land, and water quality, in effect on August 18, 1992, are incorporated into the Alaska coastal management program and, as administered by that agency, constitute the components of the coastal management program with respect to those purposes.	Alaska Admin. Code tit. 6, §80.140

Policy Title/Number	Program/Action	Policy Summary ³	Legal Authorities
Program Objectives and Policies 1. Territorial Administration	Federal Consistency	A coordinated, expeditious, and comprehensive permit and project review and approval process shall be instituted. The Development Planning Office will act as a clearing house for Territorial permits.	Am. Samoa Code Ann. §24.0501 <i>et. seq.</i>
Program Objectives and Policies 6. Slope Erosion	Federal Consistency	All clearing, grading, or construction on slopes shall use best available techniques to avoid or minimize soil erosion and exposed soil entering waterways.	Soil Conservation Ordinances Am. Samoa Code Ann §13
Program Objectives and Policies 9. Reef Protection	Federal Consistency	Protect and restore coral reefs. Coral reefs and other submerged lands shall not be dredged, filled, or other wise altered or degraded unless it can be clearly demonstrated that there is a public need, there are no feasible environmentally preferable alternative, and measures will be taken to minimize adverse impacts.	Submerged Lands Am. Samoa Code Ann. §24.0501 <i>et. seq.</i>
Program Objectives and Policies 11. Water Quality	Federal Consistency	Territorial and Federal water quality standards shall be the standards of American Samoa in the coastal zone. Degraded water quality should be restored to acceptable levels where feasible. Potential threats to water quality shall be prevented from degrading water quality where feasible.	Water Quality Certification §401 of the Clean Water Act
Program Objectives and Policies 12. Marine Resources	Federal Consistency	Living marine resources and their habitats shall be protected from over-harvesting or degradation.	Submerged Lands Am. Samoa Code Ann. §24.0501 <i>et. seq.</i>
Program Objectives and Policies 14. Unique Areas	Federal Consistency	Unique areas, including wetlands, mangrove swamps, aquifer recharge areas, critical habitat areas, floodplains, streams, watershed and nearshore waters shall be protected against any significant disruption of their physical, chemical and biological characteristics and values, and only uses dependent on such areas shall be allowed.	Submerged Lands Am. Samoa Code Ann. §24.0501 <i>et. seq.</i>

³ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
ASCMP Administrative Rules 26.0208 Major Projects D. 2. g, i.	Land Use Permit Federal Consistency	Major projects include, but are not limited to: (g) landfilling, excavating, disposing of dredged materials, mining, quarrying; (i) dredging or filling marine or fresh waters, point source discharging of water or air pollutants, ocean dumping, or constructing artificial reefs.	Am. Samoa Admin. Code §26.0208 D.2 (g), (i)
ASCMP Administrative Rules 26.0220 Standards and Criteria for Review A.2.	Land Use Permit Federal Consistency	As a requirement for approval, all projects shall satisfy or be conditioned to satisfy the following criteria: The proposed project shall not cause or threaten a substantial, or potentially substantial, adverse impact in or upon coastal resources.	Am. Samoa Admin. Code §26.0220 A.2.
ASCMP Administrative Rules 26.0220 Standards and Criteria for Review A.2.b.	Land Use Permit Federal Consistency	Adverse impact includes, but is not limited to: alteration of chemical or physical properties of coastal or fresh waters so that they no longer provide a suitable habitat for natural communities; accumulation of toxins, carcinogens, or pathogens which threaten the welfare of humans or aquatic or terrestrial organisms; disruption of the ecological balances in coastal or fresh waters upon which natural biological communities depend; disruption or burial of marine or stream bottom communities; disruption of agricultural, fishing activities or recreational opportunities; and, disruption of the natural protective and beneficial function of coastal resources.	Am. Samoa Admin. Code §26.0220 A.2.b.
ASCMP Administrative Rules 26.0220 Standards and Criteria for Review F.1.	Land Use Permit Federal Consistency	Living marine resources and their habitats shall be protected from over harvesting or degradation, in accordance with ASCA § 24.0300 et seq., and the Department of Marine and Wildlife Resources Act.	Am. Samoa Admin. Code §26.0220 F.1
ASCMP Administrative Rules 26.0220 Standards and Criteria for Review F.2, 3.	Land Use Permit Federal Consistency	Coral reefs should be protected and restored; and, fisheries development shall be promoted in a manner consistent with sound fisheries management.	Am. Samoa Admin. Code §26.0220 F.2, 3.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
ASCMP Administrative Rules	Land Use Permit	Water quality shall be maintained. Territorial water quality	Am. Samoa Admin. Code §26.0220 H.1.a.
26.0220 Standards and Criteria for	Federal Consistency	standards shall be the standards of the ASCMP and land use	
Review H.1.a.		permit applications shall adhere to those standards in	
		accordance with ASCA § 24.0100 et. seq., and the	
		Environmental Quality Act.	
ASCMP Administrative Rules	Land Use Permit	Critical habitats shall be protected, conserved and managed in	Am. Samoa Admin. Code §26.0220 I.2.a,
26.0220 Standards and Criteria for	Federal Consistency	the Territory. Critical habitat means a land or water areas	b, c
Review I.2.a, b, c		where sustaining the natural characteristics is important or	
		essential to the productivity of plant and animal species,	
		especially those that are threatened or endangered. Threatened	
		or endangered species means a species listed by the	
		Department of Marine and Wildlife Resources as being	
		threatened, or endangered, in accordance with ASCA §	
		42.0700 et. seq., the Endangered Species Act and ASCA §	
		42.0300 et. seq., the Conservation of Flying Foxes Act. No	
		taking of endangered or threatened species shall be allowed.	
ASCMP Administrative Rules	Land Use Permit	Wetlands shall be preserved, protected, conserved and	Am. Samoa Admin. Code §26.0220 C.2.
26.0222 Policy on Wetlands C.2.	Federal Consistency	managed in the Territory. The use and development of	_
-		wetlands areas shall be regulated in order to secure the natural	
		benefits of wetlands, consistent with the general welfare of the	
		Territory, including: adequate water flow, nutrients and oxygen	
		levels shall be ensured; the natural ecological and hydrological	
		processes and mangrove areas shall be preserved; critical	
		habitat that is in a wetland shall be maintained and, where	
		possible, enhanced so as to increase the potential for survival	
		of rare and endangered flora and fauna.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
ASCMP Administrative Rules	Land Use Permit	Regulated activities include: altering wetlands, which includes,	Am. Samoa Admin. Code §26.0220 F.1.b.
26.0222. Wetlands Regulated Activities	Federal Consistency	but is not limited to: the act of placing fill; the filling, dumping,	
F.1.b		or depositing of any soil, stones, sand, gravel, mud, aggregate	
		of any kind or garbage, either directly indirectly, on or in any	
		coastal wetlands; the dredging, excavating or removal of soil,	
		mud, sand, gravel, flora, fauna or aggregate of any kind from	
		any coastal wetlands; killing or materially damaging any flora or	
		fauna on or in any coastal wetland; and, the erection on coastal	
		wetlands of structures which materially affect the ebb and flow	
		of the tide.	
ASCMP Administrative Rules	Land Use Permit	Prohibited uses of wetlands: Land fill, dumping of solid waste,	Am. Samoa Admin. Code §26.0220 F.4.a.
26.0222 Wetlands Regulated Activities	Federal Consistency	discharge of pollutants, land clearing, grading or removal of	
F.4.a.		natural vegetation or any other activity or use not associated	
		with a conditional use which limits or eliminates beneficial	
		functions or values of wetlands or unique areas.	
ASCMP Administrative Rules	Land Use Permit	Prohibited uses of wetlands: Adverse impacts on natural	Am. Samoa Admin. Code §26.0220 F.4.b.
26.0222 Wetlands Regulated Activities	Federal Consistency	drainage patterns, the destruction of important habitat, and the	
F.4.b.		discharge of toxic substances shall be prohibited.	

California Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ⁴	Legal Authorities
California Coastal Act Chapter 3-Coastal Resources Planning and Management Policies Article 3-Recreation Section 30224	Federal Consistency Review Coastal Development Permits	Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non- water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors or refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.	Cal. Pub. Res. Code §30224
California Coastal Act Chapter 3-Coastal Resources Planning and Management Policies Article 4-Marine Environment Section 30230	Federal Consistency Review Coastal Development Permits	Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	Cal. Pub. Res. Code §30230
California Coastal Act Chapter 3-Coastal Resources Planning and Management Policies Article 4-Marine Environment Section 30233 (a)	Federal Consistency Review Coastal Development Permits	Permits for dredging activities are limited to listed activities, must have no feasible alternatives, and must minimize adverse effects.	Cal. Pub. Res. Code §30233(a)
California Coastal Act Chapter 3-Coastal Resources Planning and Management Policies Article 4-Marine Environment Section 30233 (b)	Federal Consistency Review Coastal Development Permits	Dredging and spoils disposal shall be planned to avoid disruption to wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.	Cal. Pub. Res. Code §30233(b)
California Coastal Act Chapter 3-Coastal Resources Planning and Management Policies Article 4-Marine Environment Section 30233 (c)	Federal Consistency Review Coastal Development Permits	Dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Further alteration limitations are placed on wetland areas identified as acquisition by the Department of Fish and Game.	Cal. Pub. Res. Code §30233(c)

⁴ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
California Coastal Act	Federal Consistency	Facilities serving the commercial fishing and recreational	Cal. Pub. Res. Code §30234
Chapter 3-Coastal Resources Planning	Review	boating industries shall be protected and, where feasible,	
and Management Policies	Coastal Development	upgraded.	
Article 4-Marine Environment	Permits		
Section 30234			
California Coastal Act	Federal Consistency	The economic, commercial, and recreational importance of	Cal. Pub. Res. Code §30234.5
Chapter 3-Coastal Resources Planning	Review	fishing activities hall be recognized and protected.	
and Management Policies	Coastal Development		
Article 4-Marine Environment	Permits		
Section 30234.5			
California Coastal Act	Federal Consistency	(a) Environmentally sensitive habitat areas shall be protected	Cal. Pub. Res. Code §30240(a),(b)
Chapter 3-Coastal Resources Planning	Review	against any significant disruption of habitat values, and only	
and Management Policies	Coastal Development	uses dependent on those resources shall be allowed within	
Article 5-Land Resources	Permits	those areas. (b) Development in areas adjacent to	
Section 30240(a),(b)		environmentally sensitive habitat areas and parks and	
		recreation areas shall be sited and designed to prevent impacts	
		which would significantly degrade those areas, and shall be	
		compatible with the continuance of those habitat and	
		recreation areas.	
California Coastal Act	Permitting of Port	Water areas may be dredged when consistent with a certified	Cal. Pub. Res. Code §30705(a)(1)-(8)
Chapter 8- Ports	Related Development and	port master plan for listed activities.	
Article 2-Policies	Certification of Port		
Section 30705(a)	Master Plans		
California Coastal Act	Permitting of Port	New or expanded port facilities shall take advantage of existing	Cal. Pub. Res. Code §30705(b)
Chapter 8- Ports	Related Development and	water depths, water circulation, siltation patterns, and	
Article 2-Policies	Certification of Port	sedimentation reduction practices so as to diminish the need	
Section 30705(b)	Master Plans	for future dredging.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
California Coastal Act	Permitting of Port	Dredging shall minimize disruption to fish and wildlife, marine	Cal. Pub. Res. Code §30705(c)
Chapter 8- Ports	Related Development and	habitats, and water circulation. Sediments to be dredged shall	
Article 2-Policies	Certification of Port	be analyzed for toxicants prior to dredging. Where water	
Section 30705(c)	Master Plans	quality standards will be met dredged spoils may be deposited	
		in closed or open coastal waters or upland sites designated as	
		fill sites by the port master plan.	
California Coastal Act	Permitting of Port	For water areas to be dredged, the commission shall balance	Cal. Pub. Res. Code §30705(d)
Chapter 8- Ports	Related Development and	and consider socioeconomic and environmental factors.	
Article 2-Policies	Certification of Port		
Section 30705(d)	Master Plans		
California Coastal Act	Permitting of Port	The disposal of dredge spoils within a designated area seaward	Cal. Pub. Res. Code §30706(b)
Chapter 8- Ports	Related Development and	of the mean high tide line within the jurisdiction of ports shall	
Article 2-Policies	Certification of Port	minimize harmful effects to coastal resources, such as water	
Section 30706(b)	Master Plans	quality, fish or wildlife resources, recreational resources, and	
		sand transport systems, and shall minimize reductions of the	
		volume, surface area, or circulation of water.	
California Coastal Act	Permitting of Port	All port-related developments shall be located, designed, and	Cal. Pub. Res. Code §30708(d)
Chapter 8- Ports	Related Development and	constructed so as to provide for other beneficial uses	
Article 2-Policies	Certification of Port	consistent with the public trust, including but not limited to,	
Section 30708(d)	Master Plans	recreation and wildlife habitat uses, to the extent feasible.	
California Coastal Act	Implementation of Port	A port master plan shall include among other requirements, an	Cal. Pub. Res. Code §30711(a)(3)
Chapter 8- Ports	Master Plan	estimate of the effect of development on habitat areas and the	
Article 3-Implentation of Master Plan		marine environment, review of water quality, habitat areas, and	
Section 30/11(a)(3)		quantitative and qualitative biological inventories.	
California Water Code - Water Quality	Water Quality Control	The State Water Quality Control Board and Regional Boards	Cal. Water Code §13392
Control Policy	Plans	shall develop a program to identify and characterize toxic hot	
		spots in sediments, plan for their cleanup, and amend policies	
		to prevent the creation of hot spots.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
California Water Code - Water Quality	Water Quality Control	No person shall dredge or disturb a toxic hot spot site that has	Cal. Water Code §13396
Control Policy	Plans	been identified and ranked without first obtaining §401 Water	Clean Water Act 33 U.S.C. §1341
		Quality Certification.	_
California Water Code	Los Angeles Basin	The California Coastal Commission and the Los Angeles	Cal. Water Code §13396.9(a)
	Contaminated Sediment	Regional Water Quality Board shall establish and participate in	
	Task Force	a multiagency Los Angeles Basin Contaminated Sediments	
		Task Force.	
California Water Code	Los Angeles Basin	The California Coastal Commission shall, based upon the	Cal. Water Code §13396.9(b)
	Contaminated Sediment	recommendations of the Task Force, develop a long-term	
	Task Force	management plan for the dredging and disposal of	
		contaminated sediments in Los Angeles County.	
California Water Code	Los Angeles Basin	The California Coastal Commission, Los Angeles Water	Cal. Water Code §13396.9(c)
	Contaminated Sediment	Quality Control Board, and Task Force shall conduct not less	
	Task Force	than one annual pubic workshop to review the status of the	
		plan and to promote public participation.	

Policy Title/Number	Program/Action	Policy Summary ⁵	Legal Authorities
II. Coastal Use Policies	Federal Consistency	High priority will be given to uses and facilities which are	Conn. Gen. Stat. §22a-92(a)(3)
B. Water Dependent Uses A. (#114)*		dependent upon proximity to the water or the shorelands	
		immediately adjacent to marine and tidal waters.	
II. Coastal Use Policies	Federal Consistency	To manage uses in the coastal boundary through existing	Conn. Gen. Stat. §22a-92(b)(1)(A)
B. Water Dependent Uses ⁶ B. (#115)		municipal planning, zoning and other local regulatory	
1		authorities and though existing state structures, dredging,	
		wetlands, and other state siting and regulatory authorities,	
		giving highest priority and preference to water dependent uses	
		and facilities in shorefront areas.	
II. Coastal Use Policies	Federal Consistency	To promote, though existing state and local planning,	Conn. Gen. Stat. §22a-92(b)(1)(C)
C. Ports and Harbors A. (#100)		development, promotional and regulatory authorities, the	
		development, reuse, or redevelopment of existing urban and	
		commercial fishing ports giving highest priority and preference	
		to water-dependent uses, including but not limited to	
		commercial and recreational fishing and boating uses.	
II. Coastal Use Policies	Federal Consistency	To disallow uses which unreasonably congest navigation	Conn. Gen. Stat. §22a-92(b)(1)(C)
C. Ports and Harbors B. (#101)		channels, or unreasonable preclude boating support facilities	
		elsewhere in a port or harbor.	

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⁶ The definition of Water Dependent Uses includes marinas, waterfront dock and port facilities, navigation aids, basins and channels. Conn. Pub. Acts 79-535 §3(16).

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
 II. Coastal Use Policies D. Coastal Structures and Filling A. (#63) * 	Federal Consistency	To require that structures in tidal wetlands and coastal waters be designed, constructed and maintained to minimize adverse impacts on coastal resources, circulation and sedimentation patterns, water quality, flooding and erosion, to reduce to the maximum extent practicable the use of fill, and to reduce conflicts with the riparian rights of adjacent landowners.	Conn. Gen. Stat. §22a-92(b)(1)(D)
II. Coastal Use PoliciesD. Coastal Structure and Filling B. (#64)	Federal Consistency	To disallow any filling of tidal wetlands and nearshore, offshore and interdtidal waters for the purpose of creating new land from existing wetlands and coastal waters which would otherwise be undevelopable, unless it is found that the adverse impacts on coastal resources are minimal.	Conn. Gen. Stat. §22a-92(c)(1)(B)
II. Coastal Use Policies D. Coastal Structure and Filling F. (#68)	Federal Consistency	The commissioner of environmental protection shall regulate dredging and the erection of structures and the placement of fill in the tidal, coastal, or navigable waters of the state waterward of the high tide line. Decisions made by the commissioner pursuant to this section shall include: regard for indigenous aquatic life, fish and wildlife; the prevention or alleviation of shore erosion and coastal flooding; the use and development of adjoining uplands; the improvement of coastal and inland navigation of all vessels, including small craft for recreational purposes; the use and development of adjacent land and properties; and, the interest of the state, including pollution control, water quality, recreational use of public water and management of coastal resources with proper regard for the right and interests of all persons concerned.	Conn. Gen. Stat. §22a-359(a) as referenced by 22a-92(a)(2)
II. Coastal Use PoliciesE. Dredging and Navigation A. (#77)	Federal Consistency	To encourage, though the state permitting program for dredging activities, the maintenance and enhancement of existing federally maintained navigation channels, basins and anchorages.	Conn. Gen. Stat. §22a-92(c)(1)(C)

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
II. Coastal Use Policies	Federal Consistency	To discourage the dredging of new federally maintained	Conn. Gen. Stat. §22a-92(c)(1)(C)
E. Dredging and Navigation B.(#78)*		navigation channels, basins, and anchorages.	
II. Coastal Use Policies	Federal Consistency	To reduce the need for future dredging by requiring that new	Conn. Gen. Stat. §22a-92(c)(1)(D)
E. Dredging and Navigation C. (#79)		or expanded navigation channels, basins and anchorages take	
		advantage of existing or authorized water depths, circulation	
		and siltation patterns and the best available technologies for	
		reducing controllable sedimentation.	
II. Coastal Use Policies	Federal Consistency	To disallow new dredging in tidal wetlands except where no	Conn. Gen. Stat. §22a-92(c)(1)(E)
E. Dredging and Navigation D.		feasible alternative exists and where adverse impacts to coastal	
(#80)		resources are minimal.	
II. Coastal Use Policies	Federal Consistency	The commissioner of environmental protection shall regulate	Conn. Gen. Stat. §22a-383 as referenced
E. Dredging and Navigation D. (#81)		the taking and removal of sand, gravel and other materials	by 22a-92(a)(2)
		from lands under tidal and coastal waters with due regard for:	
		the prevention or alleviation of shore erosion; the protection of	
		necessary shell fish grounds and finfish habitats; the	
		preservation of necessary wildlife habitats; the development of	
		adjoining upland; the rights of riparian property owners; the	
		creation and improvement of channels and boat basins; the	
		improvement of coastal and inland havigation for all vessels	
		including small craft for recreational purposes; and the	
		upon tidal and coastal waters, with due regard for the rights	
		and interests of all persons concerned	
III. Covernment Processes	Fodoral Consistancy	To coordinate planning and regulatory activities of public	Conn. Con. Stat. $822a 02(a)(9)$
A Intergovernmental Coordination of		agancies at all levels of government to insure maximum	Comi. Gen. Stat. 322d-32(d)(8)
Planning and Regulatory Activities A		protection of coastal resources while minimizing conflicts and	
(#116)		disruption of economic development	
III. Government Processes A. Intergovernmental Coordination of Planning and Regulatory Activities A. (#116)	Federal Consistency	adjoining upland; the rights of riparian property owners; the creation and improvement of channels and boat basins; the improvement of coastal and inland navigation for all vessels including small craft for recreational purposes; and the improvement, protection or development of upland bordering upon tidal and coastal waters, with due regard for the rights and interests of all persons concerned. To coordinate planning and regulatory activities of public agencies at all levels of government to insure maximum protection of coastal resources while minimizing conflicts and disruption of economic development.	Conn. Gen. Stat. §22a-92(a)(8)

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
III. Governmental Processes D. Dredging and Dredged Material Disposal Planning A. (#123)	Federal Consistency	To initiate in cooperation with the federal government and the continuing legislative committee on state planning and development a long range planning program for the continued maintenance and enhancement of federally maintained navigation facilities in order to effectively and efficiently plan and provide for environmentally sound dredging and disposal	Conn. Gen. Stat. §22a-92(c)(1)(1)
 Project Evaluation-Definitions of Adverse Impacts Characteristics & Functions of Resources 	Federal Consistency	of dredged materials. Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or function.	Conn. Gen. Stat. §22a-93(15)(H)
Project Evaluation-Definitions of Adverse Impacts Coastal Waters Circulation Patterns	Federal Consistency	Degrading existing circulation patterns of coastal waters through the significant patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours.	Conn. Gen. Stat. §22a-93(15)(B)
Project Evaluation-Definitions of Adverse Impacts Water Quality	Federal Consistency	Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity.	Conn. Gen. Stat. §22a-93(15)(A)
Project Evaluation-Definitions of Adverse Impacts Wildlife, Finfish, Shellfish Habitat	Federal Consistency	Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alteration of the natural components of the habitat	Conn. Gen. Stat. §22a-93(15)(G)

⁺ Adverse impacts are evaluated for activities occurring in all of the Coastal Land and Water Resource areas.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources		Filling may be consistent with the coastal policies when: the	Resource Use Guidelines
B. Bluffs & Escarpments		material is placed as part of an erosion control project,	
		sediment is of similar grain size, composition and character;	
		material does not contain any chemical, biological or man-	
		made pollutants which may violate state water quality	
		standards; placement minimizes destruction of vegetation;	
		material does not alter surface water drainage patterns;	
		dispersal of sediments during placement is controlled to	
		minimize impacts on water quality and sedimentation; and,	
		vegetated areas disturbed during placement are restored.	
		Disposal of dredged material may be consistent with the coastal	
		policies when it meets the guidelines for filling. Dredging and	
		excavation are generally inconsistent with the coastal use	
		policies for bluffs and escarpments.	
I. Coastal Land and Water Resources		Dredging may be consistent with the coastal policies when it:	Resource Use Guidelines
C. Rocky Shorefronts - Dredging and		does not alter the shorefront's natural resistance to erosion;	
Dredged Material Disposal		does not permanently alter a productive shorebird, finfish or	
		shellfish habitat; does not increase the natural slope of the	
		intertidal shorefront; does not reduce the capacity of the	
		shorefront to act as a buffer to flooding, storms and waves; the	
		finished side slopes of the dredged area are of the same or	
		similar roughness and composition as the existing shore; does	
		not adversely affect water quality; and, appropriate	
		sedimentation controls are employed when necessary to protect	
		shellfish beds, adjacent beaches, finfish populations or water	
		quality.	
		Disposal of dredged material may be consistent with the coastal	
		policies when it meets the guidelines for filling.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources		Filling may be consistent with the coastal policies when: the	Resource Use Guidelines
C. Rocky Shorefronts - Filling		finished slopes of the filled area are of the same or similar	
, , , , , , , , , , , , , , , , , , ,		roughness and composition as the existing shore;	
		sedimentation and erosion control techniques are employed	
		during construction when necessary to prevent disturbances of	
		water quality and to prevent spillover of sediment into	
		surrounding resource areas; the fill does not contain any	
		chemical, biological, or man-made pollutants which may have	
		an adverse effect on surface or ground water quality or which	
		may result in a violation of state water quality standards; the	
		filling does not permanently disrupt littoral transport of	
		sediment to adjacent beaches; the fill does not significantly	
		reduce the areal extent of a productive shorebird, finfish or	
		shellfish habitat; and, the material is suitably contained so as to	
		prevent it from being eroded or re-entering a waterway, unless	
		it is being placed as part of an erosion control project.	
I. Coastal Land and Water Resources	Federal Consistency	To insure that coastal uses are compatible with the capabilities	Conn. Gen. Stat. §22a-92(b)(2)(C)
D. Beaches and Dunes B. (#6)*		of the system and do not unreasonably interfere with natural	
		processes of erosion and sedimentation.	
I. Coastal Land and Water Resources	Federal Consistency	To encourage the restoration and enhancement of disturbed or	Conn. Gen. Stat. §22a-92(b)(2)(C)
D. Beaches and Dunes C. (#7)		modified beach systems.	
I. Coastal Land and Water Resources		The activity of dredging is generally inconsistent with the	Resource Use Guidelines
D. Beaches and Dunes - Disposal of		coastal policies. Disposal of dredged material for the purposes	
Dredged Material and Dredging		of beach nourishment or dune management may be consistent	
		with the coastal policies when it is accomplished according to	
		the special requirements for filling as listed above.	
I. Coastal Land and Water Resources	Federal Consistency	To manage intertidal flats so as to preserve their value as a	Conn. Gen. Stat §22a-92(b)(2)(D)
E. Intertidal Flats A. (#29)		nutrient source and reservoir, a healthy shellfish habitat and a	
		valuable feeding area for invertebrates, fish and birds.	

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources		Filling may be consistent with the coastal policies when: the fill	Resource Use Guidelines
D. Beaches and Dunes - Filling		is placed for the purposes of beach nourishment or dune	
C C		management; the fill is of a grain size distribution and character	
		which is compatible with the existing beach or dune sand; it is	
		free of chemical, biological or man-made pollutants which may	
		adversely affect water quality or violate state water quality	
		standards; the fill is placed in a manner utilizing techniques	
		which restrict, eliminate or substantially limit the destruction of	
		dune and beach vegetation and/or shorebird nesting and	
		breeding habitat; the filled beach slope is the same as the	
		natural beach slope; and, dispersal of sediments during filling is	
		controlled when necessary to minimize impacts on water	
		quality and sedimentation in surrounding areas.	
I. Coastal Land and Water Resources	Federal Consistency	To encourage the restoration and enhancement of degraded	Conn. Gen. Stat §22a-92(b)(2)(D)
E. Intertidal Flats B. (#30)*		intertidal flats.	
I. Coastal Land and Water Resources	Federal Consistency	To allow coastal uses that minimize change in the natural	Conn. Gen. Stat §22a-92(b)(2)(D)
E. Intertidal Flats C. (#31)	_	current flows, depth, slope, sedimentation and nutrient storage	
		functions.	
I. Coastal Land and Water Resources		Disposal of dredged material may be consistent with the coastal	Resource Use Guidelines
E. Intertidal Flats - Disposal of Dredged		policies only when: used for the purpose of habitat restoration	
Material		or tidal wetland creation and when the material does not	
		contain any chemical, biological or man-made pollutants which	
		may violate state water quality standards; the texture of the	
		material is compatible with the existing disposal site; and, as	
		necessary, the material is containerized in order to minimize	
		the off-site impacts to shellfish and other sensitive resources.	

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I.Coastal Land and Water Resources E. Intertidal Flats - Dredging (maintenance and enhancement)Maintenance and enhancement dredging may be consistent with the coastal policies when the channel or basin is not substantially enlarged from the original project and dimensions, the best available technologies are used to reduce controllable sedimentation, and the timing of the dredging activity avoids critical shellfish or finfish spawning periods.Resource Use GuidelinesI.Coastal Land and Water Resources E. Intertidal Flats - Dredging (new)The activity of new dredging is generally inconsistent with the coastal policies.Resource Use GuidelinesI.Coastal Land and Water Resources F. Tidal Wetlands A. (#43)*Federal ConsistencyTo preserve tidal wetlands and to prevent the despoliation and destruction thereof in order to maintain their vital natural functions.Conn. Gen. Stat. §22a-92(b)(2)(E)I.Coastal Land and Water Resources F. Tidal Wetlands A. (#43)*Federal ConsistencyTo encourage the rehabilitation and restoration of degradedConn. Gen. Stat. §22a-92(b)(2)(E)
E. Intertidal Flats - Dredging (maintenance and enhancement)with the coastal policies when the channel or basin is not substantially enlarged from the original project and dimensions, the best available technologies are used to reduce controllable sedimentation, and the timing of the dredging activity avoids critical shellfish or finfish spawning periods.I. Coastal Land and Water Resources E. Intertidal Flats - Dredging (new)The activity of new dredging is generally inconsistent with the coastal policies.Resource Use GuidelinesI. Coastal Land and Water Resources F. Tidal Wetlands A. (#43)*Federal ConsistencyTo preserve tidal wetlands and to prevent the despoliation and destruction thereof in order to maintain their vital natural functions.Conn. Gen. Stat. §22a-92(b)(2)(E)I. Coastal Land and Water Resources F. Tidal Wetlands A. (#43)*Federal ConsistencyTo encourage the rehabilitation and restoration of degradedConn. Gen. Stat. §22a-92(b)(2)(E)
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E. Interfidial Flats - Dredging (new) Coastal poincies. I. Coastal Land and Water Resources Federal Consistency F. Tidal Wetlands A. (#43)* Federal Consistency I. Coastal Land and Water Resources Federal Consistency To preserve tidal wetlands and to prevent the despoliation and destruction thereof in order to maintain their vital natural functions. Conn. Gen. Stat. §22a-92(b)(2)(E) I. Coastal Land and Water Resources Federal Consistency To encourage the rehabilitation and restoration of degraded Conn. Gen. Stat. §22a-92(b)(2)(E)
I. Coastal Land and Water Resources Federal Consistency To preserve tidal wetlands and to prevent the desponation and destruction thereof in order to maintain their vital natural functions. Conn. Gen. Stat. §22a-92(b)(2)(E) I. Coastal Land and Water Resources Federal Consistency To encourage the rehabilitation and restoration of degraded Conn. Gen. Stat. §22a-92(b)(2)(E)
F. 11dal Wetlands A. (#43) destruction thereof in order to maintain their vital natural functions. I. Coastal Land and Water Resources Federal Consistency To encourage the rehabilitation and restoration of degraded Conn. Gen. Stat. §22a-92(b)(2)(E)
I. Coastal Land and Water Resources Federal Consistency To encourage the rehabilitation and restoration of degraded Conn. Gen. Stat. §22a-92(b)(2)(E)
F Tidal Wetlands B (#45) tidal wetlands
I. Coastal Land and Water Resources Federal Consistency It is declared that much of the wetlands of this state have been Conn. Gen. Stat. §22a-92(a)(2)
F. Tidal Wetlands C. (#46)
like activities It is therefore declared to be the public policy
of this state to preserve the wetlands and prevent the
despoliation and destruction thereof.
I. Coastal Land and Water Resources Federal Consistency To disallow any filling of tidal wetlands and nearshore, Conn. Gen. Stat. §22a-92(c)(1)(B)
F. Tidal Wetlands D. (#47) offshore, and intertidal waters for the purpose of creating new
land from existing wetlands and coastal waters which would
otherwise be undevelopable, unless it is found that the adverse
impacts on coastal resources are minimal.
1. Coastal Land and Water Resources Federal Consistency In granting, denying or limiting any permit the commissioner Conn. Gen. Stat. §22a-92(a)(2)
F. 11dal wetlands E. (#48) Shall consider the effect of the proposed work with reference
to the public health and weifare, marine fisheries, shellfisheries, wildlife the protection of life and property from flood
burricane and other natural disasters and the public policy set
forth in section 22a-28 through 22a-35

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources F. Tidal Wetlands		The activities of new dredging, filling and disposal of dredged material are generally inconsistent with the coastal policies.	Resource Use Guidelines
I. Coastal Land and Water Resources G. Freshwater Wetlands and Watercourses A. (#27)*	Federal Consistency	To protect the citizens of the state by making provisions for: the protection, preservation, maintenance and use of the inland wetlands and water courses by minimizing their disturbance and pollution; maintaining and improving water quality; preventing erosion, tubidity or sitltation; preventing loss of marine organisms, wildlife and vegetation and the destruction of their natural habitats; deterring and inhibiting the danger of flood and pollution; protection for their conservation, economic, aesthetic, recreational and other public and private values; and, protection of potable fresh water supplies from drought, overdraft, pollution, misuses and mismanagement. An orderly process will be used to balance the need for economic growth of the state and the use of its land with the need to protect the environment and ecology in order to forever guarantee to the people of the state.	Conn. Gen. Stat. §22a-36 as referenced by 22a-92(a)(2)
I. Coastal Land and Water Resources G. Freshwater Wetlands and Watercourses B. (#28)	Federal Consistency	In carrying out the purposes and policies of sections 22a-36 to 22a-45, the commissioner shall take into consideration while regulating, licensing, and enforcing: environmental impact of the proposed action; alternatives to the action; relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity; irreversible and irretrievable commitments of resources which would be involved in the activity, the character and degree of injury or interference with, safety, health or the reasonable use of property; and, the suitability or unsuitability of the activity to the area for which it is proposed.	Conn. Gen. Stat. §22a-41 as referenced by 22a-92(a)(2)

^{*} Numbers denoted in parentheses reflects the policy numeration found in the State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program's *Reference Guide to Coastal Policies and Definitions*. 06/15/98.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources		Maintenance and enhancement dredging may be consistent	Resource Use Guidelines
G. Freshwater Wetlands and		with the coastal policies when: the dimensions of the channel	
Watercourses		or basin is not significantly enlarged from the original project	
		design; the impacts will not adversely affect coastal waters or	
		violate state water quality standards; and, the operations are	
		timed so as to avoid critical anadromous fish runs.	
I. Coastal Land and Water Resources		Disposal of dredge material and new dredging activities are	Resource Use Guidelines
G. Freshwater Wetlands and		generally inconsistent with the coastal policies.	
Watercourses			
I. Coastal Land and Water Resources	Federal Consistency	To promote nonstructural solutions to flood and erosion	Conn. Gen. Stat. §22a-92(b)(2)(F)
H. Coastal Hazard Areas B. (#13)*		problems.	
I. Coastal Land and Water Resources	Federal Consistency	To minimize the adverse impacts of erosion and sedimentation	Conn. Gen. Stat. §22a-92(b)(2)(J)
H. Coastal Hazard Areas D. (#15)		on coastal land uses through the promotion of nonstructural	
		mitigation measures.	
I. Coastal Land and Water Resources		The disposal of dredged material may be consistent with	Resource Use Guidelines
H. Coastal Hazard Areas		coastal policies when: the material is clean and free of	
I. Developed Shorefront		chemical, biological, or man-made pollutants which are likely to	
_		adversely affect water quality or violate state water quality	
		standards; the best available technologies are used to reduce	
		controllable sedimentation; and, the material is contained so as	
		to prevent its release to coastal waters.	
I. Coastal Land and Water Resources		Filling may be consistent with the coastal policies if the flood	Resource Use Guidelines
H. Coastal Hazard Areas		hazard potential is not significantly increased, and the fill is	
I. Developed Shorefront		clean and free of chemical, biological or man-made pollutants	
		which could adversely affect water quality or violate state water	
		quality standards.	

^{*} Numbers denoted in parentheses reflects the policy numeration found in the State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program's *Reference Guide to Coastal Policies and Definitions*. 06/15/98.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Title/ Number I. Coastal Land and Water Resources L. Shellfish Concentration Areas M. Coastal Waters and Estuarine Embayments	Program/Action	Policy Summary Maintenance and enhancement dredging may be consistent with the coastal polices when: the dredging is staged so as to avoid impacts to shellfish or finfish populations during critical breeding periods; the best available technologies are used to reduce controllable sedimentation and prevent adverse impacts on water quality; significant impacts on contiguous shellfish concentration areas are avoided; the activity is timed so as to avoid reduction s in dissolved oxygen concentration which may result in fish kills; and, the channel or basin is not substantially	Legal Authorities Resource Use Guidelines
I. Coastal Land and Water Resources L. Shellfish Concentration Areas		enlarged from the original project dimension.Filling, disposal of dredged material, and new dredging projects are generally inconsistent with the coastal policies.	Resource Use Guidelines
I. Coastal Land and Water Resources M. Coastal Waters and Estuarine Embayments C. (#23)*	Federal Consistency	To manage estuarine embayments so as to insure that coastal uses proceed in a manner that assures sustained biological productivity, the maintenance of healthy marine populations and the maintenance of essential patterns of circulation, drainage, and basin configuration.	Conn. Gen. Stat. §22a-92(c)(2)(A)
I. Coastal Land and Water Resources M. Coastal Waters and Estuarine Embayments		New dredging may be consistent with the coastal policies if it can be demonstrated that: existing navigation channels are inadequate to provide access from the facility to deep water; sensitive coastal resources areas such as shellfish areas, intertidal flats, important finfish habitats and major eelgrass flats are avoided; the channel, basin, or anchorage area is designed to take optimal advantage of naturally deep water or existing natural channels so as to minimize the need for dredging; dredging does not induce or contribute to accelerated erosion or sedimentation in critical resource areas such as beaches, bluffs and escarpments, tidal wetlands intertidal flats, and shellfish concentration areas; and appropriate guidelines under maintenance dredging are applied.	Resource Use Guidelines

^{*} Numbers denoted in parentheses reflects the policy numeration found in the State of Connecticut, Department of Environmental Protection, Office of Long Island Sound Program's *Reference Guide to Coastal Policies and Definitions*. 06/15/98.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
I. Coastal Land and Water Resources		Filling is an activity that is generally inconsistent with the	Resource Use Guidelines- Coastal Waters
M. Coastal Waters and Estuarine		coastal policies.	
Embayments			
I. Coastal Land and Water Resources		Filling may be consistent with the coastal policies when: the	Resource Use Guidelines - Estuarine
M. Coastal Waters and Estuarine		material is placed as part of an erosion control project or for	Embayments
Embayments		the purposes of promoting a water dependent use in a	
·		developed shorefront area; the material does not contain any	
		chemical biological or man-made pollutants which may violate	
		state water quality standards; dispersal of sediments during the	
		placement of the fill is controlled so as to minimize impacts on	
		water quality or sedimentation; the filling is timed so as to	
		avoid impacts on shellfish beds or spawning activities when	
		necessary; and, the fill does not restrict or alter tidal circulation	
		or flushing.	
Policy Title/Number	Program/Action	Policy Summary ⁷	Legal Authorities
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CMP Policies for Wetlands Management #11	Federal Consistency Wetlands Permit	To assure that any activity in the wetlands is appropriate, state approval shall be required prior to the initiation of such activities. The following factors will be considered prior to such approval: the environmental impact; the number and type of supporting facilities required and their impact; the effect of the activity on neighboring land uses; the appropriate state and local comprehensive plans for the general area; the economic impact of the activity in terms of jobs, taxes, and land area; and aesthetic impact of the activity	Del. Code Ann. Tit.7, §6604 Wetlands Regulations
CMP Policies for Wetlands Management #12	Federal Consistency Wetlands Permit	In considering the environmental impacts of a proposed activity in wetlands, the Department of Natural Resources and Environmental (DNREC) control shall consider the cumulative impact of individual projects.	Exec. Order No. 43 (1996)
CMP Policies for Wetlands Management #13a	Federal Consistency Wetlands Permit	No permit will be issued to: Dredge any channel through the wetlands deeper than the existing depth or the control channel depth specified by the Corps of Engineers at the point of connection to the adjacent navigable waterway to which the dredge channel is directly connected.	Wetlands Regulations
CMP Policies for Wetlands Management #13b	Federal Consistency Wetlands Permit	No permit will be issued to: Dredge any channel through the wetlands that has only one outlet to navigable water through which the normal daily tide ebbs and flows unless the channel is equipped by aerators or other means, to maintain the Water Quality Standards for streams that are issued by DNREC.	Wetlands Regulations
CMP Policies for Wetlands Management #13c	Federal Consistency Wetlands Permit	No permit will be issued to: Dredge channels through wetlands with sides more nearly vertical than a slope rises one foot vertically for each three feet of horizontal distance except where conditions of soil composition prevent slope stabilization, so that bulkheading must be used.	Wetlands Regulations

⁷ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Wetlands Management #13d	Federal Consistency Wetlands Permit	No permit will be issued to: Utilize wetlands for any activity unless it requires water access for the central purpose of the activity and has no alternative on adjoining non-wetland property of the owner.	Wetlands Regulations
CMP Policies for Coastal Waters Management #6	Federal Consistency 401 Water Quality Certification	Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. Degradation of water quality in such a manner that results in reduced number, quality, or river or stream mileage of existing uses shall be prohibited. Degradation shall be defined for the purposes of this section as a statistically significant reduction, accounting for natural variations, in biological, chemical, or habitat quality as measured or predicted using appropriate assessment protocols.	State of Delaware Surface Water Quality Standards §3.1(revised 2/26/93)
CMP Policies for Coastal Waters Management #13	Federal Consistency 401 Water Quality Certification	Regulatory mixing zones shall not impinge upon areas of special importance, including but not limited to drinking water supply intakes, nursery areas for aquatic life or waterfowl, approved or conditional shellfish areas or heavily utilized primary contact recreation areas. Zones shall not be located in such a manner as to interfere with passage of fishes or other organisms. Shore-hugging plumes should be avoided to the maximum extent practicable.	State of Delaware Surface Water Quality Standards §6.2 (revised 2/26/93)
CMP Policies Specific to Marinas #7	Federal Consistency Subaqueous Lands Lease	Dredging shall be limited to the minimum dimensions necessary for the project and shall avoid sensitive areas such as wetlands, shellfish resources, and submerged aquatic vegetation. Delaware Surface Water Quality Standards must not be violated because of dredging operations excluding whatever temporary and minimal turbidity is unavoidable when using sound dredging practices.	State of Delaware Marina Regulations §II (E)(2)(b) and (E)(4)(a)

Policy Title/Number	Program/Action	Policy Summary ⁸	Legal Authorities
CMP Policies for Subaqueous Lands and Coastal Strip Management #18	Federal Consistency Subaqueous Lands Lease	No person shall deposit material upon or remove or extract materials from submerged lands or tidelands without first having obtained a permit, lease or letter of approval from DNREC. If it is determined that granting the permit, lease or approval will result in loss to the public of a substantial resource, the permittee may be required to take measures which will offset or mitigate the loss.	Del. Code Ann. Tit.7, §7205
CMP Policies for Subaqueous Lands and Coastal Strip Management #19	Federal Consistency Subaqueous Lands Lease	The extent of jurisdictional authority over public or private subaqueous lands includes any activity in a navigable stream or waterbody, which have a hydrologic connection to natural waterbodies. "Activity" includes any human induced action, such as dredging, draining, filling, or excavation, or construction of any kind.	State of Delaware Regulations Governing the Use of Subaqueous Lands §1.02(A)(1)
CMP Policies for Subaqueous Lands and Coastal Strip Management #20 (c-f)	Federal Consistency Subaqueous Lands Lease	The following types of activities in, on, over, or under private subaqueous lands require a permit or letter of authorization from DNREC: dredging, filling, excavating or extracting of materials; excavation, creation, or alteration of any channel, lagoon, turning basin, pond, embayment, or other navigable waterway on private subaqueous lands which will make connection with public subaqueous lands; dredging of existing channels, ditches, dockages, lagoons and other navigable waterways to maintain or restore the approved depth and width; and, excavation of land which makes connection to public lands.	State of Delaware Regulations Governing the Use of Subaqueous Lands §1.03(C)
CMP Policies for Subaqueous Lands and Coastal Strip Management #21 (b,h,k)	Federal Consistency Subaqueous Lands Lease	The following types of activities on public subaqueous lands require a lease, permit, or letter of authorization from DNREC: dredging, filling, excavating or extracting or materials; maintenance dredging of existing or new channels, ditches, dockages, lagoon and other waterways to maintain or restore the approach depth and width; and, new dredging activities of channels, ditches, dockage, or other waterways.	State of Delaware Regulations Governing the Use of Subaqueous Lands §1.04(B)

