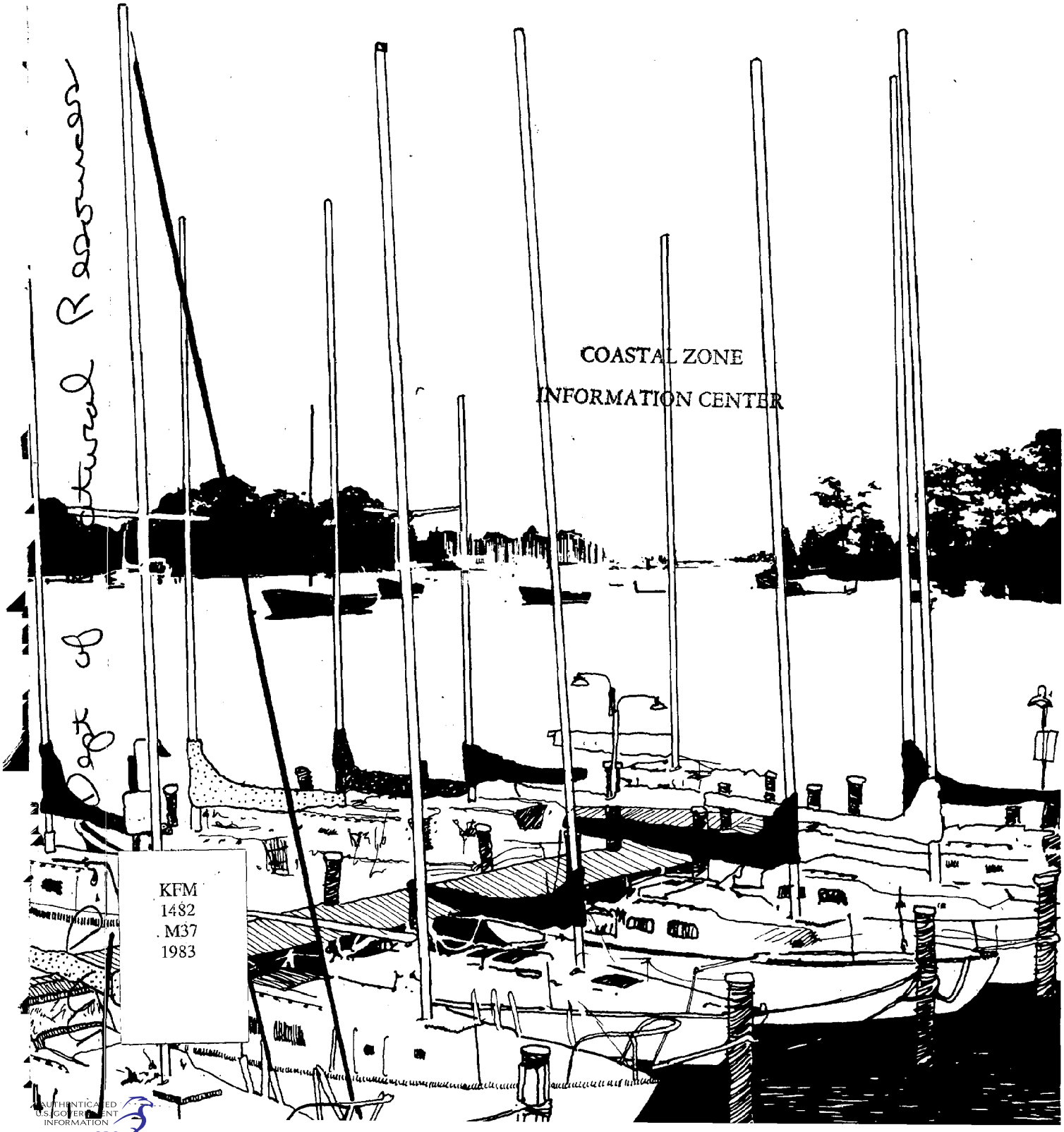
May 1983

MARINA SITING CONSIDERATIONS:

A Guide to the Permit Process in Maryland

Coastal Resources Division
Tidewater Administration
Maryland Department of Natural Resources



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MARINA SITING CONSIDERATIONS: A GUIDE TO THE PERMIT PROCESS IN MARYLAND

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Prepared for

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ACKNOWLEDGEMENTS

This report was compiled in response to a number of requests made by individuals and public and private groups relating to the Maryland permit process and its application to marina siting and construction. Through this handbook, the Maryland Coastal Resources Division is attempting to minimize uncertainties and decision-making delays that may accompany the regulatory permit process. Many Federal, State and local agencies are involved in the overall permit process and numerous representatives provided technical expertise and helpful suggestions in reviewing this report.

Special thanks are extended to Elder Ghigiarelli, Coastal Resources Division/Project Evaluation Section for his continuous support and thorough critique of this handbook. Thanks are also extended to: Harold Cassell, Water Resources Administration/Wetlands Division; Ed Acevedo, Department of Health and Mental Hygiene/Office of Environmental Programs; and Kathy Fitzpatrick, Coastal Resources Division/Special Investigations Section, Earl Bradley, Coastal Resources Division/Local Technical Assistance Program and Sarah J. Taylor, Director, Coastal Resources Division. Finally, special mention should be made of Dorothy M. Tongue, who expertly executed the typing of this document from start to finish.

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INTRODUCTION

The State of Maryland's coastal region consists of over 4,000 miles of estuarine and 31 miles of oceanic shoreline, respectively. Located along this extensive coastline are approximately 400 (not including community marinas)[1] marina facilities serving the recreational boating public of Maryland residents as well as out-of-State tourists. For the purposes of this report, a "marina" is defined as a shoreside facility, with a minimum of 10 slips/moorings, for servicing and housing recreational boats. The marinas located on Maryland's tidal waters are under either public or private ownership, with the private enterprises comprising the majority (approximately 95%) of the market.

In relation to the State-wide demand for recreational boating facilities and services, marina development is presently not keeping pace with the numbers of craft requiring shoreside storage and convenient access to the State's water resources. This imbalance has the potential to create a pressure on existing marina owners/operators to expand their facilities that in turn, lures new people into a market that does not always result in lucrative profits for the investor. All this is occurring at a time when waterfront property costs, construction costs and dredging and maintenance costs are rising. There is also the ever-present potential conflict between marina development and environmental protection considerations. Therefore, all aspects (economic, environmental, recreational, etc.) of a proposed marina development must be analyzed before any work begins.

Prior to construction of marina facilities in Maryland compliance must be met under several licensing and permit requirements at the Federal, State and local levels. These requirements generally fall into three categories:

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[1]This estimate was compiled through use of the 1982 Boating Almanac, Volume 4, Peter Geis, Publisher.

1) Federal permits relating to obstruction of navigation, dredging, filling and the disposal of dredged material;

2) State approvals including:

   a) Wetlands licenses/permits relating to the dredging or filling of wetlands,

   b) Water quality certification relating to water quality standards, and

   c) Consistency with State Coastal Zone Management Program; and

3) Local approval including: zoning ordinances, building permits, and sediment control regulations. Each reviewing agency has its own set of criteria which it uses for reviewing and evaluating each proposal. In the area of marina siting a number of activities (dredging, dredge material deposition, bulkheading, piers, etc.) and their potential impacts upon the area must be considered as part of a comprehensive review.

This report has been written in answer to a request for compilation of considerations, relating specifically to marina siting, that could be used in the permit preview process. Initially, these considerations were to be used solely by the Coastal Resources Division (CRD)/Project Evaluation staff of the Department of Natural Resources (DNR) but have since been requested by local planners, private consultants and potential applicants. A list of considerations has been developed based on an extensive literature search, a review of other coastal states' marina siting criteria, as well as a look at Maryland's

permitting process. These considerations are general rules of thumb to aid in the overall review process of marina proposals.

In addition to the compilation, a detailed description of the complete permitting process in Maryland is included in an attempt to minimize the confusion of applicants and planners. Also, an annotated bibliography, identifying a variety of useful references dealing with marina locational criteria was compiled (available separately). A listing of states which responded to the request for their regulations and standards is included as well.

The primary aim of this report is to compile all the existing information on Maryland's marina siting review process into one easily accessible handbook. Hopefully, this objective has been achieved and will assist in minimizing the uncertainties and delays that may accompany the regulatory process.

FEDERAL, STATE AND LOCAL GOVERNMENTAL ROLES

Prior to construction of marina facilities in Maryland, several licensing and permit requirements at the various governmental levels must be satisfied.

Local Level

The applicant's quest for project approval begins at the local level. The applicant's project must adhere to the jurisdiction's building permits, zoning ordinances, subdivision regulations, and local water and sewage standards.

Generally, local governments within Maryland have not imposed special restrictions on marina development within their jurisdictions. This could be due to the fact that they are satisfied with existing controls or that they do not currently feel pressured by marina development.

However, some Maryland counties have taken the initiative to establish more stringent regulations within the areas of recreational boating and marina development. Calvert County and Kent County have established pier and mooring buoy regulations, respectively. Information on these regulations can be obtained from the CRD Office. Talbot County's Planning and Zoning Office has recommended a series of guidelines regarding performance standards for future marina proposals or expansion plans in their 1980 study entitled Marinas and Recreational Boating. This report evaluates the County's current policies governing marina development and proposes strategies for strengthening those policies. The county has since adopted zoning changes as a result. Copies of these zoning amendments may be obtained from the CRD Office. The Towns of St. Michaels and Oxford (Talbot County) have also developed harbor plans to identify the actual harbor boundaries and permissible uses within these designated areas. In addition, Baltimore City's Office of Planning & Zoning is currently working on a set of guidelines for marinas and their accessory uses.

Probably the most comprehensive and successful effort in regulating marina development at the local level has been demonstrated by Anne Arundel County. Besides being the location of Annapolis, referred to by many as the boating capital of the East Coast, Anne Arundel County also has the largest number of recreational boats and marinas of any county within Maryland. During the spring of 1978, the County's Planning and Zoning Department initiated a study aimed at obtaining the following information:

a) boat user characteristics and attitudes,

b) boating activity patterns,

c) environmental impacts of boats and marinas, and

d) marina characteristics and locations.

This information was used to develop a composite picture of existing marina development and to establish management techniques for future marina proposal reviews. The results of the study, in terms of controls over the location and design of marinas, were integrated into the County Zoning Ordinance. The new ordinance subjects all development in given maritime districts to a strict site plan review based upon adopted standards. The Planning and Zoning personnel coordinate their review efforts with other county agencies including:

a) Department of Inspections and Permits -

building code requirements

b) local Soil Conservation District -

approval of grading and sediment control plans

c) Department of Public Works -

engineering reviews of infrastracture and shoreline protection design/construction standards

d) Health Department -

approval of water and sewage system development.

Table 1. Anne Arundel County Agencies: Piers, Pilings, Bulkheads, Dredging, Fill

Agency	Authority	Function
Department of Inspections and Permits	a. Building Code b. Grading and Sediment Control Ordinance, 1971	Review of project plans for structural soundness and adequacy of materials, decision as to need for grading and issuance of building permits and grading and sedimentation permits.
Office of Planning and Zoning	a. Zoning Ordinance, 1972 b. Anne Arundel County Charter, Sec. 531 c. Anne Arundel County Code, Sec. 13-322 - 13-324, 13-344	Enforcement of regulations included in the Zoning Ordinance concerning waterfront construction activities.
Soil Conservation District	Grading and Sediment Control Ordinance, 1971	Review and evaluation of grading and sediment control plans.

Source: Vaughan, W. S., Jr. et al. State - County Interagency Procedures Imposing Environmental Quality Controls on Water-oriented Development Activities. 1974. U.S. Department of the Interior, Washington, D.C.

Table 1 illustrates the function of each County agency with regards to marina development in Anne Arundel County.

Anne Arundel's Boating and Marina Study also established siting, design and construction standards to address such issues as capacity, safety and environmental concerns in the area of marina construction and expansion. These standards are listed in Appendix A.

It is still too soon to evaluate the success of Anne Arundel's efforts to regulate marina construction and expansion. However, this effort is already being used by many researchers as a case study to illustrate the regulatory powers that a county can assume when the initiative is taken. Stringent review of proposals at the local level can only facilitate the review roles of the State and Federal agencies at later stages in the overall process.

State Level

Two Maryland governmental agencies, the Department of Natural Resources (DNR) and the Department of Health and Mental Hygiene (DHMH), have responsibility for approvals that are necessary for marina development. Title 9 of the Natural Resources Article, Annotated Code of Maryland requires that a license be obtained from the State Board of Public Works for the dredging, filling or other alteration of State wetlands. State wetlands are defined as "all land under the navigable waters of the State below the mean high tide, which is affected by the regular rise and fall of the tide". The law also requires that a permit or letter of approval be obtained from the Department of Natural Resources for any work affecting Private wetlands. Private wetlands are defined as "all lands not considered State wetlands bordering on or lying beneath tidal waters, which are subject to regular or periodic tidal action and supportive of aquatic growth". Application for a license and/or permit is made

to the Water Resources Administration (WRA) of DNR. In the issuance of a wetlands license, the Board of Public Works bases its decision in part on a favorable recommendation from the Department of Natural Resources. In addition to the Water Resources Administration responsibilities, the Coastal Resources Division of the Tidewater Administration of DNR, has responsibility for determining consistency of a proposed project with the State's Coastal Zone Management Program. This consistency determination is necessary for the issuance of a Federal Corps of Engineers permit. A second approval which is necessary for a Corps permit is the issuance of Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act. This certification, issued by the Department of Health and Mental Hygiene, shows the project to be in compliance with applicable water quality standards. Table 2 illustrates the functions of the State agencies involved in marina expansion and construction permitting.

It should be noted that an applicant does not make separate application for a Water Quality Certificate or a Coastal Zone Management Consistency determination. Application for a Federal Corps of Engineers permit automatically triggers the review associated with these two State approvals.

The following sections discuss the State wetlands permit process as well as the Coastal Resources Division's role in the review of marina-related projects.

Wetlands Permit Process . All activities occurring on tidal wetlands (except trapping, hunting, fishing, shellfishing, mosquito control, the cultivating and harvesting of agricultural or horticultural products, and minor agricultural and drainage maintenance projects) are regulated by the wetlands permit and water quality certification programs. Each proposed activity is evaluated by the WRA with the assistance of relevant State and local agencies

Table 2. State Agencies Involved in Marina Development Review

Agency	Authority	Function
Department of Natural Resources, Water Resources Administration	a. Wetlands Law, 1970 b. Water Resources Law, 1972 c. Sediment Control Rules and Regulations, 1972	Review and evaluation of applications for wetlands licenses and permits, preparation of recommendations on wetlands licenses, issuance or denial of wetlands permits.
Board of Public Works	Wetlands Law, 1970	Review and issuance or denial of wetlands licenses for work in State wetlands. Advisory comments to State Wetland Permits Division.
Department of Natural Resources, Tidewater Administration	Federal Coastal Zone Management Act of 1972	Review and evaluation of, COE permit applications, issuance of Federal consistency determination (with State Coastal Zone Management Program).
Department of Health and Mental Hygiene, Office of Environmental Programs	Federal Water Pollution Control Act, Section 401	Review and evaluation of COE permit application for compliance with water quality standards, issuance or denial of Water Quality Certificates.

Source: Vaughan, W. S., Jr. et al. State - County Interagency Procedures for Imposing Environmental Quality Controls on Water-oriented Development Activities. 1974. U.S. Department of the Interior, Washington, D.C.

for its impacts on the wetlands, water quality, wildlife habitat, fisheries and shellfisheries.

The final State authority on making decisions dealing with proposed wetland projects depends upon whether State wetlands or Private wetlands are involved. In the case of projects affecting State wetlands, the final decision is made by the Board of Public Works. In the case of Private wetlands, DNR makes the final decision. In both cases, the decision is based upon the recommendations of the Wetland Permits Division of the WRA/DNR.

Upon receiving the necessary application form and plans, WRA determines whether State and/or Private wetlands are involved. WRA either 1) accepts the application as notification of customary works authorized under the rules and regulations for Private wetlands and issues an approval for the proposed work, or 2) accepts the application as a request for a State wetlands license and/or Private wetlands permit. If a license and/or permit is required, WRA does the following:

1) reviews the application for completeness, informs the applicant of the time and place of the hearing (if required), and assigns the project to a Division biologist;
2) consults with interested federal, state and local agencies as appropriate;
3) conducts a site visit and collects environmental data (as a rule all sites are visited at least once);
4) represents DNR at a public hearing where information is gathered for development of a DNR position;
5) prepares a written report and recommendation (State wetlands projects) or determination (Private wetlands projects) which: a) describes the proposal and its purpose, b) lists environmental and other findings

and comments from DNR and other interested parties or agencies, and

c) gives DNR recommendations on the proposed project with necessary conditions where applicable; and

6) represents DNR in appeal procedures when necessary.

The Wetland Permits Division has developed administrative practices to insure the management of tidal wetlands in Maryland, and specifically in relation to marina construction and/or expansion. These include the following:

*The location of the boating facility should be such that it or the boating activity it engenders does not create or aggravate:

a) adverse impacts on wetlands, aquatic resources, and navigation,

b) congestion and safety problems,

c) turbidity or other adverse water quality impacts,

d) shore erosion problems, and/or

e) other adverse environmental impacts.

*The encouragement of centralized, common boating facilities for subdivision developments or communities;

*Limitations on artificial channeling and avoidance of dead end or deep canals;

*Encourage dockage to deep water as an alternative to dredging, when feasible;

*Ecologically sound design of bulkheads and shore erosion protection measures (e.g., placement behind, rather than in front of, a marsh fringe, use of vegetative measures/rip rap whenever possible), and normally not permitting such work where it would adversely affect navigation, surface drainage, significant flora or fauna, and the like;

*Only use such filling as is necessary for the shore protection work and not to create fast land;

*Limitations are normally required on dredging in general and/or dredging for fill (e.g., stay 15 feet from identified marsh and 200 feet from oyster beds, stay out of spawning and nursery areas between April 15 and July 15);

*Preferring water-dependent shoreline uses and resisting non-appropriate uses of wetlands (i.e., uses not necessarily water-dependent, such as restaurants or factories);

*Prohibitions against navigational or water exchange obstruction;

*Guidance on road construction in wetlands;

*Locational guidance for boat facilities include siting where maximum physical advantage exists (e.g., location in lower tributary preferred over headwater areas to encourage flushing and proximity to deep water, location so as not to interfere with existing fishing, water recreation, bridges, and the like, location to avoid necessity of crossing vegetated wetland, limitation of structural encroachment into channels).

Coastal Resources Division's Role. Through its Project Evaluation Section, the Coastal Resources Division of the Department of Natural Resources becomes involved in the permit process concerning marina applications by: 1) providing additional technical assistance to the WRA for its evaluation of a particular project; and 2) making Federal Consistency determinations on Corps of Engineers permits. CRD is notified of all State wetlands permit applications through the Wetlands Pre-hearing List distributed by WRA. The Division is notified of Corps permits through receipt of Public Notices distributed by the Corps.

The Division screens the project notices and determines whether its involvement is necessary. This decision is based on: 1) any apparent conflicts with the goals, objectives and policies of the Coastal Zone Management Program (CZMP); and/or, 2) the presence of unresolved issues due to insufficient data or information to determine potential impacts. As a general "rule of thumb", CRD will be involved in projects requiring the dredging or filling of one-quarter acre or more of wetlands, new marina proposals involving 50 or more slips, and marina expansions of 25 or more slips.

CRD involvement in a marina project falls into one of two categories:

1) Review and comment based on existing information. This category refers to a situation in which existing data and information is sufficient to address the major issues; and

2) Review, comment, and provision of additional technical assistance. This refers to a situation in which existing data and information are insufficient to address all the issues. CRD has the capabilities, i.e., the funds and manpower through its consultants, to collect the necessary data to fill information gaps.

The review factors associated with a marina project include existing and potential boating congestion; water quality impacts; flushing characteristics of the site; dredging impacts on fisheries and flushing; locational characteristics (headwater areas vs. mouth of river); and the demand for boat slips. Based on its review, CRD then submits its comments to WRA for incorporation into the permit decision.

All Corps of Engineers permits require a determination of the project's consistency with the Maryland Coastal Zone Management Program (CZMP). CRD

notifies the Corps directly of any inconsistencies with the CZMP. The basic consistency requirement is that federally conducted or supported activities which affect the State's coastal zone be consistent, to the maximum extent practicable, with an approved state management Program. The purpose of the consistency review is to: 1) plan for and manage impacts resulting from federal programs; 2) develop a factual analysis of the effects of a proposed federal action; 3) determine consistency by examining the results of that analysis in the context of the goals, objectives and policies of the Program, and; 4) screen all federal actions for those with significant potential impact, individually or cumulatively, on coastal resources or activities. In general, a consistent action is generally defined as one which supports or furthers the goals, objectives and policies of the Program. If the Corps does not receive comments, either verbal or written, within 30 days of the date of the Public Notice, the project is assumed to be consistent with the CZMP.

A flow chart depicting the overall State permit review process is provided in Figure 1. Also, a copy of (1) the text of the Maryland Wetlands Act, (2) the Order establishing wetland boundaries and rules and regulations, (3) guidelines/criteria used by the Wetlands Permit Division in reviewing applications, and (4) the Maryland CZMP policies affecting marina development are included as appendices B, C, D, and E, respectively.

Federal Level

Under the Rivers and Harbors Act of 1899 (Section 10), it is the U.S. Army Corps of Engineers (COE) direct responsibility to permit any construction, excavation or deposition of materials in or over the navigable waters of the United States. Navigable waters have been defined as "all waters subject to the ebb and flow of the tide that are currently being used, were used in the

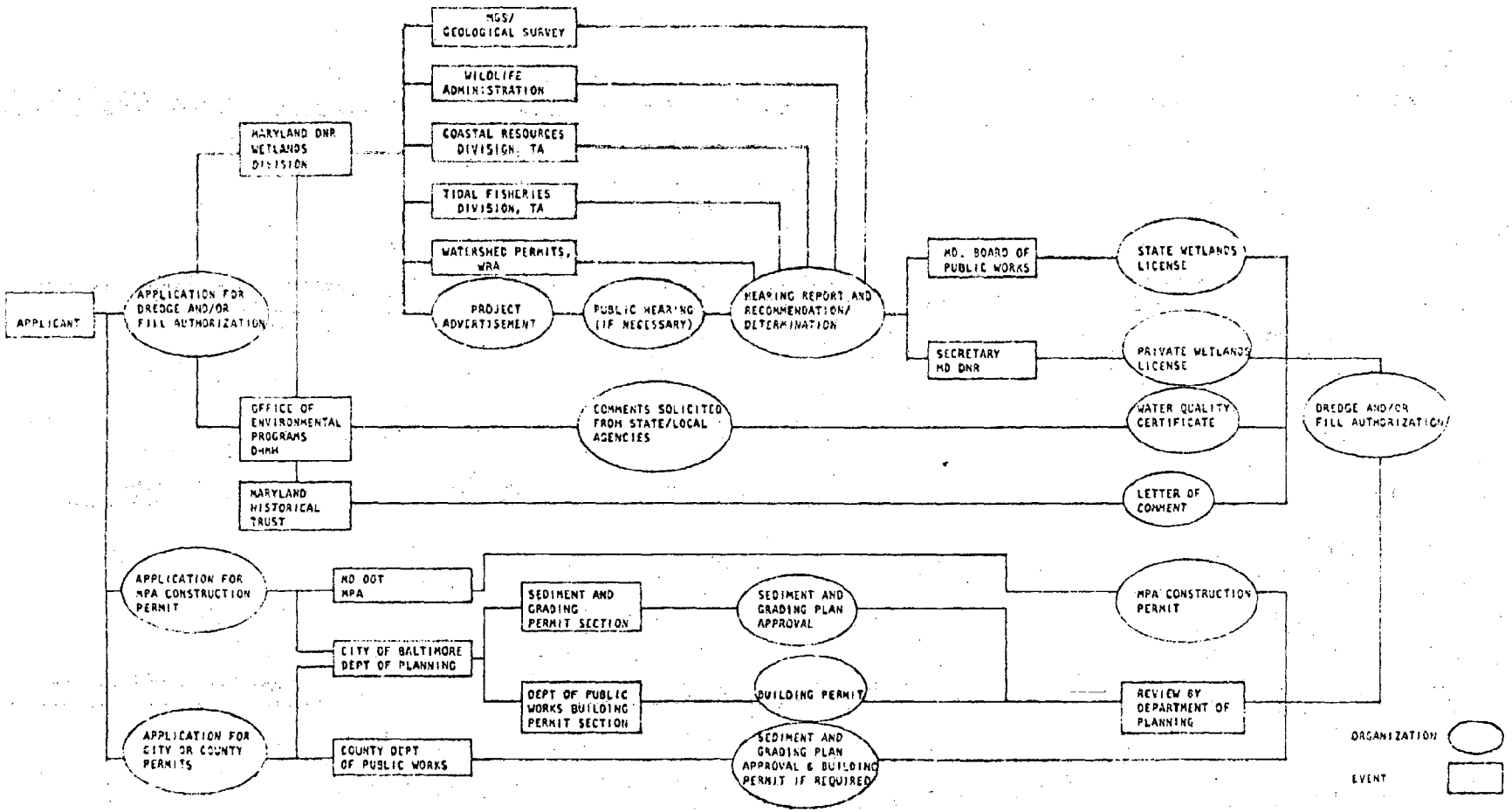


Figure 1. Flow Chart of the Maryland Dredge and Fill Permit Process - State Process

Source: Hittman and Associates, Inc. Maryland Dredge and Fill Permit Process Handbook. 1982. Columbia, Maryland.

past, or are reasonably susceptible of use for vessel navigation purposes, as well as non-navigable tributaries of navigable streams". The Rivers and Harbors Act specifically forbids the construction of any wharf, pier, bulkhead, harbor or any other structure in or over the navigable waters of the U.S. except as authorized by the Chief of Engineers. It also requires that a Corps permit be obtained for any other work affecting the course, location, condition, or capacity of U.S. waters. In addition, under Section 404 of the Federal Water Pollution Control Act Amendments (Clean Water Act of 1977), the Corps is also required to issue permits for the discharge of dredged or fill material in all waters of the United States including adjacent wetlands.

With regards to marina development, the two most important activities requiring Corps authorization are construction, and dredging and filling. While the Corps is the primary Federal regulator for both activities, it works in conjunction with the U.S. Fish and Wildlife Service (FWS), the Environmental Protection Agency (EPA), and the National Marine Fisheries Service (NMFS) during the permit review process. Table 3 illustrates the role of each of these Federal agencies in marina development. Additional Federal agencies may become involved in a marina project should their geographical or functional jurisdictions be affected by the proposed activity (e.g., enforcement of certain water pollution and boating safety regulations would involve the U.S. Coast Guard).

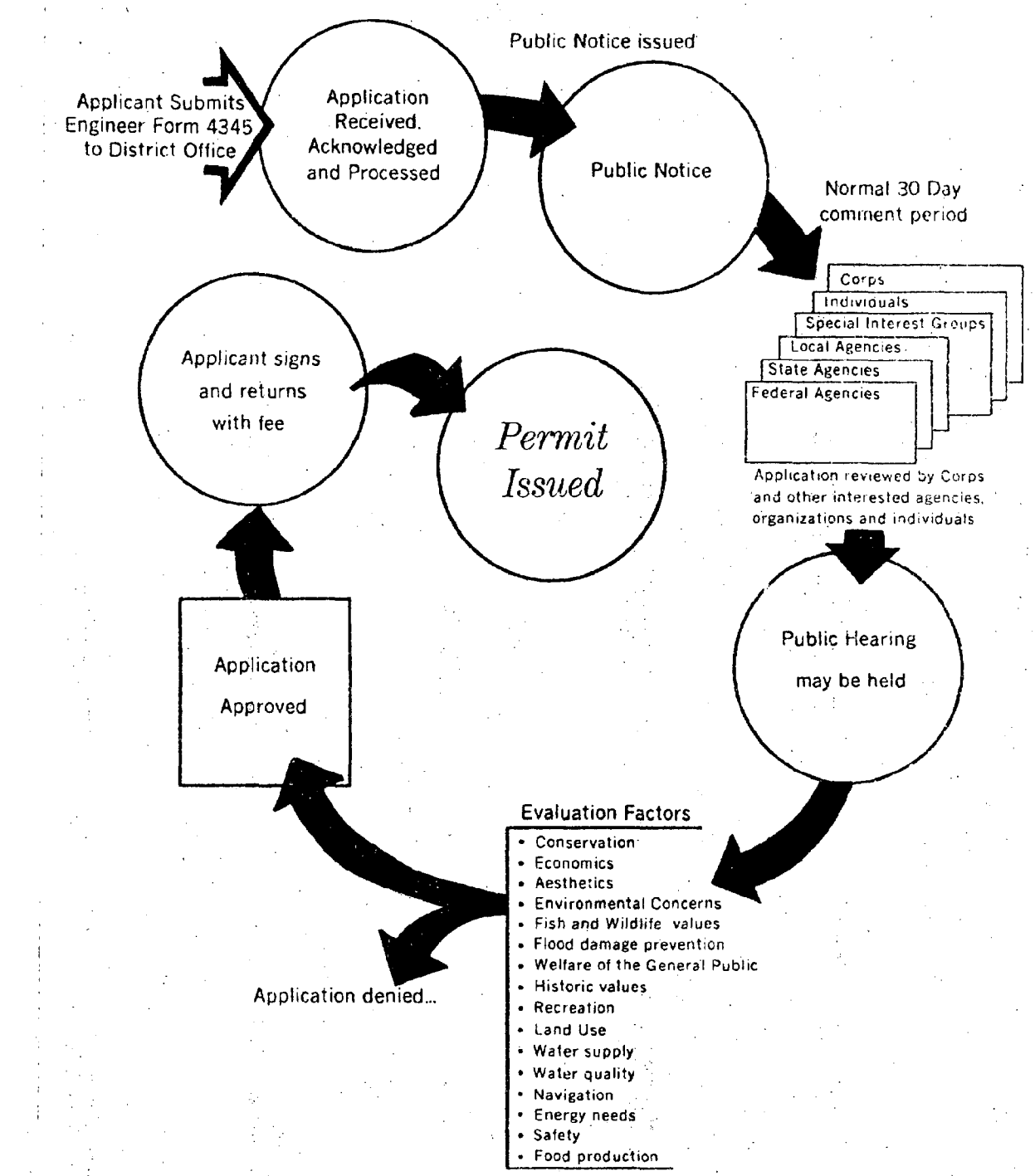
At the Federal level, the COE acts as the central processor or clearinghouse for all recommendations and approvals on permit applications. Following receipt of a permit application, the COE sends out a public notice describing the project to Federal, State and local agencies, as well as to interested

Table 3. Federal Agencies Involved in Marina Development Review

Agency	Authority	Function
U.S. Army Corps of Engineers	a. Federal Water Pollution Control Act, 1972 b. Permit Regulations for Activities in Navigable Waters or Ocean Waters, 1973 c. Rivers and Harbors Act, 1899 d. National Environmental Policy Act, 1969 e. Fish and Wildlife Act, 1956	Review and evaluation of applications, issuance of public notices, general coordination with other agencies at all levels, issuance or denial of permit.
U.S. Department of Interior; Fish and Wildlife Service	a. Coastal Zone Management Act, 1972 b. National Environmental Policy Act, 1969 c. Fish and Wildlife Act, 1956 d. Fish and Wildlife Coordination Act, 1934	Review and evaluation of projects from standpoint of impact on fish and wildlife.
Environmental Protection Agency	a. Federal Water Pollution Control Act, 1972 b. Coastal Zone Management Act, 1972	Review and evaluation of water quality and aquatic resource impacts.
National Marine Fisheries Service		Review and evaluation of projects from the standpoint of impact on marine fisheries and shell fisheries.

Source: Vaughan, W. S., Jr. et al. State - County Interagency Procedures for Imposing Environmental Quality Controls on Water-oriented Development Activities. 1974. U.S. Department of the Interior, Washington, D.C.

Figure 2. Flow Chart of Corps of Engineers Permit Review Process



Source: U.S. Army Corps of Engineers. Permit Program: A Guide for Applicants. 1977. Department of the Army, Washington, D. C.

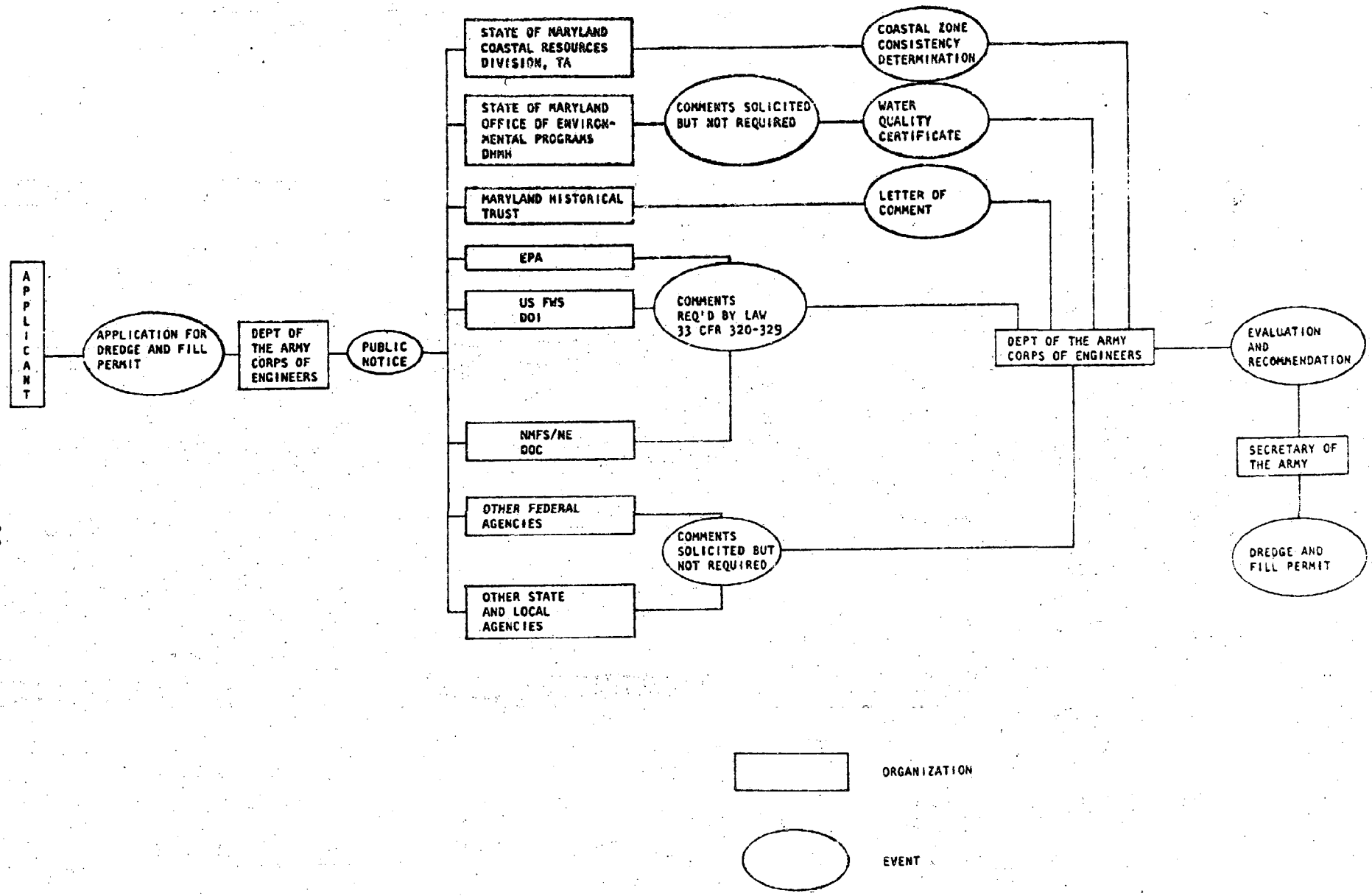


Figure 3. Flow Chart of the Maryland Dredge and Fill Permit Process - Federal Process

Source: Hittman Associates, Inc. Maryland Dredge and Fill Permit Process Handbook. 1982. Columbia, Maryland.

groups and individuals. The information received by the COE from these agencies and groups following their respective reviews of the project includes written recommendations and appropriate certifications.