⁸ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(a)		considerations include, but are not limited to: The value to the	
		state or the public in retaining any interest in subaqueous lands	
		which the applicant seeks to acquire, including the potential	
		economic value of the interest.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(D)		considerations include, but are not limited to: The value to the	
		state of the public in conveying any interest in subaqueous	
CMD Deliging for Subaguague Lands and	Enderal Consistency	The DNDEC shall consider the public interest in any proposed	State of Deleware Degulations Coverning
Constal Strip Management	Subaquoous Lands Loaso	activity which might affect the use of subaqueous lands. These	the Lies of Subaguague Lands \$1.02(A)
$\pm 22(c)$	Subaqueous Lanus Lease	considerations include but are not limited to: The potential	the Use of Subaqueous Lands S1.05(A)
11 66 (C)		effect on the public with respect to commerce navigation	
		recreation aesthetic enjoyment natural resources and other	
		uses of the subaqueous lands.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(d)	-	considerations include, but are not limited to: The extent to	
		which any disruption of the public use of such lands is	
		temporary or permanent.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(e)		considerations include, but are not limited to: The extent to	
		which the applicant's primary objectives and purposes can be	
		realized without the use of such lands (avoidance).	
CMP Policies for Subaqueous Lands and	Federal Consistency	DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(1)		which the applicant's primary purpose and objectives can be	
		realized by alternatives i.e. minimize the scope or the extent of	
		a project and its adverse impact	
		a project and its adverse impact.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(g)		considerations include, but are not limited to: Given the	
		inability for avoidance or alternatives, the extent to which the	
		applicant can employ mitigation measures to offset any losses	
		incurred by the public.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the public interest in any proposed	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands §1.03(A)
#22(n)		considerations include, but are not limited to: The extent to	
		which the public at large would benefit from the activity of project and the extent to which it would suffer detriment	
CMP Policies for Subaqueous Lands and	Fodoral Consistancy	The DNREC shall consider the public interest in any proposed	State of Delaware Pegulations Coverning
Coastal Strip Management	Subaqueous Lands Lease	activity which might affect the use of subaqueous lands. These	the Use of Subaqueous Lands \$1.03(A)
#22(i)	Subaqueous Lanus Lease	considerations include but are not limited to: The extent to	the Use of Subaqueous Lanus S1.05(A)
11 66 (I)		which the primary purpose of a project is water-dependent	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the impact on the environment.	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	including but not limited to, the following: Any impairment of	the Use of Subaqueous Lands \$3.01(B)
#23 (a)	1	water quality, either temporary or permanent, which may	
		reasonably be expected to cause violation of the state Surface	
		Water Quality Standards. This impairment may include	
		violation of criteria or degradation of existing uses.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the impact on the environment,	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	including but not limited to, the following: Any effect on	the Use of Subaqueous Lands §3.01(B)
#23 (b)		shellfishing, finfishing, or other recreational activities and	
		existing or designated water uses.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the impact on the environment,	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	including but not limited to, the following: Any harm to aquatic	the Use of Subaqueous Lands §3.01(B)
#23 (c)		or tidal vegetation, benthic organisms or other flora and fauna,	
CMD Deltates for Subservers L. J. J.	E. Jarol Consistence	and their nabilats.	State of Delement Desclations C
CMIP POlicies for Subaqueous Lands and	Federal Consistency	I he DINKEL shall consider the impact on the environment,	State of Delaware Regulations Governing
Uoastai Strip Management	Subaqueous Lands Lease	including but not limited to, the following: Any loss of natural	the Use of Subaqueous Lands $\S3.01(B)$
#20 (U)		aquatic nabitat.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall consider the impact on the environment,	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	including but not limited to, the following: The extent to which	the Use of Subaqueous Lands §3.01(B)
#23 (f)	_	the proposed project may adversely impact natural surface and	•
		groundwater hydrology and sediment transport functions.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall also consider the following to determine	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	whether to approve the application: The degree to which the	the Use of Subaqueous Lands §3.01(C)
#24(a)	-	project represents an encroachment on or otherwise interferes	•
		with public lands, waterways or surrounding private interests.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall also consider the following to determine	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	whether to approve the application: The degree to which the	the Use of Subaqueous Lands §3.01(C)
#24(b)	-	project incorporates sound engineering principles and	•
		appropriate materials of construction.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall also consider the following to determine	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	whether to approve the application: The degree to which the	the Use of Subaqueous Lands §3.01(C)
#24(c)	_	proposed project fits in with the surrounding structures,	•
		facilities, and uses of the subaqueous lands and uplands.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall also consider the following to determine	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	whether to approve the application: Whether the proposed	the Use of Subaqueous Lands §3.01(C)
#24(d)	_	activity complies with the state surface water quality standards	•
		both during construction and during subsequent operation or	
		maintenance.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The DNREC shall also consider the following to determine	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	whether to approve the application: The degree to which the	the Use of Subaqueous Lands §3.01(C)
#24(e)		proposed project may adversely affect shellfish beds or finfish	• <u>-</u> · · ·
		activity in the area.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	All dredging is to be conducted in a manner consistent with	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	sound conservation and water pollution control practices.	the Use of Subaqueous Lands §3.05(C)
#25(a)		Spoil and fill areas are to be properly diked to contain the	_
		dredged material and prevent its entrance into any surface	
		water. Specific requirements for spoils retention may be	
		specified by the DNREC in the approval permit or license.	
CMP Policies for Subaqueous Lands and	Federal Consistency	All material excavated shall be transported, deposited,	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	confined, and graded to drain within the disposal areas	the Use of Subaqueous Lands §3.05(C)
#25(b)		approved by the DNREC. Any material that is deposited	
		elsewhere than in approved areas shall be removed by the	
		applicant and deposited where directed at the applicant's	
		expense, and any required mitigation shall also be at the	
		applicant's expense.	
CMP Policies for Subaqueous Lands and	Federal Consistency	Materials excavated by hydraulic dredge shall be transported by	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	pipeline directly to the approved disposal area. All pipelines	the Use of Subaqueous Lands §3.05(C)
#25(c)		shall be kept in good condition at all times and any leaks or	
		breaks shall be immediately repaired.	
CMP Policies for Subaqueous Lands and	Federal Consistency	Materials excavated and not deposited directly into an	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	approved disposal area shall be placed in scows or other vessels	the Use of Subaqueous Lands §3.05(C)
#25(d)		and transported to either an approved enclosed basin, dumped,	
		and then rehandled by hydraulic dredge to an approved	
		disposal area, or to a mooring where scows or other vessels	
		shall be unloaded by pumping directly to an approved disposal	
		area.	
CMP Policies for Subaqueous Lands and	Federal Consistency	When scows or others are unloading without dumping, they	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	shall have their contents pumped directly into an approved	the Use of Subaqueous Lands §3.05(C)
#25(e)		disposal area by a means sufficient to preclude any loss of	
		material into the body of water.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	In approved disposal areas, the applicant may construct any	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	temporary structures or use any means necessary to control the	the Use of Subaqueous Lands §3.05(C)
#25(f)		dredge effluent, except borrowing from the outer slopes of	
		existing embankments and/or hydraulic placing of perimeter	
		embankments. For bermed disposal sites, a minimum	
		freeboard of two feet, measured vertically from the retained	
		materials and water to the top of the adjacent confining	
		embankment, shall be maintained at all times.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The applicant shall not obstruct drainage or tidal flushing on	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	existent wetlands or upland areas adjacent thereto. The	the Use of Subaqueous Lands §3.05(C)
#25(g)		applicant shall leave free, clear, and unobstructed outfails of	
		sewers, drainage differes, and other similar structures affected	
		distributed within the disposal area in a reasonably uniform	
		manner to permit full drainage without ponding during and	
		after fill operations	
CMP Policies for Subaqueous Lands and	Federal Consistency	The dradging operation must be suspended if water quality	State of Delaware Regulations Coverning
Coastal Strin Management	Subaqueous Lands Lease	conditions deteriorate in the vicinity of dredging or spoil	the Use of Subaqueous Lands & 05(C)
#25(h)	Subaqueous Lanus Lease	disposal site Minimum water quality standards may be	the Use of Subaqueous Lands 33.03(C)
<i>" 20</i> (11)		included as an element of the permit and shall be monitored by	
		the applicant. Violation of these conditions shall be cause for	
		immediate suspension of activity and notification of the	
		DNREC. Dredging shall not be resumed until water quality	
		conditions have improved and the DNREC has authorized the	
		resumption.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The following types of dredging are prohibited: Dredging of	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	biologically productive areas, such as nursery areas, shellfish	the Use of Subaqueous Lands §3.05(D)
#26(a)	-	beds, and submerged aquatic vegetation, if such dredging will	· - · · ·
		have a significant or lasting impact on the biological	
		productivity of the area.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Subaqueous Lands and	Federal Consistency	The following types of dredging are prohibited: Dredging of	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	new dead-end lagoons, new basins and new channels, which	the Use of Subaqueous Lands §3.05(D)
#26(b)		have a length to width ratio greater than 3:1 and for which the	
		applicant cannot prove, by clear and convincing evidence, that	
		such dredging would not violate state surface water quality	
		standards. I his subsection shall not apply to marina projects	
CMD Deligies for Subaguagus Lands and	Fodoral Consistancy	governed by the Marina Regulations.	State of Delaware Pegulations Coverning
Constal Strip Management	Subaquoous Lands Loaso	channels lagoons or canals dooper than the existing controlling	the Use of Subaguagus Lands \$2.05(D)
	Subaqueous Lanus Lease	denth of the connecting or controlling waterway unless	the Use of Subaqueous Lanus (3.05(D)
		otherwise approved under subsection 3.03 B(8) of the State of	
		Delaware Regulations Governing the Use of Subaqueous	
		Lands.	
CMP Policies for Subaqueous Lands and	Federal Consistency	The following types of dredging are prohibited: Dredging	State of Delaware Regulations Governing
Coastal Strip Management	Subaqueous Lands Lease	channels, cleaning marinas or other subaqueous areas by using	the Use of Subaqueous Lands §3.05(D)
#26(d)		propeller wash from boats.	-
CMP Policies for Port of Wilmington	Federal Consistency	The long-term economic viability and competitiveness of the	Encouragement Policy
Management #1		Port of Wilmington should be encouraged and supported.	
CMP Policies for Port of Wilmington	Federal Consistency	Expansion of the Port of Wilmington along the Delaware River	Encouragement Policy
Management #3		is encouraged to meet future national and regional	
		transsnipment needs and to reduce the dredging and spoils	
		disposal activities associated with port operations along the	
		christing River. Port expansion, nowever, should not proceed	
		he kent	
CMP Policies for Living Resources	Federal Consistency	No activity shall have an adverse environmental effect on living	Wetlands Regulations §7.02 A
#1(a)(1-5)		resources and shall include consideration of the effect of site	Wolania noganiton 3000 11
		preparation and the proposed activity on the following wetland	
		values: value of tidal ebb and flow for its production of	
		organic matter; protection from wave energy, flood waters, and	
		heavy rainfall; prevention of siltation in harbors and inlets	
		thereby reducing dredging; removal and recycling of inorganic	
		nutrients; and effects on the estuarine waters.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CMP Policies for Living Resources #1(b)(1-7)	Federal Consistency	No activity shall have an adverse environmental effect on living resources and shall include consideration of the effect of site preparation and the proposed activity on the following wetland values: Habitat Value: habitat for resident species of wildlife including furbearers, invertebrates, finfish; habitat for migratory wildlife species including waterfowl, wading birds, shorebirds, passerines, finfish, shrimp; rearing area, nesting area, breeding grounds for various species; habitat for rate or endangered plants; presence of plants or animals known to be rare generally, or unique to the particular location; presence of plants for animals near the limits of their territorial range; and, presence of unique geologic or wetland features.	Wetlands Regulations §7.02 B
CMP Policies for Deepwater Ports #1	Federal Consistency	Deepwater ports on the Delaware side of the Delaware River and Bay are prohibited by the Coastal Management Program. Such ports are also prohibited within Delaware's three mile jurisdiction along the Atlantic Ocean.	Del. Code Ann. Tit.7, §7001, 7003
CMP Policies for Deepwater Ports #2	Federal Consistency	Notwithstanding the Coastal Management Program objections to a Delaware Bay deepwater port, the program supports the concept of a port offshore the Atlantic Coast, provided it meets certain environmental standards including a location far enough offshore to minimize oil spill threats to the coast and to obviate dredging requirements; stringent construction and operation safeguards; a demonstrated reduction of tanker traffic and lightering in the bay; and, assurances that state financial interest are protected.	Encouragement Policy

Policy Title/Number	Program/Action	Policy Summary ⁹	Legal Authorities
Florida Statues Environmental Control 403.021(9)(a)	Federal Consistency Environmental Resource Permit	The legislature finds and declares that it is essential to preserve and maintain authorized water depth in the existing navigation channels, port harbors, turning basins, and harbor berths of this state in order to provide for the continued safe navigation of deepwater shipping commerce. The department shall recognize that maintenance of authorized water depths consistent with port master plans is an ongoing, continuous, beneficial, and necessary activity that is in the public interest; and it shall develop a regulatory process that shall enable the ports of this state to conduct such activities in an environmentally sound, safe, expeditious, and cost-efficient manner	Fla. Stat. Ch. 403.021(9)(a)
Florida Statutes Environmental Control 403.021(9)(b)	Federal Consistency Environmental Resource Permit	The provisions of paragraph (a) apply only to the port waters, dredged-material management sites, port harbors, navigation channels, turning basins, and harbor berths used for deepwater commercial navigation in the ports of Jacksonville, Tampa, Port Everglades, Miami, Port Canaveral, Ft. Pierce, Palm Beach, Port Manatee, Port St. Joe, Panama City, St. Petersburg, Pensacola, Fernandina, and Key West.	Fla. Stat. Ch. 403.021(9)(b)
Florida Statutes Environmental Control 403.061(24)(a)	Federal Consistency Environmental Resource Permit	Department powers and duties; Establish a permit system to provide for spoil site approval, as may be requested and required by local governmental agencies, to facilitate them in providing spoil sites for the deposit of spoil from maintenance dredging of navigation channels, port harbors, turning basins, and harbor berths, as part of a federal project, when the agency is acting as sponsor of a contemplated dredge and fill operation involving an established navigation channel, harbor, turning basin, or harbor berth.	Fla. Stat. Ch. 403.061(24)(a)

⁹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Statutes Environmental Control 403.061(26)(a)	Federal Consistency Environmental Resource Permit	Department powers and duties: Develop standards and criteria for waters used for deepwater shipping which standards and criteria consider existing water quality; appropriate mixing zones; and other requirements for maintenance dredging in previously constructed deepwater navigation channels, port harbors, turning basins, or harbor berths; and appropriate mixing zones for disposal of spoil material from dredging and, where necessary, develop a separate classification for such waters. Such classification shall recognize that the present dedicated use of these waters is for deepwater commercial navigation.	Fla. Stat. Ch. 403.061(26)(a)
Florida Statutes Environmental Control 403.061(37), (38)	Federal Consistency Environmental Resource Permit	Department powers and duties: Enter into a memorandum of agreement with the Florida Ports Council which provides a supplemental permitting process for the issuance of a joint coastal permit or environmental resource permit for maintenance dredging and the management of dredged materials from maintenance dredging, and for dredging and the management of materials from dredging and for other related activities necessary for development including the expansion of all navigation channels, port harbors, turning basins, and harbor berths.	Fla. Stat. Ch. 403.061(37), (38)
Florida Administrative Code Dredge & Fill Activities 62-312.080 (1), (2)	Federal Consistency Environmental Resource Permit	No permit shall be issued unless the applicant has provided the department with reasonable assurance based on plans, test results or other information that: the proposed dredging or filling will not violate water quality standards; and the project is not contrary to the public interest.	Fla. Admin. Code. Ann. r. 62-312.080 (1), (2)
Florida Administrative Code Dredge & Fill Activities 62-312.080 (3)	Federal Consistency Environmental Resource Permit	No permit shall be issued for dredging or filling which significantly degrades or is within an Outstanding Florida Water unless the applicant complies with section 403.918(2) F.S., and 62-4-242 F.A.C.	Fla. Admin. Code. Ann. r. 62-312.080 (3)
Florida Administrative Code Dredge & Fill Activities 62-312.080 (4)	Federal Consistency Environmental Resource Permit	A permit may contain specific conditions reasonably necessary to assure compliance with section 403.918(2) F.S.	Fla. Admin. Code. Ann. r. 62-312.080 (4)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code	Federal Consistency	The department recognizes the special value and importance of	Fla. Admin. Code. Ann. r. 62-312.080 (6)
Dredge & Fill Activities 62-312.080 (6)	Environmental Resource	Class II waters to Florida's economy as existing or potential	
	Permit	sites of commercial and recreational shellfish harvesting and as	
		a nursery area for fish and shellfish. Accordingly, the	
		department shall deny a permit for dredging or filling in Class	
		Il waters which are not approved for shellfish harvesting unless	
		the applicant submits a plan or proposes a procedure to protect	
		those waters and waters in the vicinity. The department shall	
		also deny a permit for dreuging of milling in any class of waters	
		proximity to Class II waters unless the applicant submits a plan	
		or proposes a procedure which demonstrates that the dredging	
		or filling will not have a negative effect on the Class II waters	
		and will not result in violations of water quality standards in the	
		Class II waters.	
Florida Administrative Code	Federal Consistency	Permits for dredging or filling directly in Class II or Class III	Fla. Admin. Code. Ann. r. 62-312.080 (7)
Dredge & Fill Activities 62-312.080 (7)	Environmental Resource	waters which are approved for shellfish harvesting by the DEP	
	Permit	shall not be issued. However, the department may issue	
		permits or certifications for maintenance dredging of	
		navigational channels.	
Florida Administrative Code	Federal Consistency	Permits for dredging or filling under rules 62-312.010-62-	Fla. Admin. Code. Ann. r. 62-312.082 (1),
Dredge & Fill Activities 62-312.082 (1),	Environmental Resource	312.110 F.A.C., shall not be valid for more than 10 years.	(2)
(2)	Permit	Permits for maintenance dredging, including snagging	
		operations, of fiver channels which are not part of a deepwater	
		more that five years	
Florida Administrative Code	Federal Consistency	Pursuant to subsection 403 921(1) F.S. the department shall	Fla Admin Code Ann r 62-312 085 (1)
Dredge & Fill Activities 62-312.085 (1)	Environmental Resource	review each permit that is issued for more than 5 years at the	
	Permit	end of the first five year period and each subsequent 5 year	
		period thereafter, if applicable.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code 25 Year Permits for Maintenance [*] Dredging in Deepwater Ports 62- 45.001(2), (3)	Federal Consistency Maintenance Dredging Permits	It is the intent of this chapter to establish a permitting system for maintenance dredging in deep water commercial navigation areas of ports. This chapter incorporates standards and criteria which recognize the present most beneficial use of these waters for deep water commercial navigation. Since the implementation of a comprehensive maintenance dredging management plan is a major factor in determining the adequacy of a long-term maintenance dredging program, it is the further intent of the chapter to give a position of prominence to such a plan within this permit system. It is the policy of the department to provide a regulatory process which will enable the ports to conduct maintenance dredging in an environmentally sound, expeditious and efficient manner.	Fla. Admin. Code. Ann. r. 62-45.001(2), (3)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62- 45.020(4), (5)	Federal Consistency Maintenance Dredging Permits	A permit may be issued for any length of time up to 25 years. The area within which work under this permit system may take place is limited to the federally maintained, port authority maintained, or private interest maintained navigation channels, turning basins, or harbor berths associated with deep water commercial navigation and associated dredged material disposal sites.	Fla. Admin. Code. Ann. r. 62-45.020(4), (5)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62-45.030 (3)	Federal Consistency Maintenance Dredging Permits	No dredging of new channels, basins or berths, or deepening of existing channels, basins or berths beyond previously permitted and dredged depths shall be authorized under this chapter, except for advance maintenance dredging when it is clearly demonstrated that such maintenance dredging is necessary and the conditions for such dredging are set forth in the permit.	Fla. Admin. Code. Ann. r. 62-45.030(3)

^{*} According to the DEP Bureau of Submerged Lands & Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code 25 Year Permits for Maintenance [*] Dredging in Deepwater Ports 62-45.070 (1)	Federal Consistency Maintenance Dredging Permits	Phase I of a permit commences upon permit issuance and has a term of up to 5 years as specified in the specific permit conditions. Phase I shall be the period of time used to verify the predicted or expected effects of the permitted activities when conducted in accordance with the terms and condition of the permit.	Fla. Admin. Code. Ann. r. 62-45.070(1)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62-45.070 (2)	Federal Consistency Maintenance Dredging Permits	Monitoring of water and sediment quality or aquatic resources may be required to supplement information obtained before application for permit. Operational monitoring shall be required to determine adequacy of performance and effectiveness of specific permit conditions. All sampling, laboratory and analysis, and data collection shall be in accordance with the methodology set forth in the publications referenced in rule 62-45.150, including quality assurance procedures.	Fla. Admin. Code. Ann. r. 62-45.070(2)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62- 45.080(1)	Federal Consistency Maintenance Dredging Permits	The specific permit conditions of Phase II shall include, but not be limited to: Phase I conditions, adjusted as necessary; a functional Port-Wide Long-Term Maintenance Dredged Material Management Plan; a modified monitoring program to reflect the operational character of phase II; and appropriate recordkeeping and reporting.	Fla. Admin. Code. Ann. r. 62-45.080(1)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62- 45.080(2)	Federal Consistency Maintenance Dredging Permits	The term of Phase II shall be stated in the notice of entry into Phase II and shall be no greater than the number of years which when added to the term of Phase I and any Phase I extension is equal to 25 years.	Fla. Admin. Code. Ann. r. 62-45.080(2)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62- 45.080(3), (4)	Federal Consistency Maintenance Dredging Permits	A comprehensive review of the permit shall be conducted by the Department at the end of every fifth year of Phase II. This review will include the sediment and water quality monitoring data from Phase I, zones of mixing, specific permit conditions, maintenance dredged material disposal capabilities, and the port-wide long-term maintenance dredged material management plan as described in rule 62-45.190.	Fla. Admin. Code. Ann. r. 62-45.080(3), (4)

^{*} According to the DEP Bureau of Submerged Lands & Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code 25 Year Permits for Maintenance [*] Dredging in Deepwater Ports 62- 45.150(1)	Federal Consistency Maintenance Dredging Permits	Methods of data acquisition, analysis, and reporting for determining: the capacity of dredged material disposal areas; sediment characteristics; quality and quantity of dredged material; water quality of port waters and disposal areas; potential impacts to biological productivity; and any subsequent arthropod and wildlife use of disposal areas is found in the Department's <i>Deepwater Ports Maintenance Dredging and Disposal</i> <i>Manual.</i>	Fla. Admin. Code. Ann. r. 62-45.150(1)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62- 45.150(2)	Federal Consistency Maintenance Dredging Permits	Topics to be discussed and evaluated for inclusion into the scope of work, the port-wide long-term maintenance dredged material management plan, and the pre-application stipulation include but are not limited to: sediment grain size analysis, elutriate testing and bulk chemical analysis; water quality analysis; proposed type of dredging equipment and method of transporting dredged material to the disposal site; marine or estuarine natural resources within the proposed zone of mixing at the dredging and disposal sites; hydrographic analysis of dredged material disposal or of dike construction in waters of the state; an inventory of available disposal sites including their volumetric capabilities, reaches from which dredged material from each site shall be derived, projected material volumes, projected service life, and information regarding existing disposal area management programs and practices; and information on proposed disposal sites.	Fla. Admin. Code. Ann. r. 62-45.150(2)
Florida Administrative Code 25 Year Permits for Maintenance* Dredging in Deepwater Ports 62-45.160	Federal Consistency Maintenance Dredging Permits	A permit may be issued to the applicant(s) upon such conditions as the department may direct only if: the applicant affirmatively provides reasonable assurance that the maintenance dredging and dredged material disposal operations will not discharge, emit, or cause pollution in contravention of department standards or rules. Issuance of a permit shall constitute a determination or concurrence that the project is consistent with the FCMP.	Fla. Admin. Code. Ann. r. 62-45.160

^{*} According to the DEP Bureau of Submerged Lands & Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code	Federal Consistency	The following criteria shall be used in evaluating maintenance	Fla. Admin. Code. Ann. r. 62-45.170(1),
25 Year Permits for Maintenance*	Maintenance Dredging	dredging and disposal practices: sediment criteria for metals,	(2), (3)
Dredging in Deepwater Ports 62-45.170	Permits	nutrients and hydrocarbons.	
(1),(2),(3)			
Florida Administrative Code	Federal Consistency	The following criteria shall be used in evaluating maintenance	Fla. Admin. Code. Ann. r. 62-45.170(4)
25 Year Permits for Maintenance*	Maintenance Dredging	dredging and disposal practices: management practices for	
Dredging in Deepwater Ports 62-45.170	Permits	hydraulic dredging, hopper dredges, clam bucket dredges, side	
(4)		casting dredges, and silt screen use.	
Florida Administrative Code	Federal Consistency	The following criteria shall be used in evaluating maintenance	Fla. Admin. Code. Ann. r. 62-45.170(5),
25 Year Permits for Maintenance*	Maintenance Dredging	dredging and disposal practices: management practices for	(6)
Dredging in Deepwater Ports 62-45.170	Permits	upland and open water dredged material disposal. It must be	
(5), (6)		demonstrated that open water disposal is the only available	
		method of disposal in order to use open water disposal sites.	
Florida Administrative Code	Federal Consistency	The Department may propose zones of mixing for dredging	Fla. Admin. Code. Ann. r. 62-45.180
25 Year Permits for Maintenance*	Maintenance Dredging	and maintenance dredged material disposal sites permitted	
Dredging in Deepwater Ports 62-45.180	Permits	pursuant to this chapter. Mixing zones shall be determined	
		based upon: presence of grass beds, live reefs, oyster and clam	
		beds, or other productive marine habitats; physical and	
		chemical characteristics of the materials to be dredged;	
		anticipated frequency of maintenance dredging or discharge	
		from disposal areas; and ambient water quality. Mixing zone	
		time shall be based on anticipated settling time.	

^{*} According to the DEP Bureau of Submerged Lands & Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code	Federal Consistency	A requirement for entry into Phase II of a long-term permit	Fla. Admin. Code. Ann. r. 62-45.190
25 Year Permits for Maintenance Dredging in Deenwater Ports 62-45 190	Permits	canability for managing port-wide projected volumes of	
Dreuging in Deepwater 1 013 02 43.130		material in an environmentally sound and efficient manner. A	
		plan for long-term dredged material management shall include:	
		projections of volumes of dredged material; an assessment of	
		existing and anticipated dredged material disposal capabilities;	
		assessment of methods for maximizing service life of disposal	
		areas; assessment of environmental protection needs and methods: identification and assessment of dradging and	
		disposal alternatives to meet needs: and proposed strategies for	
		long term management of maintenance dredged material.	
		including control of mosquito propagation.	
Florida Administrative Code	Funding Program	Port authorities which have deepwater commercial navigation	Fla. Admin. Code. Ann. r. 62C-22.003,
Spoil Site Program		as their primary purpose are eligible for funding assistance in	62C-22.008
62C-22.003, 62C-22.008		the acquisition of and improvements to dredged material	
		disposal sites. A disposal site management plan shall be	
		funding of a program for the acquisition or improvement of a	
		disposal site.	
Florida Administrative Code	Joint Coastal Permits	This Chapter implements the provisions of §161.055 of the	Fla. Admin. Code. Ann. r. 62B-49.001
62B-49.001		Florida Statutes, establishing the joint coastal permit. A joint	
Joint Coastal Permits & Concurrent		coastal permit is issued when both a coastal construction	
Processing of Proprietary Authorizations		permit and an environmental resource permit are required.	
		activity requiring a joint coastal permit that also requires a	
		activity requiring a joint coastal permit that also requires a proprietary authorization for use of sovereign submerged lands	
		owned by the Board of Trustees of the Internal Improvement	
		Trust Fund.	

^{*} According to the DEP Bureau of Submerged Lands & Environmental Resources and the Office of Beaches and Coastal Systems, this 25 year permit is no longer issued. However, the criteria that were applied for this type of permit are used in the permitting process of other dredging activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Florida Administrative Code 62-4312.080 (1),(3),(6) Dredge & Fill Activities	Dredge & Fill Activities	No permit shall be issued: unless the applicant has provided the department with reasonable assurance that the proposed dredging or filling will not violate water quality standards; for activities which significantly degrades or is within an Outstanding Florida Water unless the applicant complies with 403.918(2) F.S. and 62-4.242 F.A.C.; for activities occurring in Class II waters which are not approved for shellfish harvesting and any activities occurring in close proximity to Class II waters unless the applicant submits a plan that demonstrates	Fla. Admin. Code. Ann. r. 62-312.080 (1),(3),(6)
Florida Administrative Code 62-4312.080 (7) Dredge & Fill Activities	Dredge & Fill Activities	Permits for dredging or filling directly in Class II or Class III waters which are approved for shellfish harvesting by the DEP shall not be issued. However, the DEP may issue permits or certifications for maintenance dredging of navigational channels.	Fla. Admin. Code. Ann. r. 62-312.080 (7)
Florida Statues §373.414 (1) Criteria for activities in surface waters and wetlands	Environmental Resource Permit	Applicants for a permit must: provide reasonable assurance that state water quality standards will not be violated and that the activity is in the public interest.	Fla. Stat. Ch. 373.414 (1)
Florida Statues §373.414 (1)(a) Criteria for activities in surface waters and wetlands	Environmental Resource Permit	In determining whether an activity is not contrary to the public interest or is clearly in the public interest the following criteria shall be used: if it will adversely affect the public health, safety, or welfare or the property of others; will adversely affect the conservation of fish and wildlife, including endangered and threatened species or their habitats; will adversely affect navigation or the flow of water or cause harmful erosion or shoaling; will adversely affect the fishing or recreational values or marine productivity in the vicinity; and, will be of a temporary or permanent nature.	Fla. Stat. Ch. 373.414 (1)(a)
Florida Statutes §161.088	Beach Nourishment	It is hereby declared to be a necessary governmental responsibility to properly manage and protect Florida Beaches from erosion and that the Legislature make provision for beach restoration and renourishment projects.	Fla. Stat. Ch. 161.088

Policy Title/Number	Program/Action	Policy Summary ¹⁰	Legal Authorities
Coastal Marshlands Protection Act	Marshlands Permit	No person shall remove, fill, dredge, drain or otherwise alter	Ga. Code Ann. §12-5-286(a)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	any marshlands or construct or locate any structure on or over	
marshlands (a)		marshlands in this state within the estuarine area thereof	
		without first obtaining a permit from the committee or, in the	
		case of minor alteration of marshlands, the Commissioner.	
Coastal Marshlands Protection Act	Marshlands Permit	Each application for such permit shall be properly executed	Ga. Code Ann. §12-5-286(b)(10),(11)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	and filed with the department on forms prescribed by the	
marshlands (b)(10),(11)		department and shall include: (10) a copy of the water quality	
		certification, if required for the proposed project; and, (11)	
		certification by the applicant of adherence to soil and erosion	
		control responsibilities if required for the proposed project.	
Coastal Marshlands Protection Act	Marshlands Permit	After receipt of a completed application, the department shall	Ga. Code Ann. §12-5-286(d)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	notice the proposed activity along with a brief description in	
marshlands (d)		the legal organ of or a newspaper of general circulation in the	
		county in which such land lies.	
Coastal Marshlands Protection Act	Marshlands Permit	In passing upon the application for permit, the committee shall	Ga. Code Ann. §12-5-286(g)(1)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	consider the public interest, which, for purposes of this part,	
marshlands (g)(1)		shall be deemed to be the following considerations: (1)	
		Whether or not unreasonably harmful obstruction to or	
		alteration of the natural flow of navigational water within the	
		affected area will arise as a result of the proposal.	
Coastal Marshlands Protection Act	Marshlands Permit	In passing upon the application for permit, the committee shall	Ga. Code Ann. §12-5-286(g)(2)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	consider the public interest, which, for purposes of this part,	
marshlands (g)(2)		shall be deemed to be the following considerations: (2)	
		Whether or not unreasonably harmful or increased erosion,	
		shoaling of channels, or stagnant areas of water will be created.	

¹⁰ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Marshlands Protection Act	Marshlands Permit	In passing upon the application for permit, the committee shall	Ga. Code Ann. §12-5-286(g)(3)
§12-5-286 Permits to fill, drain, etc.	Federal Consistency	consider the public interest, which, for purposes of this part,	_
marshlands (g)(3)		shall be deemed to be the following considerations: (3)	
		Whether or not the granting of a permit and the completion of	
		the applicant's proposal will unreasonably interfere with the	
		conservation of fish, shrimp, oysters, crabs, clams, or other	
		marine life, wildlife, or other resources, including but not	
		limited to water and oxygen supply.	
Coastal Marshlands Protection Act	Marshlands Permit	If the project is not water related or dependent on waterfront	Ga. Code Ann. §12-5-288(a)
§12-5-288 Guidelines for alteration of	Federal Consistency	access or can be satisfied by the use of an alternative non-	
marshlands (a)		marshland site or by use of existing public facilities, a permit	
		usually should not be granted pursuant to §12-5-286.	
Coastal Marshlands Protection Act	Marshlands Permit	The amount of marshlands to be altered must be minimum in	Ga. Code Ann. §12-5-288(b)(3), (4)
§12-5-288 Guidelines for alteration of	Federal Consistency	size. The following activities and structures are normally	
marshlands (b)(3),(4)		considered to be contrary to the public interest when located in	
		coastal marshlands but the final decision as to whether any	
		activity or structure is considered to be in the public interest	
		shall be in the sound discretion of the committee: (3)	
		construction of dump sites and depositing of any waste	
		for the nurness of draining coastal marchlands	
Coastal Marshlands Drotaction Act	Marchlanda Darmit	This part shall not apply to the following: (2) A geneics of the	C_{2} C_{2} d_{2} A_{2} S_{10} f_{20} f_{20}
S12 5 205 Applicability of part (2)	Fodoral Consistency	United States charged by law with the responsibility of keeping	Ga. Code Ann. 912-3-295(3)
S12-5-295 Applicability of part (5)	receital Consistency	the rivers and harbors of this state open for pavigation, and	
		agancies of this state charged by existing law with the	
		responsibility of keeping the rivers and barbors of this state	
		open for navigation including areas for utilization for spoilage	
		designated by such agencies	
		ucisplated by such agenetes.	

Policy Title/Number	Program/Action	Policy Summary ¹¹	Legal Authorities
Guam Coastal Management Program Policies B.1. Shore Area Development	Federal Consistency	Only those uses shall be located within the Seashore Reserve which: enhance, are compatible with or do not generally detract from the surrounding coastal area's aesthetic and environmental quality and beach accessibility; or, can demonstrate dependence on such a location and the lack of feasible alternative sites.	Guam Gov't Code § 13416, 13417, 13454,13456,17203(b), 57044-57047, 53000 P.L. 19-05 (§112)
Guam Coastal Management Program Policies D.3. Water Quality	Federal Consistency	Safe drinking water shall be assured and aquatic recreation sites shall be protected though the regulation of uses and discharges that pose a pollution threat to Guam's waters, particularly in estuarine, reef and aquifer areas.	Guam Gov't Code §62011,12350,13416, 13417, 18400, 57020-57033, 57040-57051, 57060-57094, 53000 E.O. 78-23, 88-30,89-5 P.L.16-62, 17-87, 16-70
Guam Coastal Management Program Policies D.4. Fragile Areas	Federal Consistency	Development in the following types of fragile areas shall be regulated to protect their unique character: historic and archaeological sites, wildlife habitats, pristine marine and terrestrial communities, limestone forests, and mangrove stands and other wetlands.	Guam Gov't Code §62011, 13416, 13417, 57045-57048, 13451, 26009-26009.1, 13985, 53000 P.L.16-62, 20-151 E.O. 87-36, 88-22, 89-09, 89-24, 78-21, 90-13
Guam Seashore Protection Law General Permit Provisions	Seashore Protection Permit Federal Consistency	Any person wishing to perform any development within the seashore reserve shall obtain a permit authorizing such development from the Commission.	Guam Gov't Code §13417(a)(1)
Guam Seashore Protection Law General Permit Provisions	Seashore Protection Permit Federal Consistency	No permit shall be issued unless the Board has first found: That the development will not have any substantial adverse environmental or ecological effect.	Guam Gov't Code §13417(a)(2)(a)
Guam Seashore Protection Law General Permit Provisions	Seashore Protection Permit Federal Consistency	Notwithstanding any provisions in this section to the contrary, no permit shall be required for the following types of development: Maintenance dredging of existing navigation channels or moving dredged material from such channels to a disposal area outside the coastal reserve, pursuant to a permit from the Army Corps of Engineers.	Guam Gov't Code §13417(a)(5)(b)

¹¹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guam Land Use Commission	Standards for	Wetland acreage shall not be reduced by filling or dumping	Guam Admin. R & Regs.
Wetlands Rules & Regulations	Development &	material over submerged areas unless issued a Wetland Permit	E.O. 91-27
IV. B	Conservation of Wetland	by the Commission.	
	APCs		
Guam Land Use Commission	Standards for	Wetlands shall not be graded, dredged or subject to removal of	Guam Admin. R & Regs.
Wetlands Rules & Regulations	Development &	large areas of productive plant life unless issued a Wetland	E.O. 91-27
IV. C	Conservation of Wetland	Permit by the Commission.	
	APCs		
Guam Land Use Commission	Standards for	The flow of water within or into wetlands shall not be altered	Guam Admin. R & Regs.
Wetlands Rules & Regulations	Development &	so as to adversely effect the wetland by blocking or	E.O. 91-27
IV. D	Conservation of Wetland	channelizing rivers (within or upstream from the wetland) or	
	APCs	tidal flow, or reducing natural spring discharge unless issued a	
		Wetland Permit by the commission.	
Guam Environmental Protection Agency	401 Water Quality	Restore and maintain the biological integrity of Guam's waters	US PL 92-500, 95-217
- Water Quality Standards	Certification	and eliminate all discharges of pollutants (including dredged	GCA tit. 10, Ch.47
Appendix F.		and fill material).	PL 17-87
			Guam Admin. R. & Regs.
Guam Environmental Protection Agency	401 Water Quality	Protect waters of the Guam and special aquatic wetlands from	US PL 92-500, 95-217
- Water Quality Standards	Certification	chemical, physical and biological impacts and other types of	GCA tit. 10, Ch.47
Appendix F.		alterations.	PL 17-87
			Guam Admin. R. & Regs.
Guam Environmental Protection Agency	401 Water Quality	Require Guam EPA certification for any activity discharging	US PL 92-500, 95-217
- Water Quality Standards	Certification	into navigable waters and needing a federal license or permit.	GCA tit. 10, Ch.47
Appendix F.			PL 17-87
			Guam Admin. R. & Regs.
Guam Environmental Protection Agency	Standards for Permitted	Minimal disruption of uses should be the primary consideration	US PL 92-500, 95-217
- Water Quality Standards	Effluent Discharges	in establishing mixing zones for dredge and fill activities.	GCA tit. 10, Ch.47
			PL 17-87
			Guam Admin. R. & Regs.
			40 CFR 230.11(f)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guam Environmental Protection Agency - Water Quality Standards ¹²	General Policies	Conserve, protect, maintain, and improve the quality of Guam's waters for human consumption, for the growth and propagation of aquatic life, for marine research, for the preservation of coral reefs and wilderness areas, and for domestic, agricultural, commercial, industrial, recreational and other legitimate uses.	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.
Guam Environmental Protection Agency - Water Quality Standards	General Policies	It is Guam's goal to eliminate the discharge of pollutants into Guam's waters.	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.
Guam Environmental Protection Agency - Water Quality Standards	General Policies	Provide that no pollutant is discharged into any of Guam's waters, unless: (a) the discharge first receives processing/treatment to remove all harmful or hazardous products, or provides the control technology necessary to protect the designated beneficial uses of waters; (b) the discharge meets the effluent limitations established for that discharge; and (c) best management practices are applied as necessary	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.
Guam Environmental Protection Agency - Water Quality Standards	General Policies	Provide for the prevention, abatement, and control of new and existing water pollution sources.	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.
Guam Environmental Protection Agency - Water Quality Standards	General Policies	Maintain and improve the chemical, physical, and biological integrity of the waters of Guam as necessary to meet the Clean Water Act section 101(a).	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.
Guam Environmental Protection Agency - Water Quality Standards	Antidegredation Policy	Existing in-stream water uses, and the level of water quality necessary to protect these uses, shall be maintained and protected. No further water quality degradation which would interfere with or become injurious to existing designated uses is allowable.	US PL 92-500, 95-217 GCA tit. 10, Ch.47 PL 17-87 Guam Admin. R. & Regs.

¹² GEPA policies as written here are proposed additions to the draft revision of Guam Water Quality Standards, currently under development, to be adopted in FY 2000.

Policy Title/Number	Program/Action	Policy Summary ¹³	Legal Authorities
CZM Policy - Recreational Resources 205A-2(b)(5)(A)	Federal Consistency	Objectives: Economic Uses; (A) Provide public or private facilities and improvements important to the state's economy in	Haw. Rev. Stat. §205A-2(c)(5)(A)
		suitable location.	
CZM Policy - Recreational Resources	Federal Consistency	Provide adequate, accessible and diverse recreational	Haw. Rev. Stat. §205A-2(c)(1)(B)(i)
205A-2(c)(1)(B)(i)		opportunities in the coastal zone management area by:	
		Protecting coastal resources uniquely suited for recreational	
		activities that cannot be provided in other areas.	
CZM Policy - Recreational Resources	Federal Consistency	Provide adequate, accessible and diverse recreational	Haw. Rev. Stat. §205A-2(c)(1)(B)(ii)
205A-2(c)(1)(B)(ii)		opportunities in the coastal zone management area by:	
		Requiring replacement of coastal resources having significant	
		recreational value, including but not limited to surfing sites,	
		fishponds, and sand beaches, when such resources will be	
		unavoidably damaged by development; or requiring reasonable	
		monetary compensation to the state for recreation when	
		replacement is not feasible or desirable.	
CZM Policy - Recreational Resources	Federal Consistency	Provide adequate, accessible and diverse recreational	Haw. Rev. Stat. §205A-2(c)(1)(B)(vi)
205A-2(c)(1)(B)(vi)		opportunities in the coastal zone management area by:	
		Adopting water quality standards and regulating point and	
		nonpoint sources of pollution to protect, and where feasible,	
		restore the recreational value of coastal waters.	
CZM Policy - Recreational Resources	Federal Consistency	Provide adequate, accessible and diverse recreational	Haw. Rev. Stat. §205A-2(c)(1)(B)(vii)
205A-2(c)(1)(B)(vii)		opportunities in the coastal zone management area by:	
		Developing new shoreline recreational opportunities, where	
		appropriate, such as artificial lagoons, artificial beaches, and	
		artificial reefs for surfing and fishing.	
CZM Policy - Coastal Ecosystems	Federal Consistency	Minimize disruption or degradation of coastal water	Haw. Rev. Stat. §205A-2(c)(4)(C)
205A-2(c)(4)(C)		ecosystems by effective regulation of stream diversions,	
		channelization, and similar land and water uses, recognizing	
		competing water needs.	

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CZM Policy - Coastal Ecosystems 205A-2(c)(4)(D)	Federal Consistency	Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.	Haw. Rev. Stat. §205A-2(c)(4)(D)
CZM Policy - Economic Uses 205A-2(c)(5)(B)	Federal Consistency	Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area.	Haw. Rev. Stat. §205A-2(c)(5)(B)
CZM Policy - Economic Uses 205A-2(c)(5)(C)	Federal Consistency	Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when: the development is important to the state's economy.	Haw. Rev. Stat. §205A-2(c)(5)(C)
CZM Policy - Marine Resources 205A-2(c)(10)(B)	Federal Consistency	Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.	Haw. Rev. Stat. §205A-2(c)(10)(B)
CZM Guidelines for Special Management Areas 205A-26(2)(A)	Federal Consistency Local County Governments	No development shall be approved unless the authority has first found: That the development ¹⁴ will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options.	Haw. Rev. Stat. §205A-26(2)(A)
CZM Guidelines for Special Management Areas 205A-26(3)(A)	Federal Consistency Local County Governments	The authority shall seek to minimize, where reasonable: Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon.	Haw. Rev. Stat. §205A-26(3)(A)

¹⁴ The definition of "development" : any of the uses, activities, or operations on land or in or under water within a special management area including grading, removing, dredging, mining, or excavation of any materials. This does not include: routine maintenance dredging of existing streams, channels, and drainage ways. Haw. Rev. Stat. § 205A-22.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
CZM Guidelines for Special	Federal Consistency	The authority shall seek to minimize, where reasonable: Any	Haw. Rev. Stat. §205A-26(3)(C)
Management Areas	Local County	development which would reduce or impose restrictions upon	
205A-26(3)(C)	Governments	public access to tidal and submerged lands, beaches, portions	
		of rivers and streams within the special management areas and	
		the mean high tide line where there is no beach.	
CZM Guidelines for Special	Federal Consistency	The authority shall seek to minimize, where reasonable: Any	Haw. Rev. Stat. §205A-26(3)(E)
Management Areas	Local County	development which would adversely affect water quality,	
205A-26(3)(E)	Governments	existing areas of open water free of visible structures, existing	
		and potential fisheries and fishing grounds, wildlife habitats, or	
		potential or existing agricultural uses of land.	
CZM Prohibitions for Shoreline Setbacks	Federal Consistency	The mining or taking of sand, dead coral or coral rubble is	Haw. Rev. Stat. §205A-44(a)(2),(3),(4)
205A-44(a)(2),(3),(4)	State, Local, & County	prohibited with the following exceptions: (2) Where the mining	2
	Governments	or taking is authorized by a variance; (3) The clearing of the	
		materials from existing drainage pipes and canals and from the	
		mouths of streams including clearing for the purposes under	
		section 46-11.5 [HRS, requires counties to maintain shores,	
		beaches, channels, streams and stream mouths] provided that	
		the sand removed shall be placed on adjacent areas unless such	
		placement would result in significant turbidity; or (4) The	
		cleaning of the shoreline area for state or county maintenance	
		purposes, including the clearing for purposes under section 46-	
		12[HRS, requires counties to clean shores and beaches]	
		provided that the sand removed shall be placed on adjacent	
		areas unless the placement would result in significant turbidity.	
Hawaii Ocean Resources Mgmt. Plan	Federal Consistency	Minimize and mitigate impacts of harbor development and	Haw. Rev. Stat. §205A-62
C. Harbors - Policy B		operations ecological and cultural resources.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Hawaii Ocean Resources Mgmt. Plan	Federal Consistency	Expand protection of species, natural habitats and other	Haw. Rev. Stat. §205A-62
E. Marine Ecosystem Protection - Policy		resources of exceptional value, thereby minimizing	_
A #3a.		environmental degradation from marine and coastal activities	
		and uses. #3a- Require monitoring before, during and after	
		construction of coastal developments in order to obtain a	
		better data base for understanding the numerous and	
		cumulative impacts of these coastal developments on fringing	
		reefs, anchialine pools and other natural resources.	
Hawaii Ocean Resources Mgmt. Plan	Federal Consistency	Ensure the continued natural production of sand and assess the	Haw. Rev. Stat. §205A-62
F. Beaches & Coastal Erosion		potential for using beach replenishment. #2- Select non-rural	
Policy D #2		hazard areas and chronic eroding and unstable beaches for	
ž		sand replenishment pilot projects and monitor impacts on	
		littoral cell dynamics.	