The criteria utilized by the Corps (and other Federal agencies) during the permit review process focus on the following areas:

a. keeping waterways open to navigation,

b. prohibiting obstruction of channels or access to navigable waters,

c. potential impact of project on fish and wildlife resources,

d. potential impact of project on water quality,

e. protection of historical, scenic and recreational areas, and

f. impacts of dredging activities.

A flow chart depicting the COE permit review process is provided in Figure 2. A flow chart illustrating the overall Federal permit review process is provided in Figure 3.

VARIOUS COASTAL STATE REGULATIONS GOVERNING MARINA SITING/DEVELOPMENT

Of those states which responded to the request for information on marina development permitting practices, none had specific or extensive guidelines for marina siting. All states treated marina development as a water-dependent activity which should be allowed because of an identified public need. Primarily, any guidelines for marina siting were combined with other marina construction related activities such as dredging, bulkheading, piers, docks, etc. In this manner one set of guidelines was established for the range of activities. The following is a list of those sites which responded and identified their respective processes and authorities.

STATE	LEAD AGENCY	EXISTING AUTHORITY
Texas	General Land Office	Texas Civil Statutes (School Land Board). Has adopted set of specific regulations for one waterbody.
Oregon	Department of Land Conservation and Development	Statewide Planning Goals - minimum standards.
Wisconsin	Department of Natural Resources	"Chapter 30" performance stds.; local shoreland/floodplain zoning ordinances.
Georgia	Department of Natural Resources/Coastal Marshlands Protection Committee	Specific guidelines for alteration to marshlands.
Massachusetts	Executive Office of Environmental Affairs/Department of Environmental Quality Engineering	Massachusetts Environmental Policy Act/Massachusetts General Laws
Mississippi	Department of Wildlife Conservation/Bureau of Marine Resources	Coastal Wetland Use Plan (prescriptive regulation) and CZMP guidelines (less restrictive).
Connecticut	Department of Environmental Protection	General Statutes; Coastal Policies and Use Guidelines (CZMP).
Florida	Department of Environmental Regulation	Florida Statutes (rules for permit review).
New Jersey	Department of Environmental Protection/Division of Coastal Resources	Consultants just completed a handbook on marina development.
Pennsylvania	Department of Environmental Resources	Dam Safety and Waterway Management and Waterway Obstruction and Encroachment Regulations.
Virginia	Marine Resources	Guidelines for the Permitting of Activities which Encroach in, on or over the Submerged Lands of the Commonwealth of Virginia.

For more information on these regulations, copies of the respective guidelines and information contacts in these states, please contact the Maryland CRD office at (301) 269-2784.

MARINA SITING CONSIDERATIONS

The siting of a marina facility involves more than consideration of proposed location and size of the project. Questions concerning effects on water quality, circulation patterns, existing sewage systems, amount of dredging needed, proximity to access channels, etc., must all be addressed in order to make the review as comprehensive as possible. In this light, the resulting considerations have been grouped into specific activity categories to assist in identifying areas which should be addressed. It should be remembered that each project is reviewed on a case-by-case basis.

These general considerations may provide a checkoff list that can be applied to the majority of projects to help assure their regulatory compliance early in the process. It should be stressed that these considerations are not necessarily binding in all cases, but are to be used as "rules of thumb" at the outset of a project review.

General Considerations

1. Plans for marina development should be submitted for concurrent review by appropriate federal, state and local regulatory agencies at the earliest possible time to prevent unnecessary delays in the permitting process.
2. The proposed project should meet an identified and specific public need.
3. Marinas should not be sited in areas where it is necessary to disturb shellfish beds or large areas of marsh, swamp, or aquatic vegetation.
4. It is important, in order to adequately evaluate the water basin's suitability for a marina facility, not only to develop a physical and chronological description of the basin itself, but of the proposed activities within the basin as well.

5. Convex shorelines areas are generally better suited to marina activity, therefore these areas should be considered first as site locations.
6. Regional as well as local need should be considered in marina location.
7. The presence of any rare/endangered species should be investigated during the selection process. Sites providing habitat for such species should be avoided.

Locational Considerations

1. Location of a boating facility in the lower portions of a tidal tributary where there is better flushing and access to open water and less need for dredging is preferable and encouraged over a location in the headwater areas.
2. When building a new marina or expanding an existing one, the optimal choice would be a protected area of shoreline that is devoid of marsh or other significant aquatic resources.
3. Marina design should not create or aggravate shoreline erosion problems or interfere with natural processes or littoral transport.
4. The facility should be located so as to minimize adverse impacts on fisheries and shellfisheries.
5. Easy access to the marina site by major highways or connectors should be provided as well as safe and convenient access from the principal residential areas served by or in proximity to the marina.
6. In locating proposed marinas, sites that are near high boating use of potential high boating use areas should be considered. Boating activity should be centralized to minimize adverse impacts of the facility.

Dredging Considerations

1. New marinas should be located on existing channels when possible rather than on sites where new channels would have to be dredged.

2. The depth of dredging should be limited to the zone of light penetration unless the existing bottoms already exceed that depth.
3. Marina basins should not be deeper than the open water or channels to which they are connected.
4. Marinas designed with zoned depths increasing toward open water will facilitate flushing rates and reduce the amount of dredging required.
5. Piers are preferred to dredging as a means of reaching deep water. Restrict length to approximately 500 feet.
6. Dredging of bottom materials for the sole purpose of obtaining fill material is discouraged.
7. Spoil deposition areas should be identified and obtained prior to initial development of marina facilities.
8. Spoil resulting from dredging activity should be adequately contained above the mean high water line. This material should not be permitted to re-enter the water.

Environmental Considerations

1. Marinas should be designed with as much porous land surface and vegetative cover as possible to reduce stormwater runoff.
2. Buffer zones of natural vegetation should be established between the proposed development and any waterways.
3. Where possible, existing shoreline vegetation should remain undisturbed and thus be available for shoreline stabilization.
4. Generally, marinas should be located in areas that are well flushed so that pollutants will be carried out and dispersed in more open waters rather than accumulated in the marina basin.

Construction Considerations

1. The size and extension of a dock or pier should be limited to that required for the intended use and should meet any applicable local zoning requirements.
2. Docks and piers should be constructed and maintained in a manner that does not degrade the surrounding developed area or conflict with adjacent property interests and shoreline uses.
3. Docks and piers should be constructed in a manner that does not restrict water flow and circulation.
4. Use of floating docks and open pile piers will have less effect on water circulation and littoral transport than finger piers.
5. Docks and piers should be designed and constructed such that alterations of the natural productive potential of the shoreline and littoral habitat is minimized.
6. Docks and piers should not hinder navigation or public use of the waters.
7. Floating piers should be encouraged in those areas where scenic values are high and where activity conflicts between fishermen and recreational boaters will not be created.
8. Bulkheading should be kept to a minimum. It should be located behind marshland and as far landward as possible with access over marsh gained by piering.
9. Bulkheads should be constructed at the mean high water line and should tie in with adjacent shoreline protection structures. Sloping and vegetative stabilization of eroding shorelines should be pursued, where practical.

10. The use of sloping shoreline protection structures; e.g. revetments and marsh establishment, are environmentally preferable to vertical structures and should be considered first.
11. Slips for boats of deep draft should be build in the naturally deeper water of the marina basin.
12. The use of floating or partial sheeting breakwaters vs. solid breakwaters should be evaluated.
13. Piers and docks should be extended as far as possible into deep water to minimize the need for dredging, but not interfere with navigation.

Boating Considerations

1. Ambient currents greater than one knot and waves higher than one foot are undesirable in boat mooring or docking areas.
2. Turning basins and navigation channels should be designed to prevent long-term degradation of water quality. Dead end or deep canals without adequate flushing should be avoided. Turning basins and new channels should be large enough to accommodate the largest vessel served.

Land Use Considerations

1. Septic sytems should be designed with adequate capacity and located in proper soils sufficiently far away from waterbodies to prevent leaking of contaminants into local waters.
2. All marinas should include facilities for adequate handling of litter, sanitary wastes, refuse, petroleum products and for efficient treatment of stormwater runoff.

FURTHER READINGS ON MARINAS

Adie, Donald W. 1975. Marinas: A Working Guide to Their Development and Design. The Architectural Press Ltd., London. 336 p.

Presents comprehensive overview of marina development from a brief history of demand to marina management. Chapters analyze essential planning considerations which include: site selection factors, types of development, problems specific to inland situations, general design principles for onshore and offshore facilities, engineering concerns, landscape planning, necessary public utility services, boat-handling and storage considerations, bunkering facilities, pollution control concerns, economic and legal considerations. Each chapter concludes with subject bibliographies.

Chaney, Charles A. 1961. Marinas: Recommendations for Design, Construction and Maintenance. National Association of Engine and Boat Manufacturers, Inc., New York, N.Y. 247 p

Manual of construction methods and materials for marina development. Discusses site investigation and master planning for the marina. Detailed information presented on construction materials. Also discusses design of bulkhead walls, dredging considerations, pier and walk structures, and design of floating equipment. Presents detailed analysis of water supply systems, sewage, stormwater and waste disposal systems, fuel supply systems, and electrical systems. Concludes with suggestions for ground development, building design and construction, financing and financial feasibility, maintenance and operation concerns.

Chmura, Gail L. and Neil W. Ross. 1978. The Environmental Impacts of Marinas and Their Boats: A Literature Review with Management Considerations. Marine Advisory Service, University of Rhode Island, Narragansett, R.I. 32 p.

A review of literature focusing on saltwater environments, with some management recommendations specific to Northeastern boating states. The purpose of this review is to summarize all aspects of marina and boat-related environmental effects. Discussion focuses on studies of each component's effects, the management options needed to minimize negative effects and expand positive ones, and future needs.

Epstein, Lee R. 1980. The Development of Recreational Boat Marinas in Estuarine Settings: Measurement and Management of Development Impacts in Tidal Ecosystems. Master's Thesis, The George Washington University, Washington, D.C. 249 p.

The basic intent of this thesis was to produce a readable, usable study that may be referenced by local government officials to assist them in both evaluating local marina development proposals, and judiciously managing the delicate estuarine resources. A thorough examination and analysis of the numerous regulatory approaches, development guidelines, and evaluative criteria was made.

Mahoney, Frank E., Bram D. E. Canter and Richard G. Hamann. 1980. Legal Aspects of Recreational Marina Siting in Florida. Report No. 36. Florida Sea Grant College, Gainesville, Florida. 83 p. + Appendices.

This report has a two-fold purpose. First, it is designed to inform public and private planners and decision-makers of the major environmental regulatory controls to which a marina construction project in Florida is subject. The second purpose of the report is to make available a compilation of criteria that can be used to assess the merits of recreational marina proposals and to facilitate planning for meeting marina facility demands in a municipality, a country, a region or the entire state.

Office of Planning and Zoning. 1980. Anne Arundel County Boating and Marina Study. Anne Arundel County, Annapolis, Maryland. 165 p.

The study include the following elements: Boater characteristics and attitudes sampled through a telephone survey of a random sample of registered boats kept in the County. Marina characteristics and locations were determined through a comprehensive survey. Aerial photography and information from experienced boaters were used to document boating activity patterns, activity areas, and the intensity of activity for each river in the County. Measures to mitigate environmental impacts were obtained from published reports and the experience of marina operators and boaters. All of these elements resulted in the drafting of maritime zoning regulations for the County.

Office of Planning and Zoning. 1981. Marinas and Recreational Boating-Talbot County, Maryland. Talbot County, Easton, Maryland. 83 p.

This report attempts to provide more adequate and specific information about boating, marinas, and marina related facilities in Talbot County. It then discusses the present and potential future impacts of these facilities on the lands and waters of the County. Finally, strategies are proposed that are intended to provide appropriate guidance regarding the future location, design, construction, and expansion of marina facilities in Talbot County.

U.S. Army Corps of Engineers. 1977. Permit Program: A Guide for Applicants. Publication No. EP 1145-2-1. Department of the Army, Washington, D.C. 20 p.

This informational pamphlet is designed to assist the public in applying for Corps of Engineers permit.

U.S. Dept. of Commerce. 1976. Coastal Facility Guidelines: A Methodology for Development with Environmental Case Studies on Marinas and Power Plants. National Oceanic and Atmospheric Administration, Office of Coastal Zone Management, Washington, D.C. 96 p. + Appendices.

This report provides state coastal zone management agencies with information and recommendations for developing guidelines for facility development in the coastal zone. One section of the report presents a methodology for identifying and initiating implementation procedures for management recommendations on specific facility types. Other sections apply the methodology to marinas and power plants in the states of Florida and Maryland, respectively.

Vaughan, W.S., Jr., H.A. Blanchard and Anne S. Mavor. 1974. State-County Interagency Procedures for Imposing Environmental Quality Controls on Water-Oriented Development Activities. Contract No. 14-31-0001-9041, Project #C-4262. Whittenburg, Vaughan Associates, Inc., Landover, Maryland. 94 p.

The principal purpose of this report was to describe the procedures used by agencies of local and State governments to impose environmental quality controls on water-oriented development. The organizational context for the description was the State of Maryland and one of the State's 24 political subdivisions, Anne Arundel County. The scope of the project included a description of current, in-practice procedures, the criteria imposed and the agencies involved in the process, an analysis of the present status of this control system and recommendations for improvements to current procedures.

MA—Maritime Group A Districts.[5b]

Sec. 13-322. In general.

(a) Maritime Group A Districts shall consist of the following:

[5b]*Note.*—See editor's footnote [5a] on page 312.280.1.

(1) MA1 Community Marina Districts;

(2) MA2 Commercial Marina Districts;

(3) MA3 Yacht Club Districts. (Bill No. 129-79, § 6.)

Sec. 13-322.1. Uses permitted in MA1 Community Marina Districts.

(a) All uses permitted in a MA1 District (unless otherwise permitted by this subtitle) shall be for the sole use and enjoyment of residents and their guests (for the duration of their visit) of the subdivision within which the MA1 District is located.

(b) All lands or improvements within the community marina shall be community-owned. A builder or developer may participate in the development of community facilities with the approval of the community organization which represents the residents of the subdivision. Community slips may not exceed a slip-to-lot ratio in accordance with the following scale; provided however, that no pier, slips or moorings shall be permitted until at least twenty percent (20%) of the platted lots within the subdivision are owner-occupied.

Lots	*Slips*
Up to 15	One slip for each lot
16— 40	15 slips or 75%, whichever is greater
41—100	30 slips or 50%, whichever is greater
101—300	50 slips or 25%, whichever is greater
Over 300	75 slips or 15%, whichever is greater

(c) The following uses shall be permitted in MA1 Community Marina Districts:

(1) Launching ramps and small hoists with a maximum rated lift capacity of four thousand (4,000) pounds for the launching and removal of watercraft.

(2) Maintenance and simple repairs on watercraft of a type that can normally be done while the vessel is in the water,

although such maintenance and simple repairs may be done on the land, including scraping, sanding, painting and emergency repairs of watercraft.

(3) Wet storage and temporary docking of seaworthy watercraft at community piers, pilings, buoys, and other such facilities, excluding covered facilities. Temporary docking of seaworthy watercraft is permitted if the watercraft is owned by and registered to guests of residents of the subdivision during the duration of their visit to the community within which the MA1 district is located.

(4) Community buildings and offices, and/or administration facilities necessary for operating the uses permitted in this section, including one residential dwelling unit for the sole purpose of custodial, managerial, or operational aspects of the uses permitted within this zone. The residential facility shall be limited to one family.

(5) Swimming pools, tennis courts and other such recreational facilities.

(6) Snack bar facilities and vending machines.