Policy Title/Number	Program/Action	Policy Summary ¹⁵	Legal Authorities
Guidelines Applicable to All Uses	Coastal Use Permits	Information regarding the following general factors shall be	La. Admin. Code tit. 43, §701 F.1-15
§701 F. 1-15	Federal Consistency	utilized by the permitting authority in evaluating whether the	_
-		proposed use is in compliance with the guidelines. 1) Type,	
		nature, and location of use; 2) Elevation, soil, and water	
		conditions and flood and storm hazard characteristics of site; 3)	
		Techniques and materials used in construction, operation, and	
		maintenance of use; 4) Existing drainage patterns and water	
		regimes of surrounding area including flow, circulation, quality,	
		quantity, and salinity and impacts on them; 5) Availability of	
		feasible alternative sties or methods of implementing the use;	
		6) Designation of the area for certain uses as part of a local	
		program; 7) Economic need for use and extent of impacts of	
		use on economy of locality; 8) Extent of resulting public and	
		private benefits; 9) Extent of coastal water dependency of the	
		use; 10) Existence of necessary infrastructure to support the	
		use and public costs resulting from use; 11) Extent of impacts	
		on existing and traditional uses of the area and on future uses	
		for which the area is suited; 12) Proximity to and extent of	
		impacts on important natural features such as beaches, barrier	
		islands, tidal passes, wildlife and aquatic habitats, and forest	
		lands; 13) The extent to which regional, state, and national	
		interest are served including the national interest in resources	
		and the siting of facilities in the coastal zone as identified in the	
		coastal resources program; 14) Proximity to, and extent of	
		impacts on, special areas, particular areas, or other areas of	
		particular concern of the state program or local programs; 15)	
		Likelihood of, and extent of impacts of, resulting secondary	
		impacts and cumulative impacts.	

¹⁵ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guidelines Applicable to All Uses §701 F. 16-19	Coastal Use Permits Federal Consistency	16) Proximity to and extent of impacts on public lands or works, or historic, recreational, or cultural resources; 17) Extent of impacts on navigation, fishing, public access, and recreational opportunities; 18) Extent of compatibility with natural and cultural setting; and, 19) Extent of long term benefits or adverse impacts.	La. Admin. Code tit. 43, §701 F.16-19
Guidelines Applicable to All Uses §701 G.1-14	Coastal Use Permits Federal Consistency	The coastal resources program has listed that all activities shall be planned so as to avoid the following adverse impacts: 1)Reductions in the natural supply of sediment and nutrients by alterations of freshwater flow; 2) Adverse economic impacts on the locality of the use and affected governmental bodies; 3) Detrimental discharges of inorganic nutrient compounds into coastal waters; 4) Alterations in the natural concentration of oxygen in coastal waters; 5) destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features; 6) Adverse disruption of existing social patterns; 7) Alterations of the natural temperature regime of coastal waters; 8) Detrimental changes in existing salinity regimes; 9) Detrimental changes in littoral and sediment transport.; 10) Adverse effects o cumulative impacts; 11) Detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging; 12) Reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest; 13) Discharges of pathogens or toxic substances into coastal waters; 14) Adverse alteration or destruction of public parks, shoreline access point, public works, designated recreation areas, scenic rivers, or other areas of public use and concern.	La. Admin. Code tit. 43, §701 G. 1-14

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guidelines Applicable to All Uses	Coastal Use Permits	15) Fostering of detrimental secondary impacts in undisturbed	La. Admin. Code tit. 43, §701 G. 15-21
§701 G.15-21	Federal Consistency	or biologically highly productive wetland areas; 16) Adverse	
		alteration or destruction of unique or valuable habitats, critical	
		habitat for endangered species, important wildlife or fishery	
		breeding or nursery areas, designated wildlife management or	
		sanctuary areas, or forestlands; 17) Adverse alteration or	
		destruction of public parks, shoreline access points, public	
		works, designated recreation areas, scenic rivers, or other areas	
		of public use and concern; 18) Adverse disruptions of coastal	
		wildlife and fishery migratory patterns; 19) Land loss, erosion,	
		and subsidence; 20) Increases in the potential for flood,	
		hurricane and other storm damage, or increases in the	
		likelihood that damage will occur from such hazards; and, 21)	
		Reduction in the long term biological productivity of the	
		coastal ecosystem.	
Guidelines For Linear Facilities §705 A.	Coastal Use Permits	Linear use alignments shall be planned to avoid adverse	La. Admin. Code tit. 43, §705 A
	Federal Consistency	impacts on areas of high biological productivity or irreplaceable	
		resource areas.	
Guidelines For Linear Facilities §705 B.,	Coastal Use Permits	Linear facilities involving the use of dredging or filling shall be	La. Admin. Code tit. 43, §705 B., C.
С.	Federal Consistency	avoided in wetland and estuarine areas to the maximum extent	
		practicable. Linear facilities involving dredging shall be of the	
		minimum practical size and length.	
Guidelines For Linear Facilities §705 G.,	Coastal Use Permits	Linear facilities involving dredging shall not traverse or	La. Admin. Code tit. 43, §705 G., H.
H.	Federal Consistency	adversely affect any barrier island and shall not traverse	
		beaches, tidal passes, protective reefs, or other natural gulf	
		shoreline unless no other alternative exists.	
Guidelines For Linear Facilities §705 N	Coastal Use Permits	Areas dredged for linear facilities shall be backfilled or	La. Admin. Code tit. 43, §705 N.
	Federal Consistency	otherwise restored to the pre-existing conditions.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil shall be deposited utilizing the best practical techniques	La. Admin. Code tit. 43, §707 A.
§707 A.	Federal Consistency	to avoid disruption of water movement, flow, circulation, and	
		quality.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil shall be used beneficially to improve productivity or	La. Admin. Code tit. 43, §707 B.
§707 B.	Federal Consistency	create new habitat, reduce or compensate for environmental	
		damage done by dredging activities, or prevent environmental	
		damage. Otherwise existing spoil disposal areas shall be used	
		rather than creating new ones.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil shall not be disposed of in a manner which could result in	La. Admin. Code tit. 43, §707 C.
§707 C.	Federal Consistency	the impounding or draining of wetlands or the creation of	
		development sites unless the spoil deposition is part of an	
		approved levee or land surface alteration project.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil shall not be disposed of on marsh, known oyster or clam	La. Admin. Code tit. 43, §707 D.
§707 D	Federal Consistency	reefs, or in areas of submersed vegetation to the maximum	
		extent practicable.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil shall not be disposed of in such a manner as to create a	La. Admin. Code tit. 43, §707 E.
§707 E.	Federal Consistency	hindrance to navigation or fishing, or hinder timber growth.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	Spoil disposal areas shall be designed and constructed and	La. Admin. Code tit. 43, §707 F.
§707 F.	Federal Consistency	maintained using the best practical techniques to retain the	
		spoil at the site, reduce turbidity, and reduce shoreline erosion	
		when appropriate.	
Guidelines for Dredged Spoil Deposition	Coastal Use Permits	The alienation of state-owned property shall not result from	La. Admin. Code tit. 43, §707 G.
§707 G.	Federal Consistency	spoil deposition activities without the consent of the	
		Department of Natural Resources.	
Guidelines for Surface Alterations §711	Coastal Use Permits	1 o the maximum extent practicable wetland areas shall not be	La. Admin. Code tit. 43, §711 D.
D.	Federal Consistency	drained or filled, any approved fill or drain shall be designed	
		and constructed using best practical techniques to minimize	
	Coostal Use Demoite	adverse environmental impacts.	
Guidelines for Surface Alterations §711	Coastal Use Permits	Surface alterations shall to the maximum extent practicable, be	La. Admin. Code tit. 43, §711 H.
	Central Use Dermite	Incareu away from critical windine areas and vegetation areas.	
Guidelines for Surface Alterations §711	Coastal Use Permits	Surface alterations which have high adverse impacts on natural	La. Admin. Code tit. 43, §711 I.
1.	rederal Consistency	includis shall not occur on partier islands and beaches,	
		and aquatic species breading or spectruling areas, or in important	
		and aquadic species breeding or spawning areas, or in important	
		migratory routes.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Guidelines for Surface Alterations §711	Coastal Use Permits	Surface mining or shell dredging shall be carried out utilizing	La. Admin. Code tit. 43, §711 K.
К.	Federal Consistency	the best practical techniques to minimize adverse	
		environmental impacts.	
Guidelines for Surface Alterations §711	Coastal Use Permits	Surface alteration sites and facilities shall be designed,	La. Admin. Code tit. 43, §711 M.
M	Federal Consistency	constructed, and operated using the best practical techniques to	
		prevent the release of pollutants or toxic substance into the	
		environment and minimize other adverse impacts.	
Guidelines for Surface Alterations §711	Coastal Use Permits	To the maximum extent practicable only material that is free of	La. Admin. Code tit. 43, §711 N.
N.	Federal Consistency	contaminants and compatible with the environmental setting	
		shall be used as fill.	
Rules and Procedures for Coastal Use	Coastal Use Permits	Continuing uses are activities which by nature are carried out	La. Admin. Code tit. 43, §723.C.9.(c)(i),
Permits §723 C.9. (c)(i), (d)(ii)		on an uninterrupted basis examples include projects involving	(d)(ii)
		maintenance dredging. The term of issuance of permits shall	
		be as follows: the term of a coastal use permit for a continuing	
		use shall be five years from the date of issuance. The permit	
		term may not be extended.	
State and Local Coastal Resources	Coastal Use Permit	The secretary shall insure that whenever a proposed use of	La. Rev. Stat. Ann. §213.30 H.(1)
Management Act §213.30 H.(1)		activity requires the dredging or disposal of five hundred	
		uithin the coastel gone, the dredged meterial shall be used for	
		the beneficial purposes of watland protection, creation	
		anhancament, or combinations thereof in accordance with a	
		long term management strategies plan for each existing or	
		proposed channel or canal as approved by the secretary	
State and Local Coastal Resources	Coastal Use Permit	When a proposed use or activity involves dredging to construct	La Roy Stat Ann 8213 30 H (2)
Management Act 8213 30 H (2)	eoustal ese remit	or maintain a channel or canal greater than one mile in length	La. Nev. Stat. Ann. 3213.30 11.(2)
Wanagement Act 3210.00 11.(2)		in the coastal zone and where the secretary determines that	
		failure to maintain and stabilize the banks of such channel or	
		canal will result in direct or indirect loss of wetlands or adverse	
		impacts, the secretary shall require that such banks be	
		maintained and stabilized using dredged materials or structural	
		stabilization measures, or both.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
State and Local Coastal Resources Management Act §213.32 F(3)	Coastal Use Permit	In developing a long term management strategies plan for each existing or proposed channel, the secretary shall consult with and address the concerns of the following: the local sponsor; the governing authority for the parish; representatives of the affected or potentially affected port or waterway facility operators; representatives of the affected or potentially affected waterway user groups; and, appropriate state and federal agencies.	La. Rev. Stat. Ann. §213.32 F.(3)
State and Local Coastal Resources Management Act §213.32 F(4)	Coastal Use Permit	The plan shall address beneficial use of dredged material disposal for the purposes of wetland protection, creation, enhancement, combinations thereof, and channel bank stabilization, where deemed appropriate by the secretary from a long-range perspective and shall incorporate structural, management, institutional, and economic components for a particular existing or proposed navigation channel. The plan shall include but not be limited to the following: (a)-(d)	La. Rev. Stat. Ann. §213.32 F.(4)
State and Local Coastal Resources Management Act §213.32 F(4)(a)	Coastal Use Permit	a) A list of projects, programs, or structural channel bank stabilization measures required for the conservation, restoration, or creation of wetlands lost, adversely affected or with the potential to be lost as a result of existing or proposed navigation channels and the action required of each state or federal agency, port authority, user group, or other responsible party to implement said project, program, or channel bank stabilization measure.	La. Rev. Stat. Ann. §213.32 F.(4)(a)
State and Local Coastal Resources Management Act §213.32 F(4)(b)	Coastal Use Permit	b) A schedule, estimated cost, and source of funding for the implementation of each project, program, or channel bank stabilization measure included in the plan for a particular existing or proposed navigation channel.	La. Rev. Stat. Ann. §213.32 F.(4)(b)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
State and Local Coastal Resources Management Act §213.32 F(4)(c)	Coastal Use Permit	c) Scientific data and other reasons, including but not limited to economic, social, geographic, and biological considerations and parameters as to why each project, program, or structural measure was selected for inclusion. Specifically this will include an explanation as to how each project, program, or channel bank stabilization measure advances the plan's objectives with respect to beneficial use of dredged material disposal for the purposes of wetland protection, creation, enhancement, or a combination thereof, and channel bank stabilization where deemed appropriate by the secretary.	La. Rev. Stat. Ann. §213.32 F.(4)(c)
State and Local Coastal Resources Management Act §213.32 F(4)(d)	Coastal Use Permit	d) Provisions which address emergency situations including but not limited to instances of force major, acts of God, acts of war, and other problems or situations not anticipated in the plan.	La. Rev. Stat. Ann. §213.32 F.(4)(d)
State and Local Coastal Resources Management Act §213.32 F(5)	Coastal Use Permit	Any project, program, or structural channel bank stabilization measures included in an approved and promulgated plan for a particular existing or proposed navigation channel shall be deemed to be consistent with the Louisiana Coastal Resources Program, provided, however actual construction and implementation is done in accordance with the plan, design memorandum, local cooperation agreement, and local cooperation agreement for a particular existing or proposed navigation channel.	La. Rev. Stat. Ann. §213.32 F.(5)
State and Local Coastal Resources Management Act §213.32 F(6)	Coastal Use Permit	Any long term management strategies plan shall have, as a a term of not more than ten years. At the end of the term the secretary may extend or reissue a plan for another term of up to ten years or require a modification to incorporate terms and conditions deemed necessary.	La. Rev. Stat. Ann. §213.32 F.(6)

Maine Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ¹⁶	Legal Authorities
Me. Rev. Stat. Ann. Tit. 38, §480-C2 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	Activities requiring a NRPA permit: (A) dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials; and, (C) filling, including adding sand or other material to a sand dune.	Me. Rev. Stat. Ann. Tit. 38, §480-C2
Me. Rev. Stat. Ann. Tit. 38, §480-D1 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The department shall grant a permit when it finds that the applicant has demonstrated that the proposed activity meets the following standards: (1) The activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses.	Me. Rev. Stat. Ann. Tit. 38, §480-D1
Me. Rev. Stat. Ann. Tit. 38, §480-D2 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The department shall grant a permit when it finds that the applicant has demonstrated that the proposed activity meets the following standards: (2) The activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.	Me. Rev. Stat. Ann. Tit. 38, §480-D2
Me. Rev. Stat. Ann. Tit. 38, §480-D3 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The department shall grant a permit when it finds that the applicant has demonstrated that the proposed activity meets the following standards: (3) The activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life. If the project may cause harm, mitigation activities including avoidance, minimization, restoration, preservation, or compensation may be permitted.	Me. Rev. Stat. Ann. Tit. 38, §480-D3
Me. Rev. Stat. Ann. Tit. 38, §480-D4 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The department shall grant a permit when it finds that the applicant has demonstrated that the proposed activity meets the following standards: (4) The activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.	Me. Rev. Stat. Ann. Tit. 38, §480-D4

¹⁶ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.
Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Me. Rev. Stat. Ann. Tit. 38, §480-D5	Federal Consistency	The department shall grant a permit when it finds that the	Me. Rev. Stat. Ann. Tit. 38, §480-D5
Protection of Natural Resources	Natural Resources	applicant has demonstrated that the proposed activity meets	
	Protection Act Permits	the following standards: (5) The activity will not violate any	
		state water quality law, including those governing the	
		classification of the state's waters.	
Me. Rev. Stat. Ann. Tit. 38, §480-D6	Federal Consistency	The department shall grant a permit when it finds that the	Me. Rev. Stat. Ann. Tit. 38, §480-D6
Protection of Natural Resources	Natural Resources	applicant has demonstrated that the proposed activity meets	
	Protection Act Permits	the following standards: (6) The activity will not unreasonably	
		cause or increase the flooding of the alteration area or adjacent	
		properties.	
Me. Rev. Stat. Ann. Tit. 38, §480-D7	Federal Consistency	The department shall grant a permit when it finds that the	Me. Rev. Stat. Ann. Tit. 38, §480-D7
Protection of Natural Resources	Natural Resources	applicant has demonstrated that the proposed activity meets	
	Protection Act Permits	the following standards: (7) If the activity is on or adjacent to a	
		sand dune, it will not unreasonably interfere with the natural	
		supply or movement of sand within or to the sand dune system	
		or unreasonably increase the erosion hazard to the sand dune	
		system.	
Me. Rev. Stat. Ann. 1it. 38, §480-D8	Federal Consistency	The department shall grant a permit when it finds that the	Me. Rev. Stat. Ann. 11t. 38, §480-D8
Protection of Natural Resources	Natural Resources	applicant has demonstrated that the proposed activity meets	
	Protection Act Permits	the following standards: (8) If the proposed activity is a	
		demonstrate that no reasonable alternative exist which would	
		have loss adverse affect upon the natural and recreational	
		factures of the river segment	
Ma Day Stat App Tit 29 \$490 D0	Fadaral Consistancy	The department shall grant a permit when it finds that the	Ma Day Stat Ann Tit 29 \$490 D0
Protection of Natural Pasources	Natural Resources	applicant has demonstrated that the proposed activity meets	Me. Rev. Stat. Ann. 111. 30, 3400-D9
Totection of Ivatural Resources	Protection Act Permits	the following standards: (9) If the proposed activity involves	
		dredging dredge spoils disposal or transporting dredge spoils	
		by water, the applicant shall demonstrate that the	
		transportation route minimizes adverse impacts on the fishing	
		industry and that the disposal site is geologically suitable. A	
		public hearing must be held and an assessment of the impacts	
		of the activity on the fishing industry must be provided by the	
		Commissioner of Marine Resources.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Me. Rev. Stat. Ann. Tit. 38, §480-D9 A, B, C Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The permit must require the non-federal applicant to: Clearly mark or designate the dredging area, the spoils disposal route and the transportation route; publish in a newspaper of general circulation in the areas adjacent to the route the approved transportation route of the dredged spoils; and, publish in a newspaper of general circulation in the area adjacent to the route a procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.	Me. Rev. Stat. Ann. Tit. 38, §480-D9 A, B, C
Me. Rev. Stat. Ann. Tit. 38, §480-E3 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	The commissioner may not accept an application for dredge spoil disposal in a coastal wetland unless the following requirements are met: the applicant has collected and tested the dredge spoils in accordance with an approved protocol; the applicant has published notice of the proposed route by which the dredged materials are to be transported to the disposal site in a newspaper of general circulation; and, the application has been submitted to each municipality adjacent to any proposed marine and estuarine disposal sites and route.	Me. Rev. Stat. Ann. Tit. 38, §480-E3
Me. Rev. Stat. Ann. Tit. 38, §480-E7 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	Notwithstanding section 344, subsection 7, an individual permit or consistency determination issued by the department pursuant to this article is required for maintenance dredging if the amount of material to be dredged exceeds 50,000 cubic yards. Notwithstanding section 480-X, if an analysis of alternatives to the project has been completed within the pervious 10 years, the applicant may update the previous analysis for purposes of obtaining a permit for maintenance dredging under this subsection.	Me. Rev. Stat. Ann. Tit. 38, §480-E7
Me. Rev. Stat. Ann. Tit. 38, §480-E8 Protection of Natural Resources	Federal Consistency Natural Resources Protection Act Permits	Maintenance dredging may be performed with a permit by rule only if the applicant has been issued an individual permit for dredging in the same location within the last 10 years.	Me. Rev. Stat. Ann. Tit. 38, §480-E8

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wetlands Protection Rule 4.B.	Federal Consistency	Alterations of wetlands of special significance usually require	Code Me. R. §06-096-310
	Natural Resources	an individual permit.	
	Protection Act Permits		
Wetlands Protection Rule 5.A.	Federal Consistency	No activity that would cause a loss in a wetland area, functions	Code Me. R. §06-096-310
	Natural Resources	and values shall be permitted if there is a practicable alternative	
	Protection Act Permits	to the project that would be less damaging to the environment.	
		Each application must provide an analysis of alternatives in	
		order to demonstrate that a practicable alternative does not	
Watlands Protection Pule 5 A (1.6)	Fadaral Consistancy	In watlands of spacial significance, projects for which not	Code Mo D 806 006 210
Weitanus I Totection Rule J.A.(1-0)	Natural Resources	practicable alternative may exist are limited to those necessary	Code Me. R. 300-090-310
	Protection Act Permits	for health and safety crossings by road rail or utility lines.	
		water dependent uses: expansion of a facility that cannot	
		practicably be located elsewhere because of relation to the	
		existing facility; mineral excavation and appurtenant facilities;	
		or, walkways.	
Wetlands Protection Rule 5.B.	Federal Consistency	The amount of wetland to be altered must be kept to the	Code Me. R. §06-096-310
	Natural Resources	minimum amount necessary.	
	Protection Act Permits		
Wetlands Protection Rule 5.C.(1)	Federal Consistency	The goal of compensation is to achieve no net loss of wetland	Code Me. R. §06-096-310
	Natural Resources	functions and values. Compensation is required when the	
	Protection Act Permits	department determines that a wetland alteration will cause a	
		identified by a functional assessment or by the department's	
		evaluation of the project.	
Wetlands Protection Rule 5.C.(2)	Federal Consistency	Resource functions that will be lost or degraded are identified	Code Me. R. \$06-096-310
	Natural Resources	by the department based upon a functional assessment done by	
	Protection Act Permits	the applicant and by the department's evaluation of the project.	
		The functional assessment must be conducted for all activities:	
		in wetlands of special significance; or in all other wetlands	
		which alter more than 20,000 square feet per project.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wetlands Protection Rule 5.C.(3)	Federal Consistency Natural Resources Protection Act Permits	The compensation must take place in a location: on or close to a project site as necessary to off-set direct impacts to an aquatic ecosystem; otherwise, compensation may occur in an off-site location where it will satisfy wetland priority needs as established at the local, regional or state level to achieve and equal or higher net benefit for wetland systems, if approved by the department.	Code Me. R. §06-096-310
Wetlands Protection Rule 5.C.(4)	Federal Consistency Natural Resources Protection Act Permits	Compensation may occur in the form of: restoration of previously degraded wetlands; enhancement of existing wetlands; preservation of existing wetlands or adjacent uplands where the site to be preserved provides significant wetland functions and might otherwise be degraded by unregulated activity; and, creation of wetland from upland.	Code Me. R. §06-096-310
Wetlands Protection Rule 5.C.(5)	Federal Consistency Natural Resources Protection Act Permits	The amount of compensation required to replace lost function depends on a number of factors including: the size of the alteration; the functions of the wetland to be altered; the type of compensation to be used; and the characteristics of the compensation site. 1:1 for restoration in wetlands not of special significance, 2:1 for restoration in wetlands of special significance and, 8:1 for preservation to compensate for impacts to wetlands.	Code Me. R. §06-096-310
Maine Solid Waste Management Rules 4.C.(1)(ii)	Federal Consistency Natural Resources Protection Act Permits	Each landfill must be operated so that it does not contaminate ground or surface waters outside the solid waste boundary. Dredge materials or contaminated soils with concentrations of contaminants that exceed regulatory limits for hazardous waste, or that have a concentration of 50mg/kg or greater dry weight of PCBs, are considered a hazardous waste. Disposal of these and other hazardous wastes requires review and approval by the Department.	Code Me. R. §06-096-410

Maryland Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ¹⁷	Legal Authorities
Activities Occurring in Coastal Waters	Federal Consistency	Dredging and filling in state or private wetlands without state	Md. Code Ann., Envir. §16-202, 16-306,
A.3. Dredging & Disposal of Dredged	Tidal Wetlands	approval is not permitted.	9-301 et.seq.
Material #1	Permit/License		
	Water Quality Cert.		
	§10/404 USACE Permits		
Activities Occurring in Coastal Waters	Federal Consistency	No dredged material containing designated hazardous	Md. Code Ann., Envir. §7-201 et.seq., 9-
A.3. Dredging & Disposal of Dredged	Tidal Wetlands	substances shall be disposed of in any manner that would	301 et.seq.
Material #2	Permit/License	lethally or subleathlly affect terrestrial or aquatic ecosystems.	-
	Water Quality Cert.		
	§10/404 USACE Permits		
Activities Occurring in Coastal Waters	Federal Consistency	A system must be devised to minimize undesirable cumulative	Md. Code Ann., Nat. Res. §1-302
A.3. Dredging & Disposal of Dredged	Tidal Wetlands	impacts of dredging, disposal, and related activities in the	Md. Code Ann., Envir. §9-301 <i>et.seq.</i>
Material #3	Permit/License	coastal zone.	
	Water Quality Cert.		
	§10/404 USACE Permits		
Activities Occurring in Coastal Waters	Federal Consistency	Continued intensive monitoring of large dredging projects,	Md. Code Ann., Envir. §4-414, 9-301
A.3. Dredging & Disposal of Dredged	Tidal Wetlands	particularly those involving disposal of material in open water	et.seq.
Material #4	Permit/License	is required.	
	Water Quality Cert.		
	§10/404 USACE Permits		
Activities Occurring in Coastal Waters	Federal Consistency	The development of a method for choosing acceptable spoil	Md. Code Ann., Nat. Res. §1-302, 1-303
A.3. Dredging & Disposal of Dredged	Tidal Wetlands	disposal sites is necessary for use by counties, municipalities,	Md. Code Ann., Envir. §4-414, 5-1101, 9-
Material #5	Permit/License	and other local dredging interests.	301 <i>et.seq.</i>
	Water Quality Cert.		
	§10/404 USACE Permits		

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Activities Occurring in Coastal Waters A.3. Dredging & Disposal of Dredged Material #6	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	No material dredged from Baltimore Harbor shall be disposed of in an unconfined manner in the open water portion of the Chesapeake Bay or the tidal portions of its tributaries outside of Baltimore Harbor.	Md. Code Ann., Envir. §5-1102, 9-301 <i>et.seq.</i>
Activities Occurring in Coastal Waters A.3. Dredging & Disposal of Dredged Material #7	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	The proposed Hart and Miller Island diked disposal facility for material dredged from the federal channels in Baltimore Harbor and its approaches is required.	Md. Code Ann., Nat. Res. §1-302, 1-303 Md. Code Ann., Envir. §5-1101, 9-301 <i>et.seq.</i>
Activities Occurring in Coastal Waters A.3. Dredging & Disposal of Dredged Material #8	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	Further selection and development of the most feasible of the potential containment sites identified in Baltimore Harbor is required.	Md. Code Ann., Nat. Res. §1-302, 1-303 Md. Code Ann., Envir. §5-1101, 9-301 <i>et.seq.</i>
Activities Occurring in Coastal Waters A.3. Dredging & Disposal of Dredged Material #9	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	The economic and environmental feasibility of alternative uses of dredged material, such as transport to an inland reclamation site or production of lightweight aggregates, must be determined as part of the development of a long-term dredged material disposal plan.	Md. Code Ann., Nat. Res. §1-302, 1-303 Md. Code Ann., Envir. §5-1101, 9-301 <i>et.seq.</i>
Activities Occurring in Coastal Waters A.3. Dredging & Disposal of Dredged Material #10	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	Adequate notification of proposals for navigational channel maintenance and improvement must be provided to the state by the US Army Corps of Engineers, and the responsibility of the various state agencies involved in such projects must be clearly defined.	Md. Code Ann., Nat. Res. §1-101, 1-104, 1-302, 1-303 Md. Code Ann., Envir. §4-402,4-405,4- 414,5-1101, 16-102, 16-202, 9-301 <i>et.seq.</i> Md. Code Ann., Transp. §2-103, 6-102, 6- 204, 6-206
Activities Occurring in Coastal Waters A.4. Activities Assoc. with Living Aquatic Resources #7	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE	Dredging through an oyster bar or clam bed which causes adverse impacts to the aquatic resource located on the bar or bed will not be permitted.	Md. Code Ann., Nat Res. §1-302, 1-303 Md. Code Ann., Envir. §5-502, 16-102, 16-202, 9-301 <i>et.seq.</i>

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Activities Occurring in Intertidal Areas B.1. Use of Beach Areas #3	Federal Consistency Interagency Review for Beach Erosion Control Permits Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	Dredging, filling, and other activities which adversely affect the integrity of beach areas on the Chesapeake Bay and its tributaries will be inconsistent with the state's Coastal Zone Management Program, and will be prohibited.	Md. Code Ann., Envir. §16-102, 16-202, 9-301 <i>et.seq.</i>
Activities Occurring in Intertidal Areas B. 2. Activities in Tidal Wetlands General Policy#3	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	Dredging and filling of tidal wetlands, either state or private, is allowed only to the extent necessary to provide reasonable riparian access, to provide necessary shore erosion control, or to carry out necessary water-dependent activities, the public benefit of which clearly outweighs any harm done. All activities allowed on state or private wetlands shall be undertaken in such a manner as to minimize adverse environmental effects.	Md. Code Ann., Nat. Res. §1-302 Md. Code Ann., Envir. §16-102, 16-210, 16-306, 9-301 <i>et.seq.</i>
Activities Occurring in Intertidal Areas B. 2. Activities in Tidal Wetlands Water Dependent Activities	Federal Consistency Tidal Wetlands Permit/License Water Quality Cert. §10/404 USACE Permits	Dredging and filling is allowed only for water-dependent activities on state or private wetlands, and the filling of state or private wetlands for the purpose of creating fast land is generally considered contrary to the public interest. Activities defined as non-water-dependent includes spoil and dump sites. Non-water dependent activities may be considered if they are in the public interest and they meet the following conditions: no feasible adjacent alternative activities or locations, fast land creation must be adjacent to existing fast lands, no ecologically productive submerged wetlands or areas important for feeding, nesting, or resting of waterfowl or other valuable habitat shall be destroyed, fill for creation of fast land shall be obtained from upland sources, creation of fast land shall not obstruct navigational channels, public use, current patterns, or contour of shoreline, and where fast land is created compensation will be required.	Md. Code Ann., Nat. Res. §1-302, 1-303 Md. Code Ann., Envir. §16-102, 16-210, 16-306, 9-301 <i>et.seq.</i>

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Activities Occurring in Shoreland Areas	Federal Consistency	Dredging for fill for the efficient operation of shore erosion	Md. Code Ann., Nat. Res. §1-302
C.1. Areas Undergoing Significant Shore	Tidal Wetlands	control work shall be allowed only where access to deposit land	Md. Code Ann., Envir. §16-202, 16-306,
Erosion #9	Permit/License	source material is not feasible or costs are excessive, and the	9-301 et.seq.
	Water Quality Cert.	project is determined not to have an extended or permanent	Board of Public Works vs. Lamar Corp.,
	§10/404 USACE Permits	adverse environmental impact.	277 A2d 427 202Md. (1971)
Activities Occurring in Shoreland Areas	Nontidal Wetlands and	Dredging channels is generally the least preferable means of	Md. Code Ann., Nat. Res. §1-302, 1-303
C.2. Activities in Coastal Tidal and Non-	Waterways Permits	accomplishing stormwater management and flood control.	Md. Code Ann., Envir. §5-501, 5-503, 4-
tidal Flood Plains #5	Water Quality Cert.		101, 4-201, 5-901 et.seq., 9-301 et.seq.
	Federal Consistency		
Activities Occurring in Shoreland Areas	Federal Consistency	I he filling and dredging of non-tidal wetland areas of biological	Md. Code Ann., Nat. Res. §1-302, 1-303
C. 3. Activities in Non-tidal wettands $\#5$	Wetowyour Dormite	and/or hydrological value within the 100-year floodplain will not be permitted uplace no feasible alternative for	Md. Code Ann., Envir. §5-501, 5-503, 9-
	Water Quality Cort	not be permitted, unless no reasible alternative for	901 et.seq., 9-301 et.seq.
	810/404 USACE Permits	taken to minimize adverse environmental impacts	
Activities Occurring in Shoreland Areas	Nontidal Wetlands and	This policy covers the US Army Corps of Engineers permitting	40 CFR 230 5(b)
C 3 Activities in Non-tidal Wetlands #9	Waterways Permits	program and defines what activities are appropriate for non-	33 CFR 323 4(b)
o. o. reciviles in rom tidal wedands no	Water Quality Cert.	tidal wetland areas in Maryland.	Md Code Ann Envir 89-901 et sea 9-
	\$10/404 USACE Permits		301 et.seq
Major Facilities in the Coastal Zone D.3.	Federal Consistency	The expenditure of public funds for dredging of ship channels	Md. Code Ann., Transp. §6-204, 6-307
Ports #4	Water Quality Cert.	and turning basins will be evaluated on the basis of: existing	Md. Code Ann., Nat. Res. §1-302, 1-303
		business conditions and port services, physical surveys of	Md. Code Ann., Envir. §9-301 et.seq
		channel conditions, need for port facilities to develop and	
		improve, economic impact of these funds on existing public	
		facilities, beneficial effects of the project on the environment,	
		measures such as monitoring, maintenance, and replacement	
		that might minimize potential adverse environmental effects	
		and maximize potential beneficial environmental effects, and	
		reasonable alternatives to the project that may have fewer adverse environmental effects or greater beneficial	
		auverse environmental effects of greater beneficial	
		environmental effects.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Major Facilities in the Coastal Zone D.3. Ports #6	Federal Consistency	State of Maryland positions on deep-water port applications will include the following considerations: environmental factors, economic, social and cultural factors, impacts on existing and future public facilities and services, evidence presented at public hearings, findings of any statement prepared pursuant to the Coastal Facilities Review Act (section 14-506), and the view of all interested state agencies and county or local governments.	Md. Code Ann., Nat. Res. §3-601 <i>et. seq.</i> Md. Code Ann., Envir. §14-501 <i>et. seq.</i>
Tidal Wetlands Regulations Permits & Licenses	Tidal Wetlands Permit/License	Uses and activities prohibited on state or private tidal wetlands without a license or permit. Except when authorized, a person may not: Fill, place, dump, or discharge on tidal wetlands any: loam, peat, sand, gravel, soil, or other similar substance; Drain excavate, or dredge the tidal wetlands encompassed by this subtitle, or remove from the tidal wetlands loam, peat, sand, gravel, soil or other similar substance; or, Perform an act or use involving tidal wetlands in a manner which would destroy the natural vegetation or existing patterns of tidal flow, or alter the natural and beneficial character of the tidal wetland.	MD. Regs. Code tit. 26, §24.02.01 B.1,2,4
Tidal Wetlands Regulations Criteria for Evaluating License or Permit Applications	Tidal Wetlands Permit/License	As the basis for a recommendation or final decision, including approval, denial, suspension, or modification of a license or permit, the Department shall take into account ecological, economic, developmental, recreational, and aesthetic values of tidal wetlands in order to preserve tidal wetlands and prevent their despoliation and loss.	MD. Regs. Code tit. 26, §24.02.03 A. 2
Tidal Wetlands Regulations Criteria for Evaluating License or Permit Applications	Tidal Wetlands Permit/License	In evaluating an application, the Department shall consider the degree to which: dredging and filling activities can be avoided or minimized; and, the proposed activity is water dependent.	MD. Regs. Code tit. 26, §24.02.03 A.1,2

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	In evaluating an application, the Department shall consider the	MD. Regs. Code tit. 26, §24.02.03 A.3
Criteria for Evaluating License or Permit	Permit/License	degree to which: the proposed activity will alter or destroy tidal	
Applications		wetland, including a determination of the how the proposed	
		project will: destroy or adversely affect the value of the tidal	
		wetlands as a source of nutrients or habitat for finfish,	
		crustaceans, mollusks, or wildlife of significant economic or	
		ecological value; affect potential habitat areas such as historic	
		spawning and nursery grounds for anadromous and semi-	
		anadromous fisheries species and shallow water areas suitable	
		to support populations of submerged aquatic vegetation;	
		eliminate or substantially reduce marine commerce, recreation,	
		and aesthetic enjoyment; affect the natural ability of tidal	
		wetlands to reduce flood damage and adversely affect the	
		public health and welfare; and, substantially reduce the capacity	
		of tidal wetland to trap sediment, and result in increased silting	
		of channel and harbor areas to the detriment of free navigation.	
Tidal Wetlands Regulations	Tidal Wetlands	In evaluating an application, the Department shall consider the	MD. Regs. Code tit. 26, §24.02.03 A.
Criteria for Evaluating License or Permit	Permit/License	degree to which: the proposed activity would alter natural water	4,5,6,7,8,9,13,14,16,17,18,19
Applications		flow, water temperature, water quality, and natural tidal	
		circulation regimes; would alter littoral drift; would enhance the	
		aquatic environment; would impact local, regional, and State	
		economic conditions; is consistent with state, federal and local	
		land use plans and laws, including Critical Area laws;	
		alternatives for the disposal of dredged material have been	
		explored; navigational safety is affected; the activity benefits the	
		public, if applicable; maintenance and operation of the	
		proposed project is assured; recreational and navigational	
		access to beaches and waters of the state is provided; the	
		activity would after the scenic and qualities of a designated state	
		scenic and wild river; and the activity would impute historic	
		watertowl staging areas and colonial bird-nesting sites.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	The use of construction equipment or other temporary	MD. Regs. Code tit. 26, §24.02.06 D.
Conditions of a License or Permit	Permit/License	structural barriers may not decrease the width of the navigable	
		waterway by more than 50% during construction, unless	
		approved by the Department.	
Tidal Wetlands Regulations	Tidal Wetlands	The Department may prohibit dredging during certain times to	MD. Regs. Code tit. 26, §24.02.06 E.
Conditions of a License or Permit	Permit/License	protect shellfish. The Department may determine time	
		restrictions in accordance with the following: type of project,	
		nature of the substrate, location, and other physical site	
		characteristics of the site; mechanical dredging within 500 yards	
		of snellfish areas is prohibited from December 16 through March 14 and June 1 through Santambar 20, and hydroulie	
		March 14 and June 1 through September 30; and, hydraulic dradging within 500 yards of shallfish areas is prohibited from	
		Ureuging within 500 yards of shemish areas is prohibited from	
Tidal Watlands Dogulations	Tidal Watlands	Dredge restrictions in other identified shallfish areas shall be	MD Dage Code tit 26 \$24.02.06 E
Conditions of a License or Permit	Parmit /Liconso	datarmined on a case-by-case basis by the Department	MD. Regs. Code III. 20, 924.02.00 F.
Tidal Watlands Pogulations	Tidal Wotlands	Dradging may be prohibited during certain periods by the	MD Dage Code tit 26 824 02 06 C
Conditions of a License or Permit	Dormit /Liconso	Department to protect identified finfish spawning and nursery	MD. Regs. Code III. 20, 924.02.00 G.
Conditions of a License of Termit	I emit/ License	areas. The Department shall determine dredging time	
		restrictions in accordance with the following: during the	
		nursery period of finfish species shall be determined by the	
		Department using factors including target species, type of	
		project, location, and other physical site characteristics:	
		dredging is prohibited from February 15 through June 15 in	
		areas where yellow perch have been documented to spawn, and	
		March 1 through June 15 in areas where other important	
		finfish species identified by the Department have been	
		document to spawn.	
Tidal Wetlands Regulations	Tidal Wetlands	Dredging is prohibited within 500 yards of SAV from April 15	MD. Regs. Code tit. 26, §24.02.06 H.
Conditions of a License or Permit	Permit/License	through October 15.	
Tidal Wetlands Regulations	Tidal Wetlands	Design Guideline Requirements: Dredging of channels, canals,	MD. Regs. Code tit. 26, §24.03.02 C. 1
Dredging-General	Permit/License	and boat basins shall be designed to provide: adequate flushing	
		and elimination of stagnant water pockets and a demonstrated	
		public benefit.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Design Guideline Requirements: Navigational access projects	MD. Regs. Code tit. 26, §24.03.02 C. 2,3
Dredging-General	Permit/License	shall when possible, be designed to use piers to reach deep	
		waters rather than to use dredging; navigational access channels	
		to serve individual or small groups of riparian landowners shall	
		be designed to prevent unnecessary channels. A central access	
		channel with short spur channels shall be considered over	
		separate access channels for each landowner.	
Tidal Wetlands Regulations	Tidal Wetlands	Design Guideline Requirements: Navigational access channels	MD. Regs. Code tit. 26, §24.03.02 C. 4,5,6
Dredging-General	Permit/License	shall be designed to minimize alteration of state or private tidal	
		wetlands. The channel shall provide a minimum width, length,	
		and depth consistent with historic boating use or access. The	
		channel alignment shall make maximum use of natural or	
		existing channels and bottom contours. The alignment of the	
		channel shall first avoid and then minimize impacts to shellfish	
		beds, submerged aquatic vegetation, and vegetated tidal	
		weitalius. When leasible, the alignment shall be located the	
		aguatic vagatation, and other vagatated tidal wetlands	
Tidal Watlanda Dogulationa	Tidal Watlanda	Aqualic vegetation, and other vegetated tidal wettations.	MD Daga Cada tit 26 \$24.02.02 C 7 (a)
Dradging Caparal	Parmit /Liconso	connecting to state waters for navigational access shall be	MD. Regs. Code ul. 20 , $924.03.02$ C. 7 (a),
Dieuging-General	I emit/ License	considered only when: there is a need for access to state waters	(0)
		the dimensions are the smallest needed and no other	
		alternatives exist. New Channels shall be designed to comply	
		with Maryland water quality standards and to avoid pockets of	
		stagnant water having inadequate tidal flushing. The channels	
		design shall include provisions for adequate water circulation.	
Tidal Wetlands Regulations	Tidal Wetlands	Dredging to obtain material for beach nourishment may be	MD. Regs. Code tit. 26. §24.03.02 C. 9
Dredging-General	Permit/License	approved if an environmental analysis determines there will be	
0.0		no adverse impacts to the environment, and the requirements	
		of Regulation.06 of this chapter are fulfilled.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Dredging for sand, gravel, or fill material may be approved	MD. Regs. Code tit. 26, §24.03.02 C. 10
Dredging-General	Permit/License	when an environmental analysis determines that there will be	
		no adverse impact on the environment, and no alternative fill	
		material is available.	
Tidal Wetlands Regulations	Tidal Wetlands	A person may not dredge for projects that are non-water	MD. Regs. Code tit. 26, §24.03.02 D.
Dredging-General	Permit/License	dependent, may not dredge by means of a vessel's propeller,	1,2,3
		and may not dredge in shallow water areas 3 feet or less at	
		mean low water unless historic boat use is documented and the	
		channel represents the smallest dimensions and the channels is	
		necessary for construction of shore erosion control projects or	
		navigational improvement projects such as jettles or	
Tid-1 Watlanda Dagulations	T: 1-1 Watlanda	Dreakwaters.	
Lidal Wellands Regulations	1 Idal wettands	An applicant proposing to dispose of dredged material of	MD. Regs. Code tit. 26, §24.03.03 B.
Upland Disposal of Dreuged Material	Permit/License	time of the application; grain size analysis, a detailed dradge	
		disposed plan that include the proposed disposed area proof of	
		uisposal pian that include the proposed discharged from the	
		disposed area does not adversely impact water quality tidal	
		wotlands or aquatic habitats methods to protect waters during	
		construction operation and dewatering and methods to control	
		or divert runoff and erosion from upland disposal sites	
Tidal Wetlands Regulations	Tidal Wetlands	The Department recommends that an applicant consult with	MD Regs Code tit 26 824 03 03 C
Upland Disposal of Dredged Material	Permit/License	the department before developing and submitting the following	MD. Regs. Code in. 20, 321.00.00 C.
opining Disposit of Drougou manner		information: composition of dredged material: an analysis of	
		alternative disposal methods, including beneficial uses and site	
		selection; a geotechnical evaluation or more detailed report	
		prepared in support of the projects; and, the type and settling	
		characteristics of sediments to be dredged.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Dredged material placement facilities shall be designed with the	MD. Regs. Code tit. 26, §24.03.04 B. 1-7
Guidelines for Upland Disposal of	Permit/License	specifications set forth in this regulation unless other wise	
Dredged Material		determined by the Department. Soils shall be classified using	
		the unified soil classification system. The minimum top width	
		of an embankment is a s follows: less than 5 ft. high, top	
		width=4ft. and 6-10ft. high, top width=6 ft. greater than 10ft.	
		high, width shall be determined by the engineer approving the	
		design. A weir box and antiflotation devices shall have a	
		minimum safety factor of 1.2 There shall be a minimum 2-foot	
		freeboard to the settled top of an embankment. Embankment	
		cross-section side slopes dimensions shall be a minimum of 2	
		horxontal:1vertical inside and 3 horizontal: 1 vertical outside.	
Tidal Wetlands Regulations	Tidal Wetlands	The placement facility shall have a controlled overflow	MD. Regs. Code tit. 26, §24.03.04 B. 8
Guidelines for Upland Disposal of	Permit/License	structure design that removes excess ponded water from the	
Dredged Material		facility and that is capable of completely stopping the flow of	
		any effluent. The weir overflow shall have an adjustable crest	
		elevation to remove surface water while assuring that the	
		effluent is in compliance with water quality requirements under	
		COMAR 26.08.0204, as established by the Department.	
Tidal Wetlands Regulations	Tidal Wetlands	The placement shall have a pipe outlet design that: specifies	MD. Regs. Code tit. 26, §24.03.04 B. 9
Guidelines for Upland Disposal of	Permit/License	that the minimum size is 8 inches in diameter; includes	
Dredged Material		measures to control scour and erosion; provides an outlet	
		channel that withstands the maximum outlet velocity	
		anticipated; and, provides watertight joints.	
Tidal Wetlands Regulations	Tidal Wetlands	The design of the disposal facility shall address effluent water	MD. Regs. Code tit. 26, §24.03.04 B. 10
Guidelines for Upland Disposal of	Permit/License	quality based on surface area, embankment height, settling	
Dredged Material		time, and sediment consolidation. When sizing the facility,	
		allowances shall be incorporated in the design for ponding	
		depth and free board requirements. A stage-storage cure or	
		table is required. The size of the disposal facility shall be	
		calculated using the formula in this regulation.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Soils containing organic matter shall be rejected for use in the	MD. Regs. Code tit. 26, §24.03.04 B.
Guidelines for Upland Disposal of	Permit/License	embankment of disposal facilities. The design of the disposal	11,12
Dredged Material		facility shall include regulation provisions for the flow of	
		dredge material into the basin or increasing the depth of	
		ponded water at the overflow weir if the concentration of	
		suspended solids in the effluent increases above acceptable	
		limits.	
Tidal Wetlands Regulations	Tidal Wetlands	Conditions: Disposal facilities are prohibited in the critical area	MD. Regs. Code tit. 26, §24.03.04 D
Guidelines for Upland Disposal of	Permit/License	buffer unless approved in accordance with COMAR	
Dredged Material		27.01.03.04B, 27.02.05.04B, and a state approved critical area	
-		program of a local jurisdiction.	
Tidal Wetlands Regulations	Tidal Wetlands	An applicant proposing overboard disposal in open water is	MD. Regs. Code tit. 26, §24.03.05 B.
Placement of Dredged Material in Open	Permit/License	required to submit the following information: an environmental	0
Water		study that includes measures to preserve or enhance the	
		aesthetic, scenic, environmental and natural resource values of	
		the disposal site; test results of the physical and chemical	
		parameters of the material to be dredged; Chemical	
		characteristics, including the concentration of metals, organics,	
		oil and grease, nutrients, bacterial, and toxic compounds and	
		their potential short-term and long-term release into the water	
		column; a current bathymeteric survey of the site where	
		dredged material is to be placed; a hydrodynamic study of the	
		impacts of the potential long-term movement of all material	
		placed; a monitoring program shall be submitted that includes	
		the collection and analysis of data before, during and after the	
		disposal operation including: aquatic biota, water quality	
		parameters, turbidity, nutrients, volume reductions, and post-	
		depositional benthos community recolonization.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Dredged material may be allowed for use in establishing	MD. Regs. Code tit. 26, §24.03.05 C
Placement of Dredged Material in Open	Permit/License	substrate for marsh creation projects and beach nourishment	
Water		projects if the following parameters are met: the dredged	
		material is equal to or larger in size than sediments at the	
		placement location, unless measures are taken to control its	
		movement, including breakwaters, groins, or other similar	
		structures; the dredged material is relatively free of organic	
		material; and, It can be documented that the site is properly	
		suited to maintain the sediments placed at the site.	
Tidal Wetlands Regulations	Tidal Wetlands	Proposed material placement may not cause adverse impacts to	MD. Regs. Code tit. 26, §24.03.05 D 1-4
Placement of Dredged Material in Open	Permit/License	existing navigation channels, longshore current patterns, or	
Water		adjacent properties. Dredged material may not contain more	
		than 10% silts and clays unless measures are taken to control	
		the dredged material's movement as described in section $C(1)$	
		of this regulation. Floating debris or other objects shall be	
		prevented from entering tidal waters. Turbidity shall be	
		minimized during the disposal operation.	
Tidal Wetlands Regulations	Tidal Wetlands	Adverse impacts on fish spawning, nursery, and migration	MD. Regs. Code tit. 26, §24.03.05 D 5-7
Placement of Dredged Material in Open	Permit/License	patterns shall be prevented. Adverse impacts on commercial	
Water		and sport fishing shall be minimized. Adverse impacts on	
		vegetated tidal wetlands, submerged aquatic vegetation, charted	
		natural oyster bars, and anadromous fish spawning and nursery	
Tidal Wetley de Destalations	Tidal Weday da	grounds shall be minimized.	
Filling	l Idal Wellands	Beach nourishment projects shall meet the following	MD. Regs. Code tit. 26, §24.03.06 D. 1
Filling	Permit/License	requirements: the fill material grain size shall equal to or	
		greater in grain size and character to the existing beach	
		inaterial, of determined otherwise to be compatible with existing site conditions and accortable to the Department	
Tidal Watlanda Dogulationa	Tidal Watlanda	The fill material shall be relatively free of organic material	
Filling	Dormit / Liconso	floating dobris or other objects. Silt and clay fills that change	MD. Regs. Code ut. 20, 924.03.06 D 2-4
1. mmg	I et tittl/ Livense	the sandy nature of the existing heach material are not	
		accontable. Cravel fill may be accontable, if particle sizes are	
		acceptable. Graver fill filly be acceptable, if particle sizes are	
		equal to or greater than the existing beach material	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Tidal Wetlands Regulations	Tidal Wetlands	Fill material shall be placed above the mean high waterline	MD. Regs. Code tit. 26, §24.03.06 D 5
Filling	Permit/License	before final grading to achieve the desired beach profile, unless	0
		site conditions prohibit the placement of fill material above the	
		mean high water line and specific measures are designed to	
		prevent material from washing away from the site.	