(7) Dry storage of seaworthy watercraft and outside storage of licensed watercraft trailers, not to exceed ten percent (10%) of the total lot area.

(8) Signs, in accordance with the provisions of section 13-336 of this subtitle.

(9) Permanent parking facilities provided at a rate equal to one space for each five (5) slips; however, adequate usable land shall be available to accommodate parking at a rate of one space for each two (2) slips. (Bill No. 129-79, § 6; Bill No. 133-79, § 1.)

Sec. 13-322.2. Uses permitted in MA2 Commercial Marina Districts.

The following uses shall be permitted in MA2 Commercial Marina Districts:

(1) Wet storage and temporary docking of seaworthy watercraft or watercraft awaiting repairs at commercial piers, pilings, buoys, and other such facilities, excluding covered facilities.

(2) Rental of watercraft, including watercraft charter operations.

(3) Launching ramps and hoists with a maximum rated lift capacity of four thousand (4,000) pounds for the launching and removal of watercraft.

(4) Dry storage of seaworthy watercraft and outside storage of licensed watercraft trailers, not to exceed ten percent (10%) of the total lot area between May 1 and October 31, inclusive, and fifty percent (50%) of the total lot area between November 1 and April 30, inclusive.

(5) Maintenance and simple repairs of watercraft of a type that can normally be done while the vessel is in the water, although such maintenance and simple repairs may be done on the land, and may include scraping, sanding, painting and emergency repairs of watercraft.

(6) Restaurants, restaurants with bar facilities, snack and vending machines.

(7) Sale of groceries, packaged alcoholic beverages, fishing supplies, watercraft accessories, and marine engines up to thirty (30) horsepower, excluding watercraft trailers.

(8) Swimming pools, tennis courts, and other such recreational facilities.

(9) Office and/or administration facilities necessary for operating the permitted and special exception uses in a MA2 Commercial Marina District.

(10) Two (2) dwelling units per marina.

(11) Commercial waterman uses including and limited to:

(a) Loading and unloading of work boats that are in wet storage at the site.

(b) Storage of seafood in live boxes floating in the water, but not seafood processing or other industrial, manufacturing, or other processing uses.

(c) Small elevators, lifts, conveyors, and other such devices to assist in the unloading of seafood from workboats that are in wet storage at the site, and the loading of trucks to carry the seafood from the site. All loading of trucks shall take place between sunrise and sunset.

(d) Buildings for the storage of crab pots, nets, traps, and other such devices, and/or outside storage of such devices; provided, that such outside storage shall not exceed five percent (5%) of the lot area.

(12) Signs, in accordance with the provisions of section 13-336 of this subtitle.

(13) Off-street customer parking, in accordance with the provisions of article VIII of this subtitle. (Bill No. 129-79, § 6; Bill No. 133-79, § 1; Bill No. 124-81, § 5.)

Sec. 13-322.3. Special exceptions in MA2 Commercial Marina Districts.

The following special exceptions shall be permitted in MA2 Commercial Marina Districts:

(1) Marine service facility.

(2) Helipads. (Bill No. 129-79, § 6; Bill No. 124-81, § 5.)

Sec. 13-322.4. MA3 Yacht Club Districts.

(a) All uses permitted in a MA3 district shall be for the sole use and enjoyment of members of the yacht club and their guests unless otherwise authorized by this subtitle.

(b) The following uses shall be permitted in MA3 Yacht Club Districts:

(1) Wet storage and temporary docking of seaworthy watercraft at piers, pilings, buoys, and other such facilities, excluding covered facilities; however, wet storage of water-

craft owned by and registered to guests of members shall be permitted only on a transient and noncommercial basis.

(2) Launching ramps and hoists with a maximum rate lift capacity of four thousand (4,000) pounds for the launching and removal of watercraft.

(3) Dry storage of seaworthy watercraft and outside storage of licensed watercraft trailers not to exceed ten percent (10%) of the total lot area.

(4) Maintenance and simple repairs of watercraft, of a type that normally can be done while the vessel is in the water, although such maintenance and simple repairs may be done on the land, and may include scraping, sanding, painting and emergency repairs to watercraft.

(5) Restaurants, restaurants with bar facilities, snack and vending machines.

(6) Swimming pools, tennis courts, and other recreational facilities.

(7) Clubhouse facilities, including office and administration facilities necessary for operating the yacht club, and/or a residential dwelling, limited to ocupancy by one family, for the sole purpose of custodial, managerial, or operational aspects of the uses permitted by this section.

(8) Signs, in accordance with the provisions of section 13-336 of this subtitle.

(9) Off-street parking, in accordance with the provisions of article VIII of this subtitle. (Bill No. 129-79, § 6; Bill No. 124-81, § 5.)

Sec. 13-322.5. Special exceptions in MA3 Yacht Club Districts.

The following special exceptions shall be permitted in MA3 Yacht Club Districts:

(1) Helipads.

(2) Covered facilities for the wet storage of seaworthy watercraft, subject to the provisions of section 13-343.12(1)(f), (4) and (5) of this subtitle.

(3) Dry storage in excess of ten (10) percent of the lot area and covered dry storage of seaworthy watercraft, all subject to the provisions of section 13-343.12(1)(a) and (b), (3), (4), (5) and (6) of this subtitle. (Bill No. 129-79, § 6; Bill No. 124-81, § 5.)

MB—Maritime Group B Districts.[5c]

Sec. 13-323. Uses permitted.

The following uses shall be permitted in Maritime Group B Districts:

(1) All uses set forth in section 13-322.2 of this subtitle, including any conditions attached thereto.

(2) Travel lifts, hoists, and other such facilities for the launching and removal of watercraft, excluding marine railways, drydocks, and water lifts.

(3) Repairs of watercraft. An enclosed repair facility shall be designed to collect all scrapings, paint, oil, gasoline, fiberglass residue, or other wastes for removal to an appropriate disposal facility.

(4) Outside dry storage of seaworthy watercraft and watercraft awaiting repair, provided that:

(a) Lanes of sufficient width are maintained between watercraft to accommodate fire and emergency equipment, as required by the Anne Arundel County Fire Prevention Bureau.

(b) The total lot area used:

(i) Between May 1 and October 31, inclusive, does not exceed thirty-five percent (35%); and

(ii) Between November 1 and April 30, inclusive, does not exceed fifty percent (50%).

(5) Covered dry storage of seaworthy watercraft and watercraft awaiting repairs; provided, that:

[5c]*Note.*—See editor's footnote [5a] on page 312.280.1.

(a) The base area of all covered dry storage structures shall not exceed ten thousand (10,000) square feet for a one-acre site. For each additional acre of site area, an additional one thousand (1,000) square feet can be added to the combined base area of dry storage structures. For a site greater than twenty (20) acres, the combined base area shall not exceed twenty-nine thousand (29,000) square feet.

(b) The facilities shall be set back a minimum of twenty-five feet (25′) from the side property lines.

(c) The facilities shall be evaluated in accordance with the criteria set forth in section 13-300.7(d)(14)(iv) of this subtitle.

(6) Sales of watercraft, marine engines and watercraft trailers, including the outside storage of these products as permitted in subsection (4) above.

(7) Sailmaking and sail repairs. (Bill No. 129-79, § 6; Bill No. 133-79, § 1.)

Sec. 13-323.1. Special exceptions.

The following special exceptions shall be permitted in Maritime Group B Districts:

(1) Covered facilities for the wet storage and temporary docking of seaworthy watercraft, subject to the provisions of section 13-343.12(1)(f), (4) and (5) of this subtitle.

(2) Marine fuel sales, subject to the provisions of section 13-343.12(1)(e) and (3) of this subtitle.

(3) Helipads.

(4) Hotels and motels. (Bill No. 129-79, § 6; Bill No. 124-81, § 5.)

MC—MARITIME GROUP C DISTRICTS.[5d]

Sec. 13-324. Uses permitted.

The following uses shall be permitted in Maritime Group C Districts:

[5d]*Note.*—See editor's footnote [5a] on page 312.280.1.

(1) All uses set forth in section 13-323 of this subtitle, including any conditions attached thereto.

(2) Any repairs customarily performed on watercraft. An enclosed repair facility shall be designed to collect all scrapings, paint, oil, gasoline, fiberglass residue, and all other wastes for removal to an appropriate facility.

(3) Marine fuel sales, in accordance with the provisions of section 13-343.12 (1) (e) (i), (ii) and (iv) of this subtitle.

(4) Facilities for the manufacturing and storage of natural ice.

(5) Marine railways, drydocks, water lifts and other facilities for the launching and removal of watercraft.

(6) Covered facilities for the wet storage of seaworthy watercraft, in accordance with the provisions of section 13-343.12 (1) (f) of this subtitle.

(7) Pile driving and marine construction operations.

(8) Marine salvage and towing operations.

(9) Construction of watercraft less than sixty-five feet (65′) in length, provided, any construction which takes place in an enclosed facility shall meet the requirements of subsection (2) above.

(10) Outside storage; provided, that the total area of storage does not exceed fifty per cent (50%) of the lot area. (Bill No. 129-79, § 6.)

Sec. 13-324.1. Repealed by Bill No. 124-81, § 6.

TC-TOWN CENTER DISTRICTS

Sec. 13-325. In general.

Town center districts shall permit mixed use development, greater floor area development, unlimited heights, and an

increased intensity of use otherwise limited by the various residential and commercial districts; unless developed in accordance with the provisions of this heading, all town center uses shall conform to the provisions of the applicable zoning district for such use. (Bill No. 38-70, § 1.)

Sec. 13-325.1. Uses permitted.

The following uses shall be permitted in TC-Town Center Districts:

(1) All uses set forth in sections 13-311.1, 13-312.1 and 13-313.1.

(2) Automobile sales (totally enclosed facilities with no outside sales or storage).

(3) Educational institutions with dormitories (privately operated).

(4) Garden shops and greenhouses.

(5) Hospitals.

(6) Hotels, motels and boarding houses.

(7) Mixed uses on the same site (provided that no dwelling unit shall be on a floor with commercial uses).

(8) Multi-family uses permitted in sections 13-308, 13-309 and 13-310.1.

(9) Nursing homes.

(10) Off-street parking, in accordance with the provisions of article VIII.

(11) Radio and television towers (only as an accessory use to radio or television studios; and provided, that the towers are attached to the roof of the building housing such uses).

(12) Signs, in accordance with the provisions of article IX. (Bill No. 38-70, § 1.)

Sec. 13-325.2. Special exceptions.

The following uses shall be permitted in TC-Town Center Districts:

(1) Automotive service stations and repair centers.

(2) Heliports.

(vii) Number and size of dwelling unit by type (where applicable).

(8) When commercial or manufacturing uses are proposed, the site plans shall also include:

(i) Special uses proposed.

(ii) Number of employees for which buildings are designed.

(iii) Type of power to be used for any manufacturing process.

(iv) Type of wastes or by-products to be produced by any manufacturing process.

(v) Proposed method of disposal of such wastes or by-products. (Bill No. 86-70, § 1; Bill No. 129-79, § 6.)

Sec. 13-344.1A. Maritime group district site plans.

In evaluating proposed site plans for maritime group districts, the county shall consider the anticipated effect of the location, construction, and operation of all maritime group district uses upon the environment of the site and the adjacent area. All federal, state, and local laws and regulations applicable to maritime group district uses shall be considered with the following factors being given primary consideration:

(1) Maintenance of state water quality standards;

(2) Preservation of the integrity of the natural shoreline, including marsh areas, by minimizing dredging and the steepness of dredged slopes. Dredging shall not create slopes steeper than three (3) (horizontal) to one (1) (vertical) channelward from mean low water or the base of the bulkhead.

(3) Reduction of storm water runoff and erosion by minimizing use of impervious surfacing;

(4) Maintenance of the flow and volume of the natural drainage system;

(5) Maintenance of natural groundwater flows;

(6) Location and maintenance of marina uses, including dry storage areas in such a manner that shall provide the least detrimental impact to adjacent residential properties;

(7) Compatibility of the features of the site with the natural features of adjacent areas;

(8) Location of marinas to avoid interference with the flow of traffic on, and the operation and maintenance of existing bridges;

(9) Achievement of maximum flushing through the dimensions and location of channels in the marina basin. Dredged channels should be designed to decrease in width and depth toward shore with slips for the deepest draft boards located farthest from shore;

(10) Avoidance of turbidity and bottom disturbance by designing slips which are two (2) feet deeper at mean low water than the lowest projection of the boats that will be moored in them;

(11) Preservation of natural circulation patterns, tidal flow patterns, salinity and distribution of nutrients in the water;

(12) Preservation of rooted submerged aquatic vegetation of value to fish, shellfish and wildlife;

(13) Preservation of wetlands;

(14) Preservation of fish spawning areas;

(15) Preservation of shellfish beds;

(16) Preservation of waterfowl nesting areas; and

(17) Maintenance of the pattern and volume of littoral drift past the site. (Bill No. 129-79, § 6.)

ANNOTATED CODE OF MARYLAND (1974)

NATURAL RESOURCES

TITLE 9

WETLANDS AND RIPARIAN RIGHTS

Subtitle 1. In General.

§ 9-101. DEFINITIONS.

(a) Generally. - In this title, the following words have the meaning indicated.

(b) "Board" means Board of Public Works.

(c) "Circuit Court", when used to designate the court having jurisdiction to review administrative action taken pursuant to this title, means the Baltimore City Court if the land involved in the appeal is located in Baltimore City.

(d) "County" includes Baltimore City unless otherwise indicated.

(e) "Department" means Department of Natural Resources.

(f) "Dredging" means the removal or displacement by any means of soil, sand, gravel, shells, or other material, whether or not of intrinsic value, from any state or private wetlands.

(g)(1) "Filling" means either:

(i) The displacement of navigable water by the depositing into State or private wetlands of soil, sand, gravel, shells, or other materials; or

(ii) The artificial alteration of navigable water levels by any physical structure, drainage ditch, or otherwise.

(2) "Filling" includes storm drain projects which flow directly into tidal waters of the State.

(3) "Filling" does not include drainage of agricultural land.

(h) "Landward boundary of wetlands" means the common boundary between wetlands as defined in this section and lands not included within the definitions of wetlands appearing in this section.

(i) "Person" means any natural person, partnership, joint-stock company, unincorporated association or society, the state, any unit of the state, a political subdivision, or other corporation of any type.

§ 9-101.

(j) "Private wetlands" means any land not considered "state wetland" bordering on or lying beneath tidal waters, which is subject to regular or periodic tidal action and supports aquatic growth. This includes wetlands, transferred by the state by a valid grant, lease, patent, or grant confirmed by Article 5 of the Declaration of Rights of the Constitution, to the extent of the interest transferred.

(k) "Regular or periodic tidal action" means the rise and fall of the sea produced by the attraction of the sun and moon uninfluenced by wind or any other circumstance.

(l) "Secretary" means Secretary of Natural Resources.

(m) "State wetlands" means any land under the navigable waters of the state below the mean high tide, affected by the regular rise and fall of the tide. Wetlands of this category which have been transferred by the state by valid grant, lease, patent or grant confirmed by Article 5 of the Declaration of Rights of the Constitution shall be considered "private wetland" to the extent of the interest transferred.

§ 9-102. DECLARATION OF PUBLIC POLICY.

In many areas of the state much of the wetlands have been lost or despoiled by unregulated dredging, dumping, filling, and like activities, and the remaining wetlands are in jeopardy of being lost or despoiled by these and other activities. The loss or despoliation will affect adversely, if not eliminate entirely, the value of the wetlands as a source of nutrient to finfish, crustacea, and shellfish of significant economic value; the loss or despoliation will destroy the wetlands as a habitat for plants and animals of significant economic value and eliminate or substantially reduce marine commerce, recreation, and aesthetic enjoyment; in most cases, the loss or despoliation will affect the natural ability of tidal wetlands to reduce flood damage and affect adversely the public health and welfare; the loss or despoliation will reduce substantially the capacity of the wetlands to absorb silt and result in increased silting of channel and harbor areas to the detriment of free navigation. It is therefore the public policy of the state, taking into account varying ecological, economic, developmental, recreational, and aesthetic values, to preserve the wetlands and prevent their despoliation and destruction. (An. Code 1957, Art. 66C, § 718; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 9-103. RIPARIAN OWNERS NOT TO BE DEPRIVED OF CERTAIN RIGHTS.

Except as specifically provided in this title, a riparian owner may not be deprived of any right, privilege, or enjoyment of riparian ownership that he had prior to July 1, 1970. The provisions of this title do not transfer the title or ownership of any land or interest in land. (An. Code of 1957, art. 66C, § 731; 1973, 1st Sp. Sess., ch. 4, § 1.)

Subtitle 2. State Wetlands.

§ 9-201. ACCRETION TO AND IMPROVEMENT IN FRONT OF LAND ON NAVIGABLE WATER; RECLAMATION OF LOST FAST LAND; CONTINUATION OF EXISTING RIGHTS.

(a) A person who is the owner of land bounding on navigable water is entitled to any natural accretion to his land, to reclaim fast land lost by erosion or avulsion during his ownership of the land to the extent of provable existing boundaries. The person may make improvements into the water in front of the land to preserve that person's access to the navigable water or protect the shore of that person against erosion. After an improvement has been constructed, it is the property of the owner of the land to which it is attached. A right covered in this subtitle does not preclude the owner from developing any other use approved by the board. The right to reclaim lost fast land relates only to fast land lost after January 1, 1972, the the burden of proof that the loss occurred after this date is on the owner of the land.

(b) The rights of any person, as defined in this subtitle, which existed prior to July 1, 1973, in relation to natural accretion of land are deemed to have continued to be in existence subsequent to July 1, 1973 to July 1, 1978. (An. Code 1957, art. 66C, § 720; 1973, 1st Sp. Sess., ch. 4, § 1; 1978, ch. 791.)

§ 9-202. LICENSE FOR DREDGING OR FILLING.

(a) Required. A person may not dredge or fill on state wetlands, without a license.

(b) Secretary to assist board and prepare report. The Secretary shall assist the board in determining whether to issue a license to dredge or fill state wetlands. The Secretary shall submit a report indicating whether the license should be granted and, if so, the terms, conditions, and consideration required after consultation with any interested federal, state, and local unit, and after holding any hearing and taking any evidence the Secretary thinks advisable.

(c) Hearing; issuance; conditions; provision for periodic maintenance dredging.

(1) After a hearing in the local subdivision affected, the Board shall decide if issuance of the license is in the best interest of the State, taking into account the varying ecological, economic, developmental, recreational, and aesthetic values each application presents. If the Board decides to issue the license, it shall be for consideration and on terms and conditions the Board determines. Every license shall be in writing.

(2) With respect to an application for a license to fill or construct a shore erosion control structure other than riprap on State wetlands, the Board may issue the license without a hearing if the fill area is less than 300 feet in length parallel to the fast land as close thereto as structurally feasible but not more than 10 feet channelward of the mean high water line and if after a site visit the report of the Secretary recommends that the license be granted. The Board may issue a license without a hearing where an emergency exists caused by act of God, natural disaster, catastrophe or other similar natural

event when the health, safety, or welfare of the citizens of the State would be jeopardized by a delay caused by time requirements for notice by publication and holding a public hearing. However, the license may be granted by the Board only with the concurrence of the Secretary. Public notice of the issuance is required. However, notwithstanding any provisions to the contrary, within 30 days after the issuance of an emergency license, as provided in this subsection, the Board shall hold a hearing, after giving timely notice by publication, to determine whether the emergency license shall be made permanent or revoked.

(3) If, after a site visit, the report of the Secretary recommends that a license be granted, the Board may issue the license without a hearing as to an application for a license:

(i) To fill or construct a shore erosion control structure of riprap on State wetlands if the fill area is less than 500 feet in length parallel to the fast land as close thereto as structurally feasible but not more than 10 feet channelward of the mean high water line; or

(ii) To repair or replace a bulkhead for the purpose of shore erosion control where the bulkhead is presently functional, but is deteriorating or damaged, provided that the repair or replacement structure does not extend more than 18 inches channelward of the existing structure.

(4) With respect to the maintenance dredging of projects in State wetlands for which a license is to be issued, the license may include provision for periodic maintenance dredging if recommended by the report of the Secretary provided that the maintenance dredging be effected:

(i) Within the area, depth and in conformity with other limitations contained in the license;

(ii) That no more than 500 cubic yards of material be dredged at each maintenance dredging to restore licensed works;

(iii) That the material from maintenance dredging be deposited upon the designated or other upland site approved by the Secretary;

(iv) That the Secretary be notified and approve of each maintenance dredging operation.

(5) The provisions for periodic maintenance dredging under the aforementioned conditions shall be effective for no more than 6 years beyond the date of issuance of the license.

(6) If the licensee desires to continue maintenance dredging beyond the expiration date authorized in item (5), he must obtain a new license by submitting an application to the Board for review in accordance with the procedures of this section. (1974, ch. 856; 1978, chs. 827, 852; 1981, ch. 481.)

(d) Exceptions. The provisions of this section do not apply to any operation for:

(1) Dredging and filling being conducted as of July 1, 1970, as authorized under the terms of an appropriate permit or license granted under the provisions of existing state and federal law;

(2) Dredging of seafood products by any licensed operator, harvesting of seaweed, or mosquito control and abatement as approved by the Department of Agriculture; or

(3) Improvement of wildlife habitat or agricultural drainage ditches as approved by an appropriate unit.

(e) Penalty for violation of section. Any person who violates any provision of this section is guilty of a misdemeanor. Upon conviction, the person is subject to a fine not exceeding $1000 with costs imposed in the discretion of the court. (An. Code 1957, art. 66C § 721; 1973; 1st Sp. Sess., ch. 4 § 1.)

§ 9-203.

Any party to the proceedings aggrieved by the decision of the Board, may petition the circuit court in the county where the land is located within 30 days after receiving the decision. The appeal shall be heard on the record compiled before the Board. (1978, ch. 505.)

Subtitle 3. Private Wetlands.

§ 9-301. INVENTORY; PREPARATION OF BOUNDARY MAPS; HEARINGS ON PROPOSED BOUNDARY MAP; ORDER ESTABLISHING BOUNDS AND RULES AND REGULATIONS.

(a) Secretary to inventory private wetlands; preparation of maps. The Secretary shall promptly delineate the landward boundaries of any wetlands in the State. The landward boundaries of the wetlands shall be shown on suitable maps or aerial photographs on a scale of 1 inch to 200 feet. The maps shall cover an entire political subdivision of the State as determined by the Secretary.

(b) Secretary to hold hearing in county of affected private wetlands. The Secretary shall hold a public hearing in the county of the affected wetlands on completion of the boundary map required in subsection (a) and adoption of proposed rules and regulations provided in § 9-302. The Secretary shall give notice of the hearing by registered or certified mail not less than 30 days prior to the hearing date, to each owner shown on tax records as an owner of land designated on the map as a wetland. The notice shall include the proposed rules and regulations. The Secretary shall publish notice of the hearing at least once not more than 30 days and not fewer than 10 days before the date of the hearing in a newspaper published within and having a general circulation in every county where the wetlands are located.

(c) Order establishing bounds, rules and regulations; notice of order. After considering the testimony at the hearing and any other pertinent fact, considering the rights of every affected property owner, and the purposes of

this subtitle, the Secretary shall establish by order the landward bounds of each wetland and the rules and regulations applicable to it. A copy of the order, together with a copy of the map depicting the boundary lines, shall be in every county affected after final appeal has been completed. The Secretary shall give notice of the order to each owner of record of any land designated as wetlands by mailing a copy of the order to the owner by registered or certified mail. The Secretary shall also publish the order in a newspaper published within and having a general circulation in every county where the wetlands are located.

(d) Manner of filing among land records; effect. - Filing among the land records means that the clerk of the circuit court for each affected county shall maintain all wetlands maps and regulations so as to be accessible to the public and shall display prominently to the public an index map prepared by the Department, which shall indicate the location of each wetlands map within the county, referenced by number corresponding to the map on file. Filing of maps and regulations in accordance with this subsection shall be deemed to constitute notice at all times, to the public and to all property owners affected by this subtitle, of the applicability to the wetlands areas indicated on the maps, regardless of ownership, of the requirement to obtain a permit before dredging or filling private wetlands. (1974, ch. 864, § 3; 1981, ch. 102.)

§ 9-302. RULES AND REGULATIONS GOVERNING DREDGING AND FILLING.

(a) Secretary to promulgate. To promote the public safety, health, welfare, wildlife, and marine fisheries, the Secretary may promulgate rules and regulations governing dredging, filling, removing, or otherwise altering or polluting private wetlands. The rules and regulations may vary as to specific tracts of wetlands because of the character of the wetlands.

(b) Rules and regulations promulgated with advice and consent of Maryland Agricultural Commission. The rules and regulations shall be promulgated with the advise and consent of the Maryland Agricultural Commission, and in consultation with any appropriate unit in the affected political subdivision.

(c) Maryland Agricultural Commission to act upon proposed rules and regulations. The Secretary shall transmit a copy of any proposed rules and regulations to the Maryland Agricultural Commission. Within 60 days from the receipt of the copy, the Maryland Agricultural Commission shall inform the Secretary of its decision as to the acceptance or rejection of the rules and regulations. Failure to so inform the Secretary shall be considered approval of the rules and regulations by the commission. (An. Code 1957, art. 66C § 722; 1973, 1st Sp. Sess., ch. 4 § 1.)

§ 9-303. CERTAIN LAWFUL USES ENUMERATED.

Notwithstanding any rule or regulation promulgated by the Secretary to protect private wetlands, the following uses are lawful on private wetland:

(1) Conservation of soil, water, fish, shellfish, and wildlife;

(2) Trapping, hunting, fishing, and catching shellfish if otherwise legally permitted; and

(3) Exercise of riparian rights to improve land bounding on navigable water, to preserve access to the navigable water or protect the shore against erosion.

(4) Reclamation of fast land owned by a natural person and lost during his ownership of the land by erosion or avulsion to the extent of provable pre-existing boundaries. The right to reclaim lost fast land relates only to fast land lost after January 1, 1972. The burden of proof that the loss occurred after this date is on the owner of the land. (An. Code 1957, art. 66C § 723; 1973, 1st. Sp. Sess., ch. 4 § 1.)

§ 9-304. ADMINISTRATIVE APPEAL FROM RULES AND REGULATIONS AND DESIGNATION OF LAND AS WETLAND.

Any person who has a recorded interest in land affected by any rule or regulation promulgated under this subtitle may appeal the rule or regulation and designation of his land as wetland to the board of review of the department as provided in Title 1 of this article. The proceedings shall be held in the county where the land is located, and the board of review shall view the land in question. (An. Code 1957, art. 66C § 725; 1973, 1st Sp. Sess., ch. 4 § 1.)

§ 9-305. JUDICIAL REVIEW OF ADMINISTRATIVE APPEAL.

(a) Appeal procedure; time limitation. If the person is dissatisfied with the decision of the board of review, pursuant to § 9-304, he may petition the circuit court in the county where the land is located, within 30 days after receiving its decision, to determine whether the rule or regulation restricts the use of his property so as to deprive him of its practical use and is an unreasonable exercise of the police power so as to constitute a taking of property without compensation.

(b) Appeal not subject to administrative procedure act; de novo trial; election of jury trial; no right of removal. The appeal is not subject to the provisions of the Administrative Procedure Act. The court shall hear the case de novo. Either party may elect a jury trial. There is no right of removal.

(c) Judicial considerations. In weighing the appropriate exercise of the police power, the court shall consider the importance of the land to marine life, shellfish, wildlife, and the prevention of siltation, floods, and other natural disasters, the public health and welfare, and the public policy set forth in this title. If the court finds the rule or regulation is an unreasonable exercise of the police power it shall enter a finding that the rule or regulation does not apply to the petitioner. However, the finding may not affect any land other than that of the petitioner. The Secretary shall record a copy of the finding among the land records in the county.

(d) Appeal to Court of Special Appeals. Either party may appeal the decision of the circuit court to the Court of Special Appeals. (1976, ch. 472, § 30.)

§ 9-306. PERMIT TO CONDUCT ACTIVITY NOT PERMITTED BY RULES AND REGULATIONS - GENERALLY.

(a) Application; notice and hearing; reapplication after denial. Any person proposing to conduct on any wetland an activity not authorized by the rules and regulations adopted under the provisions of § 9-302 shall apply for a permit with the Secretary, on the form the Secretary prescribes. The application shall include a detailed description of the proposed work and a map showing the areas of wetland directly affected, the location of the proposed work, and the names of the owners of record of adjacent land and every claimant of water rights in or adjacent to the wetland known to the applicant. Within 30 days after receipt of an application, the Secretary shall notify the applicant, in writing, of the extent of state wetlands involved in the proposed activity and indicate the method of compliance with the license requirements of § 9-202 of this subtitle. If the applicant claims that any part of the designated state wetlands is private wetlands by virtue of the existence of a valid grant, lease, or patent, or a grant confirmed by Article 5 of the Declaration of Rights of the Constitution, the Secretary shall investigate and determine the validity of the claim and notify the applicant of his determination. If, within 30 days after receipt of the Secretary's determination, the applicant files with the Secretary a written objection to the determination, the Secretary shall promptly institute an appropriate judicial proceeding to determine whether the land or part of it covered by the application in dispute, is state or private wetland. The state shall bear the cost of the proceeding. The Secretary shall mail a copy of the application to the chief administrative officer in the county where the proposed work or any portion is located. No sooner than 30 days and not later than 60 days after receipt of the publication, the Secretary or his designated hearing officer shall hold a public hearing on the application in the county where the land is located. If an electric company as defined under the Public Service Commission Law applies to the Public Service Commission for a certificate of public convenience associated with power plant construction which involves private wetlands, the hearing and permit procedure shall be in accordance with § 3-306 of this article. The Secretary shall cause a notice of the hearing to be published at least once not more than 30 days and not fewer than 10 days before the hearing date in a newspaper published within and having a general circulation in each county where the proposed work, or any portion is located. Every permit application, map, or document shall be open for public inspection at the offices of the Secretary and the chief administrative officer in the county. At the hearing any person may appear and give testimony. A person may not reapply until after the expiration of 18 months from the date of the denial of a prior application or the final determination of an appeal from the denial.

(b) Issuance or denial; conditions and limitation; suspension, revocation; bond. In granting, denying, or limiting any permit, the Secretary or his designated hearing officer shall consider the effect of the proposed work with reference to the public health and welfare, marine fisheries, shellfisheries, wildlife, economic benefits, the protection of life and property from flood, hurricane, and any other natural disaster, and the public policy set forth in this title. In granting a permit the Secretary may impose conditions or limitations designed to carry out the public policy set forth in this title. He may require a bond in an amount and with surety and conditions satisfactory to him, to

secure compliance with any condition or limitation in the permit. The Secretary may suspend or revoke a permit if he finds that the applicant has not complied with any condition or limitation in the permit or has exceeded the scope of the work as set forth in the application. The Secretary shall state on the record, his findings and reasons for any action taken under this subsection. He shall give notice of his order of issuance, denial, revocation, or suspension of a permit in a newspaper published within and having a general circulation in the county where the wetland lies.

(c) Public hearing, failure to act constitutes automatic approval of application. The Secretary or his designee shall hold a public hearing on the matter within 60 days after receipt of an application for a permit filed pursuant to this section. The Secretary shall render a decision within 30 days after the hearing. Failure to act in conformance with either of these requirements is automatic approval of the application for permit as submitted.

§ 9-307. SAME - APPEAL TO BOARD OF REVIEW FROM DECISION OF SECRETARY.

The applicant, the county or the municipal government where the land is located, may appeal from the Secretary's decision pursuant to § 9-306 to the board of review of the department as provided in Title 1 of this article. The proceeding shall be in the county where the land is located and the board of review shall view the affected land. (An. Code 1957, art. 66C, § 727; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 9-308. SAME - JUDICIAL APPEAL FROM DECISION OF BOARD OF REVIEW.

(a) Appeal procedure; time limitation. Any party to the appeal to the board of review pursuant to § 9-307 may appeal to the circuit court for the county in which the land is located within 30 days after the decision of the board of review.

(b) Appeal not subject to Administrative Procedure Act; de novo trial; election of jury trial; no right of removal. The appeal is not subject to the provisions of the Administrative Procedure Act. The court shall hear the case de novo. Either party may elect a jury trial. There is no right of removal.

(c) Court may set aside or modify decision if unreasonable exercise of police power. If the court finds that the decision of the board of review appealed from is an unreasonable exercise of police power, it may set aside or modify the determination.

(d) Appeal to Court of Special Appeals. Either party may appeal the decision of the circuit court to the Court of Special Appeals. (1976, ch. 472, § 30.)

§ 9-309. SAME - PAYMENT OF COURT COSTS OF APPEAL BY STATE.

The court may order the state to pay court costs of any appeal in accordance with the provisions of §§ 9-304, 9-305, or 9-308 if it finds that the

financial situation of the person appealing warrants this action. (An. Code 1957, art. 66C, § 729; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 9-310. COURTS TO RESTRAIN VIOLATIONS OF SUBTITLE.

The court exercising equity jurisdiction in the county where the land or any part of the land is located may restrain any violation of this subtitle in an action brought by the department or any authorized unit or officer of the department. (An. Code 1957, art. 66C, § 730; 1973, 1st Sp. Sess., ch. 4, § 1.)

Subtitle 4. Lands Formed by Channel Excavation in Sinepuxent, Isle of Wight, and Chincoteague Bays.

§ 9-401. CONSTRUCTION OF SUBTITLE.

This subtitle does not affect any past or future accretion to land under private ownership bounding on, or surrounded by the waters of the Chincoteague, Isle of Wight, or Sinepuxent Bay. (An. Code 1957, art. 66C, § 33; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 9-402. TITLE TO AND USE OF LAND: PATENT RESTRICTION.

(a) Title to and use of land. - Any island created or formed within the confines of Sinepuxent, Isle of Wight, or Chincoteague Bay by the dumping or depositing of excavated material from dredging or any other artificial means employed either by the state or the United States, or both during the construction or maintenance of the Ocean City inlet and the channel in the bays, together with any accretion to any of those islands, in the past or future, are natural resources of the state and title to them is retained for the use of the department.

(b) Commissioner of Land Patents not to issue patents. - The Commissioner of Land Patents may not issue any patent for land created in the Chincoteague, Isle of Wight, or Sinepuxent Bay. (An. Code 1957, art. 66C, § 33; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 9-403. USE OF LAND FOR CONSERVATION, HUNTING AND FISHING.