Policy Title/Number	Program/Action	Policy Summary ¹⁸	Legal Authorities
Habitat Policy #1	Federal Consistency, Wetlands Protection Act, Wetlands Restriction Act, Waterways Program, §401 Water Quality Certification	Protection of coastal resource areas for their important role as natural habitats. Regulates activities such as dredging and filling that will potentially affect a wetland or waterways area.	Mass. Gen. L. ch.21, §26-53 Mass. Gen. L. ch.30, §61-62H Mass. Gen. L. ch.91 Mass. Gen. L. ch.130, §105 Mass. Gen. L. ch.131, §40 Mass. Gen. L. ch.131, §40A
Protected Areas Policy #1	Federal Consistency, Areas of Critical Environmental Concern Program	Preserve, restore, and enhance complexes of coastal resources of significance, designated as Areas of Critical Environmental Concern (ACECs). Protection mechanisms include prohibiting dredging and disposal of dredged materials within ACEC.	Mass. Gen. L. ch.21, §17B Mass. Gen. L. ch.21, §26-53 Mass. Gen. L. ch.21A, §2(7), 40(e) Mass. Gen. L. ch.30, §61-62H Mass. Gen. L. ch.91 Mass. Gen. L. ch.130, §105 Mass. Gen. L. ch.131, §40A Mass. Gen. L. ch.132A, §11,12A-16F,18 Mass. Gen. L. ch.164F-R
Ports Policy #1	Federal Consistency	Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity and public health. General provisions covered when reviewing dredging projects include: sediment analysis, impact evaluation procedures, disposal sites and methods, and special management areas.	Mass. Gen. L. ch.21, §26-53 Mass. Gen. L. ch.21A, §14 Mass. Gen. L. ch.30, §61-62H Mass. Gen. L. ch.91 Mass. Gen. L. ch.130, §105 Mass. Gen. L. ch.131, §40 Mass. Gen. L. ch.111, §150A

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Ports Policy #2	Federal Consistency	Dredging projects at designated ports and developed harbors that have the widest possible public benefit will be given highest priority in the allocation of federal and state dredging funds. Dredging projects must be consistent with marine environment policies.	Mass. Gen. L. ch.21, §26-53 Mass. Gen. L. ch.21A, §14 Mass. Gen. L. ch.30, §61-62H Mass. Gen. L. ch.91 Mass. Gen. L. ch.111, §150A Mass. Gen. L. ch.130 Mass. Gen. L. ch.130
			Mass. Gen. L. ch.131, §40

Michigan Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ¹⁹	Legal Authorities
Natural Res. & Env. Protection Act Part 303 Wetlands Protection 324.30304(a), (b)	Wetland Permit Federal Consistency	Except as otherwise provided by this part or by a permit obtained from the department under section 30306-30314, a person shall not do any of the following: (a) deposit or permit the placing of fill material in a wetland; and (b) dredge, remove, or permit the removal of soil or minerals from a wetland.	1994 Mich. Pub. Acts 324.30304(a), (b)
Natural Res. & Env. Protection Act Part 303 Wetlands Protection 324.30311(1)	Wetland Permit Federal Consistency	A permit for an activity listed in section 30304 shall not be approved unless the department determines that the issuance of a permit is in the public interest, that the permit is necessary to realize the benefits derived from the activity, and that the activity is otherwise lawful.	1994 Mich. Pub. Acts 324.30311(1)
Natural Res. & Env. Protection Act Part 303 Wetlands Protection 324.30311(2)	Wetland Permit Federal Consistency	In determining whether the activity in the public interest, the benefit which reasonably may be expected to accrue from the proposal shall be balanced against the reasonably foreseeable detriments of the activity. The decision shall reflect the national and state concern for the protection of natural resources from pollution, impairment, and destruction. The following general criteria shall be considered: (a)-(j)	1994 Mich. Pub. Acts 324.30311(2)
Natural Res. & Env. Protection Act Part 303 Wetlands Protection 324.30311(2)(a) - (d)	Wetland Permit Federal Consistency	(a) The relative extent of the public and private need for the proposed activity; (b) the availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity; (c) the extent and permanence of the beneficial or detrimental effects that the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetland provides; (d) the probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed	1994 Mich. Pub. Acts 324.30311(2)(a) - (d)

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Natural Res. & Env. Protection Act	Wetland Permit	(e) The probable impact on recognized historic, cultural, scenic,	1994 Mich. Pub. Acts 324.30311(2)(e) - (j)
Part 303 Wetlands Protection	Federal Consistency	ecological, or recreational value and on the public health or fish	
324.30311(2)(e) - (j)		or wildlife; (f) the size of the wetland being considered; (g) the	
		amount of remaining wetland in the general area; (h) proximity	
		to any waterway; and (j) economic value, both public and	
		private of the proposed land change to the general area.	
Natural Res. & Env. Protection Act	Wetland Permit	In considering a permit application, the department shall give	1994 Mich. Pub. Acts 324.30311(3)
Part 303 Wetlands Protection	Federal Consistency	serious consideration to findings of necessity for the proposed	
324.30311(3)		activity which have been made by other state agencies.	
Natural Res. & Env. Protection Act	Wetland Permit	A permit shall not be issued unless it is shown that an	1994 Mich. Pub. Acts 324.30311(4)
Part 303 Wetlands Protection	Federal Consistency	unacceptable disruption will not result to the aquatic resources.	
324.30311(4)		A permit shall not be issued unless the applicant also show	
		either of the following: (a) the proposed activity is primarily	
		dependent upon being located in the wetland; (b) a feasible and	
		prudent alternative does not exist.	
Great Lakes Shorelands Rules	Environmental Areas	In determining whether an area is necessary for the	Mich. Admin. Code r. 281.23(1)
R 281.23 Environmental Areas (1)	Permit Federal Consistency	preservation and maintenance of fish, all the following uses	
	Federal Consistency	shall be considered. spawning, nursery, recurs, protection, and	
Creat Lakas Sharalanda Dulas	Environmental Areas	Inglation.	Mich Admin Code v 201 22(2)
Great Lakes Shorelands Rules D 291 22 Environmental Areas (2)	Environmental Areas	In determining whether an area is necessary for the	Mich. Admin. Code f. 281.25(2)
K 201.23 Elivirolillental Aleas (2)	Federal Consistency	preservation and maintenance of whome, an of the following	
	rederal Consistency	shall be considered; breeding pasting rearing of young	
		feeding and resting	
Creat Lakes Shorelands Rules	Environmental Areas	The following shoreland uses in an environmental area require	Mich Admin Code r 281 23(6)(a)
R 281 23 Environmental Areas (6)(a)	Permit	a nermit from the denartment in accordance with these rules or	wich. / willin. Couc 1. 201.20(0)(d)
	Federal Consistency	from a local governmental agency under an ordinance	
		approved by the department: (a) dredging, filling grading or	
		other alterations of the soil	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Natural Res. & Env. Protection Act Part 325 Great Lakes Submerged Lands 324.32503(1)	Submerged Lands Permit Federal Consistency	Except as otherwise provided in this section, the department, after finding that the public trust in the waters will not be impaired or substantially affected, may enter into agreements pertaining to waters over and the filling in of submerged patented lands, or to lease or deed unpatented lands, after approval of the state administrative board.	1994 Mich. Pub. Acts 324.32503(1)
Natural Res. & Env. Protection Act Part 325 Great Lakes Submerged Lands 324.32503(2)	Submerged Lands Permit Federal Consistency	A riparian owner shall obtain a permit from the department before dredging or placing spoil or other materials on bottomland.	1994 Mich. Pub. Acts 324.32503(2)
Natural Res. & Env. Protection Act Part 325 Great Lakes Submerged Lands 324.32512	Submerged Lands Permit Federal Consistency	Unless a permit has been granted by the department or authorization has been granted by the legislature, a person shall not do any of the following: (a) construct, dredge, commence or do any work with respect to an artificial canal, channel, ditch, lagoon, pond, lake, or similar waterway where the purpose is ultimate connection of the waterway with any of the Great Lakes, including lake St. Clair; (b) connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or similar waterway with any of the Great Lakes, including Lake St. Claire; and (c) dredge or place spoil or other material on bottomland.	1994 Mich. Pub. Acts 324.32512
Great Lakes Submerged Lands Rules R 322.1008 Permits (1)	Submerged Lands Permits Federal Consistency	A riparian owner shall obtain a permit from the department before dredging, filling, or placing spoil or other materials on bottomlands; dredging, altering, or maintaining an existing upland channel; or constructing a new upland channel.	Mich. Admin. Code r. 322.1008
Great Lakes Submerged Lands Rules R 322.1011 Permit Issuance (1)(b)	Submerged Lands Permits Federal Consistency	The department may require such permit conditions as it deems reasonable and necessary to protect the public trust and private riparian interests, including any of the following conditions: (b) that dredged materials be deposited in a manner which will cause the least damage to the public trust, benefit public interests, or mitigate damage done through navigation projects.	Mich. Admin. Code r. 322.1011(1)(b)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Great Lakes Submerged Lands Rules	Submerged Lands	The department may require such permit conditions as it	Mich. Admin. Code r. 322.1011(1)(c)
R 322.1011 Permit Issuance (1)(c)	Permits	deems reasonable and necessary to protect the public trust and	
	Federal Consistency	private riparian interests, including any of the following	
		conditions: (c) that filling, dredging, and placing spoil and other	
		materials on bottomiands shall be conducted in a manner	
		which will cause the least damage to the public trust and least	
		the public trust or interest, or mitigate damages	
Creat Lakas Submargad Lands Dulas	Submargad Landa	The department may require such permit conditions as it	Mich Admin Code r 292 1011(1)(d)
D 322 1011 Dermit Issuance (1)(d)	Dormits	dooms roosonable and necessary to protect the public trust and	Micii. Autilii. Code I. 522.1011(1)(d)
K 522.1011 1 ennit issuance (1)(u)	Federal Consistency	private riparian interests including any of the following	
	r cuciai consistency	conditions: (d) monitoring to assure that injury to the natural	
		resources or to the riparian interest of adjacent property	
		owners does not occur, including specifically monitoring the	
		littoral drift in the project areas.	
Natural Res. & Env. Protection Act	Inland Bottomlands	Except as provided in this part, a person without a permit from	1994 Mich. Pub. Acts 324.0102
Part 301 Inland Lakes and Streams	Permit	the department shall not do any of the following: dredge or fill	
324.30102	Federal Consistency	bottomland; structurally interfere with the natural flow of an	
	5	inland lake or stream; construct, dredge, commence, extend, or	
		enlarge an artificial canal, channel, ditch, lagoon, pond, lake or	
		similar waterway where the purpose is ultimate connection with	
		an existing inland lake or stream, or where any part of the	
		artificial waterway is located within 500 feet of the ordinary	
		high-water mark of an existing inland lake or stream; and,	
		connect any natural or artificially constructed waterway, canal,	
		channels, ditch, lagoon, pond, lake, or similar water with an	
		existing inland lake or stream for navigation or any other	
		purpose.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Inland Lakes and Streams Rules	Inland Bottomlands	In each application for a permit, all existing and potential	Mich. Admin. Code r. 281.814
R 281.814	Permit	adverse environmental effects shall be determined and a permit	
	Federal Consistency	shall not be issued unless the department determines all of the	
	, i i i i i i i i i i i i i i i i i i i	following: (a) that the adverse effects to the environment and	
		the public trust are minimal and will be mitigated to the extent	
		possible ; (b) that the resource affected is not a rare resource;	
		(c) that the public interest in the proposed development is	
		greater that the public interest in the unavoidable degradation	
		of the resource; and (d) that no feasible and prudent alternative	
		is available.	

Minnesota Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²⁰	Legal Authorities
B. Coastal Waters Management	Federal Consistency	Limits excavation from the beds of protected waters,	Minn. Stat. §103G.201 -103G.315
1. Protected Waters Program	Protected Waters &	regulates the nature, degree and purpose of excavations, and	Minn. R. 6115.0010 - 6115.0810
a. Work in the Beds Permits	Wetlands Permit Program	controls the deposition of materials excavated from	
		protected waters in order to protect against adverse effects.	
C. Air and Water Quality	Minnesota Pollution	Administers §401 Water Quality Certification program	Minn. Stat. §115
2. Water Quality	Control Agency	using the Lake Superior watershed water quality rules aimed	Minn. R. 7050
		at a consistent level of environmental protection for the	
		Great Lakes ecosystem. 60 Fed. Reg. 15368	
C. Air and Water Quality	Minnesota Pollution	Permits are required for disposal practices and to operate	Minn. Stat. §115, §116, §103H
3. Ground water Protection	Control Agency	facilities that could affect the quality of ground water. * <i>This</i>	Minn. R. 7060
		policy is dependent upon the technical definition of "waste" including	
		upland disposal of contaminated dredged material.*	
D. Fish & Wildlife Management	Federal Consistency	It is the policy of the state that fish and wildlife are	Minn. Stat. §84
Legislative Policy	Protected Waters &	renewable natural resources to be conserved and enhanced	Minn. R. 6200-6290
	Wetlands Permit Program	through planned scientific management, protection, and	
		utilization.	
H. Environmental Review	Minnesota Environmental	No state action can be allowed or permitted if it is likely to	Minn. Stat. §116B,D,C,
2. Minnesota Environmental	Quality Board -	cause pollution, impairment, or destruction of the air, water,	Minn. R. 4410.0200-4410.8000
Policy Act	Environmental Review	land or other natural resources if there is a prudent and	
3. Environmental Review	Program	teasible alternative.	
Program			

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Policy Title/Number	Program/Action	Policy Summary ²¹	Legal Authorities
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	It is declared to be the public policy of this state to favor the	Miss. Code Ann. §49-27-3
Management - Part I A.1.	Federal Consistency	preservation of the natural state of the coastal wetlands and	
		their ecosystems and to prevent the despoliation and	
		destruction of the, except where a specific alteration of specific	
		coastal wetland would serve a higher public interest in	
		compliance with the public purposes of the public trust in	
		which coastal wetlands are held.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	A regulated activity shall not be conducted without a permit	Miss. Code Ann. §49-27-3
Management - Part I B	Federal Consistency	unless excluded by §49-27-7. Even though these exclusions do	
		not require permits under the Wetlands Law, they are required	
		by the Wetlands Law to comply with the public policy of	
		wetlands protection in §49-27-3.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	An application for presently non-existing work shall include:	Miss. Code Ann. §49-27-3
Management - Part I C.3.f.	Federal Consistency	(f) A description of any public benefit to be derived from the	
		proposed project dependent upon the proposed activity and	
		the extent of public use of such proposed project.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	An application for presently non-existing work shall include: (g)	Miss. Code Ann. §49-27-3
Management - Part I C.3.g.	Federal Consistency	A complete description of measures to be taken to reduce	
		detrimental off-site effects to the coastal wetland during and	
		after the proposed activity.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	An application for presently non-existing work shall include:	Miss. Code Ann. §49-27-3
Management - Part I C.3.i.	Federal Consistency	(I) An environmental assessment of the proposed regulated	
		activity. The assessment shall address the projects effect on the	
		wetlands and upon the life dependent upon them.	

²¹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	An application for presently non-existing work shall include: (j)	Miss. Code Ann. §49-27-3
Management - Part I C.3.j.	Federal Consistency	A certification that a permit from the Bureau of Pollution	
		Control, Army Corps of Engineers, and permits from	
		municipal or county agencies have been applied for or that	
		such permits are not required.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	In making recommendations for regulated activities, the	Miss. Code Ann. §49-27-3
Management - Part I E.2.	Federal Consistency	proposed activity shall be evaluated against the public policy of	
		wetlands protection in the Mississippi Code §49-27-3.	
		Preference is to be given to preserving the coastal wetlands in	
		their natural state, and that the burden of demonstrating the	
		higher public interest in altering wetlands rests with the party	
		proposing the alteration. In evaluating the public interest and	
		making recommendations, the following shall be considered:	
Charter 9 Castier 9 Wetlands	Caratal Watlanda Damait	(a-m)	
Chapter 8, Section 2 Weitands Management Dart I E 2 (a m)	Coastal Wetlands Permit	(a) Applicable legislative and judicial statement of public interact. (b) the spectal watlands use plan in part IV of this	Miss. Code Ann. §49-27-3
Management - Part I E.2. (a - III).	rederal Consistency	interest, (b) the coastal wetanus use plan in part IV of this section: (d)	
		section, (c) the guidelines in rait in or uns section, (d)	
		impacts of similar or other development in the project area: (e)	
		the extent to which the proposed activity would directly and	
		indirectly affect the biological integrity and productivity of	
		coastal wetlands communities and ecosystems: (f) the impacts	
		induced by the project, both intended and unintended but	
		reasonably anticipated: (g) any adverse impact that can be	
		avoided thought project modifications, safeguards, or other	
		conditions; (h) alternative site available to reduce unavoidable	
		project impacts; (i) the extent to which the proposed activity	
		requires a waterfront location; (j) preservation of natural scenic	
		qualities; (k) the national interest; (l) comment received through	
		the Coastal program policy coordination procedure and public	
		hearings; and (m) the provisions of special management area	
		plans.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Chapter 8, Section 2 Wetlands Management - Part I H.1, 2.	Coastal Wetlands Permit Federal Consistency	A permittee or his agent shall compensate the State of Mississippi for all material removed from coastal wetlands at a rate to be determined by the Director, based on a fair market value of the material removed. Public agencies will not be charged for material removed from coastal wetlands when the material is used for a public project.	Miss. Code Ann. §49-27-3
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for Regulated Activities - Channels and Access Canals G.1.	Coastal Wetlands Permit Federal Consistency	Alignment of channels and canals shall make maximum use of natural or existing channels to minimize initial and maintenance dredging requirements.	Program Guidelines
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for Regulated Activities - Channels and Access Canals G.2.	Coastal Wetlands Permit Federal Consistency	Alignments shall avoid shellfish beds, areas of submerged and emergent vegetation and archeological and historical sites.	Program Guidelines
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for Regulated Activities - Channels and Access Canals G.3.	Coastal Wetlands Permit Federal Consistency	Permanent spoil disposal sites shall be designated for initial construction as well as future maintenance dredging for all canal or channel projects.	Program Guidelines
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for Regulated Activities - Channels and Access Canals G.4.	Coastal Wetlands Permit Federal Consistency	Access canals shall be designed to insure adequate flushing and shall not create stagnant pockets; they shall use existing drainage patterns; they shall be of uniform depth or become gradually shallower proceeding from the receiving body of water; they shall be no deeper than the parent body of water and where feasible, shall be aligned with prevailing summer winds to increase circulation.	Program Guidelines
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for Regulated Activities - Channels and Access Canals G.5.	Coastal Wetlands Permit Federal Consistency	Construction of channels and access canals shall be conducted in a manner that minimizes turbidity and dispersal of dredged materials into adjacent coastal wetlands, and on schedules that minimize interference with fish and shellfish migration and spawning.	Program Guidelines

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Chapter 8, Section 2 Wetlands Management - Part III Guidelines for	Coastal Wetlands Permit Federal Consistency	Designs shall not alter significantly tidal circulation patterns, create change in salinity regimes, or change related nutrient and	Program Guidelines
Regulated Activities - Channels and		aquatic life distribution patterns.	
Access Canals G.6.			
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	All dredged material shall be viewed as a potential reusable	Program Guidelines
Management - Part III Guidelines for Description - Dradged Material	Federal Consistency	resource, and all disposal plans should include provisions for	
Disposal H 1		beach replenishment construction or other purposes (sanitary	
		landfill, agricultural soil improvement etc.) shall be used	
		immediately for such purposes or stockpiled in existing	
		disposal areas or other non-wetland areas for later use.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	Existing upland disposal areas shall be used to the fullest extent	Program Guidelines
Management - Part III Guidelines for Regulated Activities Dradged Material	Federal Consistency	possible. Examples include raising the height of containment	
Disposal H 2		area and the application of modern engineering techniques to	
		render the material suitable for useful purposes.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	Disposal dikes shall be shaped and stabilized immediately upon	Program Guidelines
Management - Part III Guidelines for	Federal Consistency	construction to minimize erosion and dike failure, and out-falls	
Regulated Activities - Dredged Material		shall be positioned to empty back into the dredged area.	
Disposal H.3. Chapter & Section 2 Wetlands	Coastal Wotlands Pormit	Darmanant unland disposal sites or deen water disposal sites	Program Cuidolinos
Management - Part III Guidelines for	Federal Consistency	shall be used in preference to coastal wetland disposal.	i logram Guidennes
Regulated Activities - Dredged Material		onan be abea in protoconce to commu neumina approan	
Disposal H.4.			
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	Areas containing submerged vegetation or regularly flooded	Program Guidelines
Management - Part III Guidelines for Description Description	Federal Consistency	emergent vegetation shall not be used for dredged material	
Disposal H 5		uisposai.	
Chapter 8. Section 2 Wetlands	Coastal Wetlands Permit	Toxic and highly organic materials shall be disposed of in a	Program Guidelines
Management - Part III Guidelines for	Federal Consistency	manner that prevents their harmful release into the	
Regulated Activities - Dredged Material	J	environment.	
Disposal H.6.			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	New spoil disposal proposals shall include a maintenance plan	Program Guidelines
Management - Part III Guidelines for	Federal Consistency	for the shorter of fifty years or the life of the project.	
Regulated Activities - Dredged Material			
Disposal H.7.			
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	The wetlands use plan described in this part is an authoritative	Miss. Code Ann. §49-27-65(c)
Management - Part IV Coastal Wetlands	Federal Consistency	interpretation of the wetland protection policy in Section 2 Part	
Use Plan B.		I.A. The plan has been developed pursuant to §47-27-65(c),	
		which requires that an overall plan for the use of wetlands be	
		included in the coastal program.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	A permit shall not be issued for a regulated activity unless such	Miss. Code Ann. §49-27-65(c)
Management - Part IV Coastal Wetlands	Federal Consistency	activity is associated with a use allowed in the coastal wetlands	
Use Plan C.		use plan.	
Chapter 8, Section 2 Wetlands	Coastal Wetlands Permit	The coastal wetland use plan is divided into use districts.	Miss. Code Ann. §49-27-65(c)
Management - Part IV Coastal Wetlands	Federal Consistency	These districts and the allowable uses within each district are	
Use Plan E.5.d.		described below: (5.d.) "S" districts: Special Use, S4 - Dredged	
		material disposal areas.	

New Hampshire Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²²	Legal Authorities
New Hampshire Coastal Program	Federal Consistency	Allow only water dependent uses and structures on state	N.H. Rev. Stat. Ann. §482-A
Policies #13 Coastal Dependent Uses		properties in Portsmouth-Little Harbor, Rye Harbor, and	N.H. Rev. Stat. Ann. §271-A
		Hampton-Seabrook Harbor, at the State Port Authority, the	N.H. Code Admin. R. Wt100-800
		State Fish Pier and state beaches (except those uses or	
		structures which directly support the public recreation	
		purpose). Allow only water dependent uses and structures	
		over waters and wetlands of the state. Encourage the siting of	
		water dependent uses adjacent to public waters.	
New Hampshire Coastal Program	Federal Consistency	Preserve and protect coastal and tidal waters and fish and	N.H. Rev. Stat. Ann. §482-A
Policies #14 Dredging & Dredge Spoli		wildlife resources from adverse effects of dredging and dredge	N.H. Rev. Stat. Ann. §271-A
Disposal		disposal, while ensuring the availability of havigable waters to	N.H. Code Admin. R. Wt100-800
		wildlife habitat restoration as a means of dradge disposal	
		whenever compatible	
Fill and Dredge in Wetlands	Federal Consistency	No person shall excepte remove fill dredged or construct	NH Pov Stat Ann 8489 A.31
8482-A-3 Excavating and Dredging	Fill & Dredge Permit	any structures in or on any bank flat marsh or swamp in and	11.11. Nev. Stat. Ann. 9402-A.51.
Permit	r in de Dreuge r crime	adjacent to any waters of the state without a permit from the	
		department.	
Coastal Wetlands Rules	Federal Consistency	For all major and minor projects the applicant shall	N.H. Code Admin. R. Wt302.04(a) (1)-(6)
Requirements for Application Evaluation	Fill & Dredge Permit	demonstrate that the following factors have been considered in	
Wt 302.04(a)(1)-(6)	0	their design in assessing the impact of the proposed project to	
		areas and environments under the department's jurisdiction:	
		(1) the need for the proposed impact; (2) the proposed	
		alternative is the one with the least impact to wetlands or	
		waters on site; (3) type of wetlands involved; (4) the	
		relationship of the proposed wetlands to be impacted relative	
		to nearby wetlands and surface waters; (5) the rarity of the	
		wetland, surface water, sand dunes, or tidal buffer zone area;	
		(6) the surface area of the wetlands that will be impacted.	

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Program/Action	Policy Summary	Legal Authorities
Federal Consistency	(7) the impact on plants, fish, and wildlife including: rare	N.H. Code Admin. R. Wt302.04(a) (7)
Fill & Dredge Permit	special concern species; state and federally listed threatened	
	and endangered species; species at the extremities of their	
	ranges; migratory fish and wildlife; and, exemplary natural	
	communities identified by the NH Natural Heritage Inventory.	
Federal Consistency	(8) The impact of the proposed project on public commerce,	N.H. Code Admin. R. Wt302.04(a) (8)-
Fill & Dredge Permit	navigation and recreation; (9) the extent to which a project	(15)
	interferes with the aesthetic interest of the general public; (10)	
	the extent to which a project interferes with or obstructs public	
	rights of passage or access; (11) the impact upon abutting	
	owners; (12) the benefit of a project to the health, safety, and	
	will being of the general public; (13) the impact of a project on	
	quantity or quality of surface and ground water; (14) the	
	potential of a project to cause or increase flooding, erosion, of	
	sedimentation; (15) the extent to which a project that is located	
	In surface waters reflects of redirects current of wave energy which might cause domage on bazarde	
Fadaral Consistency	(10) The sumulative impact that would result if all parties	N II. Code Admir D. $W(t202.04(c))$ (16)
Federal Consistency	(10) The cumulative impact that would result if an parties	N.H. Code Admin. R. W1302.04(a) (10)-
Fill & Dieuge Ferilin	permitted alterations proportional to their property rights: (17)	(20)
	the impact of the project on the values and functions of the	
	total watland or watland complex: (18) the impact upon the	
	value of the sites included in the latest published edition of the	
	National Register of Natural Landmarks: (19) the impact upon	
	the value of areas named in acts of congress or presidential	
	proclamations as national rivers national wilderness areas	
	national lakeshores and estuarine and marine sanctuaries and	
	(20) the degree to which a project redirects water from one	
	watershed to another	
	Program/Action Federal Consistency Fill & Dredge Permit Federal Consistency Fill & Dredge Permit Federal Consistency Fill & Dredge Permit	Program/ActionPolicy SummaryFederal Consistency Fill & Dredge Permit(7) the impact on plants, fish, and wildlife including: rare special concern species; state and federally listed threatened and endangered species; species at the extremities of their ranges; migratory fish and wildlife; and, exemplary natural communities identified by the NH Natural Heritage Inventory.Federal Consistency Fill & Dredge Permit(8) The impact of the proposed project on public commerce, navigation and recreation; (9) the extent to which a project interferes with the aesthetic interest of the general public; (10) the extent to which a project interferes with or obstructs public rights of passage or access; (11) the impact upon abutting owners; (12) the benefit of a project to the health, safety, and will being of the general public; (13) the impact of a project on quantity or quality of surface and ground water; (14) the potential of a project to cause or increase flooding, erosion, or sedimentation; (15) the extent to which a project that is located in surface waters reflects or redirects current or wave energy which might cause damage or hazards.Federal Consistency Fill & Dredge Permit(16) The cumulative impact that would result if all parties

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Wetlands Rules	Federal Consistency	In addition to the requirements of Wt 302.04(a) and (b), the	N.H. Code Admin. R. Wt302.04(c)(1)-(3)
Requirements for Application Evaluation	Fill & Dredge Permit	applicant shall demonstrate that the following factors have	
Wt 302.04(c)(1)-(3)		been considered in the design in assessing the impact of the	
		project to areas in and adjacent to tidal wetlands including the	
		tidal buffer zone: (1) the extent to which a project impacts	
		beach or tidal flat sediment replenishment and movement of	
		sediments along a shore; (2) the impact on a tidal wetland's	
		ability to dissipate wave energy and storm surge; (3) the impact	
		of project runoff on salinity levels in tidal environments.	
Coastal Wetlands Rules	Federal Consistency	Unless the conditions of Wt 304.16 apply, the department shall	N.H. Code Admin. R. Wt302.04(d)(1)-(5)
Requirements for Application Evaluation	Fill & Dredge Permit	not grant a permit if: (1) there is a practicable alternative that	
Wt 302.04(d)(1)-(5)		would have less adverse impact; (2) the project would cause or	
		contribute to significant degradation of waters of the state; (3)	
		the project will cause random or unnecessary destruction of	
		wetlands; (4) the project proposed fill of a wetland to achieve	
		septic set back from wetlands; and, (5) the requirements of Wt	
		302.04 (a)-(c) are not met.	
Coastal Wetlands Rules	Federal Consistency	The department shall place time limits on a project activity as a	N.H. Code Admin. R. Wt304.03
Approval Conditions	Fill & Dredge Permit	condition when the environmental impact of a project is	
Wt 304.03		reduced by doing so. For example the department places	
		conditions on dredging projects which require that the project	
		be conducted either during drawdown or to a certain time	
		period to account for spawning, fishery migration, and to	
		decrease the degradation of the water quality.	
Coastal Wetlands Rules	Federal Consistency	Dredge spoils shall be disposed of out of the areas under the	N.H. Code Admin. R. Wt304.11(a)
Approval Conditions	Fill & Dredge Permit	jurisdiction of the department unless other disposition is	
Wt 304.11(a)		specifically permitted. Dredge spoils means material removed	
		as the result of dredging.	
Coastal Wetlands Rules	Federal Consistency	Dredging in tidal waters shall be done between November 15	N.H. Code Admin. R. Wt304.11(b)
Approval Conditions	Fill & Dredge Permit	and March 15, and shall not be permitted during a fish	
Wt 304.11(b)		migration or larval setting stage of shellfish.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Wetlands Rules	Federal Consistency	Dredging in freshwater lakes, ponds, streams, brooks, or rivers,	N.H. Code Admin. R. Wt304.11(c)
Approval Conditions	Fill & Dredge Permit	shall be done as not to impede fish migrations or interfere with	
Wt 304.11(c)		spawning areas for fish.	
Coastal Wetlands Rules	Federal Consistency	Dredging shall not disturb contaminated layers of sediment,	N.H. Code Admin. R. Wt304.11(d)
Approval Conditions	Fill & Dredge Permit	unless specifically identified and permitted with protective	
Wt 304.11(d)		conditions.	
Coastal Wetlands Rules	Federal Consistency	Dredging projects in tidal waters shall be designed to ensure	N.H. Code Admin. R. Wt304.11(e)
Approval Conditions	Fill & Dredge Permit	that there is no disruption of tidal flushing. Tidal flushing	
Wt 304.11(e)		means the influx or outflow of water which is associated with	
		the ebb and flow of the tide.	
Coastal Wetlands Rules	Federal Consistency	Appropriate controls, such as cofferdams, siltation curtains, or	N.H. Code Admin. R. Wt304.11(f)
Approval Conditions	Fill & Dredge Permit	nonporous curtains, shall be used to contain turbidity.	
Wt 304.11(f)			
New Hampshire State Port Authority	Federal Consistency	The New Hampshire State Port Authority, in cooperation with	N.H. Rev. Stat. Ann. §271-A:2 I.
§271-A:2 Purposes I.		the department of resources and economic development shall:	
		I. Plan for the maintenance and development of the ports,	
		harbors and navigable tidal rivers of the State of New	
		Hampshire from the head of navigation to the seaward limits	
		within the jurisdiction of the state.	
New Hampshire State Port Authority	Federal Consistency	III. Cooperate with any agencies or department of the federal	N.H. Rev. Stat. Ann. §271-A:2 III.
§271-A:2 Purposes III.		government in planning the maintenance, development, and	
		use of the state ports, harbors, and navigable tidal rivers.	
New Hampshire State Port Authority	Federal Consistency	I. The New Hampshire port authority shall be responsible for	N.H. Rev. Stat. Ann. §271-A:20 I.
§271-A:20 Dredge Mgmt. In Tidal		managing harbor and channel dredging activities within the	
Waters I.		tidal waters of the state. The authority shall: I. Assess the	
		existing dredge permitting process with state and federal	
		permitting agencies for the purposes of identifying an	
		improved review process.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
New Hampshire State Port Authority	Federal Consistency	II. Establish and implement a process to ensure that dredging	N.H. Rev. Stat. Ann. §271-A:20 II.
§271-A:20 Dredge Mgmt. In Tidal		projects are completed in an timely and cost effective manner,	
Waters II.		recognizing the need to; (a) coordinate with and utilize the	
		services of the local and private sector to establish a reliable	
		program; and (b) work in conjunction with other state and	
		federal agencies to ensure uniform and timely compliance with	
		other laws, regulations and rules, including, but not limited to,	
		permitting in accordance with RSA 482-A and 485-A and to	
		ensure that a certificate of consistency is obtained from the	
		coastal zone management program; and, (c) develop a long-	
		range plan and schedule to serve as a guide for individual	
		dredging activities.	
New Hampshire State Port Authority	Federal Consistency	III. Initiate and implement dredging projects to maintain and	N.H. Rev. Stat. Ann. §271-A:20 III.
§271-A:20 Dredge Mgmt. In Tidal		improve channels and harbors in accordance with the long-	
Waters III.		range plan and schedule.	
New Hampshire State Port Authority	Federal Consistency	IV. Submit an annual report to the senate president, the	N.H. Rev. Stat. Ann. §271-A:20 IV.
§271-A:20 Dredge Mgmt. In Tidal		speaker of the house and the governor on the status of current	
Waters IV.		dredging projects and the projection of future dredging	
		projects and costs.	

New Jersey Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²³	Legal Authorities
Special Areas 7:7E-3.2 Shellfish Habitat (e)(1),(2),(3)	Federal Consistency Coastal Permits	New dredging within shellfish habitat is prohibited, except when it is necessary to maintain the use of public launching facilities. New dredging for existing marinas or for the expansion of such facilities is conditionally acceptable provided	N.J. Admin. Code tit. 7E §3.2 (e)
		not be located within the shellfish habitat; the marina has restrooms, marine sanitation device and a pumpout station; and, the width, depth and length of the channel to be dredged and basin are limited to minimum dimensions needed to	
Special Areas 7:7E-3.2 Shellfish Habitat (f)	Federal Consistency Coastal Permits	Maintenance dredging within shellfish habitats is conditionally acceptable, provided the disturbance is minimized to the greatest extent possible.	N.J. Admin. Code tit. 7E §3.2(f)
Special Areas 7:7E-3.2 Shellfish Habitat (g)	Federal Consistency Coastal Permits	New dredging adjacent to shellfish habitat may be conditionally acceptable if it can be demonstrated that the proposed dredging will not adversely affect shellfish habitat, population or harvest. If dredging is conducted, it shall be managed so as not to cause significant mortality form increased turbidity and sedimentation, resuspension of toxics, or any other occurrence which will interfere with the natural functioning of the habitat.	N.J. Admin. Code tit. 7E §3.2(g)
Special Areas 7:7E-3.2 Surf Clam Areas (b)(1)	Federal Consistency Coastal Permits	Development ²⁴ which would result in the destruction, condemnation, or contamination of surf clam areas is prohibited.	N.J. Admin. Code tit. 7E §3.3(b)
Special Areas 7:7E-3.4 Prime Fishing Areas (b)(2)	Federal Consistency Coastal Permits	Prohibited uses in prime fishing areas include sand or gravel submarine mining which would alter existing bathymetry so as to reduce the high fishery productivity of these areas.	N.J. Admin. Code tit. 7E §3.4 (b)
Special Areas 7:7E-3.5 Finfish Migratory Pathways (b)	Federal Consistency Coastal Permits	Development such as channelization which creates a physical barrier to the movement of fish along finfish migratory pathways is prohibited, unless acceptable mitigating measures are used.	N.J. Admin. Code tit. 7E §3.5(b)

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Special Areas	Federal Consistency	Development which lowers water quality so as to interfere with	N.J. Admin. Code tit. 7E §3.5(c)
7:7E-3.5 Finfish Migratory Pathways	Coastal Permits	the movement of fish along finfish migratory pathways or to	
(c)(1)		violate water quality standards is prohibited. Mitigating	
		measures are required for any development which would result	
		in: lowering of dissolved oxygen levels, releasing toxic	
		chemicals, raising ambient water temperature, impinging or	
		suffocating fish, entrainment of fish eggs, larvae, or juveniles,	
		causing sultation, or raising turbidity levels during migration	
		periods.	
Special Areas	Federal Consistency	New dredging of state and federal navigation channels is	N.J. Admin. Code tit. 7E §3.6(b)
(h)(2)	Coastal Permits	allowed provided that there is no practicable of feasible	
(D)(2)		anernative to avoid vegetation, and that impacts to the habitat	
		Mitigation will be required for destruction of one zero or more	
		which possess submarged aquatic vagatation	
Special Areas	Fadaral Consistance	Maintenance dredging of previously authorized state and	N I Admin Code tit 7E 82 6(b)
JPECIAL Aleas 7.7E 3.6 Submarged Vagatation Habitat	Coastal Parmits	fodoral navigational channels and associated disposal areas is	N.J. Admin. Code ut. 7E §5.0(b)
(h)(3)	Coastai I erinits	allowed provided that there is no practicable or feasible	
(b)(0)		alternative to avoid the vegetation and that impacts are	
		minimized to the maximum extent practicable	
Special Areas	Federal Consistency	New and maintenance dredging of previously authorized	N I Admin Code tit 7E §3.6(b)
7:7E-3.6 Submerged Vegetation Habitat	Coastal Permits	marinas, access channels, and existing launch facilities is	
(b)(4)		allowed provided that the proposed areas to be dredged are	
		minimized to the maximum extent practicable.	
Special Areas	Federal Consistency	Maintenance dredging to regain access to existing private	N.J. Admin. Code tit. 7E §3.6(b)
7:7E-3.6 Submerged Vegetation Habitat	Coastal Permits	docks, piers, boat ramps and mooring piles not associated with	U (<i>i</i>)
(b)(5)		marinas that were previously dredged to an authorized channel	
		is allowed provided that there is no feasible alternative on site	
		that would avoid dredging in submerged vegetation habitat.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Special Areas	Federal Consistency	Construction of a single noncommercial dock or pier is allowed	N.J. Admin. Code tit. 7E §3.6(b)
7:7E-3.6 Submerged Vegetation Habitat	Coastal Permits	provided that no dredging shall be performed in conjunction	
(b)(6)(v)		with the use of the dock or pier.	
Special Areas	Federal Consistency	New or maintenance dredging of existing navigation channels	N.J. Admin. Code tit. 7E §3.7(b)
7:7E-3.7 Navigation Channels (b)(1)	Coastal Permits	is conditionally acceptable providing that the condition under	
		the new or maintenance dredging rule is met (7:7E-4.2(f), (g)).	
Special Areas	Federal Consistency	In canals presently used for navigation, maintenance dredging	N.J. Admin. Code tit. 7E §3.8(b)
7:7E-3.8 Canals (b)(1)(ii)	Coastal Permits	is encouraged as needed provided that an acceptable spoil	
		disposal site is available and turbidity is controlled.	
Special Areas	Federal Consistency	Filling is prohibited in inlets.	N.J. Admin. Code tit. 7E §3.9(b)
7:7E-3.9 Inlets (b)(1)	Coastal Permits		
Special Areas	Federal Consistency	New or maintenance dredging in marina mooring areas and	N.J. Admin. Code tit. 7E §3.10(d)
7:7E-3.10 Marina Moorings (d)	Coastal Permits	access channels is conditionally acceptable, provided that the	
		proposed dredging complies with the provisions applicable to $\frac{1}{2}$	
C		new and maintenance dredging (7:7E-4.2(I)(g)).	
Special Areas	Federal Consistency	Disposal of dredged material is discouraged, but may be	N.J. Admin. Code tit. 7E §3.14(f)
7:7E-3.14 Wet Borrow Pits (I)	Coastal Permits	acceptable in limited cases, provided that condition (b) is met	
		and. the dredged material is clean and non-toxic, an	
		appropriate particle size, and will not disturb groundwater now	
		the time of the first coastal narmit application for filling	
		romains as surface water in pattern design to maximize wildlife	
		habitat value and create watland areas except that the entire	
		lake may be filled if necessary to prevent the lake from acting	
		as a channel for salt water intrusion into aquifers.	
Special Areas	Federal Consistency	All proposed dredging and filling activities shall comply with	N.I. Admin. Code tit. 7E §3.14(b)
7:7E-3.14 Wet Borrow Pits (b)	Coastal Permits	any applicable Freshwater Wetlands Protection Act Rules and	
		must receive a water quality certificate.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Special Areas	Federal Consistency	Discharge of liquid or solid waste, other than clean dredge fill	N.J. Admin. Code tit. 7E §3.14(h)
7:7E-3.14 Wet Borrow Pits (h)	Coastal Permits	of acceptable particle size, is prohibited.	
Special Areas	Federal Consistency	Development, filling, new dredging or other disturbance is	N.J. Admin. Code tit. 7E §3.15(b)
7:7E-3.15 Intertidal and Subtidal	Coastal Permits	discouraged but may be permitted in accordance with the	
Shallows (b)(1)-(4)		acceptability conditions at 7:7E-4.2 and if the following criteria	
		are satisfied: dredging may be acceptable to maintain adequate	
		water depths for existing or new marinas with 25 or more slips	
		or public launching facilities and existing ports; maintenance	
		dredging for legally constructed, existing docks other than those identified above is acceptable provided that the depth	
		does not exceed four fast mean low water, the width is the	
		minimum required to moor a heat at the dock and the	
		maintenance complies with all applicable Special Water Area	
		Rules: submerged infrastructure is conditionally accentable	
		provided that there is no feasible alternative route that would	
		not disturb intertidal and subtidal shallows, the infrastructure is	
		buried deeply enough to avoid exposure or hazard, directional	
		drilling for the purpose of installation of submerged	
		infrastructure is preferred to trenching where feasible, and all	
		trenches are backfilled to the preconstruction depth with	
		naturally occurring sediment; and, the filling of intertidal and	
		subtidal shallows for beach nourishment is conditionally	
		acceptable provided it meets the requirements found under the	
		filling rule and the coastal engineering rule 7:7E-4.2(j), and	
		7.11(d)	
Special Areas	Federal Consistency	Dredging activities for residential noncommercial docks will	N.J. Admin. Code tit. 7E §3.15(c)
7:/E-3.15 Intertidal and Subtidal	Coastal Permits	not require mitigation. Dredging activities for projects which	
Shallows (c)		do not met the criteria listed in $(b)(1)$ and (2) , marinas and	
		ports will not require mitigation provided the dredged area is	
		reduced to the minimum extent practicable.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Special Areas 7:7E-3.27 Wetlands (b)	Federal Consistency Coastal Permits	Development ²⁵ in wetlands defined under the Freshwater Wetlands protection Act of 1987 is prohibited unless the	N.J. Admin. Code tit. 7E §3.27(b)
		development is found to be acceptable under the Freshwater Wetlands Protection Act Rule 7:7A.	
Special Areas 7:7E-3.27 Wetlands (c)	Federal Consistency Coastal Permits	Development of all kinds in all other wetlands not defined in (b) above is prohibited unless the Department can find that the proposed development meets the following four conditions: requires water access or is water oriented, the use must be water dependent; has no prudent or feasible alternative on a non-wetland site; will result in minimum feasible alteration or impairment of natural tidal circulation; and, will result in minimum feasible alteration or impairment of natural contour	N.J. Admin. Code tit. 7E §3.27(c)
Crucial Acces	E davel Consistences	the natural vegetation of the wetlands.	
Special Areas 7:7E-3.27 Wetlands (g)	Federal Consistency Coastal Permits	For projects which require a Waterfront Development permit, the reuse of former dredged material disposal sites for continued dredge material disposal is conditionally acceptable provided the following criteria are met: the site has been used for dredged material disposal within the past 10 years; the site has existing dikes or berms in sound condition, and/or has sufficient area of previously disposed material with the previously disturbed disposal area to allow the construction of structurally sound dikes and berms; there are no anticipated adverse effects on threatened or endangered species; there are no colonial nesting birds present on site which would be adversely affected(seasonal restrictions may be required); no wetlands regulated pursuant to the Wetlands Act of 1970 would be adversely affected; the former dredged material disposal area is not subject to daily tidal inundation, and the vegetation community is limited primarily to scrub/shrub or phragmities; and, the required Waterfront Development permit and Water Quality Certification are obtained.	N.J. Admin. Code tit. 7E §3.27(g)

²⁵ "Development" is defined as those activities regulated under the Freshwater Wetlands Protection Act of 1987, including dredging and filling activities.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Special Areas 7:7E-3.35 Dry Borrow Pits (f)	Federal Consistency Coastal Permits	Dredge spoil disposal is conditionally acceptable provided that: the spoil will not degrade groundwater quality; the spoil is of a particle size that will not disturb groundwater quality; and, spoil disposal is compatible with neighboring uses.	N.J. Admin. Code tit. 7E §3.35(f)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (f)(1)	Federal Consistency Coastal Permits	Maintenance dredging is the removal of material from previously authorized channels, marinas, lagoons, canals, or moorings to the depth, length, and width of the previous dredging operation.	N.J. Admin. Code tit. 7E§4.42(f)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (f)(2)(i), (ii)	Federal Consistency Coastal Permits	Maintenance dredging is conditionally acceptable provided that sections i-vii are met: (i) An acceptable dredged material disposal site with sufficient capacity exists. (ii)Pre-dredging chemical and physical analysis of the dredged material and/or its elutriate may be required where the Department suspects contamination of sediments, additional bioaccumulation testing, and bioassay of sediments may also be required. The results of these tests will be used to determine if contaminants may be resuspended at the dredging site and what methods may be needed to control their escape. The results will also be used to determine acceptability of the proposed disposal method.	N.J. Admin. Code tit. 7E§4.42(f)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (f)(2)(iii)	Federal Consistency Coastal Permits	(iii)Turbidity concentrations and other water quality parameters at, downstream, and upstream of the dredging site, and slurry water overflows shall meet applicable State Surface Water Quality Standards. NJDEP may require the permittee to conduct biological, physical and chemical water quality monitoring before, during and after dredging and disposal operations to ensure that water quality standards will not be exceeded.	N.J. Admin. Code tit. 7E§4.42(f)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
General Water Areas	Federal Consistency	(iv)If predicted water quality parameters are likely to exceed	N.J. Admin. Code tit. 7E§4.42(f)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	State Surface Water Quality Standards, or if pre-dredging	
(f)(2)(iv)		chemical analysis of dredged material or eluitrate reveals	
		significant contamination, then the Department will work	
		cooperatively with the applicant to fashion acceptable control	
		measures and will impose seasonal restrictions under the	
		specific circumstances identified below.	
General Water Areas	Federal Consistency	(v)For maintenance dredging using mechanical dredges such as	N.J. Admin. Code tit. 7E§4.42(f)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	clamshell bucket, dragline, grab, orange peel, or ladders,	-
(f)(2)(v)		deploying silt curtains at the dredging site may be required, if	
		feasible based on site conditions. In sites at which the use of	
		silt curtains is infeasible, dredging using closed watertight	
		buckets of lateral digging buckets will be examined.	
		Mechanical dredging of highly contaminated sites may not be	
		allowed even if turbidity control measures are planned.	
General Water Areas	Federal Consistency	(vi)In the waterways that are known spawing or nursery areas	N.J. Admin. Code tit. 7E§4.42(f)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	of endangered shortnose sturgeon and anadromous fishes,	
(f)(2)(vi)		downstream of anadromous fish spawing sites where the	
		predicted turbidity plume will encompass the entire cross-	
		sectional area of the waterbody, areas of contaminated	
		sediments with high levels of fecal coliform or streptococcus	
		bacteria, and areas of known female blue crab winter	
		hibernation, if the applicant cannot meet the acceptability	
		conditions in (f)2i-v, then the Department will authorize	
		dredging only on a seasonally restricted basis.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (f)(2)(vii)	Federal Consistency Coastal Permits	(vii) For hydraulic dredges, if the applicant cannot meet the acceptability conditions in (f)2i-v, specific operational procedures, such as removal of cutterhead, flushing of pipeline sections prior to disconnection, limitations on depth of successive cuts etc. shall be examined. Seasonal dredging restrictions may be imposed in the following areas to prevent entrainment and mortality of aquatic organisms: known female blue crab winter hibernation areas; known spawning, nursery, or wintering areas of endangered shortnose sturgeon and/or winter flounder; and, known wintering areas of adult Atlantic or shortnose sturgeon, striped bass and/or white perch.	N.J. Admin. Code tit. 7E§4.42(f)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (f)(3)	Federal Consistency Coastal Permits	To mitigate adverse impacts upon shellfish Hhbitat or endangered and threatened wildlife or vegetation species habitat, finfish migratory pathways, marine fish and fsheries, and wintering areas for finfish or blue crabs, and to prevent reduction of ambient dissolved oxygen below critical levels, or the increase of turbidity or the resuspension of toxic substances above critical levels, seasonal limitations may be imposed on maintenance dredging as specifically described in this subsection.	N.J. Admin. Code tit. 7E§4.42(f)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (g)(1)	Federal Consistency Coastal Permits	New dredging is the removal of sediment from the bottom of a water body that has not been previously dredged, for the purpose of increasing water depth, or the widening or deepening of navigable channels to a newly authorized depth or width.	N.J. Admin. Code tit. 7E§4.42(g)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (g)(2)(i)1-10	Federal Consistency Coastal Permits	Acceptability conditions for new dredging are as follows for boat moorings, navigation channels or anchorages provided that: there is a demonstrated need that cannot be met with existing facilities; the facilities satisfy the location requirements for Special Water's Edge Areas; the adjacent water areas are currently used for recreational boating, commercial fishing or marine commerce; the dredge area causes no significant disturbance to special Water or Water's Edge Areas; the adverse environmental impacts are minimized to the maximum extent feasible; dredging will be accomplished consistent with all conditions described under the maintenance dredging provisions, (f)(2i-vii) above as appropriate to the dredging method; an acceptable dredge spoil disposal site exists; the dredge area is reduced to the minimum practical; the maximum depth of the newly dredged area will not exceed that of the connecting access or navigation channel necessary for vessel passage to bay or ocean; and, dredging will have no adverse impacts on groundwater resources.	N.J. Admin. Code tit. 7E§4.42(g)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (g)(2)(ii)	Federal Consistency Coastal Permits	To mitigate adverse impacts upon shellfish habitat or endangered and threatened wildlife or vegetation species habitat, finfish migratory pathways, marine fish and fisheries, and wintering areas for finfish or blue crabs, and to prevent reduction of ambient dissolved oxygen below critical levels, or the increase of turbidity or the resuspension of toxic substances above critical levels, seasonal and/or dimensional limitations may be imposed on new dredging.	N.J. Admin. Code tit. 7E§4.42(g)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (g)(2)(iii)	Federal Consistency Coastal Permits	New dredging or excavation to create new lagoons for residential development is prohibited in wetlands, wetlands buffer, endangered or threatened wildlife or vegetation species habitats and discouraged elsewhere.	N.J. Admin. Code tit. 7E§4.42(g)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (g)(2)(iv)	Federal Consistency Coastal Permits	New dredging is conditionally acceptable to control siltation in lakes, ponds, and reservoirs, provided that an acceptable sedimentation control plan is developed to address re- sedimentation of these water bodies.	N.J. Admin. Code tit. 7E§4.42(g)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (h)	Federal Consistency Coastal Permits	Dredged material disposal is the discharge of sediment removed during dredging operations.	N.J. Admin. Code tit. 7E§4.42(h)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (h)(2)(i),(ii)	Federal Consistency Coastal Permits	Acceptability conditions relevant to dredged material disposal are as follows: disposal is prohibited in tidal guts, man-made harbors, and medium rivers, creeks and streams; disposal is discouraged in open bays, semi-enclosed and backbays where the water depth is less than six feet.	N.J. Admin. Code tit. 7E§4.42(h)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (h)(2)(iii)	Federal Consistency Coastal Permits	(iii) Disposal in the ocean and bays deeper than six feet is conditionally acceptable provided that it is in conformance with the USEPA and US Army Corps of Engineers Guidelines established under Section 404(b) of the Clean Water Act.	N.J. Admin. Code tit. 7E§4.42(h)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (h)(2)(iv)	Federal Consistency Coastal Permits	EPA guidelines require that consideration be given to the need for the proposed activity, the availability of alternate sites and methods of disposal that are less damaging to the environment, and applicable water quality standards. They also require that the choice of the site minimize harm to municipal water supply intakes, shellfish, fisheries, wildlife, recreation, threatened and endangered species, benthic life, wetlands and submerged vegetation, and that it be confined to the smallest practicable area.	N.J. Admin. Code tit. 7E§4.42(h)
General Water Areas 7:7E-4.2 Acceptable Conditions for Use (h)(2)(v)	Federal Consistency Coastal Permits	Overboard disposal of uncontaminated sediments into unconfined disposal sites is conditionally acceptable in existing anoxic dredge holes, provided that data on water quality, benthic productivity and seasonal finfish use evidence limited biological value and a submerged elbow or underwater diffuser is used. The hole shall not be filled higher than the depth of the surrounding waters.	N.J. Admin. Code tit. 7E§4.42(h)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
General Water Areas	Federal Consistency	Overboard disposal of sediments less than 90 percent sand	N.J. Admin. Code tit. 7E§4.42(h)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	shall be acceptable in unconfined disposal site when shallow	
(h)(2)(vi)		waters preclude removal to an upland or confined site provided	
		that: Shellfish habitats are not within 1,000 meters, disposal	
		will not smother or cause condemnation or contamination of	
		harvestable shellfish resources, and, sediment characteristics of	
		the dredged material and disposal site are similar. If	
		unconfined aquatic disposal can not meet these conditions the	
		NJDEP shall impose a seasonal restriction appropriate to the	
Conord Water Areas	Federal Consistency	resource of concern.	
General Water Areas	Coostal Dormita	Uncomaminated dredged sediment with 75 percent sand or	N.J. Admin. Code tit. 7E§4.42(n)
(h)(2)(vii)	Coastal Fermits	greater are generally encouraged for beach nourisinnent.	
General Water Areas	Federal Consistency	Dredged material disposal in lakes, ponds and reservoirs is	N.J. Admin. Code tit. 7E§4.42(h)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	prohibited.	c (<i>i</i>)
(h)(2)(vii)			
General Water Areas	Federal Consistency	In no event may regulated wetlands be filled except under the	N.J. Admin. Code tit. 7E§4.42(j)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	conditions of the Wetlands Special Area Rule 7:7E-7.11.	
(j)(3)			
General Water Areas	Federal Consistency	Filling using clean sediment of suitable particle size and	N.J. Admin. Code tit. 7E§4.42(j)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	composition is acceptable for beach nourishment projects.	
(j)(4)			
General Water Areas	Federal Consistency	Sand and gravel extraction is discouraged in General Water	N.J. Admin. Code tit. 7E§4.42(l)
7:7E-4.2 Acceptable Conditions for Use	Coastal Permits	Areas, priority will be given to sand extraction for beach	
(I)(Z)		nourisnment.	
Use Rules	Federal Consistency	If dredging is necessary for marina construction, it shall be	N.J. Admin. Code tit. 7E§7.3A(b)
7:7E-7.3A Marina Development (b)(z)	Coastal Permits	scheduled around critical life stages of marine organisms.	
	Federal Consistency	Dredging shall take place during the colder months when the	N.J. Admin. Code tit. 7E§7.3A(b)
1:1E-1.3A Marina Development (b)(3)		dissolved oxygen levels are naturally nign.	
	Federal Consistency	Clean dredge spoil with adequate grain size shall be used for	N.J. Admin. Code tit. 7E§7.3A(b)
7:7E-7.3A Marina Development (b)(6)	Coastal Permits	beach nourishment.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Use Rules 7:7E-7.9 Port Use Rule (e)	Federal Consistency Coastal Permits	New, expanded or redeveloped port facilities must have direct access to navigation channels of sufficient depth for anticipated vessel access, with minimal dredge and fill requirements, adequate access to road, rail transportation, and adjacent land with sufficient load bearing capacity for structures.	N.J. Admin. Code tit. 7E§7.9(e)
Use Rules 7:7E-7.11 Coastal Engineering (d)(1)	Federal Consistency Coastal Permits	Beach nourishment projects, such as non-structural shore protection measures, are encouraged, provided that: the particle size and type of fill is compatible with the existing beach material; the elevation, width, slope and form of the proposed beach nourishment projects are compatible with the characteristics of the existing beach; the sediment deposition will not cause unacceptable shoaling in downdrift inlets and navigation channels; and, public access to the nourished beach is provided in cases where public funds are used to complete the project.	N.J. Admin. Code tit. 7E§7.11(d)
Use Rules 7:7E-7.12 Dredged Material Disposal on Land (b)	Federal Consistency Coastal Permits	Dredged material disposal is conditionally acceptable under the following conditions: sediments are covered with appropriate clean material that is similar in texture to surrounding soils, and the sediment will not pollute the groundwater table by seepage, degrade surface water quality, present an objectionable odor in the vicinity of the disposal area or degrade the landscape.	N.J. Admin. Code tit. 7E§7.12(b)
Use Rules 7:7E-7.12 Dredged Material Disposal on Land (b)(1)	Federal Consistency Coastal Permits	Dredged material disposal is prohibited on wetlands unless the disposal satisfies the criteria found at 7:7E-3.27.	N.J. Admin. Code tit. 7E§7.12(b)
Use Rules 7:7E-7.12 Dredged Material Disposal on Land (b)(2)	Federal Consistency Coastal Permits	The use of uncontaminated dredged material of appropriate quality and particle size for beach nourishment is encouraged. Creation of useful materials such as bricks and lightweight aggregate from the dredged material is encouraged.	N.J. Admin. Code tit. 7E§7.12(b)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Use Rules	Federal Consistency	The use of uncontaminated dredged material for purposes such	N.J. Admin. Code tit. 7E§7.12(b)
7:7E-7.12 Dredged Material Disposal on	Coastal Permits	as restoring landscape, enhancing farming areas, creating	
Land $(b)(3)$		recreation-oriented landfill sites, including beach protection	
		and general land reclamation, creating marsnes, capping	
		wildlife habitats is encouraged.	
Use Rules	Federal Consistency	Effects associated with the transfer of the dredged materials	N.J. Admin. Code tit. 7E§7.12(b)
7:7E-7.12 Dredged Material Disposal on	Coastal Permits	from the dredging site to the disposal site shall be minimized to	
Land (b)(4)		the maximum extent feasible.	
Use Rules	Federal Consistency	Dredged material disposal in wet and dry borrow pits is	N.J. Admin. Code tit. 7E§7.12(b)
7:7E-7.12 Dredged Material Disposal on	Coastal Permits	conditionally acceptable.	
Land (b)(5)			
Use Rules	Federal Consistency	If pre-dredging sediment analysis indicates contamination, then	N.J. Admin. Code tit. 7E§7.12(b)
7:7E-7.12 Dredged Material Disposal on	Coastal Permits	special precautions shall be imposed including but not	
Land (b)(6)		necessarily limited to increasing retention time of water in the	
		disposal site or rehandling basin through weir and dike design	
		modifications, use of coagulants, ground water monitoring, or	
		measures to prevent biological uptake by colonizing plants.	
Use Rules	Federal Consistency	Dewatering release from confined (diked) disposal sites and	N.J. Admin. Code tit. 7E§7.12(b)
7:7E-7.12 Dredged Material Disposal on	Coastal Permits	rehandling basins shall meet existing State Water Quality	
Land (b)(7)		Standards.	

Policy Title/Number	Program/Action	Policy Summary ²⁶	Legal Authorities
New York CMP - Section 6 Coastal	Federal Consistency	Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters. Dredging to support water	N.Y. Exec. Law §42
Policy 2		dependent land and water uses including commercial maritime	N.I. SEQRA So N.V. Unconsol 85941
		activities shall be promoted. Water-enhanced land and water	11.1. Onconsol. 35241
		uses shall not displace or pre-empt water dependency.	
New York CMP - Section 6 Coastal	Federal Consistency	Further develop the state's major ports as centers of commerce	N.Y. Exec. Law §42
Policies and Implementation		and industry. Dredging to maintain the economic viability of	N.Y. Envtl. Conserv. Law §8
Policy 3		major ports will be regarded as an action of regional or	N.Y. Transp. Law §2
		statewide public benefit if a need is shown, and it can be	
		demonstrated that environmental impacts would be at an	
		acceptable level according to state regulations governing the	
		activity.	
New York CMP - Section 6 Coastal	Federal Consistency	Strengthen the economic base of smaller harbor areas by	N.Y. Exec. Law §42
Policies and Implementation		encouraging the development and enhancement of those	N.Y. SEQRA §8
Policy 4		with their unique maritime identity. Dredging in support of	N.Y. Unconsol. §5241
		maritime uses in small harbors will be promoted. Emphasis in	
		nation be promoted. Emphasis in policy is placed on maintaining the function of smaller harbors	
New York CMP - Section 6 Coastal	Federal Consistency	In order to protect and preserve a significant habitat land and	NY Free Law 842
Policies and Implementation	reactar consistency	water uses shall not be under taken if they destroy or impair	NY Envtl Conserv Law 88
Policy 7		the viability of an area as a habitat. Activities which may affect	NY Envtl Conserv Law 824
- y		such habitats include: dredging or excavation and dredge spoil	NY Envtl Conserv Law 815 5
		disposal. Parameters to be considered include physical,	NY Envtl Conserv Law §15, 0
		biological and chemical.	NY Envtl Conserv Law §11,0501
			N.Y. Parks Rec. & Hist. Preserv. 820
			NY Envtl Conserv Law 845
			N.Y. Envtl. Conserv. Law §51

²⁶ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
New York CMP - Section 6 Coastal Policies and Implementation Policy 8	Federal Consistency	Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bioaccumulate in the food chain or which cause significant sublethal or lethal effects on those resources.	N.Y. Envtl. Conserv. Law §17 N.Y. Envtl. Conserv. Law §37 N.Y. Envtl. Conserv. Law §27 N.Y. Envtl. Conserv. Law §13-0345, 17- 0503
New York CMP - Section 6 Coastal Policies and Implementation Policy 15	Federal Consistency	Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach material to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.	N.Y. Exec. Law §42 N.Y. Envtl. Conserv. Law §18 N.Y. Envtl. Conserv. Law §34 N.Y. Pub. Lands Law §2 N.Y. Envtl. Conserv. Law §15 N.Y. Envtl. Conserv. Law §25 N.Y. Envtl. Conserv. Law §24
New York CMP - Section 6 Coastal Policies and Implementation Policy 44	Federal Consistency	Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.	N.Y. Envtl. Conserv. Law §25 N.Y. Envtl. Conserv. Law §24 N.Y. Envtl. Conserv. Law §15
New York CMP - Section 6 Coastal Policies and Implementation Policy 35	Federal Consistency	Dredging and dredge spoil disposal in coastal waters will be undertaken in a manner that meets existing state dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.	N.Y. Envtl. Conserv. Law §15 N.Y. Envtl. Conserv. Law §25 N.Y. Envtl. Conserv. Law §24 N.Y. Envtl. Conserv. Law §8 N.Y. Envtl. Conserv. Law §34 N.Y. Exec. Law §42

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
New York CMP - Section 6 Coastal	Federal Consistency	To safeguard the vital economic, social and environmental	N.Y. Exec. Law §42
Policies and Implementation		interests of the state and of its citizens, proposed major actions	N.Y. Envtl. Conserv. Law §18
Policy 18		in the coastal area must give full consideration to those	N.Y. Envtl. Conserv. Law §15
		interests, and to the safeguards which the state has established	N.Y. Envtl. Conserv. Law §25
		to protect valuable coastal resource areas.	N.Y. Envtl. Conserv. Law §24
			N.Y. Envtl. Conserv. Law §11,3
			N.Y. Envtl. Conserv. Law §11-0503
			N.Y. Envtl. Conserv. Law §17,8
			N.Y. Envtl. Conserv. Law §13-0345,17-
			0503
			N.Y. Envtl. Conserv. Law §37
			N.Y. Envtl. Conserv. Law §27,9,7
			N.Y. Nav. Law §12, 11
			N.Y. Pub. Health Law §11
			N.Y. Transp. Law §2, 14-F
			N.Y. Envtl. Conserv. Law §36
			N.Y. Envtl. Conserv. Law §34
			N.Y. Envtl. Conserv. Law §49
			N.Y. Envtl. Conserv. Law §51, 51-0701
			N.Y. Parks Rec. & Hist. Preserv. Law §11,
			14,3,20
			N.Y. Envtl. Conserv. Law §45
New York CMP - Section 6 Coastal	Federal Consistency	The CMP will identify scenic resources of statewide	N.Y Exec. Law §42
Policies and Implementation		significance based upon quality, uniqueness, public accessibility,	N.Y. Envtl. Conserv. Law §8
Policy 24		and public recognition and prevent activities that would impair	N.Y. Envtl. Conserv. Law §49-
		them.	0103.1,0.0314
			N.Y. Envtl. Conserv. Law §45
			N.Y. Pub. Serv. Law §7,8
			N.Y. Envtl. Conserv. Law §25
			N.Y. Envtl. Conserv. Law §24
			N.Y. Envtl. Conserv. Law §34

North Carolina Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²⁷	Legal Authorities
Coastal Management Land Use Planning Guidelines N.C. Admin. Code tit.15A, r. 7B.0212	Land Use Plans Federal Consistency CAMA Permitting	Lists requirements for local 10-year land use plans. Under the Economic and Community Development section the land use plan shall include policy statements on assistance to channel maintenance, interstate waterways, and beach nourishment projects (including financial aid, provision of borrow and spoil areas, provision of easements for work).	N.C. Gen. Stat. §113A-107(a), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Public Trust Areas N.C. Admin. Code tit.15A, r. 7H.0207	Federal Consistency CAMA Permitting	The development of navigational channels or drainage ditches, the use of bulkheads to prevent erosion and the building of piers, wharves, or marinas are examples of uses that may be acceptable within public trust areas provided that such uses will not be detrimental to the public trust rights and the biological and physical functions of the estuary.	N.C. Gen. Stat. §113A-107(a), 113A- 107(b), 113A-113(b)(5), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern General Use Standards N.C. Admin. Code tit.15A, r. 7H.0208(a)(2)	Federal Consistency CAMA Permitting	Dredging may be considered as a water dependent use. Before a permit may be granted the applicant must comply with the following standards; development shall not violate water quality standards, shall not measurably increase siltation, shall not create stagnant water bodies, shall be timed to have minimum adverse significant effect on life cycles of estuarine resources, and shall not impede navigation or create undue interference with access to, or use of, public trust areas or estuarine waters.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)	Federal Consistency CAMA Permitting	Navigation channels, canals, and boat basins shall be aligned or located so as to avoid primary nursery areas, highly productive shellfish beds, beds of submerged aquatic vegetation, or significant areas of regularly or irregularly flooded coastal wetlands.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124

²⁷ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)(A)	Federal Consistency CAMA Permitting	Navigation channels and canals may be allowed through narrow fringes of flooded coastal wetlands if the loss of wetlands will have no adverse impact on fishery resources, water quality, or adjacent wetlands, and if there is no reasonable alternative that would avoid the wetlands losses.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)(B)	Federal Consistency CAMA Permitting	All spoil material from new construction shall be confined landward of flooded wetlands and stabilized to prevent entry of sediments into adjacent water bodies or marsh.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)(C)	Federal Consistency CAMA Permitting	Spoil from maintenance of channels and canals through irregularly flooded wetlands shall be placed on non-wetland areas, remnant spoil piles, or disposed of by a method having no significant, long-term impacts. Under no circumstances shall spoil be paced on regularly flooded wetlands.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)(D)	Federal Consistency CAMA Permitting	Widths of the canals and channels shall be the minimum required to meet the applicant's needs and provide adequate water circulation.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Navigation N.C. Admin. Code tit.15A, r. 7H.0208(b)(1)(E), (F)	Federal Consistency CAMA Permitting	Boat basin design shall maximize water exchange by having the widest possible opening and the shortest practical entrance canal. Depths of boat basins shall decrease from the waterward end inland. Any canal or boat basin shall be excavation deeper than the depth of the connecting channels.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Management	Federal Consistency	Maintenance excavation in canals, channels and boat basins	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidelines for Areas of	CAMA Permitting	within primary nursery areas and beds of submerged aquatic	113A-113(b), 113A-124
Environmental Concern		vegetation shall be avoided. However, essential maintenance	
Specific Use Standards-Navigation		may be permitted if it is demonstrated that there is a water-	
N.C. Admin. Code tit.15A, r.		dependent need, a previously permitted channel exists and was	
7H.0208(b)(1)(J)		continuously used, excavated material can be removed and	
		placed in an approved disposal areas without impacts, and the	
		original depth and width of the channel will not be increased	
Coastal Managamant	Enderel Consistency	to allow a new of expanded use of the channel.	N.C. C
State Cuidelines for Areas of	CAMA Pormitting	distance sufficient to preclude erosion of the containment dike	N.C. Gen. Stat S115A-107(D), 115A-108.
Environmental Concern	CAWATermitting	and a maximum distance from spillways to allow adequate	115A-115(D), 115A-124
Specific Use Standards-Hydraulic		settlement of suspended solids	
Dredging		settement of suspended solids.	
N.C. Admin. Code tit. 15A. r.			
7H.0208(b)(2)(A)			
Coastal Management	Federal Consistency	Dredge spoil shall be either confined on high ground by	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidelines for Areas of	CAMA Permitting	adequate retaining structures or if the material is suitable,	113A-113(b), 113A-124
Environmental Concern		deposited on beaches for purposes of renourishment, with the	
Specific Use Standards-Hydraulic		exception of (G) of this subsection.	
Dredging			
N.C. Admin. Code tit.15A, r.			
7H.0208(b)(2)(B)			
Coastal Management	Federal Consistency	Confinement of excavated materials shall be on high ground	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidelines for Areas of	CAMA Permitting	landward of flooded marshland and with adequate soil	113A-113(b), 113A-124
Environmental Concern		stabilization measures to prevent entry of sediment into the	
Specific Use Standards-Hydraulic		adjacent water bodies or marsh.	
Dreaging			
IN.U. Admin. Uode tit. 15A, r. $711.0200(h)(0)(C)$			
/H.UZU8(D)(Z)(C)			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Management	Federal Consistency	Effluent from diked areas receiving disposal from hydraulic	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidelines for Areas of	CAMA Permitting	dredging operations shall be contained by pipe, trough, or	113A-113(b), 113A-124
Environmental Concern		similar device to a point waterward of emergent vegetation or,	
Specific Use Standards-Hydraulic		where local conditions require, below mean low water.	
Dredging			
N.C. Admin. Code tit.15A, r.			
7H.0208(b)(2)(D)			
Coastal Management	Federal Consistency	When possible, effluent from diked disposal areas shall be	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidelines for Areas of	CAMA Permitting	returned to the area being dredged.	113A-113(b), 113A-124
Environmental Concern			
Specific Use Standards-Hydraulic			
Dreaging			
N.C. Admin. Code ut.15A, f. $711.0208(h)(2)(E)$			
/H.U2U8(D)(2)(E)	Federal Consistency	A water control structure shall be installed at the intelse and of	N = C = C + C + C + C + C + C + C + C + C
Coastal Management	Federal Consistency	A water control structure shall be installed at the intake end of	N.C. Gen. Stat §113A-107(b), 113A-108.
State Guidennes for Areas of	CAMA Permitting	the efficient pipe.	113A-113(D), 113A-124
Environmental Concern Specific Use Standards Hydraulie			
Drodging			
NC Admin Code tit 15A r			
7H 0208(h)(2)(F)			
Coastal Management	Federal Consistency	Publicly funded projects shall be considered by review agencies	N.C. Con Stat \$113A_107(b) 113A_108
State Guidelines for Areas of	CAMA Permitting	on a case-hy-case hasis with respect to dredging methods and	$113\Delta_{-113}$ (h) $113\Delta_{-191}$
Environmental Concern	orminer	spoil disposal	113A 113(0), 113A 124
Specific Use Standards-Hydraulic		spon asposa.	
Dredging			
N.C. Admin. Code tit.15A, r.			
7H.0208(b)(2)(G)			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Hydraulic Dredging N.C. Admin. Code tit.15A, r. 7H.0208(b)(2)(H)	Federal Consistency CAMA Permitting	Dredge spoil from closed shellfish waters and effluent from diked disposal areas used when dredging in closed shellfish waters shall be returned to the closed shellfish waters.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Marinas N.C. Admin. Code tit.15A, r. 7H.0208(b)(5)(B), (K)	Federal Consistency CAMA Permitting	Marinas which require dredging shall not be located in primary nursery areas nor in areas which require dredging through primary nursery areas for access. Marinas which require dredging shall provide acceptable areas to accommodate disposal needs for future maintenance dredging.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Specific Use Standards-Beach Nourishment N.C. Admin. Code tit.15A, r. 7H.0208(b)(8)(E)	Federal Consistency CAMA Permitting	Material from dredging projects may be used for beach nourishment if it is handled in a manner consistent with rules governing disposal, it is allowed to dry, and the material is of acceptable grain size. Material shall not be placed directly on the beach by dredge or dragline during maintenance excavation.	N.C. Gen. Stat §113A-107(b), 113A-108. 113A-113(b), 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern Development Standards Applicable to All Areas of Environmental Concern N.C. Admin. Code tit.15A, r. 7H.0602	Federal Consistency CAMA Permitting	No development shall be allowed in any AEC which would have a substantial likelihood of causing pollution of the waters of the state in which shellfishing is an existing use to the extent that such waters would be officially closed to the taking of shellfish.	N.C. Gen. Stat §113A-107(a),(b), 113A- 113A-124
Coastal Management State Guidelines for Areas of Environmental Concern General Permit for Excavation N.C. Admin. Code tit15A, r.7H.1505	Federal Consistency CAMA Permitting	Proposed maintenance excavation activities must meet criteria for size, location, spoil placement, original project dimensions, and time of year.	N.C. Gen. Stat §113A-107(a),(b), 113A- 113(b), 113A-118.1, 133A-229(cl)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Coastal Management Procedures for Handling Major Development Permits-Dredge and Fill N.C. Admin. Code tit. 15A, r. 7J.0407	CAMA Permitting	No project previously requiring a major development and/or dredge and fill permit may be maintained after the expiration of the authorized development period without approval from the Department. Maintenance under a dredge and fill permit shall be limited to excavation and filling which is necessary to maintain the original project dimensions.	N.C. Gen. Stat. §113A-103(5)c, 113A- 120(b)
Coastal Management Classes of Minor Maintenance that will be Exempted from CAMA Major Development Permit- Exemption Dredge and Fill, N.C. Admin. Code tit. 15A, r. 7K.0202	CAMA Permitting	Lists dredge and fill maintenance activities that are exempted from the major development permit requirement.	N.C. Gen. Stat §113A-103(5)(c), 113A- 118(a)
Coastal Management Classes of Federal Activities Exempted from the Permit Requirement- Maintenance of Federal Navigation Channels N.C. Admin. Code tit. 15A, r. 7K.0401, .0402	CAMA Permitting	Operation and maintenance of all federal navigation channels and all federal agency development activities in areas of environmental concern are granted an exemption from the CAMA permitting requirement.	N.C. Gen. Stat §113A-103(5)(c)
Coastal Management Policies on Beneficial Use and Availability of Materials Resulting from the Excavation or Maintenance of Navigational Channels N.C. Admin. Code tit. 15A, r.7M.1101		It is the policy of the State of North Carolina that material resulting from the excavation or maintenance of navigation channels be used in a beneficial way whenever practicable.	N.C. Gen. Stat. §113A-107
Coastal Management Policies on Beneficial Use and Availability of Materials Resulting from the Excavation or Maintenance of Navigational Channels N.C. Admin. Code tit. 15A, r.7M.1102		Clean, beach quality material dredged from navigation channels within the active nearshore, beach, or inlet shoal systems must not be removed permanently from those areas. Research on beneficial use of dredged material is encouraged. Material in disposal sites not privately owned shall be available to anyone proposing a beneficial use not inconsistent with this rule. Restoration of estuarine waters and public trust areas adversely impacted by existing disposal sites or practices is in the public interest and shall be encouraged at every opportunity.	N.C. Gen. Stat. §113A-107

Northern Mariana Islands Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²⁸	Legal Authorities
Office of Coastal Resources	CRM Permit	In the course of reviewing all CRM Permits for activities	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	occurring in or affecting APCs. Adverse impacts include but	- Rules & Regulations
Section 9 Standards for CRM Permit		are not limited to: (a) the alteration of chemical or physical	Section 9 Standards for CRM Permit
Issuance		properties of coastal or marine waters so that they no longer	Issuance A.(a)-(f)
		provide a suitable habitat for natural biological communities;	
		(b) the accumulation of toxins, carcinogens or pathogens which	
		threaten the welfare of man or aquatic organisms; (c)	
		disruption of the ecological balances in coastal or marine	
		waters upon which natural biological communities depend; (d)	
		the addition of man-made substances foreign to the coastal or	
		marine environment for which organisms have had no	
		opportunity of adaptation and whose impacts are largely	
		known; (e) the disruption or burial of bottom communities; or	
		(f) the interference with fishing activities.	
Office of Coastal Resources	CRM Permit	The CRM agency officials and the CRM Administrator shall	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	consider the following when evaluating all CRM permit	- Rules & Regulations
Section 9 Standards for CRM Permit		applications: (i) Cumulative Impact; (ii) Compatibility; (iii)	Section 9 Standards for CRM Permit
Issuance		Alternatives; (iv) Conservation; (v) Compliance with local and	Issuance B.(i)-(ix)
		federal laws; (vi) Right to a clean and healthful environment;	
		(vii) Effect on existing public services; (viii) Adequate access;	
		(ix) Setbacks.	

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Office of Coastal Resources	CRM Permit	Any project proposed for location within the Lagoon and Reef	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	APC shall be evaluated to determine its compatibility with the	- Rules & Regulations
Section 9 Standards for CRM Permit		following standards: (1) subsistence usage of coastal areas and	Section 9 Standards for CRM Permit
Issuance		resources shall be insured; (2) living marine resources,	Issuance C.(i)(a)(1)-(5),(7)
		particularly fishery resources, shall be managed so as to	
		maintain optimum sustainable yields; (3) significant adverse	
		impacts to reefs and corals shall be prevented; (4) lagoon and	
		reef areas shall be managed so as to maintain or enhance	
		subsistence, commercial and sport fisheries; (5) lagoon and reef	
		areas shall be managed so as to assure the maintenance of	
		natural water flows, natural circulation patterns, natural	
		nutrient and oxygen levels and to avoid the discharge of toxic	
		wastes, sewage, petroleum products, siltation and destruction	
		of productive habitat; and, (7) underwater preservation areas	
		shall be designated.	
Office of Coastal Resources	CRM Permit	Use priority categories for the Lagoon and Reef APCs of the	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	Northern Mariana Islands are as follows: Highest: (c) water-	- Rules & Regulations
Section 9 Standards for CRM Permit		dependent projects which are compatible with adjacent uses;	Section 9 Standards for CRM Permit
Issuance		and (e) activities related to the prevention of beach erosion.	Issuance C.(ii)(a)(1)(c), (e)
Office of Coastal Resources	CRM Permit	Use priority categories for the Lagoon and Reef APCs of the	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	Northern Mariana Islands are as follows: Lowest: (a) point	- Rules & Regulations
Section 9 Standards for CRM Permit		source discharge of drainage water which will not result in	Section 9 Standards for CRM Permit
Issuance		significant permanent degradation in the water quality of the	Issuance C.(ii)(a)(3)(a), (b)
		lagoon; and (b) dredge and fill activity for the purpose of	
		constructing piers, launching facilities, infrastructure, and boat	
		harbors, if designed to prevent or mitigate adverse	
		environmental impacts.	
Office of Coastal Resources	CRM Permit	Use priority categories for the Lagoon and Reef APCs are as	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	follows: Unacceptable: (e) dredge and fill activities not	- Rules & Regulations
Section 9 Standards for CRM Permit		associated with permitted construction of piers, launching	Section 9 Standards for CRM Permit
Issuance		facilities, infrastructure and boat harbors.	Issuance C.(ii)(a)(4)(e)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Office of Coastal Resources	CRM Permit	Use priority categories for Managaha Island, in addition to	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	those listed for general Lagoon and Reef APCs shall be as	- Rules & Regulations
Section 9 Standards for CRM Permit		follows: Moderate: improvements for the purposes of	Section 9 Standards for CRM Permit
Issuance		sanitation and navigation.	Issuance C.(ii)(b)(2)(a)
Office of Coastal Resources	CRM Permit	Use priority categories for Anjota Island shall be as follows:	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	Unacceptable: expansion of the port and industrial section of	- Rules & Regulations
Section 9 Standards for CRM Permit	_	Anjota island which would encroach upon and have significant	Section 9 Standards for CRM Permit
Issuance		adverse impact upon the maintenance of a wildlife preserve or	Issuance C.(ii)(c)(2)(a)
		upon recreational uses of the island.	
Office of Coastal Resources	CRM Permit	Any project proposed for location within the Wetland and	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	Mangrove APC shall be evaluated to determine its	- Rules & Regulations
Section 9 Standards for CRM Permit	_	compatibility with the following standards: (1) significant	Section 9 Standards for CRM Permit
Issuance		adverse impact on natural drainage patterns, the destruction of	Issuance C.(iii)(a)(1), (2), (3)
		important habitat and the discharge of toxic substances shall be	
		prohibited; adequate water flow, nutrients and oxygen levels	
		shall be ensured; (2) the natural ecological and hydrological	
		processes and mangrove areas shall be preserved; and, (3)	
		critical wetland habitat shall be maintained and, where possible,	
		enhanced so as to increase the potential for survival of rare and	
		endangered flora and fauna.	
Office of Coastal Resources	CRM Permit	Use priority categories for the Wetland and Mangrove APC are	Office of Coastal Resources Management
Management - Rules & Regulations	Federal Consistency	as follows: Highest: preservation and enhancement of wetland	- Rules & Regulations
Section 9 Standards for CRM Permit		and mangrove areas; and (b) preservation of wildlife, primary	Section 9 Standards for CRM Permit
Issuance		productivity, conservation areas and historical properties in	Issuance C.(iv)(a)(1)(a), (b)
		both wetland and mangrove areas.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance	CRM Permit Federal Consistency	Any project proposed for location within the Shoreline APC shall be evaluated to determine its compatibility with the following standards: (1) the impact of onshore activities upon wildlife, marine or aesthetic resources shall be minimized; (2) the effects of shoreline development on natural beach processes shall be minimized; and, (3) the taking of sand, gravel or other aggregates and minerals from the beach and near shore areas shall not be allowed.	Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance C.(v)(a)(1), (2), (3)
Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance	CRM Permit Federal Consistency	In addition to deciding whether the proposed project is consistent with the above standards, CRM agency officials shall consider the following in their review of coastal permit applications: (2) whether the proposed project is to facilitate or enhance coastal recreation, subsistence, or cultural opportunities; (6) Whether the proposed project is designated to prevent or mitigate shoreline erosion; and (7) Whether the proposed project would be more appropriately located in the Port and industrial APC.	Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance C.(v)(b)(2), (6), (7)
Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance	CRM Permit Federal Consistency	Use priorities for categories for the Shoreline APCs of the entire Northern Mariana Islands chain are as follows: Highest: (d) preservation of fish and wildlife habitat; and, (f) activities related to the prevention of beach erosion through non- structural means.	Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance C.(vi)(1)(d), (f)
Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance	CRM Permit Federal Consistency	Use priorities for categories for the Shoreline APCs of the entire Northern Mariana Islands chain are as follows: Unacceptable: (c) the taking of sand for other than cultural usage, and mining of gravel and extraction of minerals, oil and gas, or other extractive uses.	Office of Coastal Resources Management - Rules & Regulations Section 9 Standards for CRM Permit Issuance C.(vi)(4)(c)

Policy Title/ Number
Office of Coastal Resources
Management - Rules & Regulations
Section 9 Standards for CRM Permit
Issuance
Office of Coastal Resources
Management - Rules & Regulations
Section 11 Standards for Determination
Offers of Country Decourses
Office of Coastal Resources
Management - Rules & Regulations
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Office of Coastal Resources Management - Rules & Regulations Section 11 Standards for Determination of a Major Siting Office of Coastal Resources Management - Rules & Regulations Section 11 Standards for Determination of a Major Siting

Ohio Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ²⁹	Legal Authorities
Policy 6 (1.C.) - Water Quality	Federal Consistency	It is the policy of the state of Ohio to maintain and improve the quality of the state's coastal waters by assuring attainment of state water quality standards and other water quality related requirements through: C. Regulating discharge of dredge or fill material into surface waters including wetlands in accordance with section 401 of the Clean Water Act.	Ohio Admin. Code §3745-1 Ohio Rev. Code Ann. §6111.03
Policy 12 (A) - Wetlands	Federal Consistency	It is the policy of the state of Ohio to protect, preserve and manage wetlands with the overall goal to retain the state's remaining wetlands, and, where feasible, restore and create wetlands to increase the state's wetlands resource base by: (A) Regulating activities in wetlands through the enforcement of Ohio water quality standards for any activity that may result in any discharge into wetlands and other waters of the state.	Ohio Admin. Code §3745-1, 3745-32 Ohio Rev. Code Ann. §6111.03 (p),(o)
Policy 17 (A-C) - Dredging and Dredged Material Disposal	Federal Consistency Submerged Lands Lease 401 Water Quality Certification	It is the policy of the state of Ohio to provide for the dredging of harbors, river channels and other waterways and to protect the water quality, public right to navigation, recreation and natural resources associated with these waters in the disposal of the dredged material by: (A) Regulating, through the Ohio Environmental Protection Agency water quality certification , the discharge or disposal of dredged material; (B) Requiring a lease for state-administered submerged lands through the department of natural resources before initiating the confined disposal of dredged material in the waters or on lands underlying the waters of Lake Erie; (C) Regulating commercial dredging of mineral resources.	Ohio Admin. Code §3745-1, 1506.11, 1505.07, 1505.99 Ohio Rev. Code Ann. §6111.03 (p)

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy 17 (D) - Dredging and Dredged	Federal Consistency	(D) Coordinating interdisciplinary reviews of dredging projects	Recommendation Policy
Material Disposal		at Ohio's Lake Erie ports and providing technical assistance to	
		help select and implement environmentally sound dredging and	
		dredged sediment management practices.	
Policy 37 - Offshore Mineral Extraction	Federal Consistency	It is the policy of the State of Ohio to provide for and regulate	Ohio Rev. Code Ann. §1505.07
		the extraction of minerals and other substances from and from	
		under the bed of Lake Erie, through the issuance of Ohio	
		Department of Natural Resources Mineral Leases and Permits,	
		to protect the public safety and welfare, and to minimize	
		adverse environmental impacts.	
Ohio Revised Code §6111.03 (J)		The Director of Environmental Protection may do any of the	Ohio Rev. Code Ann. §6111.03
Water Pollution Control		following: (J) issue, revoke, or deny permits for the discharge	
		of sewage, industrial waste, or other wastes into the waters of	
$(1) \mathbf{D} (1) \mathbf{D} (2) \mathbf{D} (2) ($	401 Weter Oralita	The Director of Engineering and Director tion many documentation	
Ohio Revised Code §6111.03 (O),(P)	401 Water Quality	The Director of Environmental Protection may do any of the following: (O) Evenetics all incidental powers processes to come	Ohio Rev. Code Ann. §6111.03
Water Pollution Control	Certification	out the numbers of this shorter (D) Cortific or deny.	
		out the purposes of this chapter, (P) Certify of deny	
		conduct any activity that may result in any discharge into the	
		waters of the state that the discharge will comply with the	
		"Faderal Water Pollution Control Act"	
Obio Revised Code \$1505.07	Permit for Removal of	The Director of Natural Resources may issue permits and	Obio Rev. Code Ann. 86505.07
Division of Geological Survey	Substances from the Bed	make leases to parties making application for permission to	Olio Rev. Code Ann. 30003.07
Division of Geological Survey	of Lake Erie	take and remove sand gravel stone and other minerals or	
		substances from and under the bed of Lake Erie, either upon a	
		royalty or rental basis, as he determines to be best for the state.	
		No person shall remove sand, gravel, stone, or other minerals	
		or substances from and under the bed of Lake Erie without	
		first obtaining a permit or lease from the Director.	