Subject to the approval of the board, the department may use the land described in this subtitle for conservation purposes in the manner and under the rules and regulations it deems in the best interest of the state. However, any person who may lawfully hunt or fish in Worcester County may hunt or fish on these lands during the open season for hunting or fishing. (An. Code 1957, art. 66C, § 33; 1973, 1st Sp. Sess., ch. 4, § 1.)

Subtitle 5. Penalties and Fines.

§ 9-501. ENUMERATION.

(a) First offense. - Any person who violates any provision of this title is guilty of a misdemeanor. Unless another penalty is specifically provided elsewhere in this title, the person, upon conviction, is subject to a fine not exceeding $500, or imprisonment not exceeding three months, or both, with costs imposed in the discretion of the court.

(b) Second or subsequent offense. - Any person found guilty of a second or subsequent violation of any provision of this title, unless another penalty is specifically provided elsewhere in this title, is subject to a fine not exceeding $1,000, or imprisonment not exceeding one year, or both with costs imposed in the discretion of the court. For the purpose of this subsection, a second or subsequent violation is one which has occurred within two years of any prior violation of this title.

(c) Violation of rule or regulation. - In addition to any administrative penalty provided in this title, violation of any rule or regulation adopted by any unit within the Department pursuant to the provisions of this title is a misdemeanor and is punishable as provided in subsection (a) and (b) of this section.

(d) Additional penalty. - Any person who knowingly violates any provision of this title is liable to the state for restoration of the affected wetland to its condition prior to the violation if possible. The court shall specify a reasonable time for completion of the restoration.

(e) Defense that maps and regulations not properly filed among land records. - The provisions of this title are enforceable against any person charged with dredging or filling private wetlands without a permit, notwithstanding a defense that pertinent wetlands maps and regulations had not been properly filed among the land records, if the court finds that the person charged had actual notice of the applicable regulatory requirements before he dredged or filled the private wetlands. This subsection shall apply only to dredging or filling activities occurring after July 1, 1981. (1976, ch. 183, § 1, 1981, ch. 102.)

APPENDIX C

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION

ORDER ESTABLISHING WETLAND BOUNDARIES
AND RULES AND REGULATIONS
FOR COUNTY, MARYLAND

The Secretary of Natural Resources, acting pursuant to Sections 718 through 731 of Article 66C of the Annotated Code of Maryland, for the purpose of promoting the public safety, health and welfare and protecting public and private property, wildlife and marine fisheries, hereby adopts this order establishing the landward boundaries of wetlands in this county, as delineated on maps entitled "Wetlands Boundaries", which are listed and are recorded herewith together with the rules and regulations governing dredging, filling, removing, altering or polluting said wetlands in said county.

Section I: Definitions

For the purpose of this Order and the Rules and Regulations thereto:

A. "State wetlands" means all land under the navigable waters of the State below the mean high tide, which is affected by the regular rise and fall of the tide. Such wetlands, which have been transferred by the State by a valid grant, lease or patent or a grant confirmed by Article 5 of the Declaration of Rights of the Constitution of Maryland, shall be considered "private wetland" to the extent of the interest so transferred.

B. "Private wetlands" means all lands not considered "State wetlands" bordering on or lying beneath tidal waters, which are subject to regular or periodic tidal action and which support aquatic growth. These include wetlands which have been transferred by the State by a valid grant, lease or patent or a grant confirmed by Article 5 of the Declaration of Rights of the Constitution of Maryland, to the extent of the interest so transferred.

C. "Dredging" means the removal or displacement by any means of soil, sand, gravel, shells or other material, whether of intrinsic value or not, from State or private wetlands affected by the regular ebb and flow of the tide.

D. "Filling" means either the displacement of navigable waters by the deposition into wetlands affected by the regular ebb and flow of the tide of soil, sand, gravel, shells or other material; or the artificial alteration of navigable water levels by physical structures, drainage ditches or otherwise.

Section I: Definitions (Continued)

E. "Person" means any natural person, partnership, joint stock company, unincorporated association or society, or the State and any agency thereof, or municipal or political subdivisions or other corporation of any character whatsoever.

F. "Regular or periodic tidal action" means the rise and fall of the sea that is produced by the attraction of the sun and the moon uninfluenced by winds or other circumstances.

G. "Landward Boundary of Wetlands" means the common boundary between wetlands as defined in this Section and lands not included within the definitions of wetlands appearing in this Section.

Section II: General Conditions

This Order and the Rules and Regulations issued pursuant thereto does not grant any property rights; it does not authorize any person to trespass or injure the property of another; it does not excuse any person from complying with other applicable Federal, State, and local laws, regulations or ordinances.

Section III: Authorized Uses of Private Wetlands

The following uses are permitted on private wetlands if otherwise permitted by law:

A. Projects or Activities Requiring Approval of Other State or Local Agencies of Officials

1. The construction or maintenance of agricultural drainage ditches as approved by the Soil Conservation District for said county.

2. Alterations or modifications for mosquito control purposes as approved by the State entomologist.

B. Recurring Activities

1. Trapping, hunting, fishing, shellfishing;

2. The cultivation and harvesting of shellfish, including such reasonable excavation as normally is necessary in conducting such activities;

3. The cultivation and harvesting of agricultural or horticultural products, including grazing and haying.

Section III: Authorized Uses of Private Wetlands (Continued)

C. Permanent Alteration or Modification Not Requiring Notification under Section V below

1. The construction and maintenance of walkways, foot bridges, duckblinds, docks, boathouses, boat shelters, and other similar structures, provided that said structures are so constructed on pilings as to permit the unobstructed flow of the tide and preserve the natural contour of the private wetland;

2. The excavation of a single navigation channel for small craft passage intended for private use, provided that the channel is not greater than sixty (60) feet in length, twenty (20) feet in width or three (3) feet in depth at mean low water;

3. Construction and maintenance of tide gates designed to prevent the encroachment of salt water into agricultural drainage ditches.

D. Permanent Alteration or Modification Requiring Notification under Section V below

1. Alterations or modifications which are customary and normal to the conservation of soil, vegetation, water, fish, shellfish, and wildlife;

2. Making improvements necessary to preserve access to navigable waters or to protect private wetlands against erosion; provided that any improvement authorized under this Section (2) involving either the dredging or filling of State wetlands shall not proceed unless a license for filling or dredging such wetland is issued by the Board of Public Works under the provisions of Section 721, Article 66C of the Annotated Code of Maryland;

3. The installation and maintenance of underground utilities, provided that the surface of the wetland is restored substantially to its original condition.

Section IV: Uses and Activities Prohibited on Private Wetlands Without a Permit

Except where otherwise authorized in Section III above or subsequent to a permit issued pursuant to Section VI herein:

A. No person shall fill, place, dump or discharge on the wetlands encompassed in this Order any loam, peat, sand, gravel, soil, or other similar substance; or any trash, garbage, debris, junk, or other polluting substance.

Section IV: Uses and Activities Prohibited on Private Wetlands Without a Permit (Continued)

B. No person shall drain, excavate or dredge the wetlands encompassed by this Order, or remove therefrom loam, peat, sand, gravel, soil, or other similar substance.

C. No person shall perform any act or use the wetlands encompassed in this Order in a manner which would destroy the natural vegetation, substantially alter existing patterns of tidal flow, or otherwise alter or permit the alteration of the natural and beneficial character of such wetland.

Section V: Notification of Intent or Application for Permit and/or License to dredge, fill, remove, or otherwise alter state or private wetlands

Except for the activities authorized under Section III A, B, or C, no person shall dredge, fill, remove or otherwise alter any private wetlands in this county without first informing the Secretary and receiving approval or permit as applicable. A single form as prescribed by the Secretary shall serve either as Notification of Intent or Application for Permit and/or License. The form shall be submitted by mail or in person.

A. NOTIFICATION of Intent

The form shall serve as the Notification prescribed in Section III D for activities not requiring permit and/or license. The proposed activity specified in the form may proceed upon advice from the Secretary.

B. APPLICATION for Permit and/or License

The form shall also serve as the Application for permit to conduct an activity on private wetland not permitted in Section III above, and for license to conduct any activity on state wetlands.

Within thirty (30) days after receipt of the completed form, NOTIFICATION of Intent or APPLICATION for Permit and/or License, the Secretary shall inform the person filing such form by mail whether the proposed activity may proceed or whether it shall require a private wetlands permit from the Department of Natural Resources. In the case of an activity affecting State wetlands, the Secretary shall inform the person of the extent of State wetlands involved and shall indicate the requirements to obtain a license from the Board of Public Works.

Section VI: Permits

Following the procedures set forth in Section 726 of Article 66C, of the Annotated Code of Maryland, including due notice and a public hearing in this county, the Secretary shall grant, deny, or limit a permit for the proposed work within thirty (30) days following completion of the hearing record.

Where the proposed activity involves the requirement for both a state wetlands license from the Board of Public Works and a private permit from the Secretary of Natural Resources, a joint public hearing may be held.

In granting, denying, or limiting any permit, the Secretary or his duly designated hearing officer shall consider the effect of the proposed work with reference to the public health and welfare, marine fisheries, shellfisheries, wildlife, economic benefits, the protection of life and property from flood, hurricane and other natural disasters, and the public policy set forth in the law. In granting a permit the Secretary may limit or impose conditions or limitations designed to carry out the public policy set forth in the law.

Appeal by the applicant or the appropriate county or municipality from the Departmental decision shall be taken in accordance with the provisions of Article 41, Section 237 of the Code and the Rules of the Board of Review of the Department of Natural Resources.

Any person aggrieved by a decision of the Board of Review made in response to an appeal for any decision taken under the private wetlands section of the wetlands act, may appeal such decision in the circuit court of this county. The court shall hear the case de novo, and the proceedings shall be a jury trial at the request of either party.

Section VII: Appeal of Order and Rules and Regulations

Any person aggrieved by this Order and the Rules and Regulations issued pursuant thereto who has a recorded interest in any portion of the lands so affected, may seek review by the Secretary of the Department of Natural Resources or any department or agency thereof, pursuant to Section 237 of Article 41 of the Annotated Code of Maryland. The complainant shall file a first request for review within thirty (30) days after the decision complained of, or, in the case of a failure to act within thirty (30) days after written request from the complainant to the official or body having the authority to act. The complainant shall file a complaint for further review within sixty (60) days after filing the first request for review as required by said Section 237.

Appeals to the Board of Review shall be filed with the Secretary to the Board within thirty (30) days after the complainant has been sent a copy of the decision on the complaint as provided for in Section 237 (1) of Article 41. In the event that no decision on the complaint

Section VII: Appeal of Order and Rules and Regulations (Continued)

has been sent to the complainant within the time prescribed by said Section 237(1), an appeal may be filed with the Board of Review within thirty (30) days from the time the decision should have been made pursuant to Section 237(1). The Board for good cause shown may extend the time within which appeal must be filed, provided that a motion for such extension is filed with the Secretary to the Board within thirty (30) days from the time filing of appeal is required by this Section.

Persons aggrieved from the decision of the Board of Review may within thirty (30) days after receiving notice thereof petition the Circuit Court in this county to determine whether such rules or regulations are confiscatory and therefore an unreasonable exercise of the police power. The court shall hear the case de novo and the proceedings shall be a jury trial at the request of either party.

Section VIII: Appeals of Secretary of Natural Resources Determination Regarding the Extent of State Wetlands Involved in an Application for an Activity Not Permitted by Rules and Regulations

Under the provisions of Section 726 of Article 66C of the Annotated Code of Maryland, any applicant aggrieved by a determination of the Secretary of Natural Resources regarding the extent of State wetlands involved in the proposed activity by virtue of a claim that a part of the area designated State wetlands is private because of the existence of a valid grant, lease or patent or a grant confirmed by Article 5 of the Declaration of Rights of the Constitution of Maryland, shall file a written objection to the Secretary's determination thirty (30) days after notice of the same. The Secretary shall institute a proceeding in the appropriate court in order to place in issue the question as to the efficacy and validity of the aforesaid claims by the applicant. The State shall bear the cost of such proceeding.

Section IX: Penalties

Under the provisions of Section 730 of Article 66C of the Annotated Code of Maryland, any person violating the Rules and Regulations validly promulgated by the Secretary shall be punished by a fine of not more than one hundred dollars ($100.00) or imprisonment for not more than one (1) month, or both. Any person knowingly violating such Rules and Regulations may also become liable to the State for restoring any affected wetlands to its condition prior to such violation.

APPENDIX D

POLICY GUIDELINES FOR IMPLEMENTATION OF THE MARYLAND WETLANDS LAW

Purpose

To implement the public policy of the State to preserve its tidal wetlands and prevent their despoliation and destruction by unregulated dredging, dumping, filling and like activities, the Wetlands Permit Section uses the policy guidelines outlined below in the review and approval of these activities for State wetlands and Private wetlands in Maryland. Included are policy guidelines for recommendations of the Department of Natural Resources on all applications for Federal permits for any construction in the navigable waters of the State.

Regarding State wetlands, the purpose of the guidelines is to safeguard the public interest in protecting those natural resources that are in State ownership. Alteration of State wetlands is authorized only when such alteration clearly serves the overall public interest, taking into account the affects upon the varying ecological, economic, developmental, recreational and aesthetic values of such wetlands.

Regarding Private wetlands, the purpose of the guidelines is to permit reasonable use by the owner if such use is carried out under the conditions of the permit, and in accordance with the regulations where applicable, to protect the natural resource values in both the Private wetlands and the State wetlands.

The purpose of the guidelines concerned with the recommendations on applications for Federal permits is to provide a basis for objective comment on each application that reflects the effect of the proposed construction, or the use of the facility after completion, upon public access and use and the effect upon the water quality of the surrounding area.

General Requirements of the Wetlands Act

The dredging or filling of "State Wetlands", as defined by the Wetlands Act, to preserve access from riparian land to navigable water or to protect the shore from erosion requires the issuance of a license from the State Board of Public Works (An exception is the submerged lands under valid grant or patent, which are Private wetlands). Dredging or filling in "Private Wetlands", as defined by the Act, requires a permit from the Water Resources Administration except in those cases specifically noted as exemptions (See "Order Establishing Wetland Boundaries and Rules and Regulations, Section III C).

Maps delineating the upland boundary of tidal wetlands for each county are available at the county seat of each county in the tidewater region, and at the Wetlands Permit Section of the Water Resources Administration. Any landowner proposing to dredge or fill within the area of Private or State wetlands should consult with the Water Resources Administration on the procedure for obtaining a permit or license. A Federal permit is also required for such work within navigable waters. The landowner must apply to the Baltimore District, Corps of Engineers, U.S. Army, for a Federal permit. Concurrent application is recommended.

The following outlines when a license or permit is required.

(1) A State wetlands license must be obtained before any person starts any dredging or filling within State wetlands, except for

a. dredging of seafood products by licensed operators
b. harvesting of seaweed
c. mosquito control and abatement work approved by the Maryland Department of Agriculture
d. improvement of wildlife habitat approved by the Department of Natural Resources
e. maintenance of agricultural drainage ditches approved by appropriate Soil Conservation District. Construction of new drainage ditches within State Wetlands requires a State wetlands license.

(2) Any dredging or filling in the area landward of the mean high waterline to the limit of tidal influence and supporting aquatic vegetation (termed Private wetlands) may require, depending upon the nature of the work, Notification to the Secretary of Natural Resources or a Private wetlands permit.

The Secretary of Natural Resources has promulgated regulations concerning dredging, filling, removing or otherwise altering Private wetlands. The regulations do not grant any property rights, nor do they authorize any person to trespass upon or injure the property of another, nor do they excuse any person from complying with other applicable Federal, State, and local laws, regulations, or ordinances.

(3) Authorized Uses of Private Wetlands

The following uses do not require a Private wetlands permit and are permitted on Private wetlands if otherwise permitted by law:

a. Projects or activities requiring approval of other state or local agencies of officials

1) The maintenance of agricultural drainage ditches as approved by the appropriate Soil Conservation District.
2) Alterations or modifications for mosquito control purposes as approved by the Maryland Department of Agriculture.

b. Recurring activities

1) Trapping, hunting, fishing and shellfishing.
2) The cultivation and harvesting of shellfish, including such reasonable excavation in Private wetlands as normally is necessary in conducting such activities.
3) The cultivation and harvesting of agricultural or horticultural products, including grazing and haying.

c. Permanent alteration or modification not requiring Notification

1) The construction and maintenance of walkways, foot bridges, duckblinds, docks, boathouses, boat shelters, and other similar structures, provided that said structures are so constructed on pilings as to permit the unobstructed flow of the tide and preserve the natural contour of the private wetland;
2) Construction and maintenance of tide gates designed to prevent the encroachment of salt water into agricultural drainage ditches;
3) The repair and maintenance of earthen dikes about a single residential dwelling, provided that such work does not involve the extension or increase in dimension of the existing dike.

d. Permanent alteration or modification requiring Notification

The Water Resources Administration is to be notified in writing before any person starts to dredge, fill or otherwise alter Private Wetlands in any county to carry out any of the following work:

1) Alterations or modifications which are customary and permitted by existing regulations for the conservation of soil, vegetation, water, fish, shellfish, and wildlife, including fur-bearing animals;
2) Making improvements necessary to preserve access to navigable waters, or to protect Private wetlands against erosion; provided that any improvement authorized involving either the dredging or filling of State wetlands may not proceed unless a license for filling or dredging has been issued by the State Board of Public Works under the provisions of Title 9, Natural Resources Article of the Annotated Code of Maryland;
3) The installation and maintenance of underground utilities, provided that the surface of the wetland is restored substantially to its original condition.

(4) Uses and Activities Prohibited on Private Wetlands Without a Permit

The following types of work may not be done except under the conditions of a Private wetlands permit:

a. No person may fill, place, dump, or discharge on the Private wetlands any loam, peat, sand, gravel, soil, or other similar substance; or any trash, garbage, debris, junk, or other polluting substance.

b. No person may drain, excavate or dredge the Private wetlands or remove therefrom loam, peat, sand, gravel, soil, or other similar substance.

c. No person may perform any act or use Private wetlands in a manner which would destroy the natural vegetation, substantially alter existing patterns of tidal flow, or otherwise alter or permit the alteration of the natural and beneficial character of such wetland.

(5) Notification of Intent or Application for Permit and/or License to dredge, fill, remove, or otherwise alter State or Private wetlands

Except for the activites authorized under Section (3)a,b, or c, a person may not dredge, fill, remove or otherwise alter any Private wetlands in any county without first informing the Water Resources Administration and receiving approval or permit as applicable. A single form as prescribed by the Water Resources Administration shall serve either as Notification of Intent or Application for Permit and/or License.

a. NOTIFICATION of Intent

The form shall serve as the Notification prescribed in Section (3)d for activities not requiring permit and/or license. The proposed activity specified in the form may proceed upon advice from the Water Resources Administration.

b. APPLICATION for Permit and/or License

The form shall also serve as the Application for permit to conduct an activity on private wetland not permitted in Section (4) above, and for license to conduct any activity on State wetlands.

Policy Guidelines for Evaluating Applications

Dredging of Channels for Reasonable Riparian Access

The public policy of the State is to preserve the wetlands while providing for the rights of the riparian land owner for his access to navigable waters. Sections 9-202 and 9-306 describe procedures for obtaining state permission for making permanent changes to the wetlands in order to construct some artificial means for obtaining such access. The intent of the Act is carried out by the use of the following policy criteria in evaluating project plants submitted for recommendations or approval:

(1) In cases where reasonable access for a riparian property owner can be provided directly from fast land, such an alternative shall be taken as opposed to the creation of a channel through the vegetated wetlands or filling for access.

(2) In those cases where access is to be provided to a subdivision or other multi-home development or community, creation of one common access channel or pier is encouraged; thus, a centralized boating facility is preferable. In the case of isolated single family dwellings a pier from fast land to open water shall normally fulfill the right of reasonable riparian access.

(3) The ownership of land bordering upon tidal waters does not carry with it the right to extend boat access inland by means of artifical channels.

(4) Canals, channels, ponds or lagoons may not be excavated without the plans also being approved by the appropriate Soil Conservation District. As there are only a few types of usch excavations that do not by law require a wetlands permit from the Department of Natural Resources, the Soil Conservation District is asked to verify the existence of such permit prior to their approval of the Sediment Control Plan. Ponds or other excavations within 100 feet of an existing shoreline might not be approved by the Soil Conservation Districts without the written approval of the Water Resources Administration.

(5) The authorization by the state for any person to dredge a navigation channel through wetlands is coordinated to the maximum possible extent with the approval of such work by federal and local agencies.

Construction of Shore Erosion Protection Work

The owner of land bounding on navigable or tidal waters is entitled to protect his shore against erosion as described in Title 9 of the Natural Resources Article. To ensure this right, the Water Resources Administration uses the following criteria to review proposed projects in carrying out the state policy to preserve the wetlands while allowing the exercise of the right of a riparian owner to protect his shore against erosion.

(6) The construction of bulkheads or other shore protection measures shall include only such filling as necessary for effective use of such measures and shall generally be located at the mean high water line or no further channelward than needed for proper tie-back emplacement, or in cases of a steep bank or cliff, no further channelward than needed to obtain a stable slope.

(7) Where shore protection is needed and a marsh exists in front of an applicant's land, the shore protection structure shall be placed behind the marsh or low profile protection (preferably riprap) placed channelward of the marsh so that normal tidal flow into the marsh will be maintained.

(8) Bulkheads shall be constructed with adequate returns to fastland or connected to adjacent shore erosion control structures, as may be applicable.

(9) Because of their possible detrimental effect, shoreline protective structures may not be approved or recommended for approval in the following cases, except where there is no alternative means to achieve a necessary public benefit whose need significantly outweighs the harm done by the proposed work:

a. Marshland will be filled or otherwise destroyed.
b. Surface drainage channels will be filled or occluded.
c. Navigation will be adversely affected.
d. Unique or rare and endangered flora or fauna will be affected.
e. Important historical or archeological sites will be adversely affected.
f. Private oyster leases or natural oyster bars in adjacent open waters will be affected.

(10) The provision of shoreline protection is encouraged in locations subject to severe erosion where conditions described in (9) above do not apply. In the review of such projects in locations determined by Maryland Geological Survey (where applicable) to have documented erosion, the Water Resources Administration recommends such protective works to be constructed in such way to have the minimum adverse effect upon the ecological, economic, hydrological, aesthetic, historical, and recreational values in the area.

(11) Permits or licenses may not be granted for shore protective structures or filling unless adequate provision is made for drainage from inland areas. The construction of bulkheads and other protective structures across wetland areas shall provide only such filling as is necessary for the effective operation of the shore protection work and shall not be used for the creation of fast land from wetlands except in those cases where the proposed activity is water dependent and the filling complies with other pertinent policy in these guidelines.

(12) Dredging for fill to be used for the efficient operation of shore erosion control work is allowed only where access to deposit land source material is not feasible or costs are excessive and it is determined not to have an extended or permanent adverse environmental impact. Dredging seaward of an existing bulkhead will alter the graduated bottom depth that helps dissipate wave energy. If dredging is used for fill, adequate compensation may be required by the state for this material. An example of cases where dredging to obtain backfill material may be permitted is where:

a. A steep bank or cliff exists and the nearshore water depths are shallow which makes trucking-in or barging-in fill material infeasible.

b. Large trees or buildings prevent trucking-in fill material.

In both a and b above, however, if grading is to be done, trucking-in fill material usually becomes feasible. The fact that dredged material may be less expensive than trucked-in fill is not a major factor.

(13) The shore protection measures used must satisfy the following criteria regarding quality and performance:

a. When site conditions permit the use of a sloping bank stabilized with vegetation, with or without riprap, this method should be encouraged as an economical solution while preserving the natural conditions.

b. Junk metal, tires, tree stumps and logs or other material that does not contain, and will not create pollutants, not placed as an interlocking structure shall not be used as part of any shore protection measures.

c. If jetties or groins are used, they must be designed at a minimum length and height to serve the purpose intended and only placed in a location not harmful to navigation or to the land of nearby land owners and the general public. The Water Resources Administration requests a determination from the Maryland Geological Survey on such works. Such work shall be approved only if it does not interfere with public access, create adverse sand transportation patterns or adversely disturb the aquatic ecosystem.

d. The approval by the Water Resources Administration of any shore protection measures does not constitute state certification of the adequacy of the fixed structures for the particular circumstances, or for any specified time period.

Other Construction Within Wetlands

To carry out the state policy in providing for the preservation of the wetlands as stated in Section 9-102, Natural Resources Article, the following criteria are used by this Administration in evaluating proposed construction within wetland areas and for preparing appropriate recommendations upon such projects. The preceding criteria deal with provision of access to navigable waters and with shore erosion protection. The following criteria deal with other activities as noted below.

(14) The general policy is to allow dredging and filling only for those water-dependent activities on State or Private wetlands which are of such nature that they must be along the shoreline or in the wetlands in order to function. Wherever possible construction shall occur on fast land instead of involving the filling of wetlands.

An example of a water-dependent facility is a boat facility which must be along a shoreline and could not function in an area away from the shore.

Some examples, but not an all-inclusive list, of structures, facilities and activities that generally are <u>not</u> appropriate uses of wetlands are:

Restaurants and businesses
Residences, apartments, motels, hotels, trailor parks
Parking lots and offices
Spoil and dump sites
Lagoons for sewage or industrial waste
Industries and factories
Storage areas for small boats
Recreational areas requiring filling above tide level such as athletic fields, parking, picnic area.

(15) The applicant shall clearly demonstrate that any proposed work which involves alteration or destruction of wetland areas is water-dependent and that there is no alternative upland site available and that the best public interest is served by this facility meeting a specific need clearly defined by the applicant.

(16) No dredging of private wetlands to obtain fill shall be permitted, except where there is no alternative means to achieve a necessary public benefit.

(17) All activites allowed on State or Private wetlands shall be undertaken in such a manner as to minimize adverse environmental effects.

(18) It is the general policy of the state not to allow the filling of State wetlands for the purpose of creating fast land.

(19) In those cases where the best public interest justifies approval of the work, such projects involving the filling of Private or State wetlands including those involving the creation of fast land, approval of such project may be considered if the following conditions are satisfied:

a. The project cannot feasibly be undertaken on an adjacent or nearby fast land location.

b. It is not feasible to provide the service the project is intended to provide by an alternative means not involving the filling of wetlands.

c. The creation of fast land shall occur only in those areas adjoining existing fast lands.

d. No significant ecologically productive submerged wetlands, such as major finfish and shellfish spawning and habitat areas, shall be destroyed.

e. Fill utilized for the creation of fast land shall be obtained from a land-based source and not dredged from adjacent Private or State Wetlands.

f. The creation of fast land shall not obstruct navigational channels, adversely affect the public's use of the waters of the state including the public's right to navigation and fisheries, significantly affect major current patterns, or significantly alter the existing contour of the shoreline.

g. In all projects involving the filling of State wetlands, compensation for fast land created in the public domain shall generally be provided to the State in an amount determined by the State Board of Public Works.

(20) Title 9, Natural Resources Article, requires that in granting, denying or limiting any permit, the Department of Natural Resources shall consider the effect of the proposed work with reference to the public health and welfare, marine fisheries, shellfisheries, wildlife, economic benefits, the protection of life and property from flood, hurricane and other natural disasters, and the public policy set forth in Section 9-102 of that Article. In granting a permit or license, limitations or conditions may be imposed to carry out this public policy.

(21) The policy regarding approval of earthen dikes for the protection of structures constructed in Private wetlands is as follows:

a. The repair and maintenance of earthen dikes in Private wetlands are considered as works not requiring notification [Requirements of the Wetlands Act, 3(c)], provided that such work does not involve the extension or increase in dimension of an existing dike. The latter is considered under 3(d) or 4 of the Requirements, requiring notification and/or permit, depending upon the nature and magnitude of the work.

b. The construction of earthen dikes in Private wetlands about a single residential dwelling which is subject to encroachment by tidal waters, is considered under Requirement 3(d), as works requiring notification.

c. The construction of earthen dikes in Private wetlands about any structure, other than single residential dwelling, which is or may be subject to encroachment by tidal waters is considered under Requirement 4, as works requiring permit.

d. Favorable consideration is given to the construction of such earthen dikes as may be deemed reasonable to meet the state purpose and which will be of minimal adverse on adjoining wetlands.

(22) The policy with respect to road construction in or involving Private wetlands for timbering operations is to minimize adverse environmental impact with due consideration for the public and private benefits that may be derived from that industry. Such road construction for this purpose is that access required for the harvesting of ten (10) or more acres of forest to which reasonable direct access cannot be made available from fast land. The Department of Natural Resources gives favorable consideration to the construction of such access, temporary or permanent, preferably the former, under the following conditions:

a. That the placement of the road is for the least distance across wetlands and tidal guts that is necessary to make the operation economically feasible; and recognizing property rights involved.

b. That temporary road construction will be encouraged to the extent practicable, with such construction to consist of a roadbed no more than twenty (20) feet in width and an elevation no more than one (1) foot above adjacent wetlands and be built of excavated marsh or clean inorganic earth fill. While land source fill is preferable, excavation of adjacent marsh on either side, for a surface width of eight (8) feet and to no greater depth than three (3) feet below marsh surface is acceptable.

c. That permanent road construction will be permitted where the nature of the particular operation, including continued use for access to adjoining harvest areas, would make this environmentally and economically more feasbile. This road construction may be for a roadbed no more than thirty (30) feet in width with elevation no more than three (3) feet above adjacent wetlands, and composed of excavated marsh. The excavation of adjacent marsh for a surface width of ten (10) feet and no more than five (5) feet in depth on either side of the roadbed is acceptable. The installation of culverts may be required to adequately handle flushing and drainage of the wetland areas affected by the construction. The crossing of natural streams shall be by piered structures.

d. The temporary roads are those that are within the above described parameters, and will be used for no longer period than six (6) months, and for which provision will be made to remove any section of the roadbed that has temporarily closed any natural tidal gut so as to restore normal tidal flow when harvesting is completed.

e. The permanent roads are those that are within the above described parameters and for which periodic maintenance is to be provided to insure the continued operability of any culverts and drainage ditches incorporated.

f. The Department of Natural Resources recognizes that while temporary roads, as defined above, may be operationally of limited duration, the effect of the works constitute a more permanent alteration of Private wetlands. Accordingly, such proposed works require a permit. Proposals for permanent road construction, or for those temporary or permanent roads for access to less than or more than ten (10) acres of harvestable timber also require a permit.

(23) The policy with respect to the construction of ditches and sumps in Private wetlands for the purpose of allowing water to flow to fast land to be used for irrigation, is to permit the construction of such ditches within the following guidelines:

a. That the placement of the ditch is for the least possible distance across wetlands to allow a sufficient supply of water for irrigation purposes.

b. That the ditch be limited to four (4) feet in surface width and three (3) feet in depth at mean low tide.

c. That the sump adjacent to fast land be limited to a maximum surface area of 100 square feet and maximum depth of six (6) feet.

d. That spoil from such ditches be placed on either side within five (5) feet and in piles interrupted every 20 feet for a distance of five (5) feet, so as to permit the flow of water in the wetlands.

e. That the spoil from the sump be placed on fast land or within ten (10) feet of the sump if in wetlands.

f. The construction of irrigation ditches and sumps within these parameters is considered as permanent alteration not requiring notification or permit [Requirement 4(c)]. The construction of irrigation ditches and sumps not within each of the aforementioned parameters shall require notification and/or permit as the particular circumstances and magnitude of the works may dictate.

(24) The policy with respect to drainage ditches for mosquito control or agricultural drainage is to allow the construction or maintenance of such ditches when approved by the Maryland Department of Agriculture, and by the appropriate Soil Conservation District. Such work shall be in accordance with the following guidelines. This policy is to allow such ditches for the purpose of draining agricultural and related rural lands. All work shall be inaccordance with drainage practice standards and specifications of the United States Soil Conservation Service and shall conform to the following guidelines:

a. Ditches shall extend onto private wetlands for the least distance required to insure an outlet for adjacent lands, and shall follow the alignment having the least disturbance to wetlands.

b. Ditches in Private wetlands shall be sized according to good agricultural drainage practice and in no case shall exceed the following maximum size limitations:

   1) Top width -- 14 feet
   2) Depth -- 4 feet
   3) Side Slopes -- 1 to 1

c. The spoil from such ditches shall be placed either:

   1) wherever possible on fast land; or
   2) in piles interrupted every twenty (20) feet for a distance of five (5) feet so as to permit the flow of water in wetlands; or
   3) in continuous rows with tide gates at intervals to allow water movement in wetlands, if diking is needed to protect uplands from tidal flooding.

d. The fringe of natural vegetation at least 8 feet wide bordering both sides of the ditch shall be left intact as a filter strip without being disturbed or covered by spoil.

e. Where appropriate, revegetate spoil areas by either:

   1) Stripping, stockpiling and placing original vegetation on spoil area surfaces; or
   2) Plant and/or seed to species suited to local soils and salinity conditions.

Review of Applications for Federal Permits

Coordination with Federal Agencies

The Department of the Army, acting through the Corps of Engineers is responsible for administration of federal laws requiring permits for any structure or work in or affecting navigable waters of the United States, the discharge of dredged material into such waters, or the transportation of dredged material for the purpose of dumping it into ocean waters. The policy, practice and procedure for this is described in the regulation 209.120 of the Corps of Engineers, U.S. Army, effective July 25, 1975. That regulation describes the authorization needed to comply with federal law for all structures and work except for the work pertaining to bridges and causeways, which authorization is administered by the U.S. Coast Guard under the Secretary of Transportation. The Baltimore District, Corps of Engineers, U.S. Army, and the Fifth Coast Guard District, Corps of Engineers, U.S. Army, and offices for their respective agencies responsible for work within the navigable waters in Maryland.

The Water Resources Administration of the Maryland Department of Natural Resources is responsible for reviewing all applications for federal permits and coordinate the comments of other state agencies into a single response as the official comment and recommendation from the State of Maryland on each permit application. The following pages describe this process of coordination and establishes the policy of the State in commenting upon work proposed within navigable waters. A part of this process is to notify persons that work involving dredging and filling within the tidal waters requires a permit or license from the State in addition to the federal permit.

A major step in coordination of activities was the signing of a Memorandum of Agreement between the Maryland Department of Natural Resources and the Baltimore District of the Corps of Engineers to jointly process and evaluate non-routine (major) project applications for Department of Army permits and State permits. This agreement provides a more efficient and effective permit program by avoiding duplication of effort, realizing economics in administration by the respective agencies, and eliminating unnecessary delays in processing applications. The Agreement applies only to projects in tidal waters and their adjacent wetlands referenced as Phase I in the revised Department of the Army 404 regulation (Federal Water Pollution Control Act; P.L. 92-500). Subsequent modifications to the Agreement will address Phases II and III as necessary.