³⁰ The definition of "other wastes" includes dredged or fill material according to § 6111.01 of the Ohio Revised Code.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Ohio Administrative Code §1501-6-03 Lease of Submerged Lands of Lake Erie	Submerged Lands Lease	(A) The Director's recommendation to the governor as to whether to approve an application for a lease of submerged land shall be based upon an evaluation of whether the development, improvement or activity is consistent with the policies of the Ohio coastal management program document, in accordance with section 1506.03 of the Revised Code and does not otherwise contravene the general public's interest in lake Erie submerged lands, waters of the state, fish and wildlife, or cultural or other public trust resources.	Ohio Admin. Code §1501-6-03
Ohio Administrative Code §1501-6-03 Lease of Submerged Lands of Lake Erie	Submerged Lands Lease	(B) Consistent with the protection of coastal area resources, the department will coordinate policies and decision-making with the rules and policies of other state and federal resource and regulatory agencies.	Ohio Admin. Code §1501-6-03
Ohio Administrative Code §1501-6-03 Lease of Submerged Lands of Lake Erie	Submerged Lands Lease	(D) In addition to any other laws or rules administered by any other state, local or federal agency, these are the criteria, if applicable, against which each application for a lease of submerged lands will be evaluated: Water Dependency; Protection of the Environmental Quality; Public Recreation; and Relationship to Plans for Port Developments, Commercial Navigation and Urban Waterfront Development.	Ohio Admin. Code §1501-6-03
Ohio Administrative Code §3745-32-01 Section 401 Water Quality Certifications	401 Water Quality Certifications	(C) Discharge of dredged material means any addition of dredged material, in excess of one cubic yard when used in a single or incidental operation, into waters of the state. This term includes, without limitation, the addition of dredged material to a specified disposal site which is located in waters of the state, or the runoff or overflow of dredged material from a contained land or water disposal area which enters the waters of the state.	Ohio Admin. Code §3745-32-01
Ohio Administrative Code §3745-32-02 Section 401 Water Quality Certifications	401 Water Quality Certifications	(A) A section 401 water quality certification is required to obtain the following: a permit from the Army Corps of Engineers pursuant to section 10 of the Rivers and Harbors Act, pursuant to section 404 of the Clean Water Act or both.	Ohio Admin. Code §3745-32-02

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Ohio Administrative Code §3745-32-03 Section 401 Water Quality Certifications	401 Water Quality Certifications	No section 401 water quality certification need be obtained if: (B) The discharge of dredged or fill material is part of the construction of a federal project specifically authorized by congress, provided the effects of such discharge are included in an environmental impact statement submitted to congress prior to the actual discharge.	Ohio Admin. Code §3745-32-03
Ohio Administrative Code §3745-32-05 Section 401 Water Quality Certifications	401 Water Quality Certifications	(A) The director shall not issue a section 401 water quality certification unless he determines that the applicant has demonstrated that the discharge of dredged or fill material to waters of the state or the creation of any obstruction or alteration in the waters of the state will: Not prevent or interfere with the attainment or maintenance of applicable water quality standards; and Not result in a violation of any applicable provision of the Federal Water Pollution Control Act.	Ohio Admin. Code §3745-32-05
Ohio Administrative Code §3745-32-05 Section 401 Water Quality Certifications	401 Water Quality Certifications	(D) Prior to the issuance of a section 401 water quality certification or prior to, during, or after the discharge of dredged or fill material to waters of the state or the creation of any obstruction or alteration in waters of the state to ensure adequate protection of water quality, the director may require that the applicant perform various environmental quality tests including, but not limited to, chemical analyses of water, sediment or fill material, and bioassays.	Ohio Admin. Code §3745-32-05

Oregon Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ³¹	Legal Authorities
Statewide Planning Goals & Guidelines Goal 6 - Air, Water, and Land Resources Quality	Local Comprehensive Plans Federal Consistency	All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules, and standards. With respect to the air, water and land resources of the applicable airsheds and river basins described or included in state environmental quality statutes, rules, standards and implementation plans, such discharges shall not: exceed the carrying capacity of such resources; or, threaten the availability of such resources.	Or. Admin. R. 660-015
Statewide Planning Goals & Guidelines Goal 16 - Estuarine Resources, Natural Estuarine Management Units	Local Comprehensive Plans Federal Consistency	Natural estuarine units include, all major tracts of salt marsh, tideflats, and sea grass and algae beds. Permissible uses in these areas includes dredging necessary for on-site maintenance of existing functional tidegates and associated drainage channels and bridge crossing support structures. A use or activity is consistent with the resource capabilities of the areas when either the impacts on estuarine species, habitat, biological productivity and water quality are not significant or that the resources of the area are able to assimilate the use and activity and their effects and continue to function in a manner to protect significant wildlife habitats, natural biological productivity, and values for scientific research and education.	Or. Admin. R. 660-015

³¹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Statewide Planning Goals & Guidelines Goal 16 - Estuarine Resources, Conservation Management Units	Local Comprehensive Plans Federal Consistency	Conservation estuarine units include tracts of significant habitat smaller or of less biological importance than those in natural units, and recreational or commercial oyster and clam beds not included in natural units. Permissible uses in conservation estuarine areas include uses allowed in natural estuarine areas, minor navigational improvements, mining and mineral	Or. Admin. R. 660-015
		extraction, dredging necessary for mineral extraction, and aquaculture requiring dredge or fill or other alteration of the estuary. A use or activity is consistent with the resource capabilities of the areas when either the impacts on estuarine species, habitat, biological productivity and water quality are not significant or that the resources of the area are able to assimilate the use and activity and their effects and continue to function in a manner which conserves long-term renewable resources, natural biologic productivity, recreational and aesthetic values and aquaculture.	
Statewide Planning Goals & Guidelines Goal 16 - Estuarine Resources, Development Management Units	Local Comprehensive Plans Federal Consistency	Estuarine development management units include deep-water areas adjacent or in proximity to the shoreline, navigation channels, subtidal areas for in-water disposal of dredged material and areas of minimal biological significance needed for uses requiring alteration of the estuary not included in natural and conservation areas. Permissible uses include dredge or fill as allowed elsewhere in the goal, water transport channels where dredging may be necessary, and flow-lane disposal of dredged material monitored to assure that estuarine sedimentation is consistent with the resource capabilities and purposes of affected natural and conservation management units.	Or. Admin. R. 660-015

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Statewide Planning Goals & Guidelines	Local Comprehensive	Unless activities such as dredging, fill, and flow-lane disposal of	Or. Admin. R. 660-015
Goal 16 - Estuarine Resources,	Plans	dredged material are addressed in the local comprehensive	
Implementation Requirements #1	Federal Consistency	plan, these activities must be preceded by a clear presentation	
		of the impact of the proposed alteration. Information shall	
		include: type of alteration; resources affected; and, expected	
		impacts on water quality, physical characteristics of the estuary,	
		living resources, recreation and aesthetic use, navigation, and	
		other existing uses.	
Statewide Planning Goals & Guidelines	Local Comprehensive	Dredging and filling shall be allowed only if: it is required for	Or. Admin. R. 660-015
Goal 16 - Estuarine Resources,	Plans	navigation or other water-dependent uses, or if specifically	
Implementation Requirements #2	Federal Consistency	allowed by the management unit requirements; a need is	
		demonstrated and the use does not interfere with public trust	
		impacts are minimized	
Statewide Danning Coals & Cuidelines	Local Comprehensive	When dradge or fill activities are permitted in intertidal or tidal	Or Admin P 660 015
Coal 16 Estuaring Bosources	Diane	marsh areas, their effects shall be mitigated by creation	OI. Aunini. R. 000-015
Implementation Requirements #5	Fadaral Consistency	restoration or enhancement. Comprehensive plans shall	
implementation requirements #5	rederal Consistency	designate and protect sites for mitigation which are similar to	
		the areas proposed for dredging or filling	
Statewide Planning Goals & Guidelines	Local Comprehensive	Comprehensive local programs shall include specific sites and	Or. Admin. R. 660-015
Goal 16 - Estuarine Resources.	Plans	procedures for disposal and stock-piling of dredged materials.	
Implementation Requirements #6	Federal Consistency	These programs shall encourage the disposal of dredged	
1 1	5	material in uplands or ocean waters, and shall permit disposal	
		in estuary waters only where such disposal will be consistent	
		with the objectives of this goal and state and federal law.	
		Dredged material shall not be disposed in intertidal or tidal	
		marsh estuarine areas unless part of an approved fill project.	
Statewide Planning Goals & Guidelines	Local Comprehensive	Coastal shorelands identified under the Estuarine Resources	Or. Admin. R. 660-015
Goal 17 - Coastal Shorelands,	Plans	Goal for dredged material disposal shall be protected from new	
Implementation Requirements #3	Federal Consistency	uses and activities which would prevent their ultimate use for	
		dredged material disposal.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Statewide Planning Goals & Guidelines Goal 17 - Coastal Shorelands, Implementation Requirements #5	Local Comprehensive Plans Federal Consistency	Land-use management practices and non-structural solutions to problems or erosion and flooding shall be preferred to structural solutions. Where shown to be necessary, fill, whether located in the waterways or on shorelands above ordinary high water mark, shall be designed to minimize adverse impacts on water currents, erosion, and accretion patterns.	Or. Admin. R. 660-015
Statewide Planning Goals & Guidelines Goal 18 - Beaches & Dunes	Local Comprehensive Plans Federal Consistency	To conserve, protect, and where appropriate, restore the resources and benefits of coastal beach and dune areas; and, to reduce the hazard to human life and property from natural or man-induced actions associated with these areas. Coastal comprehensive plans and implementing actions shall provide for diverse and appropriate use of beach and dune areas consistent with their ecological, recreational, aesthetic, water resource and economic values, and consistent with the natural limitations of beaches, dunes, and dune vegetation for development.	Or. Admin. R. 660-015
Statewide Planning Goals & Guidelines Goal 19 - Ocean Resources, Implementation Requirements #2 iib.	Local Comprehensive Plans Federal Consistency	Each state and federal agency, special district, city and county within the limits of its jurisdiction and as necessary to determine the impact of proposed projects or action as and for the sound conservation of ocean resources shall: Identify and protect areas of important biological habitat, including kelp and other algae beds, seagrass beds, rock reef areas and areas of important fish, shellfish and invertebrate concentration. Identify and protect important feeding areas; spawning areas; nurseries; migration routes; and other biologically important areas of marine mammals, marine birds, and commercially and recreationally important fish and shellfish.	Or. Admin. R. 660-015

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Statewide Planning Goals & Guidelines	Local Comprehensive	Each state and federal agency, special district, city and county	Or. Admin. R. 660-015
Goal 19 - Ocean Resources,	Plans	within the limits of its jurisdiction and as necessary to	
Implementation Requirements #2 iic.	Federal Consistency	determine the impact of proposed projects or action as and for	
		the sound conservation of ocean resources shall: Determine	
		for the state as a whole, the navigation needs for the coast of	
		Oregon. Such needs will reflect, in part, the capability of each	
		port to handle differing types of ship traffic, consistent with	
		other statewide planning goals. Maintain appropriate	
		navigation lanes and facilities free from interference by other	
		uses to provide safe transportation along and to the Oregon	
		Coast.	
Statewide Planning Goals & Guidelines	Local Comprehensive	Each state and federal agency, special district, city and county	Or. Admin. R. 660-015
Goal 19 - Ocean Resources,	Plans	within the limits of its jurisdiction and as necessary to	
Implementation Requirements #2 iig.	Federal Consistency	determine the impact of proposed projects or action as and for	
		the sound conservation of ocean resources shall: Provide for	
		suitable sites and practices for the open seas discharge of	
		dredged materials, which do not substantially interfere with or	
		detract form the use of the continental shelf for fishing,	
		navigation, recreation, or from the long-term protection of	
		renewable resources.	

Oregon Policies Related to Dredging
Oregon Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Title/Number Oregon Administrative Rules Division 17 Classifying Estuaries 660-17-0025 (2)	Program/Action Local Comprehensive Plans	Policy Summary Conservation estuaries shall be managed for long-term uses of renewable resources that do not require major alterations of the estuary. Permissible uses in the conservation management units shall be those allowed in section (1) of this rule; active restoration measures; aquaculture; and communication facilities. Where consistent with resources capabilities of the management unit and the purposes of maintaining conservation management units, high-intensity water- dependent recreation; maintenance dredging of existing facilities; minor navigational improvements; mining and mineral extraction; water dependent uses requiring occupation of water surface area by means other than fill; bridge crossings; and riprap shall also be appropriate. Conservation estuaries may have shorelines within urban or developed areas. Dredged marinas and boat basins without jetties or channels are appropriate in conservation estuaries. Waste discharge meeting	Legal Authorities Or. Admin. R. §660-017-0025
		appropriate in conservation estuaries. Waste discharge meeting state and federal water quality standards would be acceptable.	
		Conservation estuaries shall have both concentration and natural management units, as provided in the Estuarine	
		Resource Goal.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Oregon Administrative Rules	Local Comprehensive	Both shallow and deep draft development estuaries shall be	Or. Admin. R. §660-017-0025
Division 17 Classifying Estuaries	Plans	managed to provide for navigation and other identified needs	
660-17-0025 (3)		for public, commercial, and industrial water-dependent uses	
		consistent with overall Estuarine Resources Goal requirements.	
		Where consistent with the development management unit	
		requirements of the Goal, other appropriate uses include riprap	
		and those uses listed as permissible uses in development	
		management units in the Goal. Minor and major navigational	
		improvements are allowed in both shallow-draft and deep-draft	
		estuaries, consistent with the requirements of the Goal.	
		However, in shallow-draft estuaries, extension or	
		improvements in main channels shall not be designed to	
		exceed 22 feet in depth. Information about the location,	
		extent, and depth of channels and jetties including planned	
		extensions, shall be developed during the local planning	
		process and described in the comprehensive plans.	
Oregon Revised Statutes	Removal-Fill Permits	Except as otherwise specifically permitted under ORS 196.600	Or. Rev. Stat. §196.810(1)(a)
Removal of Material; Filling		to 196.905, no person or governmental body shall remove any	
§ 196.810(1)(a)		material from the beds or banks or fill any waters of the state	
		without a permit issued under authority of the Director of the	
		Division of State Lands, or in a manner contrary to the	
		conditions set out in the permit, or in a manner contrary to the	
		conditions set out in an order approving a wetlands	
		conservation plan.	O_{1} D_{2} O_{1} O_{2} O_{2
Oregon Revised Statutes	Removal-Fill Permits	Notwithstanding the permit requirements of this section and	Or. Rev. Stat. §196.810(1)(b)
Removal of Material; Filling		notwithstanding the provisions of ORS 196.800(5) and (12), if	
§ 196.810(1)(b)		any removal of fill activity is proposed in essential indigenous	
		anadromous salmonid nabitat, except for those activities	
		customatiny associated with agriculture, a permit is required.	
		under this section shall be further defined and designated by	
		rule by the Division of State Lands in consultation with the	
		Department of Fish and Wildlife and in consultation with other	
		affected parties	
Oregon Revised Statutes Removal of Material; Filling § 196.810(1)(b)	Removal-Fill Permits	conservation plan. Notwithstanding the permit requirements of this section and notwithstanding the provisions of ORS 196.800(5) and (12), if any removal or fill activity is proposed in essential indigenous anadromous salmonid habitat, except for those activities customarily associated with agriculture, a permit is required. Essential indigenous anadromous salmonid habitat as defined under this section shall be further defined and designated by rule by the Division of State Lands in consultation with the Department of Fish and Wildlife and in consultation with other affected parties.	Or. Rev. Stat. §196.810(1)(b)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Oregon Revised Statutes Removal of Material; Filling § 196.825(1)	Removal-Fill Permits	The Director of the Division of State Lands shall issue a permit to remove material from the beds or banks of the of any waters of this state applied for under ORS 196.815 if the director determines that the removal described in the application will not be inconsistent with the protection, conservation and best use of the water resources of this state as specified in ORS 196.805.	Or. Rev. Stat. §196.825(1)
Oregon Revised Statutes Removal of Material; Filling § 196.825(2)	Removal-Fill Permits	The director shall issue a permit applied for the filling waters of the state if the director determines that the proposed fill would not unreasonably interfere with the paramount policy of this state to preserve the us of its waters for navigation, fishing and public recreation.	Or. Rev. Stat. §196.825(2)
Oregon Revised Statutes Removal of Material; Filling § 196.825(3)a-h	Removal-Fill Permits	In determining whether or not a permit shall be issued, the director shall consider all of the following: the public need for the proposed fill and the social, economic or other public benefits likely to result from the proposed fill. When the applicant for a fill permit is a public body, the director may accept and rely upon the public body's findings as to local public need and local public benefit; the economic cost to the public if the proposed fill is not accomplished; the availability of alternative to the project for which the fill is proposed; the availability of alternative sites for the proposed fill; whether the proposed fill conforms to sound policies of conservation and would not interfere with public health and safety; whether the proposed fill is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and zoning ordinances; whether the proposed fill is to take place; and, whether the proposed fill is for streambank protection.	Or. Rev. Stat. §196.825(3)a-h

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Oregon Revised Statutes	Removal-Fill Permits	The director may issue a permit for a substantial fill in an	Or. Rev. Stat. §196.825(4)
Removal of Material; Filling		estuary for a nonwater dependent use only if the fill is for a	
§ 196.825(4)		public use and would satisfy a public need that outweighs harm	
		to navigation, fishery and recreation and if the proposed fill	
		meets all other criteria contained in ORS 196.600 to 196.905.	
Oregon Revised Statutes	Removal-Fill Permits	Any agency listed in ORS 196.825(5) may request the Water	Or. Rev. Stat. §196.840
Removal of Material; Filling		Resources Commission by rule to close one or more specified	
§ 196.840		waters of this state to the issuance of permits. After a public	
		hearing held in conformity with ORS 183.10 to 183.550, if the	
		Water Resources commission finds that issuance of permits	
		with respect to such water resources would be inconsistent	
		with the protection, conservation and best use of the water	
		resources of this state as specified in ORS 196.805, the Water	
		Resources Commission may by rule close such waters to the	
		issuance of permits and to any other removals or fills under	
		ORS 196.805 for and indefinite period or during such other	
		times as are stated in the rule.	
Oregon Administrative Rules - Division	Removal-Fill Permits	For maintenance dredging projects, a permit may be issued for	Or. Admin. R. 141-085-0032(4)
85 Removal and Fill Permits		up to five years upon a determination that: there is a sufficient	
141-085-0032 (3)		capacity for dredged material disposal in an approved location	
		for the duration of the permit; there is no indication that toxic	
		or polluted materials would enter the waterway where water	
		quality standards would be violated; and, maintenance dredging	
		has been conducted within permit conditions for at least one	
		year preceding the multi-year application.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Oregon Administrative Rules - Division	Removal-Fill Permits	In evaluating the probable impacts of the proposed activity,	Or. Admin. R. 141-085-0050(2)
85 Removal and Fill Permits		things to be considered include: environmental and economic	
141-085-0050 (2)		consequences; direct and indirect effects on submerged and/or	
		submersible lands; effects on the hydraulic characteristics such	
		as water circulation, tidal fluctuation, current patterns and	
		flood hazards; effects on special aquatic sites and refuges,	
		sanctuaries, and scenic waterways; effects on water supply,	
		water access, public recreation and aesthetics; effects on water	
		quality and aquatic life and habitats; and, whether the activity	
		will adversely affect the health, safety, and welfare.	
Oregon Administrative Rules - Division	Removal-Fill Permits	No permit will be issued without a determination that: the	Or. Admin. R. 141-085-0050(4)
85 Removal and Fill Permits		project is consistent with water quality and toxic effluent	
141-085-0050 (4)		standards of the State of Oregon; there is no practicable	
		alternative that would have less impact; the project would not	
		adversely affect rare, threatened or endangered species; the	
		project would not cause significant degradation to aquatic life	
		and habitats, functions of the aquatic ecosystem, or to	
		recreational, aesthetic, and economic values of the water	
		resources of the state; and, steps have been taken which will	
		minimize adverse impacts of the project on aquatic life and	
		habitats.	

Policy Title/Number	Program/Action	Policy Summary ³²	Legal Authorities
Policy 2.1 DSD/Regulation	Federal Consistency	Ensures that dredging and spoil disposal will be regulated to protect against obstruction to navigation, reduction in flood flow capacity, damages to the public interest, and impacts to fish and wildlife habitats.	PA Const. Art.I, §27 Dam Safety Act 32 P.S. §693.1 Administrative Code Act 71 P.S. §194, 510-1, 510-8, 510-17, 510-20 25 Pa. Code §105
Policy 2.2 DSD/Hydraulic Dredging	Federal Consistency	Hydraulic dredging is recommended instead of mechanical dredging whenever feasible.	PA Const. Art.I, §27 Dam Safety Act 32 P.S. §693.1
Policy 3.1 FM/Support Fish Life	Federal Consistency	Coastal waters shall not contain substances that would be harmful to the water uses or to human, animal, or aquatic life.	PA Const. Art.I, §27 The Clean Streams Law 35 P.S. §691.1 25 Pa. Code §92,93 The Fish Law 30 P.S.§200
Policy 7.1, 7.2, 7.3 Port Activities/Development, Planning, and Urban Base Enhancement	Support of Ports	Encouragement policies designed to attract port dependent economic activities to ports, to support long-range comprehensive port planning, and to enhance port economic activities.	N/A Encouragement Policies
Policy 4.1 and 4.2 Wetlands	Federal Consistency	Protection , enhancement, and restoration of wetlands by regulation of dredging and filling activities through permits. Protection of wetlands from contaminated runoff and sedimentation through comprehensive stormwater management plans.	PA Const. Art.I, §27 Dam Safety Act 32 P.S. §693.1 Clean Streams Law 35 P.S. §691.1 Stormwater Mgmt. Act 32 P.S. §680.1 Soil Conservation Law 3 P.S. §849 Solid Waste Mgmt. Act 35 P.S. 6018.10- 6018.1003 Wild Resources Conservation Act 34 P.S. §101 Pennsylvania Sewage Facilities Act 35 P.S. §750.1

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy 9.1 IC/Consistency	"State Consistency"	All state agencies shall enforce and act consistently with the	PA Const. Art.I, §27
		enforceable policies of the Pennsylvania Coastal Zone	PA Const. Art.IV, §2
		Management Program.	Admin. Code of 1929 71 P.S. §510-20,
			241, 181
			Executive Order 1980-20 (Thornberg)
Policy 9.2 IC/Water Quality	Federal Consistency/	Incorporation of the federal Clean Water Act into	Sewage Facilities Act 35 P.S. §750.1
	CWA Water Quality	Pennsylvania's Coastal Zone Management Program.	Clean Streams Law 35 P.S. §691.1
			Solid Waste Management Act 35 P.S.
			§6018.101-6018.1003
Policy 9.4 IC/Permit Improvement	Permitting	Encouragement policy designed to improve involvement in	N/A - Encouragement Policy
		improving the regulatory permitting process in the	
		Commonwealth's Coastal Zone.	

Puerto Rico Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ³³	Legal Authorities
Islandwide Land Use Plan Criteria for Diking or Filling	Endorsement of Corps of Engineers Permits Federal Consistency	Diking or filling of coastal waters (other than for shoreline structures) shall, to the maximum extent practicable, be permitted only where necessary and where there is no less environmentally damaging alternative for: (1) port or airport expansion, national defense or coastal-dependent facilities; or (2) land restoration (e.g. diking to reduce sedimentation or to restore land previously lost because of coastal erosion).	Law No. 75 Organic Act for Puerto Rico Planning Board
Islandwide Land Use Plan Criteria for Dredging	Endorsement of Corps of Engineers Permits Federal Consistency	Dredging of coastal waters shall to the maximum extent practicable (a) minimize the disruption of natural systems, and (b) be limited to the following: (1) port, energy, or national defense facilities; (2) navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps; (3) entrance channels or minor deepening of harbor areas for recreational boating facilities; (4) commercial fishing harbors; (5) flood control projects; (6) extraction of sand, gravel, and minerals; (7) other public service purposes (e.g., to restore water circulation) provided that the results are carefully monitored and evaluated for restorative value. The need for dredging shall be minimized by careful design and location of facilities with respect to existing water depths, water circulation, siltation patterns, and by efforts to reduce controllable sedimentation. Where bottom materials are highly contaminated, dredging or mining shall be avoided to the maximum extent practicable.	Law No. 75 Organic Act for Puerto Rico Planning Board

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Islandwide Land Use Plan	Endorsement of Corps of	Dredged sediments meeting criteria specified by EPA for	Law No. 75 Organic Act for Puerto Rico
Criteria for Deposit of Dredged	Engineers Permits	freshwater, estuarine, or marine disposal may be deposited at	Planning Board
Sediments	Federal Consistency	open water sites designated to minimize potential adverse	
		impacts on marine organisms or in fill sites specifically	
		authorized by DNR. Dredge material shall not be transported	
		from coastal waters into mangrove wetlands, estuarine, or	
		freshwater areas for water disposal. Dredged material	
		exceeding approved water quality criteria must be placed either	
		on dry land in a manner that prevents pollution of marine,	
		underground or surface water or, if land disposal is infeasible	
		or environmentally unacceptable, at designated deep ocean	
		sites (depths greater than 100 fathoms) approved by EPA.	
Sand, Gravel & Stone Law	Permit for Extraction	Nobody shall excavate or extract, remove, or dredge the	28 P.R. Laws Ann. tit. 8, §207
	from the Earth's Crust	components of the earth's crust in public or private land within	
		the geographical limits of the Commonwealth of Puerto Rico	
		without having obtained a permit for such purposes from the	
		Secretary. Neither may components of the earth's crust which	
		are excavated, extracted, removed, or dredged in the	
		Commonwealth of Puerto Rico be exported without the prior	
		authorization of the Secretary.	

Rhode Island Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ³⁴	Legal Authorities
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal B.1.	Federal Consistency CRMC Permit	The Council shall support necessary maintenance dredging activities in Type 2, 3, 4, 5, and 6 waters, provided environmentally sound disposal locations and procedures are identified.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal B.2.	Federal Consistency CRMC Permit	The Council favors offshore open-water disposal for large volumes of dredged materials, providing that environmental impacts are minimized.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal B.3.	Federal Consistency CRMC Permit	The Council encourages the use of innovative nearshore methods of dredged materials disposal, particularly when small volumes of material must be disposed. These options include creation of wetlands, shellfish habitat, and beach nourishment in suitable areas.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal B.4.	Federal Consistency CRMC Permit	For disposal of dredged material resulting from maintenance dredging operations, a Category A Review may be permitted provided the Executive Director determines: that the disposal is consistent with RIDEM's classification of the dredged material sediments; the volume is not greater than 2,000 c.y.; the area of disposal is not greater than one acre in size; the proposal complies with all applicable local zoning ordinances; applicable soil erosion and sediment controls are employed; and, the proposal meets the standards of section 110.1.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal B.5.	Federal Consistency CRMC Permit	For beach replenishment, a Category A review may be permitted for the placement of clean sands provided the Executive Director determines that the placement of the materials shall be for beach replenishment only, and the proposal meets the standards of section 110.1 and 300.9 as applicable.	R.I. Gen. Laws §46-23-6

³⁴ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management	Federal Consistency	Permits for maintenance and improvement dredging and	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	disposal projects for navigational purposes must be obtained	
Section 300.9 Dredging and Dredged		from the Army Corps of Engineers as well as the Council.	
Materials Disposal C.1.		Council and Army Corps requirements are designed to	
		complement one another; applicants should consider the	
		requirements of both agencies when preparing to begin the	
		permit process and may apply for CRMC and Army Corps	
DI Constal Descurrees Management	Fadaral Consistancy	Event for federal consistency reviews, applicants from	
RI Coastal Resources Management	CPMC Pormit	dradging or open waters disposal of dradged materials shall be	R.I. Gen. Laws 940-23-0
Section 300.9 Dredging and Dredged	CRIVIC Fermit	required to obtain a Section 401 Water Quality Certification	
Materials Disposal C 9		from the DFM before the Council can consider granting	
Materials Disposal C.2.		approval for the project. The application for the Section 401	
		Certification will be forwarded to the DEM when all Council	
		application forms have been completed.	
RI Coastal Resources Management	Federal Consistency	All materials to be dredged for either open water disposal or	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	upland disposal must be classified by the DEM based upon an	, j
Section 300.9 Dredging and Dredged		approved analysis process prior to the Council acting on an	
Materials Disposal C.3.		application of either dredging or dredged materials disposal.	
RI Coastal Resources Management	Federal Consistency	Any application for open water disposal of dredged material	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	shall have all requisite Army Corps of Engineers and	
Section 300.9 Dredging and Dredged		Environmental Protection Agency approvals.	
Materials Disposal C.4.			
RI Coastal Resources Management	Federal Consistency	All applicable requirements of the Freshwater Wetland Act	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	have or will have been met.	
Section 300.9 Dredging and Dredged			
Materials Disposal C.5.	E. J		
KI Coastal Resources Management	CDMC Dermit	Upland disposal of dredged materials must comply with all	K.I. Gen. Laws §46-23-6
Flugialli Policies	URINU Perimit	applicable local zoning ordinances.	
Materials Disposal C 6			
Materiais Disposal C.o.			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal D.1.	Federal Consistency CRMC Permit	The disposal of dredged materials on or adjacent to coastal wetlands in Type 1 and 2 waters is prohibited unless associated with a Council approved program of wetland building or rehabilitation. The disposal of dredged materials is also prohibited on coastal wetlands designated for preservation in Type 3, 4, 5, and 6 waters (see section 210.3)	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal D.2.	Federal Consistency CRMC Permit	No dredging for navigational purposes is permitted in Type 1 waters, and only maintenance dredging may be permitted in Type 2 waters.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal E.1.	Federal Consistency CRMC Permit	Applicants for all dredging projects shall provide accurate soundings in the area of the proposed dredging operation.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal E.2.	Federal Consistency CRMC Permit	Applicants shall describe any temporary or permanent disturbance to a coastal feature which is required or anticipated in order to gain access for heavy equipment to the dredging or disposal site.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal E.3.	Federal Consistency CRMC Permit	When fine-grained sediments are to be removed, the applicant shall install siltation curtains to control the transport of materials placed in suspension by dredging unless the applicant demonstrated to the Council on the basis of competent professional analysis that such transport will not be significant or will be controlled by other measures.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal E.4.	Federal Consistency CRMC Permit	The applicant shall limit dredging and disposal to specific times of the year in order to minimize odors and/or impacts on fish and shellfish unless the applicant demonstrates to the Council on the basis of competent professional analysis that such odors or impacts will not be significant or will be controlled by other measures.	R.I. Gen. Laws §46-23-6

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management	Federal Consistency	Applicants for improvement dredging projects shall describe,	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	on the basis of competent professional analysis, anticipated	
Section 300.9 Dredging and Dredged		siltation rates, sediment sources, and anticipated maintenance	
Materials Disposal E.5.		dredging needs.	
RI Coastal Resources Management	Federal Consistency	When dredged materials are removed from a marine to an	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	upland environment for disposal, the applicant shall	
Materials Disposal E 6		demonstrate that the release of pollutants present in the materials shall not cause significant threats to groundwater or	
Materiais Disposal E.o.		cause other environmental degradation	
RI Coastal Resources Management	Federal Consistency	Applicants proposing dredging operations associated with	R I Gen Laws \$46-23-6
Program Policies	CRMC Permit	residential boating facilities must demonstrate that the purpose	10.1. Cicli. Laws 310 20 0
Section 300.9 Dredging and Dredged		is to restore channels and basins to dimensions that support	
Materials Disposal E.7.		and maintain existing levels of use, and must submit clear and	
-		convincing evidence documenting a diminished use of a facility	
		or navigational fairway by natural shoaling or accretion, not	
		merely a need for additional water depth.	
RI Coastal Resources Management	Federal Consistency	Standards for dredging: Bottoms of dredged areas shall slope	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	downward into the waterway so as to maximize tidal flushing.	
Section 300.9 Dredging and Dredged			
Materials Disposal F.I. (a)	Federal Consistency	Standards for deadeing Batton alongs at the adges of deaded	
RI Coastal Resources Management	CPMC Pormit	statuatus foi uteuging. Dottom stopes at the euges of uteugeu	R.I. Gell. Laws 940-23-0
Section 300.9 Dredging and Dredged	CRIME I ellint	aleas shall have a maximum slope of 50 percent.	
Materials Disposal F.1. (b)			
RI Coastal Resources Management	Federal Consistency	Standards for dredging: Dredging shall be planned so as to	R.I. Gen. Laws \$46-23-6
Program Policies	CRMC Permit	avoid undermining adjacent shoreline protection facilities	
Section 300.9 Dredging and Dredged		and/or coastal features.	
Materials Disposal F.1. (c)			
RI Coastal Resources Management	Federal Consistency	Standards for dredging: Shellfish dredged from waters	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	classified SB or lower shall not be made available for human	
Section 300.9 Dredging and Dredged		consumption or bait.	
Materials Disposal F.1. (d)			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.2. (a)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in open water: Dredged materials may not be placed in areas determined by the CRMC to be prime fishing grounds.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.2. (b)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in open water: Measures must be employed and described to ensure that all dredged materials will be dumped solely within the confines of an approved site.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.2. (c)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in open water: Hydrographic conditions at the approved disposal site must be such that the disposed dredged materials will remain within the disposal area and that re-suspension of bottom sediments will be minimal.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.2. (d)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in open water: Following disposal operations involving polluted materials, clean, course-grained materials must be deposited to cap the spoil mound and minimize the release of any potential contaminants to the water column. The cap shall have a minimum thickness of six inches.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.2. (e)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in open water: The applicant shall provide for an environmental monitoring program designed to detail physical conditions and biological activity at and near the site for a period of at least one year. The results of such programs shall be made public.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.3. (a)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in the creation of wetlands, aquatic habitat, or island: Disposal sites must be in sheltered environments which are approved by the Council for such purposes and are not prone to extensive wave or current energies yet subject to sufficient tidal action to provide adequate flushing.	R.I. Gen. Laws §46-23-6

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.3. (b)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in the creation of wetland, aquatic habitat, or island: Dredged materials must be pumped or placed into a containment area that will permit sediment consolidation and prevent erosion.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F. 3. (c)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in the creation of wetland, aquatic habitat, or island: The applicant must provide for an environmental monitoring program designed to detail physical conditions and biological activity at and near the site for a period of at least one year. The results of such a program shall be made public.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.3. (d)	Federal Consistency CRMC Permit	Standards for dredged materials disposal in the creation of wetland, aquatic habitat, or island: All applicable requirements of section 300.2 shall be met.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.4. (a)	Federal Consistency CRMC Permit	Standards for upland disposal: Dewatering of dredged materials shall occur behind a berm or bulkhead of sufficient height to contain the material.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.4. (b)	Federal Consistency CRMC Permit	Standards for upland disposal: After dewatering, dredged materials placed on upland adjacent to tidal waters shall be vegetated or otherwise permanently stabilized. Surface slopes of the disposal area shall be graded so as to prevent surface ponding.	R.I. Gen. Laws §46-23-6
RI Coastal Resources Management Program Policies Section 300.9 Dredging and Dredged Materials Disposal F.4. (c)	Federal Consistency CRMC Permit	Standards for upland disposal: Where dredged materials are placed behind a wall or bulkhead: the structure shall be suitably engineered to resist the pressures of the dredged material; the material including fines, shall be prevented from seeping though the wall or bulkhead by the placement of an adequate filtering device; and all applicable standards listed for shoreline protection facilities (section 300.7) shall be met.	R.I. Gen. Laws §46-23-6

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management	Federal Consistency	Standards for upland disposal: All applicable requirements of	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	section 300.2 shall be met.	
Section 300.9 Dredging and Dredged			
Materials Disposal F.4. (d)			
RI Coastal Resources Management	Federal Consistency	Standards for disposal for beach nourishment: The placement	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	of dredged materials on a beach is a preferred disposal	
Section 300.9 Dredging and Dredged		alternative, providing that the materials in question are	
Materiais Disposal F.5. (a)		predominantly clean sands possessing grain size and such other characteristics to make them compatible with the naturally	
		occurring beach material	
RI Coastal Resources Management	Federal Consistency	Standards for disposal for heach nourishment: In areas where	RI Can Laws 846-23-6
Program Policies	CRMC Permit	the processes of littoral drift would result in significant re-entry	1.1. Gen. Laws 940-25-0
Section 300.9 Dredging and Dredged		of dredged sediments into a navigable waterway, dredged	
Materials Disposal F.5. (b)		materials must be placed on the downdrift side of the inlet.	
RI Coastal Resources Management	Federal Consistency	Standards for disposal for beach nourishment: All applicable	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	requirements of section 300.2 shall be met.	
Section 300.9 Dredging and Dredged			
Materials Disposal F.5. (c)			
RI Coastal Resources Management	Federal Consistency	In wetlands that are designated for preservation adjacent to	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	Type 3, 4, 5, and 6 waters, dredging and filling are prohibited.	
Section 210.3 Coastal Wetlands C.5.			
RI Coastal Resources Management	Federal Consistency	All persons applying for a category B assent are required to: (5)	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	demonstrate that the alteration or activity will not result in	
Section 300.1 Category B Requirements		significant impacts on the abundance and diversity of plant and	
(3), (7)		will not result in significant impacts to water circulation	
		flushing turbidity and sedimentation	
RI Coastal Resources Management	Federal Consistency	Filling, removing, or grading on coastal wetlands is prohibited	R I. Gen. Laws \$46-23-6
Program Policies	CRMC Permit	adjacent to Type 1 and 2 waters, and in coastal wetlands	10.1. Cicli. Laws 340 20 0
Section 300.2 Filling, Removing, or		designated for preservation adjacent to Type 3, 4, 5, and 6	
Grading of Shoreline Features B.2.		waters, unless a consequence of an approved mosquito-control	
``		ditching project.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
RI Coastal Resources Management	Federal Consistency	In considering the merits of any given proposal to fill tidal	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	waters, the Council shall weigh the public benefit to be served	
Section 300.10 Filling in Tidal Waters		by the proposal against the loss or degradation of the affected	
B.2.		public resource(s).	
RI Coastal Resources Management	Federal Consistency	Activities under CRMC jurisdiction including dredging and	R.I. Gen. Laws §46-23-6
Program Policies	CRMC Permit	dredged materials disposal should avoid and minimize impacts	
Section 300.18 Submerged Aquatic		to submerged aquatic vegetation habitat.	
Vegetation and Aquatic Habitats of			
Particular Concern C.2.			

San Francisco Bay Conservation & Development Commission Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ³⁵	Legal Authorities
San Francisco Bay Plan	Permits for Bay Filling &	Water quality in all parts of the Bay should be maintained at a	McAteer-Petris Act Cal. Gov't Code
Part III-The Bay as a Resource	Dredging	level that will support and promote the beneficial uses of the	§66650
Water Quality #2	Federal Consistency	Bay as identified by the state and regional water quality control	
		boards.	
San Francisco Bay Plan	Permits for Bay Filling &	Filling and diking that reduce surface area and water volume	McAteer-Petris Act Cal. Gov't Code
Part III-The Bay as a Resource	Dredging	are only allowed when they provide substantial public benefits	§66650
Water Surface Area and Volume#1 and	Federal Consistency	and when there is no reasonable alternative. Water circulation	
#2		in the Bay should be maintained and improved as much as possible.	
San Francisco Bay Plan	Permits for Bay Filling &	Filling and diking that eliminate marshes and mudflats should	McAteer-Petris Act Cal. Gov't Code
Part III-The Bay as a Resource	Dredging	therefore be allowed only for purposes providing substantial	§66650
Marshes and Mudflats #1-3	Federal Consistency	public benefits and only if there is no reasonable alternative.	
		Proposed fills should be evaluated and modified to minimize	
		their effects on marshes and mudflats. To offset possible	
		additional losses of marshes due to filling, in selected areas new	
		marshes should be created through carefully placed lifts of	
Can Error dana Dan Dian	Demotion from Dem Filling 0	dredged spoils.	Ma Ataun Dataia A at Cal Caucit Cada
San Francisco Bay Plan	Permits for Bay Filling &	Marinas should be allowed at any suitable site on the Bay.	MCAteer-Petris Act Cal. Gov t Code
Part IV - Development of the Day and Shoreline	Enderal Consistency	continuable sites are those that tend to fill up rapidly with	800000
Shoremite Recreation $\# I(h)(1)$	rederal Consistency	mudflat or other wildlife habitat: or are subject to unusual	
		amounts of for	
San Francisco Bay Plan	Permits for Bay Filling &	Further study should be given to the feasibility of dredging a	McAteer-Petris Act Cal. Gov't Code
Part IV - Development of the Bay and	Dredging	network of channels paralleling the shoreline in shallow areas	\$66650
Shoreline	Federal Consistency	for use by small boats and recreational ferries. Channels could	200000
Recreation #8		open up large areas, particularly in the South Bay and San	
		Pablo Bay, for recreational boating, could make possible the	
		development of marinas and launching lanes at more frequent	
		intervals, and could add visual interest to shoreline areas. In	
		addition, the channels could separate marshes and mudflats	
		from dry land, thus enhancing the wildlife value of these areas.	