The Corps of Engineers or the U.S. Coast Guard (in the case of bridge construction) issues a public notice on each application for a federal permit. Such notification includes a description of the proposed work and requests comments on the effect of the proposed activity upon factors affecting the public interest.

Water Quality Certificate

Under Section 401 of the Federal Water Pollution Control Act (P.L. 92-500; 86 Stat. 816, 33 USC 1411), any applicant for a federal permit to conduct an activity which may result in a discharge into navigable waters is required to obtain a certification from the State that the discharge will comply with the applicable water quality standards. The certification also pertains to the subsequent operation of the facility.

In cases where the Corps of Engineers or U.S. Coast Guard has stated that a water quality certificate is required, the Water Resources Administration issues or denies the water quality certificate, or places certain conditions on the activity. Even in public notices that do not state that a water quality certificate is required, but it is felt that the construction or use of the facility will create a discharge to the waters of the State, the Water Resources Administration reviews the proposed activity and issues or denies the water quality certificate, providing appropriate recommendations to the Corps of Engineers to implement water quality protection measures. The Administration

may solicit comments from interested parties and may schedule a public hearing on the project.

Failure to comply with the conditions of the Water Quality Certificate constitutes reason for cancellation of certification and legal proceedings may be instituted against the applicant in accordance with Section 8-1401 through 8-1501 inclusive, of the Natural Resources Article, Annotated Code of Maryland (1974 Volume). In granting the Water Quality Certificate, the Water Resources Administration reserves the right to inspect at any time the operations and records regarding the project.

The evaluation of the proposed work for the purpose of preparing a water quality certificate is started promptly upon receipt of the public notice. Where a State Wetlands license or Private Wetlands permit is required, recommendations for the issuance or denial of the license or permit include the evaluation regarding the water quality certificate. This evaluation utilizes the existing information on water quality, supplemented by environmental information requested from the applicant and other water quality data gathered in the field when considered necessary by the Water Resources Administration.

Policy Guidelines for the Review of Federal Permit Applications Requiring a Water Quality Certificate or other State Approval

Recommendations on applications and the action taken on the issuance or denial of water quality certificates is done in accordance with the policy criteria described below.

(1) Compliance with water quality standards

a. Water quality certificates for dredging and filling within State or Private wetlands are issued only after the application for the State wetlands license or Private wetlands permit has been recommended for approval by the Water Resources Administration, and is in accordance with the conditions of the license or permit.

b. Applications for federal permits to construct, repair or make improvements to a marina with a capacity of more than four boats requires a water quality certificate. Applications for federal permits if no boat facilities are provided or for a boat facility providing for four or less boats does not require a water quality certificate if one is not called for by the Corps of Engineers.

c. A Water Quality Certificate for the construction or enlargement of a marina for a capacity more than four boats is based upon consideration of the following factors:

1) Facilities shall be provided for proper disposal on land outside the wetlands area for sanitary sewage, industrial discharges and solid waste.

2) Toilet facilities are to be located ashore as approved by the County Health Department to provide toilets and lavatories in sufficient numbers for boat occupants.

3) Grading and sediment control plans approved by the appropriate Soil Conservation District.

4) Regulations of the marina owner requiring users of the marina facilities to:

- Avoid use of heads while boats are in port; and
- Avoid discharge of non-degradable detergent, fuel, grease, oil, paint, or solid waste into water.

5) Maintenance program being carried out by marina owner to prevent soil or other materials from being washed into water.

(2) Location of Boat Facilities

The Water Resources Administration is guided by the following criteria in reviewing the construction or enlargement of marinas.

a. In planning the construction of piers for small boats, the need for protecting safety and promoting the public welfare governs the recommendations of the Department of Natural Resources in the issuance or denial of a permit. As a matter of policy, in the absence of overriding public interest, favorable consideration is given to applications from riparian owners for permits for piers for small boats if such piers do not create possible obstructions to the public's use of the waterway and to the neighboring owner's access to the waterway.

b. The facility shall be located so as not to interfere with existing or proposed bridges, with water recreation areas or with commercial fishing areas.

c. The width and depth of channels must be sufficient to permit the safe movement of boats. In reviewing an application, one objective is to limit the amount and frequency of expected maintenance dredging. In terms of draft requirements, maintenance dredging shall be compatible with ambient depths and channel access routes.

d. Due to better flushing and access to open water, location in the lower portions of a tidal tributary is preferable and encouraged over a location in the headwater areas. Similarly, proliferation of boating facilities within the upper reaches of existing artificial (canal) systems is discouraged.

e. A location which does not require crossing a vegetated wetland for access to the facility is preferable to a site which requires such a crossing. If there is no feasible alternative to the latter, the preferred means of crossing is a piered structure or, if not, a culverted causeway of minimum dimensions. The approval of such a causeway is dependent upon such factors as distance, the capability of the marsh to support such a structure, and the potential adverse impact on the remaining marsh.

f. In those cases where a marina or docking facility is to be provided to a multi-home development or community, a centralized facility is encouraged.

(3) Non-Interference Criteria

a. Investigation is made by the Water Resources Administration to assure that the plans of the proposed work show that the new facility will avoid endangering or blocking other boat traffic traversing the area or access to nearby piers.

b. Except in ususual locations deemed applicable by the Administration, no structure is to extend beyond any of the following limits:

1) Three hundred (300) feet beyond shoreline at mean high tide, existing at time these improvements are made.

2) The near boundary of a defineable channel.

3) In the absence of a defined channel, not more than one-third the width of the waterway surface at mean high water, and in no case extending into or across a natural channel normally used by boat traffic.

c. Where proposed construction will conflict with existing facilities, the Water Resources Administration may recommend the limits of construction to cause the least interference with such existing or possible future construction.

d. Where existing piers do not already fix a pattern of pier location along a portion of a shoreline, the following method is used for defining divisional lines between the water areas off-shore of adjoining properties, unless otherwise established by applicable law:

<u>With straight shorelines</u>, the divisional lines shall either be the extension of the property lines, or be lines approximately perpendicular to the shoreline starting at the property line.

<u>With irregular shorelines</u>, a base line shall be drawn between the two corners of each lot at the mean high water line and lines erected perpendicular to such base lines at each such property corner. The angle formed between the two perpendiculars starting at such property corner shall be bisected and the bisectors shown as divisional lines.

Piers, mooring piles or other construction shall normally be confined to the water area at least ten (10) feet away from such divisional lines.

APPENDIX E

ACTIVITIES OCCURRING IN TIDAL WETLANDS

Situation

Wetlands play a key role in Maryland's estuarine environment, providing basic nutrients in the food chain and habitat for many fish and wildlife species, helping to protect water quality, inhibit flooding and control shore erosion.

Prior to 1970, protection of Maryland's tidal wetlands was limited, and controls over dredging and filling of wetlands were primarily based on consideration of the effects of navigation rights rather than on ecological impact. Inadequate protection resulted in the loss of an estimated 23,777 acres of wetland area between 1942 and 1967. There is still considerable pressure to alter tidal wetlands.

Issues

This situation necessitates that state and local governments coordinate their activities and regulatory actions, with federal government cooperation and consistency, toward the objective identified in the Coastal Zone Management Program:

(4) To protect, maintain, and where feasible, restore the integrity of the State's tidal wetlands.

Investigations and regulatory procedures must consider whether or not a proposed action:

- Actually necessitates wetlands alteration.
- Can be met through alternatives that do not involve wetlands alteration.
- Will have adverse impacts on the productivity of the wetlands; wildlife habitat, fisheries, and shellfisheries.
- Is water-dependent.
- Creates a public benefit.
- Involves upland activities which will directly affect the productivity and integrity of adjacent wetlands.
- Contributes to adverse cumulative effects of minor wetlands alterations.

Policies

General

1. All vegetated tidal wetlands are Geographic Areas of Particular Concern. (Natural Resources Article, Section 9-102).

2. In granting, denying or limiting any wetlands permit or license, the State shall consider the effect of the proposed work on the public health and welfare, marine fisheries, shellfisheries, wildlife, economic benefits, the protection of life and property from flood, hurricane and other natural disasters, and the public policy set forth in Section 9-102 of the Natural Resources Article to protect wetlands and prevent their despoliation and destruction. (Natural Resources Article, Section 9-202, 9-306)

3. 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. (Natural Resources Article, Sections 1-302, 9-102, 9-201, 9-306)

Hunting, Fishing, Trapping, Etc.

1. The dredging of seafood products by any licensed operator, harvesting of seaweed, mosquito control and abatement as approved by the Department of Agriculture, improvement of wildlife habitat approved by the Department of Natural Resources, and maintenance of drainage ditches approved by the appropriate Soil Conservation District do not require a state wetlands license. (Natural Resources Article, Section 9-202)

2. The following are lawful uses of private wetlands:

   a. Conservation of soil, vegetation, water, fish, shellfish and wildlife.

   b. Trapping, fishing, and catching shellfish if otherwise legally permitted. (Natural Resources Article Section 9-303)

Riparian Access

The public policy of the State is to preserve wetlands and protect water quality while providing for the riparian land owner's right of access to navigable waters. Thus,

1. Whenever reasonable access can be provided directly from fast land, creation of a channel through vegetated wetlands, filling for access, or extending access inland with artifical channels shall be prohibited.

2. In those cases where access is to be provided to a subdivision or other multi-home development or community, a centralized boating access channel or pier is preferable to multiple piers or channels. In the case of isolated single family dwellings, a pier from fast land to open water shall normally fulfill the right of reasonable riparian access.

3. The ownership of land bordering upon tidal waters does not carry with it the automatic right to create channels to extend boat access.

(Natural Resources Article, Sections 1-302, 9-102, 9-202, 9-306; pending revised DNR wetlands regulations)

Shore Erosion Control

The policy of the State is to preserve wetlands while allowing the riparian owner to exercise his right to protect his shore against documented erosion. (Natural Resources Article, Sections 9-102, 9-201, 9-303(4)) (See also the Section on Activities Occurring in Areas Undergoing Significant Shore Erosion)

Water Dependent Activities

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. Water-dependent facilities, such as boat facilities, are those which cannot function in an area away from the shoreline. Non-water dependent facilities include (but are not limited to) restaurants and businesses, residences, apartments, motels, hotels, trailer parks, parking lots, officies, spoil and dump sites, lagoons for sewage or industrial waste, industries and factories, storage areas for small boats, recreational areas requiring filling above tidal level such as athletic fields, parking areas and picnic areas. In those cases where the public interest justifies approval

of projects involving the filling of Private or State wetlands, including those involving the creation of fast land, approval may be considered if the following conditions are satisfied (Natural Resources Article, Sections 1-302, 1-303, 9-102, 9-202, 9-306; pending revised DNR wetlands regulations):

- The project cannot feasibly be undertaken on an adjacent or nearby fast land location.

- It is not feasible to provide the project's intended service by an alternative means not involving the filling of wetlands.

- The creation of fast land shall occur only in those areas adjoining existing fast lands.

- No ecologically productive submerged wetlands, such as finfish and shellfish spawning and habitat areas, shall be destroyed.

- No areas important for the feeding, nesting, or resting of waterfowl or other valuable wildlife habitat shall be destroyed.

- Fill utilized for the creation of fast land shall be obtained from an appropriate land-based source and not dredged from adjacent Private or State wetlands.

- The creation of fast land shall not obstruct navigational channels, adversely affect the public's use of the waters of the state, including the public's right to navigation and fisheries, significantly affect major current patterns, or significantly alter the existing contour of the shoreline.

- In all projects involving the filling of State wetlands, compensation for fast land created in the public domain shall generally be provided to the State in an amount determined by the State Board of Public Works. (See Board of Public Works v. Larmar Corp. 262 Md. 64, 277A2d.427 (1971))

Construction and Maintenance of Drainage Ditches

Drainage ditches for mosquito control or agricultural drainage are generally allowed if they conform to the drainage standards and specifications of the Soil Conservation Service, if they are approved by the Department of Agriculture, and if they are constructed to minimize adverse environmental impacts. Construction of ditches and seeps on Private wetlands for the purpose of allowing irrigation water to flow to fast land are permitted if they are constructed in a minimally disruptive manner. (Natural Resources Article, Sections 1-202(d), 9-303)

Implementation

Lead Agencies

Federal: U.S. Army Corps of Engineers

State: Water Resources Administration and Board of Public Works

Participating Agencies

Federal: U.S. Fish and Wildlife
National Marine Fisheries Service
Environmental Protection Agency

State: Maryland Fisheries Administration
Maryland Wildlife Administration
Department of State Planning
Other state and local agencies as relevant

Management Procedures

All activities occuring on tidal wetlands except trapping, hunting, fishing, shellfishing, the cultivating and harvesting agricultural or horticultural products, and minor agricultural and drainage maintenance projects, are regulated by the state wetland permits and licenses and Water Quality Certification programs. Each proposed activity is evaluated by the Water Resources Administration with the assistance of relevant state agencies, for its impacts on the wetlands, water quality, wildlife habitat, fisheries, and shellfisheries. Larger projects are given a comprehensive review through participation of any federal, state and local agency with a special expertise or concern. The policies noted above are the criteria utilized by the Wetlands Section of the Water Resources Administration in permit decisions, and the Water Resources Administration is in the process of formalizing them into regulations.

The final State authority on making decisions on proposed wetland projects varies somewhat depending on whether State wetlands or private wetlands are involved. (The term tidal wetlands is used in this document to include both State and private wetlands.) State wetlands are defined as "all land under the navigable waters of the State below the mean high tide, which is affected by regular rise and fall of the tide". Private wetlands are "all lands not considered State wetlands bordering on or lying beneath tidal waters, which are subject to regular or periodic tidal action and which support aquatic growth". In the case of projects affecting State wetlands, the final decision is made by the Board of Public Works which is composed of the Governor, the Comptroller, and the Treasurer. In the case of private wetlands the Department of Natural Resources makes the final decision. In both cases, the decision is based on the recommendation of the Wetlands Permit Section of the Department of Natural Resources.

Whenever possible, the State's wetlands programs are coordinated with the Corps of Engineers, Section 10 and Section 404 permit programs. To further coordination, the Department of Natural Resources has established an agreement with the U.S. Corps of Engineers to undertake, to the maximum extent feasible, joint site reviews and hearings on projects falling under the jurisdiction of both agencies. The Corps has also established general permit procedures for the use of riprap for shore protection, the replacement of bulkheads, and the installation of piers and mooring piles. Under these procedures, their approval will automatically be granted if specified criteria are met and the State approves the project, except in special circumstances.

These permit procedures greatly reduce delays in Corps approval of routine projects, and allow special attention to be given to projects with special circumstances. Since the State participated in developing the criteria, most projects that meet the criteria will also receive prompt state approval, although the State reserves the authority to disapprove projects wherever necessary.

Coastal Zone Unit Role

Project Evaluation

The existing permit program generally gives adequate protection to tidal wetlands. In FY 1976 only 1.5 acres of vegetated wetlands and 45 acres (36 acres dredging, 9 acres filling) of open waters were altered by projects permitted by WRA. The Coastal Zone Unit will participate in the review of projects requiring the dredging or filling of a 1/4 acre or more of wetland because of the significance of their potential impacts. (See also sections on Dredging and Filling, Recreational Boating, Marinas and Activities Occurring in Areas Undergoing Significant Shore Erosion.)

Program Review

As described in Chapter IV, all tidal wetlands will be designated Geographic Areas of Particular Concern, and will be protected by existing programs. In the case of wetland areas which, due to their particular value, warrant special protection, designation as State Critical Areas for preservation will be sought. These efforts will be aided by the Tidal Wetlands Study undertaken by the Coastal Zone Unit, which provides detailed information on wetland vegetation types, their location, extent and value.

In addition, the Coastal Zone Unit will:

1. Cooperate with other State and Federal agencies involved with review of wetland permits to establish mutually acceptable evaluation criteria and expeditious permit procedures.

2. Cooperate with WRA and U.S. Army Corps of Engineers on the establishment of an information base for all projects undertaken in wetlands areas, so that cumulative impact evaluations can be undertaken.

3. Cooperate with WRA and the U.S. Army Corps of Engineers to incorporate consideration of cumulative and long-term impacts into the existing permit processes.

4. Cooperate with local governments to modify, where necessary, local planning, zoning and regulatory programs to insure consistency with State policies.

5. Encourage, in cooperation with appropriate governmental agencies, the use of buffer zones between upland developments and wetlands.

6. Encourage the preservation of wetlands through the use of easements (and acquisition where appropriate).

7. Cooperate with WRA and appropriate federal agencies on the development of measures to restore presently degraded wetlands habitats and to ensure the monies received as compensation for the filling of State wetlands is used to preserve, restore, or improve wetland areas.

8. Cooperate with the State Department of Agriculture, the U.S. Department of Agriculture, and the U.S. Fish and Wildlife Service to evaluate the effectiveness of the Open Marsh Water Management method of mosquito control in the marshes of the lower Eastern Shore of Maryland.

AUTHORITIES RELATED TO TIDAL WETLANDS

Statutory Authority	Management Technique	Agency
Wetlands Law Art. NR, Title 9	Direct State Planning and Regulation	DNR (WRA)
Federal Water Pollution Control Act Amendments of 1972, Section 404 Rivers and Harbors Act of 1899, Section 10	Federal Consistency State Water Quality Certification	Federal: U.S. Army Corps of Engineers State: DHMH (OEP)

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