³⁵ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
San Francisco Bay Plan	Permits for Bay Filling &	Dredging may be permitted if: there is a need, water quality	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Dredging	requirements have been met, natural resources are protected,	§66650
Shoreline	Federal Consistency	and disposal requirements are met. Disposal is encouraged in	
Dredging #1, #2		non-tidal and ocean sites. Tidal disposal must meet specific	
		requirements.	
San Francisco Bay Plan	Permits for Bay Filling &	When dredged material volume annual limits set by the	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Dredging	Commission are reached, projects will be authorized according	§66650
Shoreline	Federal Consistency	to need, economic impact, environmental impact, regional	
Dredging #3		effects, and economic feasibility of using alternate disposal	
San Francisco Bay Plan	Permits for Bay Filling &	Non-tidal disposal sites should be secured and open ocean	McAteer-Petris Act Cal. Cov't Code
Part IV-Development of the Bay and	Dredging	disposal sites should be designated, the maximum feasible	866650
Shoreline	Federal Consistency	amount of dredged material should be disposed of at these	300000
Dredging #4, #5		sites. Disposal projects should maximize the use of dredged	
		material as a resource.	
San Francisco Bay Plan	Permits for Bay Filling &	Proposed channels should be designed as not to undermine the	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Dredging	stability of adjacent dikes, fills or fish and wildlife habitats.	§66650
Shoreline	Federal Consistency		
Dredging #6			
San Francisco Bay Plan	Permits for Bay Filling &	The Commission should encourage increased efforts to reduce	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Dredging	soil erosion as much as possible.	§66650
Shoreline	Federal Consistency		
Dredging #7			
San Francisco Bay Plan	Permits for Bay Filling &	Protection of underground fresh water reservoirs. Dredging or	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the bay and Shoreline	Dreuging Enderal Consistency	construction work should not be permitted that might	800000
Drodging #8	Federal Consistency	resorvoir	
San Francisco Bay Plan	Permits for Bay Filling &	Interested agancies and parties are encouraged to evolute and	McAteer-Petris Act Cal Cov't Code
Part IV-Development of the Bay and	Dredging	find funding solutions for additional costs incurred by	SEESO
Shoreline	Federal Consistency	transporting dredged materials to non-tidal waters and ocean	20000
Dredging #9		disposal sites.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
San Francisco Bay Plan	Permits for Bay Filling &	Dredged materials should only be used to create artificial	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and Shoreline	Dreaging Federal Consistency	islands in the Bay if competent studies demonstrate that these fill islands would have no harmful affect on Bay natural	\$6665U
Dredging #10	rederal Consistency	resources	
San Francisco Bay Plan	Permits for Bay Filling &	The Commission should encourage, sponsor, and participate in	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Dredging	research initiatives on Bay sediment movement, the effects of	§66650
Shoreline	Federal Consistency	dredging and disposal on Bay natural resources, alternatives to	
Dredging #11		Bay aquatic disposal, and funding additional costs for	
		sites.	
San Francisco Bay Plan	Port Planning and	Further deepening of ship channels is needed to accommodate	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Development	expected growth in ship size. Development of port facilitaties	§66650
Shoreline Dorts #1h_d		should provide for the least potential adverse environmental	
FOILS #1D, U San Francisco Bay Plan	Port Planning and	Some filling and dradging will be required to provide for	McAteer-Petris Act Cal Cov't Code
Part IV-Development of the Bay and	Development	necessary port expansion, but should be in accord with the	S66650
Shoreline	2 of oropinone	Seaport Plan.	300000
Ports #2		*	
San Francisco Bay Plan	Uses of the Bay and its	Wherever waterfront areas are used for housing, the amount of	McAteer-Petris Act Cal. Gov't Code
Part IV-Development of the Bay and	Shores	shoreline and the surface area of the Bay should be increased	§66650
Shoreline Other Uses of the Pey and Shoreline		by dredging additional channels inland from the Bay.	
#3(a)			
San Francisco Bay Plan	Permit Procedures for	Fills in accord with the Bay Plan should meet one of several	McAteer-Petris Act Cal. Gov't Code
Part V-Carrying Out the Plan	Filling and Dredging	conditions including, bay related purposes for which filling may	§66650
Control of Filling and Dredging in the $D_{red}(1)$ (1) (2) (2) (5)		be needed, minor fills for improving shoreline appearance or	
Bay $\# I(a)(1)$, (a)(3), (a)(5)		public access, of filling that would provide public access to the Bay and for improvement of shoreline appearance	
San Francisco Bay Plan	Permit Procedures for	A permit for proposed fill, dike, or pier should be approved if	McAteer-Petris Act Cal. Gov't Code
Part V-Carrying Out the Plan	Filling and Dredging	it has been evaluated on the basis of the policies on Water	§66650
Control of Filling and Dredging in the		Quality, surface area and volume, marshes and mudflats, and	č
Bay #1(d)		minimized to avoid harmful effects. Dredging should be in	
		accordance with the Dredging polices.	

Policy Title/Number	Program/Action	Policy Summary ³⁶	Legal Authorities
30-11 General Guidance for All Critical	Federal Consistency	General considerations for assessing the potential impacts of	S.C. Reg. 30-11 B(2)
Areas ^{or} B.2.	Critical Areas Perifitis	projects in childal areas includes. The extent to which the activity would harmfully obstruct the natural flow of navigable	
		water.	
30-11 General guidance for All Critical	Federal Consistency	General considerations for assessing the potential impacts of	S.C. Reg. 30-11 B(3)
Areas B.3	Critical Areas Permits	projects in critical areas includes: The extent to which the	
		completed project would affect the production of fish, shrimp,	
		oysters, crabs, or clams or any marine life or wildlife, or other	
		to water and oxygen supply	
30-11 General guidance for All Critical	Federal Consistency	General considerations for assessing the potential impacts of	S.C. Reg. 30-11 B(7)
Areas B.7	Critical Areas Permits	projects in critical areas includes: The extent of the economic	
		benefits as compared with the benefits from preservation of an	
		area in its unaltered state.	
30-12 Specific Project Standards for	Federal Consistency	Marinas should be located in areas where the least initial and	S.C. Reg. 30-12 E(4)(c),(e)
Tidelands and Coastal Waters	Critical Areas Permits	maintenance dredging will be required. Marina design must	
E. Marina/Community Dock Location		minimize the need for excavation and filling of shoreline areas.	
and Design (4)(c), (e)			
30-12 Specific Project Standards for	Federal Consistency	Applications for marinas must include maintenance dredging	S.C. Reg. 30-12 (E)(4)(j), (5)(c)
F Marine (Community Dock Location	Critical Areas Permits	Schedules and dredged material disposal sites when applicable.	
E. Marina/Community Dock Location and Design (4)(i) (5)(c)		12(F)(6)(d) and 30-12(C)	
30-12 Specific Project Standards for	Federal Consistency	Unless otherwise allowed by permit all initial and maintenance	S.C. Reg. $30-12$ (F)(6)(d)(i) (ii)
Tidelands and Coastal Waters	Critical Areas Permits	dredging shall take place between December 1 and March 1	5.0. Ing. 30 12 (L)(0)(u)(i),(i)
E. Marina/Community Dock Location		and all dredging shall be performed by hydraulic dredge.	
and Design (6)(d)(i),(ii)		Agitation dredging is prohibited.	

³⁶ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority. ³⁷ The definition of critical areas encompasses coastal waters, tidelands, and beach/dune systems. *S.C. Reg 30-1 C.3*

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
30-12 Specific Project Standards for	Federal Consistency	The Department discourages dredging and filling.	S.C. Reg. 30-12G(1)
Tidelands and Coastal Waters	Critical Areas Permits		
G. Dredging and Filling (1)			
30-12 Specific Project Standards for	Federal Consistency	Specific standards for dredging projects include: The creation	S.C. Reg. 30-12G(2)(a)
Deciding and Coastal Waters	Critical Areas Permits	of commercial and residential lots strictly for private gain is not	
G. Dredging and Filling $(z)(a)$		a legitimate justification for the ming of wetlands. Permit	
		applicants for these purposes shall be defined, except for arosion control or boat ramps. All other dradge and fill	
		activities not in the public interest will be discouraged	
30-12 Specific Project Standards for	Federal Consistency	Dredging and filling in wetland areas should be undertaken	S.C. Reg. 30-12G(2)(b)
Tidelands and Coastal Waters	Critical Areas Permits	only if that activity is water-dependent and there are no feasible	
G. Dredging and Filling (2)(b)		alternatives.	
30-12 Specific Project Standards for	Federal Consistency	To the maximum extent feasible, dredging and filling activities	S.C. Reg. 30-12G(2)(c)
Tidelands and Coastal Waters	Critical Areas Permits	should be restricted in nursery areas and shellfish grounds and	
G. Dredging and Filling (2)(c)		during periods of migration, spawning, and early development	
		of important sport and commercial species.	
30-12 Specific Project Standards for	Federal Consistency	Dredging and excavation shall not create stagnant water	S.C. Reg. 30-12G(2)(d)
Lidelands and Coastal Waters	Critical Areas Permits	conditions, lethal fish entrapments, or deposit sumps or	
G. Dredging and Filling (2)(d)	Endavel Consistency	Otherwise contribute to water quality degradation.	$S = C = D_{2} = C = (2) (2) (2)$
50-12 Specific Project Standards for Tidolands and Coastal Waters	Critical Aroas Parmits	for the protective manufacture such as silt curtains	S.C. Reg. 30-12G(2)(e)
C. Dredging and Filling (2)(a)	Cilical Areas I erinits	diamers and weirs to protect water quality in adjacent areas	
G. Dreugnig and Timing $(z)(c)$		during construction by preventing the dispersal of silt materials	
30-12 Specific Project Standards for	Federal Consistency	Dredged materials shall be deposited and contained in such a	S.C. Reg. 30-12G(2)(f)
Tidelands and Coastal Waters	Critical Areas Permits	manner so as to prevent dispersal into adjacent wetland areas	
G. Dredging and Filling (2)(f)		and, in all cases, new facilities must have permanent upland	
		disposal sites. Existing facilities must have either permanent	
		upland disposal sites or EPA approved ocean disposal sites.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(g)	Federal Consistency Critical Areas Permits	Applications for dredging in submerged and wetland areas for purposes other than access, navigation, mining, or drainage shall be denied, unless an overriding public interest can be demonstrated. Dredging permits for mining will be issued only as specified in (2)(h) below. Drainage permits must be consistent with provisions in 30-12(L).	S.C. Reg. 30-12G(2)(g)
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(h)	Federal Consistency Critical Areas Permits	Applications for dredging for mining activities within the critical areas will be denied unless a significant portion of the resource is located in the critical area, extraction of the resource is clearly necessary, and benefits derived from extraction would outweigh resultant detrimental impacts on coastal ecosystems. For any permit issued to allow dredging for mining operations in the critical areas, a complete site reclamation plan shall be required.	S.C. Reg. 30-12G(2)(h)
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(i)	Federal Consistency Critical Areas Permits	Wetlands shall not be utilized as depositories for waste material except as discussed in 30-12(I).	S.C. Reg. 30-12G(2)(i)
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(j)	Federal Consistency Critical Areas Permits	In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.	S.C. Reg. 30-12G(2)(j)
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(k)	Federal Consistency Critical Areas Permits	Only hydraulic dredging is permitted unless the material is being placed in a hopper barge for offshore disposal or unless the applicant can show that hydraulic dredging is infeasible in a site-specific application	S.C. Reg. 30-12G(2)(k)
30-12 Specific Project Standards for Tidelands and Coastal Waters G. Dredging and Filling (2)(l)	Federal Consistency Critical Areas Permits	Marinas will usually not be allowed in areas that require maintenance dredging more often than once every four years.	S.C. Reg. 30-12G(2)(l)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
30-12 Specific Project Standards for Tidelands and Coastal Waters H. Navigation Channels and Access Canals (2)(a)	Federal Consistency Critical Areas Permits	Dredging for establishment of new canals which involves permanent alteration of wetland habitats will be prohibited unless no feasible alternative exists. Establishment of canals for purposes of creating waterfront lots from inland property will be prohibited unless it can be demonstrated that there will	S.C. Reg. 30-12H(2)(a)
30-12 Specific Project Standards for Tidelands and Coastal Waters H. Navigation Channels and Access Canals (2)(c)	Federal Consistency Critical Areas Permits	be no significant environmental impacts on critical areas. Access canals shall be designed to insure adequate flushing and shall not create dead-end or stagnant water pockets. Open- ended, U-shaped, or semicircular canals are generally preferred over dead-end canals, since they usually provide better water circulation.	S.C. Reg. 30-12H(2)(c)
30-12 Specific Project Standards for Tidelands and Coastal Waters H. Navigation Channels and Access Canals (2)(e)	Federal Consistency Critical Areas Permits	The sides of navigation channels and access canals should be gently sloping rather than vertical to facilitate biological as well as physical stabilization of the canal banks.	S.C. Reg. 30-12H(2)(e)
30-12 Specific Project Standards for Tidelands and Coastal Waters H. Navigation Channels and Access Canals (2)(f)	Federal Consistency Critical Areas Permits	When several landowners are to be served by a project, dredging for navigation channels and access canals should be well planned to prevent unnecessary excavation. Tributary canals in the highlands leading to a central navigation channels should be utilized rather than separate channels for each waterfront landowner.	S.C. Reg. 30-12H(2)(f)
30-12 Specific Project Standards for Tidelands and Coastal Waters I. Deposition of Dredged Material (2)(a)	Federal Consistency Critical Areas Permits	Upland disposal of dredged material shall always be sought in preference to disposal in wetlands. Vegetated wetlands and mudflats shall not be utilized for disposal of dredged materials unless there are no feasible alternatives. Any other wetland should not be utilized for disposal of dredged materials when other alternatives exist.	S. C. Reg. 30-12I(2)(a)
30-12 Specific Project Standards for Tidelands and Coastal Waters I. Deposition of Dredged Material (2)(b)	Federal Consistency Critical Areas Permits	Open water and deep water disposal should be considered as an alternative if highland alternatives are not feasible. However, open and deep water disposal sites should be seriously considered only after careful consultation with the Department and other relevant state and federal agencies.	S. C. Reg. 30-12I(2)(b)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
30-12 Specific Project Standards for	Federal Consistency	Dredged materials containing hazardous levels of toxic material	S. C. Reg. 30-12I(2)(c)
Tidelands and Coastal Waters	Critical Areas Permits	must be disposed of with extraordinary caution. These	
I. Deposition of Dredged Material (2)(c)		materials shall never be disposed of in wetland areas and only	
		in highland areas which are lined and diked with impervious	
		materials. These materials will only be disposed in open water	
		ocean dumping sites when maximum safety has been	
		demonstrated after thorough review by the Department and	
		other appropriate state and federal agencies.	
30-12 Specific Project Standards for	Federal Consistency	Dikes surrounding disposal areas should be shaped and	S. C. Reg. 30-12I(2)(d)
Tidelands and Coastal Waters	Critical Areas Permits	vegetated immediately to minimize erosion, with outfalls	
I. Deposition of Dredged Material (2)(d)		positioned to empty into non-wetland areas.	
30-12 Specific Project Standards for	Federal Consistency	Future disposal sites shall be reviewed on a case-by-case basis.	S. C. Reg. 30-12I(2)(e)
Tidelands and Coastal Waters	Critical Areas Permits		
I. Deposition of Dredged Material (2)(e)			
30-12 Specific Project Standards for	Federal Consistency	Wherever feasible, existing disposal areas shall be utilized to the	S. C. Reg. 30-12I(2)(f)
Tidelands and Coastal Waters	Critical Areas Permits	fullest extent possible, this would include raising the height of	
I. Deposition of Dredged Material (2)(f)		the embankments to increase the holding capacity of the	
		disposal area.	
30-12 Specific Project Standards for	Federal Consistency	Consideration must be given to possible adverse impacts of	S. C. Reg. 30-121(2)(g)
Tidelands and Coastal Waters	Critical Areas Permits	various alternative sites on spawning, fish migrations, shellfish	
I. Deposition of Dredged Material (2)(g)		harvesting, waterfowl nesting and wintering areas, and	
		mosquito control. Attention must be given to possible adverse	
		impact of various alternative sites on the public health and	
		welfare as well as on critical fish and wildlife areas.	
30-12 Specific Project Standards for	Federal Consistency	In all cases, dredging activities shall not be approved until	S. C. Reg. 30-121(2)(h)
Tidelands and Coastal Waters	Critical Areas Permits	satisfactory disposal sites have been acquired.	
I. Deposition of Dredged Material (2)(h)			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
30-12 Specific Project Standards for	Federal Consistency	All dredged material must be disposed of in accordance with	S.C. Reg. 30-12L(2)(e)
Tidelands and Coastal Waters	Critical Areas Permits	the regulations under 30-12(I).	
L. Drainage Canals or Ditches (2)(e)			
3. Resource Policies	Dredging in the Coastal	To the extent feasible dredging should be performed only	South Carolina Coastal Management Act
VIII. A. Dredging (1)(a)	Zone	during closed shellfishing season if proposed in a productive shellfish area.	of 1977
3. Resource Policies	Dredging in the Coastal	Suspended sediments must be kept to a minimum. The use of	South Carolina Coastal Management Act
VIII. A. Dredging (1)(b)	Zone	structures such as weirs and silt curtains to minimize water	of 1977
		quality degradation is encouraged. Where highly toxic	
		sediments are encountered, dredging will be prohibited unless	
		the activity is consistent with other dredging policies, as well as	
	Dradging in the Coastal	Dredging should not unduce water simulation, water surrouts	South Carolina Coastal Management Act
3. Resource Policies	Zono	mixing flushing or calinity in the immediate area	of 1077
VIII. A. Dredging (1)(c)	Dradging in the Coastal	Dredging for establishment of new concle which involves	01 1977 South Carolina Coastal Management Act
3. Resource Policies	Zono	Dreuging for establishment of new canals which involves	of 1077
VIII. A. Dieuging (1)(u)	Zone	prohibited unless no feasible alternative exists or an	01 1977
		overwhelming public interest can be demonstrated	
		Establishment of canals for purposes of creating waterfront	
		lots from inland property, especially where dead-end canals	
		would result, will be prohibited unless it can be demonstrated	
		that there will be no significant environmental impacts.	
3. Resource Policies	Dredging in Critical Areas	Dredging for public projects in the wetland areas should be	South Carolina Coastal Management Act
VIII. A. Dredging (2)(a)		undertaken only if that activity is water-dependent and there	of 1977
		are no feasible alternatives.	
3. Resource Policies	Dredging in Critical Areas	Dredge activities should be restricted in nursery areas, in pubic	South Carolina Coastal Management Act
VIII. A. Dredging (2)(b)		and private shellfish grounds during periods of migration,	of 1977
		spawning and early development of important sport and	
		commercial species.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
3. Resource Policies	Dredging in Critical Areas	Dredging and excavation shall not create stagnant water	South Carolina Coastal Management Act
VIII. A. Dredging (2)(c)		conditions, lethal fish entrapments, or deposit sumps or	of 1977
		otherwise contribute to water quality degradation.	
3. Resource Policies	Dredging in Critical Areas	Designs for dredging and excavation projects shall, where	South Carolina Coastal Management Act
VIII. A. Dredging (2)(d)		reasonable, include protective measures such as silt curtains,	of 1977
		diapers, and weirs to protect water quality in adjacent areas	
		during construction by preventing the dispersal of silt materials.	
3. Resource Policies	Dredging in Critical Areas	Dredged materials shall be deposited and contained in such a	South Carolina Coastal Management Act
VIII. A. Dredging (2)(e)		manner so as to prevent dispersal into adjacent wetland areas.	of 1977
3. Resource Policies	Dredging in Critical Areas	In general, excavation of materials from productive submerged	South Carolina Coastal Management Act
VIII. A. Dredging (2)(f)		and wetland areas for fill purposes shall be denied.	of 1977
3. Resource Policies	Dredging in Critical Areas	Wetlands shall not be utilized as depositories for waste	South Carolina Coastal Management Act
VIII. A. Dredging (2)(g)		materials except as discussed in 30-12(I).	of 1977
3. Resource Policies	Dredging in Critical Areas	A specialized form of dredging activity involves the creation	South Carolina Coastal Management Act
VIII. A. Dredging (2)(h)		and maintenance of navigational channels and access canals.	of 1977
		These activities have a potential for severe environmental	
		impacts and should meet a demonstrated public need.	
3. Resource Policies	Dredging in Critical Areas	To the extent feasible, project plans should utilize piers or	South Carolina Coastal Management Act
VIII. A. Dredging (2)(I)		catwalks, rather than channels or canals, to reach deep water	of 1977
		areas.	
3. Resource Policies	Dredging in Critical Areas	Access canals shall be designed to insure adequate flushing and	South Carolina Coastal Management Act
VIII. A. Dredging (2)(j)		shall not create dead-end water or stagnant pockets. Open-	of 1977
		end, U-shaped, or semicircular canals are generally preferred	
		over dead-end canals, since they usually provide better water	
		circulation.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
3. Resource Policies VIII. A. Dredging (2)(k)	Dredging in Critical Areas	Highway waterway construction that is slated to be tied into wetland areas should be constructed in the dry, if possible, so that sloping and stabilization of the banks can be completed before the plug is removed for the connection to open waters. Where dry construction is not possible, temporary plugs or silt curtains at the end of canals connected to waterways should be	South Carolina Coastal Management Act of 1977
3. Resource Policies VIII. A. Dredging (2)(l)	Dredging in Critical Areas	The sides of navigation channels and access canals should be gently sloping rather than vertical to facilitate biological as well as physical stabilization of the canal banks.	South Carolina Coastal Management Act of 1977
3. Resource Policies VIII. A. Dredging (2)(m)	Dredging in Critical Areas	When several land owners are to be served by a project, dredging of navigation channels and access canals should be well planned to prevent unnecessary excavation. Tributary canals in the highlands leading to a central navigation channels should be utilized rather than separate channels for each waterfront landowner.	South Carolina Coastal Management Act of 1977
3. Resource Policies VIII. A. Dredging (2)(n)	Dredging in Critical Areas	The berm of access should be raised so that there is a gradual slope away from the canal edge. This will help prevent introduction of contaminants into adjacent wetland areas.	South Carolina Coastal Management Act of 1977
3. Resource Policies VIII. A. Dredging (2)(0)	Dredging in Critical Areas	Alignment of channels and canals should make maximum use of natural or existing channels. Alignment of channels and canals should avoid shellfish beds, nursery areas, and spawning areas in highly productive wetlands.	South Carolina Coastal Management Act of 1977
3. Resource Policies VIII. B. Dredged Material Disposal (1)(a)	Dredged Material Disposal in the Coastal Zone	To the maximum extent feasible, dredged material must not be placed on high value natural habitats such as salt, brackish or freshwater wetlands, submerged vegetation, oyster reefs, or tidal guts. Where upland disposal is not possible, areas of relatively low productivity should be utilized, or ocean disposal should be employed.	South Carolina Coastal Management Act of 1977
 Resource Policies VIII. B. Dredged Material Disposal (1)(b) 	Dredged Material Disposal in the Coastal Zone	Upland dredge material disposal sites must be stabilized and maintained where necessary to prevent erosion and direct water run-off.	South Carolina Coastal Management Act of 1977

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
3. Resource Policies	Dredged Material	Where water disposal is necessary, natural channels must not	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in the Coastal	be blocked with dredged material and impact on existing water	of 1977
(1)(c)	Zone	circulation should be minimized. Deposition in water areas of	
		higher flushing rates will decrease damage from suspended	
		sediments and oxygen depletion.	
3. Resource Policies	Dredged Material	Consideration must be given to the temporal aspects of spoil	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in the Coastal	deposition such as impacts on spawning seasons, fish	of 1977
(1)(d)	Zone	migrations, waterfowl nesting and wintering areas, and	
		mosquito control.	
3. Resource Policies	Dredged Material	The selection of upland dredge disposal sites should include	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in the Coastal	consideration for minimizing negative impacts on valuable	of 1977
(1)(e)	Zone	terrestrial wildlife or vegetative nabitals.	
3. Resource Policies	Dredged Material	Upland disposal of dredged material should always be sought	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in Critical Areas	in preference to disposal in wetlands, where upland disposal	of 1977
(Z)(a)		is not possible, areas of relatively low productivity above mean high water mark should be utilized. Highly productive wetland	
		areas or bottoms situated below the mean high water mark	
		should not be utilized for disposal of dredged materials when	
		other alternatives exist	
3 Resource Policies	Dredged Material	Open water and deep water disposal should be considered as	South Carolina Coastal Management Act
VIII B Dredged Material Disposal	Disposal in Critical Areas	an alternative if highland alternatives are not feasible.	of 1977
(2)(b)	F	However, open and deep water disposal sites should be	
		seriously considered only after careful consultation with the	
		Council and other relevant state and federal agencies.	
3. Resource Policies	Dredged Material	Toxic and highly organic materials should be disposed of in	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in Critical Areas	highland areas behind impervious dikes.	of 1977
(2)(c)	-		
3. Resource Policies	Dredged Material	Dikes surrounding disposal areas should be shaped and	South Carolina Coastal Management Act
VIII. B. Dredged Material Disposal	Disposal in Critical Areas	vegetated immediately to minimize erosion, with outfalls	of 1977
(2)(d)	-	positioned to empty into non-wetland areas.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
 Resource Policies VIII. B. Dredged Material Disposal (2)(e) 	Dredged Material Disposal in Critical Areas	Future disposal sites shall be reviewed on a case-by-case basis.	South Carolina Coastal Management Act of 1977
 Resource Policies VIII. B. Dredged Material Disposal (2)(f) 	Dredged Material Disposal in Critical Areas	Existing disposal areas should be utilized to the fullest extent possible, this utilization would include raising the height of the embankment to increase the holding capacity of the disposal area.	South Carolina Coastal Management Act of 1977
 Resource Policies VIII. B. Dredged Material Disposal (2)(g) 	Dredged Material Disposal in Critical Areas	In evaluating potential sites for dredged material disposal, attention must be given to possible adverse impacts on public health and welfare as well as on critical fish and wildlife areas such as endangered species habitats, waterfowl wintering areas, and shellfish harvesting areas.	South Carolina Coastal Management Act of 1977
 Resource Policies VIII. B. Dredged Material Disposal (3)(a) 	Dredged Material Disposal Recommendations	Consideration for future maintenance of the spoil area, for example, development of spoil islands which have been found to be beneficial for terrestrial habitat and migratory waterfowl.	Policy Recommendation
 Resource Policies VIII. B. Dredged Material Disposal (3)(b) 	Dredged Material Disposal Recommendations	Abandoned sand or gravel pits in proximity to a dredge site, where spoil can be more adequately contained, should be used for disposal areas.	Policy Recommendation
 Resource Policies VIII. B. Dredged Material Disposal (3)(c) 	Dredged Material Disposal Recommendations	Consideration for reuse of spoil disposal sites, such as development of public parks or recreational areas.	Policy Recommendation
 Resource Policies VIII. B. Dredged Material Disposal (3)(d) 	Dredged Material Disposal Recommendations	Consideration for the mining of spoil areas so as to extend their life expectancies.	Policy Recommendation
3. Resource Policies VIII. B. Dredged Material Disposal (3)(e)	Dredged Material Disposal Recommendations	Prior to major dredging projects, the economic and environmental feasibility for alternative use of the dredged material should be studied. The physical and chemical characteristics of the spoil should be determined in order to decide the most appropriate disposal options. Spoil suitable as fill material for residential, commercial or industrial development should be utilized for such uses. Spoil shells can be used to stimulate oyster production or for dike constructions. Beach renourishment and spoil disposal are related issues and should be addressed concurrently.	Policy Recommendation

Policy Title/Number	Program/Action	Policy Summary ³⁸	Legal Authorities
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 1.	Federal Consistency	Dredging and dredged material disposal and placement shall avoid and otherwise minimize adverse effects to coastal waters, submerged land, critical areas, coastal shore areas, and Gulf beaches to the greatest extent practicable. In implementing this policy category, cumulative and secondary adverse effects of dredging and the disposal and placement of dredged material and the unique characteristics of affected sites shall be considered.	Tex. Admin. Code tit. 31, §501.14(j)(1)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 1.A.	Federal Consistency	Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under policy category 6.	Tex. Admin. Code tit. 31, §501.14(j)(1)(A)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 1.B.	Federal Consistency	Except as otherwise provided in subparagraph (D) of this paragraph, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with policy category 8.	Tex. Admin. Code tit. 31, §501.14(j)(1)(B)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 1.C.	Federal Consistency	Except as provided in subparagraph (D) of this paragraph, dredging and the disposal and placement of dredged material shall not be authorized if: (i) there is a practicable alternative that would have fewer adverse effects so long as that alternative does not have other significant adverse effects; (ii) all appropriate and practicable steps have not been taken to minimize adverse effects; or (iii) significant degradation of critical areas under policy category 8 would result.	Tex. Admin. Code tit. 31, §501.14(j)(1)(C)

³⁸ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and	Federal Consistency	A project that would be prohibited solely by application of	Tex. Admin. Code tit. 31, §501.14(j)(1)(D)
Dredged Material Disposal and		subparagraph (C) of this paragraph, may be allowed if it is	
Placement - 1.D.		determined to be of overriding importance to the public and	
		national interest in light of economic impacts on navigation	
		and maintenance of commercially navigable waterways.	
Policy Category 10: Dredging and	Federal Consistency	Adverse effects from dredging and dredged material disposal	Tex. Admin. Code tit. 31, §501.14(j)(2)
Dredged Material Disposal and		can be minimized by employing the techniques in this	
Placement - 2.		paragraph where appropriate and practicable. (i)-(vii)	
Policy Category 10: Dredging and	Federal Consistency	(i) Locating and confining discharges to minimize smothering	Tex. Admin. Code tit. 31, §501.14(j)(2)(i)-
Dredged Material Disposal and		of organisms; (ii) locating and designing projects to avoid	(vii)
Placement - 2.(1)-(VII)		adverse disruption of water inundation patterns, water	
		circulation, erosion and accretion processes and other	
		nydrodynamic processes; (iii) using existing or natural channels	
		and basins instead of dredging new ones and discharging	
		for disposal or placement of dradged material: (iv) limiting	
		project dimensions to the minimum reasonably required to	
		serve the project nurnose including allowing for reasonable	
		over dredging and future expansion without causing additional	
		adverse effects: (v) discharging materials at sites where the	
		substrate is composed of material similar to that being	
		discharged: (vi) locating and designing discharges to minimize	
		the extent of any plume and otherwise control dispersion of	
		material: and (vii) avoiding the impoundment of drainage of	
		critical areas.	
Policy Category 10: Dredging and	Federal Consistency	Dredging and disposal and placement of material to be dredged	Tex. Admin. Code tit. 31, §501,14(i)(2)(B)
Dredged Material Disposal and	, ,	shall comply with applicable standards for sediment toxicity.	
Placement - 2.B.		Adverse effects from constituents in materials can be	
		minimized by treatment of or limitations on the material itself.	
		Some ways to accomplish this include: (i)-(iv)	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 2.B(i)-(iv)	Federal Consistency	(i) Disposal or placement of material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants; (ii) limiting the solid, liquid, and gaseous components of material discharged; (iii) adding treatment substances to the discharged material; and (iv) adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.	Tex. Admin. Code tit. 31, §501.14(j)(2)(B)(i)-(iv)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 2.C.	Federal Consistency	Adverse effects from dredging and dredged material disposal or placement can be minimized through control of the materials discharged. Some ways of accomplishing this include: (i)-(v)	Tex. Admin. Code tit. 31, §501.14(j)(2)(C)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 2.C.(i)-(iv)	Federal Consistency	(i) Use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching; (ii) use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem; (iii) capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material; (iv) properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and, (v) timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.	Tex. Admin. Code tit. 31, §501.14(j)(2)(C)(i)-(iv)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 2.D.	Federal Consistency	Adverse effects from dredging and dredged material disposal or placement can be minimized by controlling the manner in which material is disposed Some ways of accomplishing this include: (i)-(vii)	Tex. Admin. Code tit. 31, §501.14(j)(2)(D)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and	Federal Consistency	(i) Where environmentally desirable, distributing the material in	Tex. Admin. Code tit. 31,
Dredged Material Disposal and		a thin layer; (ii) orienting material to minimize undesirable	§501.14(j)(2)(D)(i)-(vii)
Placement - 2.D.(i)-(vii)		obstruction of the water current or circulation patterns; (iii)	
		using silt screens or other appropriate methods to confine	
		suspended particulates or turbidity to a small area where	
		settling or removal can occur; (iv) using currents and	
		circulation patterns to mix, disperse, dilute, or otherwise	
		control the discharge; (v) minimizing turbidity by using a	
		diffuser system or releasing material near the bottom; (vi)	
		selecting sites or managing discharges to confine and minimize	
		the release of suspended particulates and turbidity and maintain	
		light penetration for organisms; and (vii) setting limits on the	
		amount of material to be discharged per unit of time or volume	
		of receiving waters.	
Policy Category 10: Dredging and	Federal Consistency	Adverse effects from operations can be minimized by adapting	Tex. Admin. Code tit. 31,
Dredged Material Disposal and		technology to the needs of each site. Some ways of	§501.14(j)(2)(E)(i)-(iii)
Placement - 2.E.(i)-(iii)		accomplishing this include: (i) using appropriate equipment,	
		machinery, and operating techniques for access to sites and	
		transport of material, including those designed to reduce	
		damage to critical areas; (ii) having personnel on site adequately	
		trained in avoidance and minimization techniques and	
		requirements; and (iii) designing temporary and permanent	
		access roads and channel spanning structures using culverts,	
		open channels, and diversions that will pass both low and high	
		water flows, accommodate fluctuating water levels, and	
		maintain circulation and faunal movement.	
Policy Category 10: Dredging and	Federal Consistency	Adverse effects on plant and animal populations from dredging	Tex. Admin. Code tit. 31, §501.14(j)(2)(F)
Dredged Material Disposal and		and dredged material disposal or placement can be minimized	
Placement - 2.F.		by: (i)-(vii)	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and	Federal Consistency	(i) Avoiding changes in water current and circulation patterns	Tex. Admin. Code tit. 31,
Dredged Material Disposal and		that would interfere with the movement of animals; (ii)	§501.14(j)(2)(F)(i)-(vii)
Placement - 2.F.(i)-(vii)		selecting sites or managing discharges to prevent or avoid	
		creating habitat conducive to the development of undesirable	
		predators or species that have a competitive edge ecologically	
		over indigenous plants or animals; (iii) avoiding sites having	
		unique habitat or other values, including habitat of endangered	
		species; (iv) using planning and construction practices to	
		institute habitat development and restoration to produce a new	
		or modified environmental state of higher ecological value by	
		displacement of some or all of the existing environmental	
		characteristics; (v) using techniques that have been	
		demonstrated to be effective in circumstances similar to those	
		under consideration whenever possible and when proposed	
		development and restoration techniques have not yet advanced	
		to the pilot demonstration stage, initiating their use on a small	
		scale to allow corrective action if unanticipated adverse effects	
		occur; (vi) timing dredging and dredged material disposal or	
		placement activities to avoid spawning or migration seasons	
		and other biologically critical time periods; and (vii) avoiding	
		the destruction of remnant natural sites within areas already	
		affected by development.	
Policy Category 10: Dredging and	Federal Consistency	Adverse effects on human use potential from projects can be	Tex. Admin. Code tit. 31,
Dredged Material Disposal and	5	minimized by: (i) selecting sites and following procedures to	§501.14(j)(2)(G)(i)-(iv)
Placement - 2.G.(i)-(iv)		prevent or minimize any potential damage to the aesthetically	
		pleasing features of the site, particularly with respect to water	
		quality; (ii) sites which are not valuable as natural aquatic areas;	
		(iii) timing dredging and dredged material disposal or	
		placement activities to avoid the seasons or periods when	
		human recreational activity associated with the site is most	
		important; and (iv) sites that will not increase incompatible	
		human activity or require frequent dredge or fill maintenance	
		activity in remote fish and wildlife areas.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and	Federal Consistency	Adverse effects from new channels and basins can be	Tex. Admin. Code tit. 31, §501.14(j)(2)(H)
Dredged Material Disposal and		minimized by locating them at sites: (i) that ensure adequate	
Placement - 2.H.		flushing and avoid stagnant pockets; or (ii) that will create the	
		fewest practicable adverse effects on CNRAs from additional	
		infrastructure such as roads, bridges, causeways, piers, docks,	
		wharves, transmission line crossings, and ancillary channels	
		reasonably likely to be constructed as a result of the project;	
		(III) with least practicable risk that increased vessel traffic could	
		result in navigation nazarus, spins, or other forms of	
		provided that, for any dredging of new channels or basing	
		subject to the requirements of policy category 20 data and	
		information on minimization of secondary adverse effects need	
		not be produced or evaluated to comply with this subparagraph	
		is such data and information is produced and evaluated in	
		compliance with policy category 20.	
Policy Category 10: Dredging and	Federal Consistency	Disposal or placement of dredged material in existing	Tex. Admin. Code tit. 31. §501.14(i)(3)
Dredged Material Disposal and	5	contained dredged disposal sites identified and actively used as	
Placement - 3.		described in an environmental assessment or environmental	
		impact statement issued prior to the effective date of this	
		chapter shall be presumed to comply with the requirements of	
		paragraph (1) of this policy category unless modified in design,	
		size, use or function.	
Policy Category 10: Dredging and	Federal Consistency	Dredged material from dredging projects in commercially	Tex. Admin. Code tit. 31, §501.14(j)(4)
Dredged Material Disposal and		navigable waterways is a potentially reusable resource and must	
Placement - 4.		be used beneficially in accordance with this policy.	
Policy Category 10: Dredging and	Federal Consistency	It the costs of the beneficial use of dredged material are	Tex. Admin. Code tit. 31, §501.14(j)(4)(A)
Dredged Material Disposal and		reasonably comparable to the cost of disposal in a non-	
Placement - 4.A.		beneficial manner, the material shall be used beneficially.	
Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
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Policy Category 10: Dredging and Dredged Material Disposal and Placement - 4.B.	Federal Consistency	If the costs of beneficial use are significantly greater than the costs of disposal, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to: (i)-(iii).	Tex. Admin. Code tit. 31, §501.14(j)(4)(B)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 4.B.(i)-(iii)	Federal Consistency	(i) Environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits; (ii) the proximity of the beneficial use site to the dredge site; and, (iii) the quantity and quality of the dredged material and its suitability for beneficial use.	Tex. Admin. Code tit. 31, §501.14(j)(4)(B)(i)-(iii)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 4.C.(i)-(x)	Federal Consistency	Examples of the beneficial use of dredged material include, but are not limited to projects designed to: (i) reduce or minimize erosion or provide shoreline protection; (ii) create or enhance public beaches or recreational areas; (iii) benefit the sediment budget or littoral system; (iv) improve or maintain terrestrial or aquatic wildlife habitat; (v) improve or maintain terrestrial or aquatic wildlife habitat; (v) improve or maintain terrestrial or aquatic wildlife habitat; (v) improve or maintain terrestrial or marshlands, coastal wetlands, or other critical areas; (vi) benefit benthic communities or aquatic vegetation; (vii) create wildlife management areas, parks, airports, or other public facilities; (viii) cap landfills or other waste disposal areas; (ix) fill private property or upgrade agricultural land, if cost-effective public beneficial uses are not available; and (x) remediate past adverse impacts on the coastal zone.	Tex. Admin. Code tit. 31, §501.14(j)(4)(C)(i)-(x)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 5.	Federal Consistency	If dredged material cannot be used beneficially as provided in paragraph (4)(B) of this policy, to avoid and otherwise minimize adverse effects as required in paragraph (1) of this policy, preference will be given to the greatest extent practicable to disposal in: (A) contained upland sites; (B) other contained sites; and (C) open water areas of relatively low productivity or low biological value.	Tex. Admin. Code tit. 31, §501.14(j)(5)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 6.	Federal Consistency	For new sites, dredged materials shall not be disposed of or placed directly on the boundaries of submerged lands or at such location so as to slump or migrate across the boundaries of submerged lands in the absence of an agreement between the affected public owner and the adjoining private owner or owners that defines the location of the boundary or boundaries affected by the deposition of the dredged material.	Tex. Admin. Code tit. 31, §501.14(j)(6)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 7.A., B., C.	Federal Consistency	Emergency dredging shall be allowed without a prior consistency determination as required in the applicable consistency rule when: (A) there is an unacceptable hazard to life or navigation; (B) there is an immediate threat of significant loss of property; or (C) an immediate and unforeseen significant economic hardship is likely if corrective action is not taken within a time period less than the normal time needed under standard procedures.	Tex. Admin. Code tit. 31, §501.14(j)(7)(A),(B),(C)
Policy Category 10: Dredging and Dredged Material Disposal and Placement - 8.	Federal Consistency	Mining of sand, shell, gravel, and mudshell on submerged lands shall be prohibited unless there is an affirmative showing of no significant impact on erosion within the coastal zone and no significant adverse effect on coastal water quality or terrestrial and aquatic wildlife habitat within any CNRA.	Tex. Admin. Code tit. 31, §501.14(j)(8)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Policy Category 8: Development in Critical Areas 1.	Federal Consistency	Dredging and construction of structures in, or the discharge of dredged or fill material into, critical areas shall comply with the policies in this category. In implementing this policy, cumulative and secondary adverse effects of these activities will	Tex. Admin. Code tit. 31, §501.14(h)(1)
		be considered.	
Policy Category 8: Development in Critical Areas 1.A.	Federal Consistency	These policies shall be applied in a manner consistent with the goal of achieving no net loss of critical area functions and values.	Tex. Admin. Code tit. 31, §501.14(h)(1)(A)
Policy Category 8: Development in Critical Areas 1.B.	Federal Consistency	Persons proposing development in critical areas shall demonstrate that no practicable alternative with fewer adverse effects is available. It must be demonstrated that the activity is water-dependent. If the activity is not water-dependent, practicable alternatives are presumed to exist unless demonstrated otherwise. An alternatives analysis shall be conducted in light of the activity's overall purpose.	Tex. Admin. Code tit. 31, §501.14(h)(1)(B)
Policy Category 8: Development in Critical Areas 1.C.	Federal Consistency	In evaluating practicable alternatives, the following sequence shall be applied: avoidance, minimization, and compensation.	Tex. Admin. Code tit. 31, §501.14(h)(1)(C)
Policy Category 8: Development in Critical Areas 1.G.	Federal Consistency	Development in critical areas shall not be authorized if significant degradation of critical areas will occur: Significant degradation occurs if: the activity will jeopardize the continued existence of species listed as endangered or threatened or will result in the destruction or adverse modification to critical habitats under the Endangered Species Act; violation of surface water quality standards; violation of applicable toxic effluent standard or prohibition; violates requirements under the Marine Protection, Research, and Sanctuaries Act of 1972; and if there are significant adverse effects to human health, life stages of aquatic life and other wildlife, ecosystem diversity and productivity, and recreational aesthetic or economic values.	Tex. Admin. Code tit. 31, §501.14(h)(1)(G)

Policy Title/Number	Program/Action	Policy Summary ³⁹	Legal Authorities
Virgin Islands Coastal Zone	Coastal Zone Permit	Development policies are as follows: (8) to assure that dredging	Virgin Islands Coastal Zone Management
Management §906(a)(8)	Federal Consistency	and filling of submerged lands is clearly in the public interest	Act of 1978 §906(a)(8)
-		and to ensure that such proposals are consistent with specific	
		marine environment policies contained in this chapter. To	
		these ends, the diking, filling or dredging of coastal waters, salt	
		ponds, lagoons, marshes or estuaries may be permitted in	
		accordance with other applicable provisions of this chapter	
		only where there are no feasible, less environmentally-	
		damaging alternatives and, where feasible, mitigation measures	
		have been provided to minimize adverse environmental effects.	
Virgin Islands Coastal Zone	Coastal Zone Permit	Dredging and filling activities in any event shall be limited to	Virgin Islands Coastal Zone Management
Management §906(a)(8)(i)-(v)	Federal Consistency	the following: (i) maintenance dredging required for existing	Act of 1978 §906(a)(8)
-		navigational channels, vessel berthing and mooring areas; (ii)	
		incidental public service purposes, including but not limited to	
		the burying of cables and pipes, the inspection of piers and the	
		maintenance of existing intake and outfall lines; (iii) new or	
		expanded port, oil, gas and water transportation, and coastal	
		dependent industrial uses, including commercial fishing	
		facilities, cruise ship facilities, and boating facilities and	
		marinas; (iv) except as restricted by federal law, mineral	
		extraction, including sand, provided that such extraction shall	
		be prohibited in significant natural areas; and (v) restoration	
		purposes.	

³⁹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Virgin Islands Coastal Zone	Coastal Zone Permit	Environmental policies in the first tier shall be as follows: (2) to	Virgin Islands Coastal Zone Management
Management §906(b)(2)	Federal Consistency	protect complexes of marine resource systems of unique	Act of 1978 §906(b)(2)
		productivity, including reefs, marine meadows, salt ponds,	
		mangroves and other natural systems, and assure that activities	
		in or adjacent to such complexes are designed and carried out	
		so as to minimize adverse effects on marine productivity,	
		habitat value, storm buffering capabilities, and water quality of the entire complex	
Virgin Islands Coastal Zone	Coastal Zone Permit	Environmental policies in the first tier shall be as follows: (8) to	Virgin Islands Coastal Zone Management
Management 8906(b)(8)	Federal Consistency	assure that dredging and disposal of dredged material will cause	Act of 1978 8906(b)(8)
Management 3000(b)(0)	i cuciu consistency	minimal adverse affects to marine and wildlife habitats and	Act of 1970 3000(b)(0)
		water circulation.	
Virgin Islands Coastal Zone	Coastal Zone Permit	Environmental policies in the first tier shall be as follows: (9) to	Virgin Islands Coastal Zone Management
Management §906(b)(9)	Federal Consistency	assure that development in areas adjacent to environmentally-	Act of 1978 §906(b)(9)
_		sensitive habitat areas, especially those of endangered species,	
		significant natural areas, and parks and recreational areas, is	
		sited and designed to prevent impacts which would	
		significantly degrade such areas.	
Virgin Islands Coastal Zone	Coastal Zone Permit	On or after the effective date of this chapter, any person	Virgin Islands Coastal Zone Management
Management §910(a)(1)	Federal Consistency	wishing to perform or undertake any development ⁴⁰ in the first	Act of 1978 §910(a)(1)
		tier of the coastal zone, except as provided in subsection (b) of	
		this section, shall obtain a coastal zone permit in addition to	
		and any other permit required by law from any public	
		agency prior to performing or undertaking any development.	

⁴⁰ The definition of "development" as found in the Virgin Islands Coastal Zone Management Act includes dredging and discharge or disposal of any dredged material on any land or under the water. Virgin Islands Coastal Zone Management Act of 1978 §902(1).

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Virgin Islands Coastal Zone	Coastal Zone Permit	A permit shall be granted for a development if the appropriate	Virgin Islands Coastal Zone Management
Management §910(a)(2)	Federal Consistency	Committee of the Commission or the Commissioner,	Act of 1978 §910(a)(2)
-		whichever is applicable, finds that (A) the development is	
		consistent with the basic goals, policies, and standards provided	
		in Sections 903 and 906 of this Chapter; and (B) the	
		development as finally proposed incorporates to the maximum	
		extent feasible mitigation measures to substantially lessen or	
		eliminate any and all adverse environmental impacts of the	
		development; otherwise the permit application shall be denied.	
		The applicant shall have the burden of proof to demonstrate	
		compliance with these requirements.	
Virgin Islands Coastal Zone	Coastal Zone Permit	Permit required prior to development or occupancy: (1) No	Virgin Islands Coastal Zone Management
Management §911(a)(1)	Federal Consistency	person shall develop or occupy the trustlands or other	Act of 1978 §911(a)(1)
		submerged or filled lands of the Virgin Islands without	
		securing a coastal zone permit which includes, in addition to	
		the elements of a Section 910 permit, a permit or lease for the	
		development or occupancy of the trustlands or other	
		submerged or filled lands.	

Virginia Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ⁴¹	Legal Authorities
Title 28.2, Chapter 12 Submerged Lands Ownership and Uses 1203 A., A.(3)	Subaqueous Lands Permit Federal Consistency	It shall be unlawful for any person to build, dump, trespass or encroach upon or over, or take or use any materials from the beds of the bays, ocean, rivers, streams, or creeks which are the property of the Commonwealth, unless such act is performed pursuant to a permit issued by the Commission or is necessary for the following: (3) Construction and maintenance of Congressionally approved navigation and flood-control projects undertaken by the US Army Corps of Engineers to regulate navigation, navigable waters or flood control.	Va. Code. Ann. §28.2-1203
Title 28.2, Chapter 12 Submerged Lands Ownership and Uses 1204 1.	Subaqueous Lands Permit Federal Consistency	The Commission is authorized to: Issue permits for all reasonable uses of state-owned bottomlands not authorized under subsection A of 28.2-1203, including but not limited to, dredging, the taking and use of material, and the placement of wharves, bulkheads, and fill by owners of riparian land in the waters opposite their lands, provided such wharves, bulkheads, and fill do not extend beyond any lawfully established bulkhead lines.	Va. Code. Ann. §28.2-1204
Title 28.2, Chapter 12 Submerged Lands Ownership and Uses 1205 A.	Subaqueous Lands Permit Federal Consistency	When determining whether to grant or deny any permit for the use of state-owned bottomlands, the Commission shall be guided in its deliberations by the provisions of Article XI, Section I of the Constitution of Virginia. In addition to other factors, the Commission shall also consider the public and private benefits of the proposed project and shall exercise its authority under this section consistent with the public trust doctrine in order to protect and safeguard the public right to the use and enjoyment of the subaqueous lands of the Commonwealth.	Va. Code. Ann. §28.2-1205

⁴¹ This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Title 28.2, Chapter 12 Submerged Lands	Subaqueous Lands Permit	The Commission shall also consider the project's effect on the	Va. Code. Ann. §28.2-1205
Ownership and Uses	Federal Consistency	following: 1) Other reasonable and permissible uses of state	
1205 A.1-6		waters and state-owned bottomlands; 2) Marine and fisheries	
		resources of the Commonwealth; 3) Tidal wetlands, except	
		when this has or will be determined under the provisions of	
		Chapter 13 of this title; 4) Adjacent or nearby properties; 5)	
		Water quality; and 6) Submerged aquatic vegetation.	
Title 28.2, Chapter 12 Submerged Lands	Subaqueous Lands Permit	The Commission shall consult with other state agencies,	Va. Code. Ann. §28.2-1205
Ownership and Uses	Federal Consistency	including the Virginia Institute of Marine Science, the State	
1205 B.		Water Control Board, the Virginia Department of	
		Transportation, and the State Corporation Commission	
		whenever the Commission's decision on a permit application	
		relates to or effects the particular concerns or activities of those	
		agencies.	
Title 28.2, Chapter 12 Submerged Lands	Subaqueous Lands Permit	When the activity or project for which a permit is requested	Va. Code. Ann. §28.2-1206
Ownership and Uses	Federal Consistency	will involve the removal of bottom material, the application	
1206 C.		shall indicate this fact. If granted, the permit shall specify a	
		royalty of not less than twenty cents, nor more than sixty cents,	
		per cubic yard of bottom material removed. In fixing the	
		amount of the royalty, the Commission shall consider, among	
		other factors, the following: 1) The primary and secondary	
		purposes for removing the bottom material; 2) Whether the	
		material has any commercial value and whether it will be used	
		for any commercial purpose; 3) The use to be made of the	
		removed material and any public benefit or adverse effect upon	
		the public which will result from the removal or disposal of the	
		material; 4) The physical characteristics of the material to be	
		removed; 5) The expense of removing and disposing of the	
		material.	
Title 28.2, Chapter 12 Submerged Lands	Subaqueous Lands Permit	Bottom material removed attendant to maintenance dredging	Va. Code. Ann. §28.2-1206
Ownership and Uses	Federal Consistency	shall be exempt from any royalty.	
1206 E.			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Subaqueous Guidelines	Subaqueous Lands Permit	Dredging depths should be determined by the proposed use	VMRC Subaqueous Guidelines
Section II Dredging Operations A.	Federal Consistency	and controlling water depths outside the area to be dredged.	
Subaqueous Guidelines	Subaqueous Lands Permit	Overdredging to reduce the frequency of maintenance	VMRC Subaqueous Guidelines
Section II Dredging Operations B.	Federal Consistency	dredging should not exceed an additional two feet and the need	
		for overdredging should be based on the expected rate of	
		sedimentation at the dredge site.	
Subaqueous Guidelines	Subaqueous Lands Permit	Generally side slope cuts of a dredging area should not exceed	VMRC Subaqueous Guidelines
Section II Dredging Operations C.	Federal Consistency	a two horizontal to one vertical slope to prevent slumping of	
		material into the dredged area.	
Subaqueous Guidelines	Subaqueous Lands Permit	In order to lessen the possibility of dredging having adverse	VMRC Subaqueous Guidelines
Section II Dredging Operations D.	Federal Consistency	effects on commercially or recreationally important fisheries,	
		certain seasonal dredging limitations may be imposed on a site	
		specific basis depending on sediment type, proximity to	
		shellfish areas or spawning grounds, dredging method, the	
		project's size, location and measures taken to reduce turbidity.	
		In important spawning and nursery areas in fresh and near	
		fresh waters, dredging may be restricted to the months of	
		November through mid-March. For brackish and saline waters	
		where significant quantities of oysters and clams are present the	
		better months for dredging are mid-march through June and in	
		October and November. Where commercial dredging for	
		crabs in deeper waters is an important consideration, the better	
		months for dredging are from April through November.	
		These limitations will be judiciously applied in order to prevent	
		undue economic burdens on the permittee or his contractor.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Subaqueous Guidelines Section II Dredging Operations E.	Subaqueous Lands Permit Federal Consistency	Dredging for proposed small craft channels should be not more than one foot deeper than adjacent natural water bodies and only as wide as necessary to safely navigate in order to avoid creating water circulation and flushing problems. Dredging to depths deeper than the nearest channels can create stagnant conditions which can lead to decreased oxygen levels, unpleasant odors and degradation of local marine resources.	VMRC Subaqueous Guidelines
Subaqueous Guidelines Section II Dredging Operations F.	Subaqueous Lands Permit Federal Consistency	Only under special or unusual circumstances should dredged material be double handled. This practice involves the placement of dredged material at another location in the waterway from which it was dredged only to be redredged for proper disposal.	VMRC Subaqueous Guidelines
Subaqueous Guidelines Section II Dredging Operations G.	Subaqueous Lands Permit Federal Consistency	Dredging in shellfish areas, both public and private, beds of submerged aquatic vegetation and other highly productive areas is discouraged.	VMRC Subaqueous Guidelines
Subaqueous Guidelines Section II Dredging Operations H.	Subaqueous Lands Permit Federal Consistency	A minimum and maximum royalty for new dredging is prescribed by law. Generally, the minimum is assessed if no beneficial use can be made of the material. The maximum may be assessed if the material is to be used for fill or other commercial use.	VMRC Subaqueous Guidelines
Subaqueous Guidelines Section III. Filling and Dredged Material Placement C.	Subaqueous Lands Permit Federal Consistency	Dredged material must be placed in a disposal area which is acceptable to the Commission. Factors to be considered include, but are not limited to: 1) Encroachment into natural drainage ways; 2) Chemical nature of the dredged material and its potential for polluting adjacent or nearby underground water supplies; 3) Encroachment over underground utilities, i.e., water lines and sewer facilities; 4) Value of the site to the natural environment; 5) Proximity to populated areas; and, 6) Anticipated use of the material or disposal site after dredged material is placed and consolidated.	VMRC Subaqueous Guidelines

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Subaqueous Guidelines Section III Filling and Dredged Material	Subaqueous Lands Permit	The disposal area should be properly prepared to receive and permanently contain the fill before the start of dredging or	VMRC Subaqueous Guidelines
Placement D.	r cuciai consistency	filling.	
Subaqueous Guidelines	Subaqueous Lands Permit	Overboard disposal of dredged material into tidal waters is	VMRC Subaqueous Guidelines
Section III. Filling and Dredged Material Placement F	Federal Consistency	usually not permitted unless the material is uncontaminated and granular (sand size). Quality dredged material may be used	
i meenient L.		for beach replenishment at various public beaches in Virginia	
		where natural sources of sand supply are inadequate.	
Subaqueous Guidelines Section III, Filling and Dredged Material	Subaqueous Lands Permit	When overboard disposal is authorized, areas to be used for	VMRC Subaqueous Guidelines
Placement E.1.	reactar consistency	on commercially important bottom dwelling organisms such as	
		oysters and clams, submerged aquatic vegetation, wetlands and	
Subaguague Cuidalinae	Subaquaque Lande Darmit	other shallow productive habitats.	VMPC Subaguagus Cuidalinas
Subaqueous Guidelines Section III. Filling and Dredged Material	Federal Consistency	positioned to reduce scour and sedimentation.	VMRC Subaqueous Guidennes
Placement E.2	, and the second s	I ·····	
Title 28.2, Chapter 13 Wetlands	Wetlands Permit	Standards for use and development of wetlands; utilization of	Va. Code. Ann. §28.2-1308
1308 A.1.	Federal Consistency	guidelines. Wetlands of primary ecological significance shall not be altered so that the ecological systems in the wetlands are	
		unreasonably disturbed.	
Title 28.2, Chapter 13 Wetlands	Wetlands Permit	Standards for use and development of wetlands; utilization of	Va. Code. Ann. §28.2-1308
1308 A.2.	Federal Consistency	guidelines. Development in Tidewater Virginia, to the	
		lesser ecological significance, in vegetated wetlands which have	
		been irreversibly disturbed before July 1, 1972, in nonvegetated	
		wetlands which have been irreversibly disturbed prior to	
		vetlands.	
Title 28.2, Chapter 13 Wetlands	Wetlands Permit	The Commission shall preserve and prevent the despoliation	Va. Code. Ann. §28.2-1301
1301 B.	Federal Consistency	and destruction of wetlands while accommodating necessary	
		economic development in a manner consistent with wetlands	
		preservation.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Title 28.2, Chapter 13 Wetlands	Wetlands Permit	The Commission shall promulgate and periodically update	Va. Code. Ann. §28.2-1301
1301 C.	Federal Consistency	guidelines which scientifically evaluate vegetated and	
		nonvegetated wetlands by type and describe the consequences	
		of use of these wetland types.	
Title 28.2, Chapter 13 Wetlands	Wetlands Permit	In developing guidelines or regulations under this chapter the	Va. Code. Ann. §28.2-1301
1301 D.	Federal Consistency	Commission shall consult with all affected state agencies.	
		Consideration shall be given to the unique character of the	
		Commonwealth's tidal wetlands which are essential for the	
		production of marine and inland wildlife, waterfowl, finfish,	
		shellfish, and flora; serve as a valuable protective barrier against	
		floods, tidal storms and the erosion of shores and soil; are	
		important for the absorption of silt and pollutants; and are	
		important for recreational and esthetic enjoyment of the people	
		and for the promotion of tourism, navigation and commerce.	
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Fill material, whether on wetlands or nearby fastalands, should	VMRC Wetlands Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	not contain contaminants which may leach into adjacent	
Specific Criteria Filling and Dredged		waters. Upland source material is generally preferable to	
Material Disposal B.3.		dredged material for use as fill.	
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Where feasible, controlled disposal of dredged material on	VMRC Wetlands Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	highland property is the preferred method.	
Specific Criteria Filling and Dredged			
Material Disposal B.4.			
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Dredged material disposal areas should meet the following	VMRC Wetlands Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	criteria: Disposal by the bucket or dragline method: 1) Build an	
Specific Criteria Filling and Dredged		earth-tight bulkhead along the perimeter of the disposal area	
Material Disposal B.5.a.(1)		sufficient to confine the dredge spoil. The bulkhead or dike	
		should have a top elevation at least 3 feet above the average	
		upper limit of spring tides.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal B.5.a.(2)	Wetlands Permit Federal Consistency	Earthen dikes (berms) should be compacted as they are constructed, have side slopes on steeper than 1 horizontal to 3 vertical, a top width of at least 3 feet, and the toe of the slope should be at least 15 feet from existing marsh grasses. Spillway boxes or release pipes should be provided to prevent water from eroding or over-topping the dike. As soon as possible after completion of the project, the disposal area should be	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal B.5.a.(3)	Wetlands Permit Federal Consistency	graded and vegetative cover established. In some projects involving small volumes of generally sandy material, a double line of staked straw bales may provide suitable containment.	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal B.5.b.(1)	Wetlands Permit Federal Consistency	Disposal by hydraulic methods: 1) Earthen dikes should be constructed by dragline or land fill methods to the specifications described above. The volume of the disposal area lying below the elevation of the spillway crest should, at all times during the dredging, be sufficient to provide a retention time long enough to clarify the discharge water to meet applicable water quality standards. The spillway should be placed as far as possible from the discharge end of dredging pipes.	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal B.5.b.(2)	Wetlands Permit Federal Consistency	Disposal by hydraulic methods: 2) The dredge pipeline should have tight joints to prevent leaks. Grading and vegetative cover should be accomplished as soon as possible.	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal B.6	Wetlands Permit Federal Consistency	Dredged material should not ordinarily be deposited in adjacent marsh as a convenience. If it becomes necessary to place spoil on a marsh, consideration should be given to placing it on those portions of lower value or to scattering the material in a thin layer rather than containing it behind a berm. Berms in marshes should be used to contain fill only when absolutely necessary and when they will not impair tidal flow to other wetland areas.	VMRC Wetland Guidelines

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Overboard disposal of dredged material is generally undesirable	VMRC Wetland Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	unless the deposits are basically clean sand, the disposal area is	
Material Disposal B 9		deposits will have a beneficial effect on shoreline erosion	
Material Disposa D.o.		problems. There may be occasions when overboard disposal	
		of silty spoil can be used to create marsh. This will probably	
		also entail the planting or seeding of marsh vegetation under	
		closely controlled conditions.	
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Whenever overboard disposal is permitted, the operation	VMRC Wetland Guidelines
for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged	Federal Consistency	snould be located and conducted so as to minimize impacts on	
Material Disposal B 10		clams and ovsters, submerged aquatic vegetation, and other	
Material Disposal D.10.		unique or highly productive habitats.	
Wetlands Guidelines Section IV Criteria	Wetlands Permit	The overboard disposal of good quality sand in order to	VMRC Wetland Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	replenish beaches is generally acceptable so long as the beach	
Specific Criteria Filling and Dredged		sand and dredged sand are size compatible.	
Material Disposal B.11.			
for Evaluating Alterations of Wetlands	Federal Consistency	when possible, open pile piers should be lengthened to reach	VMRC Wetland Guidelines
Specific Criteria Filling and Dredged	reueral Consistency	dredging required	
Material Disposal C.1.		a cugnig required.	
Wetlands Guidelines Section IV Criteria	Wetlands Permit	Dredging for the singular purpose of obtaining fill is ordinarily	VMRC Wetland Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	not justified.	
Specific Criteria Filling and Dredged			
Material Disposal C.2.			
for Evaluating Alterations of Wetlands -	Federal Consistency	For relatively small projects (2000 c.y. or less), dredging by dragline or bucket method is generally preferred	VMRC Wetland Guidelines
Specific Criteria Filling and Dredged	reueral consistency	diagnine of bucket method is generally preferred.	
Material Disposal C.3.			
Wetlands Guidelines Section IV Criteria	Wetlands Permit	The practice of "double handling" dredged material in a	VMRC Wetland Guidelines
for Evaluating Alterations of Wetlands -	Federal Consistency	waterway is generally undesirable.	
Specific Criteria Filling and Dredged			
Material Disposal C.4.			

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal C.5.	Wetlands Permit Federal Consistency	Dredging in shellfish areas, beds of subaquatic vegetation and other areas of singularly high productivity should be avoided if possible.	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal C.6.	Wetlands Permit Federal Consistency	In oyster and clam growing areas, dredging should be avoided during the months of July, August, September, December, January, and February, whenever possible. This is particularly important when the dredging is to be performed within 500 yards of, or overboard disposal is within one mile of, productive public or privately leased oyster ground. In anadromous fish spawning and nursery areas, dredging and overboard disposal operations should be avoided, when possible, during the period of mid-March thought October. Particularly critical is the actual spawning period, mid-March though June. Concern is heightened when overboard disposal is involved.	VMRC Wetland Guidelines
Wetlands Guidelines Section IV Criteria for Evaluating Alterations of Wetlands - Specific Criteria Filling and Dredged Material Disposal C.7.	Wetlands Permit Federal Consistency	In relatively large water bodies, overdredging to reduce the frequency of maintenance dredging, should not exceed an additional two feet and this should be based on the anticipated sedimentation rate. In narrow canals and other water bodies subject to poor flushing, the dredged depth should not exceed one foot below that of the connecting waters.	VMRC Wetland Guidelines

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Title 62.1, Chapter 10 Virginia Port Authority 132.20 A.		No agency of the commonwealth, including the Virginia Port Authority, shall have the authority to expand the Craney Island Disposal Area northward or westward or beyond its present capacity or to cause activities which will result in such expansion of the Craney Island Disposal Area. In addition, no state funds shall be expended for any activities which will result in the expansion of Craney Island northward or westward or beyond its present capacity as a disposal area for material dredged from any site, including the Hampton Roads harbor. However, the Commonwealth and the Virginia Port Authority are authorized to expend state funds for a feasibility study and an environmental impact study related to the potential expansion of Craney Island to the east for an additional marine terminal.	Va. Code. Ann.§62.1-132.20
Title 62.1, Chapter 10 Virginia Port Authority 132.20 B.		The Virginia Port Authority is hereby directed, in coordination with other state and federal agencies, including the Army Corps of Engineers, to locate, establish, and use ocean disposal areas for ocean-suitable dredge materials from the Hampton Roads Harbor, or some other suitable site, and to use the existing Craney Island Disposal Area for dredge material suitable or unsuitable for alternate disposal, including ocean disposal, with priority given to materials dredged from the Southern Branch of the Elizabeth River. An additional marine terminal may, with the consent of the General Assembly and the Governor, be constructed on the eastern side of Craney Island if studies show that it in the public interest to use dredge material to develop such a facility.	Va. Code. Ann.§62.1-132.20

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Title 62.1, Chapter 10 Virginia Port Authority 132.20 C.		Prior to the disposal of any dredged material either at an ocean area or on the Craney Island Disposal Area, after the Craney Island Disposal Area has attained its capacity limit, the appropriate state agencies shall investigate and consider the cost and availability of beneficial uses of the dredged material and to ensure the environmental acceptability of any beneficial use. When such environmentally acceptable beneficial use is available and economically feasible, the appropriate state agencies shall pursue such use.	Va. Code. Ann.§62.1-132.20
Virginia Administrative Code Chapter 400, Criteria for the Placement of Sandy Dredged Material Along Beaches 4 VAC 20-400-10 A.		The objective is to assure that all suitable dredged material is utilized on eroding beach shorelines to the maximum extent practicable.	4 VAC 20-400-10
Virginia Administrative Code Chapter 400, Criteria for the Placement of Sandy Dredged Material Along Beaches 4 VAC 20-400-10 B.		In considering dredging permit applications, the commission will endeavor to: 1) Give priority consideration at sites for the disposal of that portion of dredged material determined to be suitable for beach nourishment; 2) Coordinate and cooperate with the appropriate state and federal agencies to the extent that the commission regulatory actions can support those agencies in administering the House Joint Resolution regarding the use of dredge material for beach nourishment; 3) Resolve or minimize legal, environmental and engineering problems which can result from inadequate planning of dredged material placement.	4 VAC 20-400-10
Virginia Administrative Code Chapter 400, Criteria for the Placement of Sandy Dredged Material Along Beaches 4 VAC 20-400-20		The purpose of this chapter is to develop manageable criteria and threshold levels for use by commission staff in determining which projects justify a requirement for the expenditure of funds by an applicant for sediment tests as well as investigation of legal, environmental and engineering implications inherent in every dredged material placement proposal.	4 VAC 20-400-20

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Virginia Administrative Code Chapter		The Commission will strive to achieve maximum beneficial	4 VAC 20-400-30
400, Criteria for the Placement of Sandy		uses of suitable dredged material for those projects which	
Dredged Material Along Beaches 4 VAC		qualify under criteria established here while protecting the	
20-400-30		interests of the Commonwealth in the land and the resources	
		lying channelward of the mean low water shoreline which land	
		and resources are owned by the Commonwealth and are to be	
		held as a common for use by all its citizens.	
Virginia Administrative Code Chapter		Increasing interest in the beneficial uses of dredged material	4 VAC 20-400-40
400, Criteria for the Placement of Sandy		dictates a more structured approach to the processing of	
Dredged Material Along Beaches 4 VAC		dredging permit applications. Parameters to be considered in	
20-400-40		attempting to utilize suitable material for beach nourishment	
		are frequently economic, legal, political, or technical, as well as	
		environmental, and most often a combination of all these	
		factors. Because of the complexity of interests involved,	
		certain threshold levels are needed to more readily define	
		projects which justify the time and expense of determining	
		whether beach nourishment is a reasonable alternative.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Virginia Administrative Code Chapter		The following general criteria should be used to determine	4 VAC 20-400-40
400, Criteria for the Placement of Sandy		candidate projects suitable for detailed evaluation: 1) More	
Dredged Material Along Beaches 4 VAC		than 7,500 cubic yards of material is to be removed and, based	
20-400-40 (1-5)		on previous experience, there is a reasonable expectation that	
		usable quantities of suitable beach nourishment material free	
		from toxic compounds is present in the material to be dredged;	
		2) Beaches with a demonstrated need for and capability of	
		provimity of the dredging site: 3) The political subdivision	
		within which the notential placement site is located has	
		expressed an interest in obtaining beach nourishment material:	
		4) The applicant understands that he will be required to	
		undertake the research necessary to locate private property	
		owners willing to accept the material if no publicly owned	
		shoreline is in reasonable proximity; 5) When beach	
		nourishment is incorporated into a dredging project, a more	
		comprehensive subsurface investigation plan is required than if	
		dredging is the only consideration.	
Virginia Administrative Code Chapter	Dredging Permits	Sufficient borings must be made and analyzed to develop a	4 VAC 20-400-50
400, Criteria for the Placement of Sandy	Federal Consistency	clear picture of the vertical and norizontal limit of sand	
20 400 50 Å		responsibility of the dredging applicant	
Virginia Administrativa Coda, Chanter	Dredging Permits	Shoreline investigations at the nourishment site shall determine	4 VAC 20-400-50
400 Criteria for the Placement of Sandy	Federal Consistency	the characteristics of the native material the location of	4 VAC 20-400-30
Dredged Material Along Beaches 4 VAC	r cuciui consistency	utilities, structures, outfall pipes, property lines along shore	
20-400-50 B.		transport, and other basic engineering considerations.	
Virginia Administrative Code Chapter	Dredging Permits	Engineering information must be analyzed to determine	4 VAC 20-400-50
400, Criteria for the Placement of Sandy	Federal Consistency	acceptable grain size range of fill material, design berm height,	
Dredged Material Along Beaches 4 VAC		width and length, probable fate of the material, expected loss	
20-400-50 C.		rates and the resulting maintenance requirements.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Virginia Administrative Code Chapter	Dredging Permits	Legal easements and public right of way must be obtained from	4 VAC 20-400-50
400, Criteria for the Placement of Sandy	Federal Consistency	property owners which preserve public use and state ownership	
Dredged Material Along Beaches 4 VAC		of all state-owned submerged land existing channelward of	
20-400-50 D.		mean low water shoreline prior to the placement of any	
		material.	
Virginia Administrative Code Chapter	Dredging Permits	The project should be engineered in a manner which results in	4 VAC 20-400-50
400, Criteria for the Placement of Sandy	Federal Consistency	the least environmental impact while providing an efficient and	
Dredged Material Along Beaches 4 VAC		cost effective construction plan. Consideration will be given,	
20-400-50 E.		but not limited to, the project's potential impacts on existing	
		natural resources and habitats. These include, inter alia,	
		existing finfish, shellfish, turtle and avian species and their	
		critical time periods for spawning, nesting, and nursery	
		functions in areas of submerged aquatic vegetation, wetlands	
		and submerged or intertidal and beach habitat.	
Virginia Administrative Code		The purpose of this policy is to establish the policy of the State	9 VAC 25-380-10
State Water Control Board, Chapter 308		Water Control Board in order to support the principles of the	
Wetlands Policy 9 VAC 25-380-10		Wetlands Act, in dealing with water quality of the wetland of	
		the Commonwealth.	
Virginia Administrative Code		It shall be the board's policy to minimize alteration in the	9 VAC 25-380-20
State Water Control Board, Chapter 308		quantity or quality of the natural flow of water that nourishes	
Wetlands Policy 9 VAC 25-380-20 B		wetlands and to protect wetlands from adverse dredging or	
		filling practices, solid waste management practices, siltation, or	
		the addition of pesticides, salts, or toxic materials arising form	
		non-point source wastes and though construction activities,	
		and to prevent violation of applicable water quality standards	
		form such environmental insults.	

Washington Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ⁴²	Legal Authorities
Washington Shoreline Mgmt. Act Guidelines- The Master Program WAC 173-16-040	Master Program	The objective of the Shoreline Management Guidelines is to provide state guidelines under which local government agencies can develop master programs for the regulation and permitting of shoreline uses.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs. Wash. Admin. Code §173-16- 040.
Washington Shoreline Mgmt. Act Guidelines- The Use Activities WAC 173-16-060(14) Landfill	Master Program and Shorelands Permitting	Guidelines on landfill of wetland areas include protection of existing ecological values or natural resources, avoidance or alteration of local currents, erosion prevention, and use of fill material that will not cause water quality problems. Priority should be given to landfills for water-dependent uses and public uses. Factors used in evaluation of fill projects include: water surface reduction, navigation restriction, impediment to water flow and circulation, reduction of water quality and destruction of habitat.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs. Wash. Admin. Code §173-16- 060(14).
Washington Shoreline Mgmt. Act Guidelines- The Use Activities WAC 173-16-060(16)(a) Dredging	Master Program and Shorelands Permitting	Local governments should control dredging to minimize damage to existing ecological values and natural resources both to the area to be dredged and to the area to be filled.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs. Wash. Admin. Code §173-16- 060(16)(a).
Washington Shoreline Mgmt. Act Guidelines- The Use Activities WAC 173-16-060(16)(b) Dredging	Master Program and Shorelands Permitting	Local master plans must include long-range plans for the deposit and use of spoils on land and in water. Deposition of spoils in water areas should be allowed only for habitat improvement, to correct problems adversely affecting fish and shellfish resources, or where the alternative of placement on land is more detrimental to shoreline resources than water areas.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs. Wash. Admin. Code §173-16- 060(16)(b).

⁴² This column is intended to only be a summary of a specific policy. For the actual policy language please refer to the cited policy document and/or the legal authority.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Washington Shoreline Mgmt. Act Guidelines- The Use Activities WAC 173-16-060(16)(c) Dredging	Master Program and Shorelands Permitting	Dredging of bottom materials for the single purpose of obtaining fill material should be discouraged.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs. Wash. Admin. Code §173-16- 060(16)(c).
Washington Shoreline Mgmt. Act Guidelines- Ocean Management WAC 173-16-064(7)(b) General Ocean Uses Guidelines ⁴³	Master Program and Federal Consistency	Ocean uses that will have less adverse social and economic impacts on coastal uses and communities should be given priority over uses and activities that will have more such impacts.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs, Ocean Resources Management Act augmentation. Wash. Admin. Code §173-16-064(7)(b).
Washington Shoreline Mgmt. Act Guidelines- Ocean Management WAC 173-16-064(7)(j) General Ocean Uses Guidelines ⁴⁴	Master Program and Federal Consistency	Ocean uses and their associated coastal or upland facilities should be located, designed and operated to prevent, avoid, and minimize adverse impacts on migration routes and habitat areas of species listed as endangered or threatened, environmentally critical and sensitive habitats such as breeding, spawning, nursery, foraging areas and wetlands, and areas of high productivity for marine biota such as upwelling and estuaries.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs, Ocean Resources Management Act augmentation. Wash. Admin. Code §173-16-064(7)(j).
Washington Shoreline Mgmt. Act Guidelines- Ocean Management WAC 173-16-064(7)(k), (l) General Ocean Uses Guidelines ⁴⁵	Master Program and Federal Consistency	Ocean uses and their associated uses should be located to avoid adverse impacts on proposed or existing environmental and scientific preserves, sanctuaries, parks, designated recreation areas, and historic or culturally significant sites.	Washington Shoreline Mgmt. Act Guidelines For Development of Master Programs, Ocean Resources Management Act augmentation. Wash. Admin. Code §173-16-064(7)(k), (l).

⁴⁵ Ibid.

⁴³ The dredging does fall under the definition of "development" in the Washington Shoreline Management Act Guidelines for Development of Master Programs. "Ocean Uses" is defined as activities or developments involving renewable and/or nonrenewable resources that occur on Washington's coastal waters and includes their associated off shore, near shore, inland marine, shoreland and upland facilities and the supply, service and distribution activities circulating to and between the activities and developments. There fore dredging and disposal can be considered under Ocean uses. ⁴⁴ Ibid.

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Washington Shoreline Mgmt. Act	Master Program and	Detrimental effects on air and water quality, tourism,	Washington Shoreline Mgmt. Act
Guidelines- Ocean Management	Federal Consistency	recreation, fishing, aquaculture, navigation, transportation,	Guidelines For Development of Master
WAC 173-16-064(7)(t) General Ocean		public infrastructure, public services, and community culture	Programs, Ocean Resources Management
Uses Guidelines ⁴⁶		should be considered in avoiding and minimizing adverse social	Act augmentation. Wash. Admin. Code
		and economic impacts.	§173-16-064(7)(t).
Washington Shoreline Mgmt. Act	Master Program and	Storage, loading, transporting, and disposal of materials shall be	Washington Shoreline Mgmt. Act
Guidelines- Ocean Management	Federal Consistency	done in conformance with local, state, and federal requirements	Guidelines For Development of Master
WAC 173-16-064(11)(a) Ocean Disposal		for protection of the environment.	Programs, Ocean Resources Management
			Act augmentation. Wash. Admin. Code
			§173-16-064(11)(a).
Washington Shoreline Mgmt. Act	Master Program and	Ocean disposal shall be allowed only in sites that have been	Washington Shoreline Mgmt. Act
Guidelines- Ocean Management	Federal Consistency	approved by the Washington Department of Ecology, the	Guidelines For Development of Master
WAC 173-16-064(11)(b) Ocean Disposal		Washington Department of Natural Resources, the US EPA,	Programs, Ocean Resources Management
		and the US Army Corps of Engineers.	Act augmentation. Wash. Admin. Code
			§173-16-064(11)(b).
Washington Shoreline Mgmt. Act	Master Program and	Ocean disposal sites should be located and designed to	Washington Shoreline Mgmt. Act
Guidelines- Ocean Management	Federal Consistency	prevent, avoid, and minimize adverse impacts on	Guidelines For Development of Master
WAC 173-16-064(11)(c) Ocean Disposal		environmentally critical and sensitive habitats, coastal resources	Programs, Ocean Resources Management
		and uses, or loss of opportunities for mineral resource	Act augmentation. Wash. Admin. Code
		development. Ocean disposal sites for which the primary	§173-16-064(11)(c).
		purpose is habitat enhancement may be located in a wider	
		variety of habitats, but the general intent of the guidelines	
		should still be met.	

⁴⁶ Ibid.

Wisconsin Policies Related to Dredging

Policy Title/Number	Program/Action	Policy Summary ⁴⁷	Legal Authorities
Specific State Coastal Policies 1. Coastal Water Quality and Quantity And Air Quality 1.4	Federal Consistency	Disposal in the waters of the state of the following defined pollutants shall be restricted: dredged spoil.	Wis. Stat. §283.01(13), 283.31(1), 29.288, 29.29
Specific State Coastal Policies Coastal Natural Areas, Wildlife Habitat and Fisheries 2.13(c)	Federal Consistency	All counties shall adopt and administer shoreland management programs which includes provisions for filling, grading, lagooning, and dredging. These activities shall only be permitted only in accord with state law and were protection against erosion, sedimentation and impairment of fish and aquatic life has been assured.	Wis. Admin. Code §NR 115
Specific State Coastal Policies Coastal Natural Areas, Wildlife Habitat and Fisheries 2.15	Federal Consistency	The Department of Natural Resource shall preserve and protect wetlands under its management and control. It shall use its regulatory authority to minimize adverse changes in the quality or quantity of the flow of waters that support wetlands, to protect wetlands which were unlawfully altered.	Wis. Admin. Code §NR 1.95, 299,103
Specific State Coastal Policies Community Development 4.1	Federal Consistency	All coastal counties shall adopt and enforce management programs for all unincorporated coastal shorelands. These programs shall: maintain safe and healthful conditions; prevent and control water pollution; protect fish and aquatic life, particularly spawining grounds; control land uses, placement of structures, and building sites; preserve and protect shore cover; and protect natural beauty.	Wis. Stat. §59.971, 281.35 Wis. Admin. Code §NR 115
Specific State Coastal Policies Community Development 4.11	Federal Consistency	Dredging, filling, placing structures upon, and removing materials from the bed of navigable waters shall not be allowed if it damages the public interest, is deleterious to fish or game habitat, materially obstructs navigation or reduces effective flood flow capacity.	Wis. Stat. §30.12, 30.20
Specific State Coastal Policies Community Development 4.12	Federal Consistency	Enlarging the course of a navigable water, constructing an artificial waterway, canal, ditch, lagoon, pond, lake or similar waterway or connecting an artificial waterway with an existing body of navigable water shall not be allowed if it damages the public's interest in the waters, is deleterious to fish or game habitat, materially obstructs navigation, or reduces effective flood flow capacity.	Wis. Stat. §30.19

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Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Specific State Coastal Policies Economic Development 5.8	Federal Consistency	The state shall formulate and coordinate a program of port planning, promotion, protection and development The state shall provide financial assistance for commercial harbor improvements.	Wis. Stat. §560.03-560.04, 85.095
Specific State Coastal Policies Public Involvement 7.1	Federal Consistency	The public shall be entitled to the fullest and most complete information regarding the affairs of government, compatible with the conduct of government business. To this end, all meetings of all state and local governments shall be preceded by public notice, shall be open to the public, and shall be held in places reasonably accessible to members of the public.	Wis. Stat. §19.81, 19.83
Specific State Coastal Policies Public Involvement 7.2	Federal Consistency	Any person may, with proper care, examine and copy any official property and records.	Wis. Stat. §19.21
Specific State Coastal Policies Public Involvement 7.4	Federal Consistency	The Department shall, upon the verified complaint of six or more citizens, hold a public hearing to any alleged or potential environmental pollution.	Wis. Stat. §144.537
Managing Coastal Resources and Development 1. Special Coastal Areas	Federal Consistency	Six designated special coastal areas include: areas of significant natural, recreational, scientific, or historic value; areas especially suited for water-related economic development; hazard areas; specific coastal areas identified as future power plant sites; areas for preservation; and, areas that should be restored.	
Managing Coastal Resources and Development 2. Land and Water Uses of Management Concern	Federal Consistency	Uses deemed to have a direct and significant impact on the coastal environment are: removing materials from the bed or enlarging the course of a Great Lake or other navigable coastal water; constructing an artificial waterway or connecting one to a Great Lake or other navigable water; depositing materials in the Great Lakes or other navigable water; discharging of effluents or placing refuse into coastal water; using rural shorelands; and, using wetlands.	

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
Wis. Stat. §30.20(1)(a)	Federal Consistency	No person may remove any material from the bed of any	Wis. Stat. §30.20(1)(a)
	Removal of Bed Materials	navigable lake or from the bed of any outlying waters of this state without first obtaining a contract or permit from the	
	remms	Denartment	
Wis. Stat. §30.20(2)(c)	Federal Consistency Removal of Bed Materials Permits	A permit to remove material form the bed of any lake or stream not included in sub.(1)(a), may be issued by the department if it finds that the issuance of such a permit will be consistent with the public interest in the water involved. A permit or contract issued under this paragraph may be issued for up to 10 years if the applicant notifies the department at least 30 days before removing any material.	Wis. Stat. §30.20(2)(c)
Wis. Stat. §30.202(1)	Federal Consistency	The Department may enter into a memorandum of understanding with the US Corps of Engineers concerning the dredging of the Mississippi, St. Croix, and Black rivers and the disposal of these dredge spoils. This memorandum shall specify where dredge spoils may be deposited and shall specify conditions and standards which are required for use of an approved site. The memorandum may also contain recommended or required dredge disposal methods, equipment and policies.	Wis. Stat. §30.202(1)
NR 347 Sediment Sampling & Analysis,	Federal Consistency	It is department policy to encourage reuse of dredged material	Wis. Admin. Code §NR 347.01 (2)
for Dredging Projects	Permits	project.	
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	Prior to submission of a formal application, anyone seeking to remove material from the beds of waterways shall provide the department with preliminary information including: name of waterbody and location of project; volume of material to be dredged; description of dredging method and equipment; description of the disposal method and location and the size of the disposal facility; map of location indicating bathymetry and sediment sampling sites; and, anticipated starting and completion dates of the project.	Wis. Admin. Code §NR 347.05(1)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	An initial evaluation shall be conducted by the Department to determine if there is reason to believe that the material proposed to be dredged is contaminated. This will be used to specify sediment sampling and analysis requirements. The Department will look at: the potential routes that may have introduced contaminants into the dredging site; previous tests of the material at the dredging site or in the vicinity; the probability of past introduction of contaminants from land runoff; spills of toxic or hazardous substances; introduction of contaminants from point sources; source and previous use of materials used or proposed to be used as fill; natural deposits of minerals; and, any other relevant information that is available.	Wis. Admin. Code §NR 347.05(2)
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	Upon completion of the initial evaluation, the Department shall establish sampling and analysis requirements. Collection of sufficient samples to describe the chemical, physical and biological properties for the sediment may be required. Samples from the proposed disposal area may also be required. Samples from proposed beach nourishment sites must be taken for every 250 linear feet of beach with a minimum of two samples for particle size and color.	Wis. Admin. Code §NR347.06(3)
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	Describes the appropriate methods to be used when taking and handling sediment samples.	Wis. Admin. Code §NR347.06(4),(5)
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	Describes the appropriate analyses to be performed on sediment samples, delineating between Great Lakes and inland waters.	Wis. Admin. Code §NR347.06(6)
NR 347 Sediment Sampling & Analysis, Monitoring Protocol & Disposal Criteria for Dredging Projects	Federal Consistency	When sediment sampling and analyses have been completed, the applicant shall submit a copy of the testing report to the department. The department shall review the information and may require additional sampling and analysis when there is evidence of contamination.	Wis. Admin. Code §NR347.07(1),(2),(3)

Policy Title/Number	Program/Action	Policy Summary	Legal Authorities
NR 347 Sediment Sampling & Analysis,	Federal Consistency	The department may allow beach nourishment disposal if: the	Wis. Admin. Code §NR347.07(4)
Monitoring Protocol & Disposal Criteria		average percentage of silt plus clay in the dredged material does	
for Dredging Projects		not exceed the average percentage of silt plus clay in the	
		existing beach by more than 15% and the color of the dredged	
		material does not differ significantly from the color of the	
		beach material; and, the criteria of any general permit	
		regulating wastewater discharges under the Wisconsin pollutant	
		discharge elimination system is not exceeded.	
NR 347 Sediment Sampling & Analysis,	Federal Consistency	Projects that are authorized by a WPDES permit, monitoring,	Wis. Admin. Code §NR347.08(2)(a), (2)(c)
Monitoring Protocol & Disposal Criteria		analyses and reporting shall be performed as specified in the	
for Dredging Projects		WPDES permit. Project characteristics to be monitored may	
		include, but are not limited to, carriage water return flow, total	
		suspended solids, dissolved oxygen concentrations, effluent	
		and receiving water temperatures, receiving stream flow rates,	
		effluent ammonia-nitrogen concentrations, and pH.	

APPENDIX-B

State, Territory, & Commonwealth Dredging Information Template

Dredging Policy Breakdown

A. General Dredging Policies

1. Does the state have policies related to dredging? List all appropriate policies, including name and policy number. Indicate if these policies are enforceable or advisory and include the legal authorities applicable to each policy.

2. What types of state permits are required in addition to federal consistency concurrence for dredging activities? How long are permit review time periods? Is there formal/informal coordination amongst federal and state permitting agencies?

3. Is there any sort of permit application/federal consistency guidance provided to project applicants? Is there any pre-permit application consultation for applicants available in the planning stages of a project?

4. How are public participation requirements addressed, are state requirements followed in addition to federal consistency requirements outlined in *15 CFR §930*?

5. List any other types of policies, guidance documents, memorandums of understanding or similar instruments that may be used by the state during dredging decision-making or long term planning.

6. Are there any policies that outline the level of chemical and/or biomonitoring data needed to make dredging permitting decisions?

7. Are there specific policies that set time periods in which maintenance activities can occur (i.e. the permit that is issued will cover all maintenance activities for 1 year, 3 years, or 5 years...)?

B. Policies Specific to Economic Concerns

1. According to state policies (if they exist), during project review how should the economic benefits of a dredging project be weighed against the environmental costs of a project?

2. Is a cost/benefit analysis done? If so, who prepares it and who reviews it?

C. Policies Specific to Sediment and Water Quality Concerns

Are there any state policies or guidelines that address:

1. Chemical composition of material to be dredged - is testing required in areas prone to contamination? If so, have consistent constituent testing methodologies and acceptable contaminant levels been established? (policies with respect to disposal of contaminated material should be addressed in the section covering dredged material management and disposal).

2. Acceptable mixing zones for meeting water quality standards (turbidity and contaminants)?

3. Changes in hydrodynamic circulation patterns and/or salinity levels from channel alteration/deepening.

D. Policies Specific to Dredging Techniques and Methodologies

Are there state policies or guidelines that:

1. List preferred or restricted dredging techniques or methodologies? I.e. hydraulic vs. clamshell, hopper vs. pipeline, economic loading.

2. List dredging window time-frames or other conditions for endangered/threatened species? I.e. fisheries spawning or juvenile migration.

3. List requirements or best management practices used to prevent accidental species takings? I.e.Turtle exclusion devices (TEDs).

4. List areas restricted from dredging activities due to habitat and water quality (turbidity)concerns? Include essential fish habitat (EFH) concerns.

E. Policies Specific to Dredged Material Management/Disposal

1. Does the state have a long term plan for dredged material management, and if so is it mandated by a policy, executive order or regulation? How was the plan developed and what does it cover?

2. Does the state have preferences as to where dredged material is placed? Upland areas vs: underwater sites. Are there specific geographic areas identified as sites for disposal?

Are there state policies or guidelines that:

3. List dredged material disposal options or restrictions with respect to contaminated dredged material?

4. List placement, dewatering, monitoring, or maintenance methodologies/requirements for disposal of dredged material into confined upland disposal facilities (CDFs) - include surface water runoff and ground water percolation concerns.

5. List placement footprints, capping, or other requirements for underwater disposal areas?

6. Include restrictions for placement of dredged material deemed contaminated in underwater disposal areas?

F. Policies Specific to Beneficial Uses of Dredged Material

1. Does the state have a policy on beneficial use of dredged material, is it preferred or discouraged?

2. Does the state define what beneficial use is? E.g. beach nourishment, island creation, underwater sand stockpiling, levee or berm construction, wetlands/habitat creation, erosion protection, and alternative uses such as using dredged material as saleable product for asphalt production.

3. Does the state have an established pre-project review process for evaluating beneficial use projects? If so what does this review process cover? E.g. sediment grain size and composition, benthic resources impacted, coverage/density of vegetation, type and value of habitat created/destroyed, susceptibility to erosional forces, and longshore transport. Are there any areas designated as recipient sites for beneficial use projects?

G. Other Dredging Policies not Mentioned Above

Use this space to:

1. Indicate other policies related to dredging not mentioned above (this may include policies aimed at reducing sediment loads to waterbodies etc...).

2. List any complex or controversial issues that your state is currently trying (or would like to try) to address through policy development(i.e. federal consistency issues).

3. List specific programs, products or documents that are directly related to dredged material management.

4. List the total full time employees (FTEs) working on dredging. Is there a special dredging team located within the coastal management program or in other state agencies?

5. List/describe specific planned or completed beneficial use projects and any associated reports or documents.