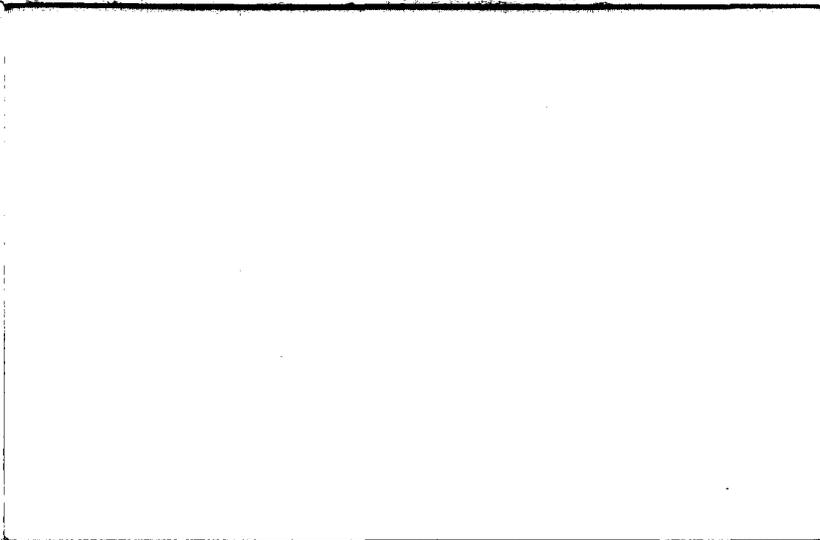


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EXISTING LEGAL FRAMEWORK FOR MANAGEMENT  
OF VIRGINIA'S COASTAL WETLANDS

by

MAR 27 1978

William E. Cox

Research Report  
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ALTERNATIVE MANAGEMENT STRATEGIES  
FOR  
VIRGINIA'S COASTAL WETLANDS  
SEA GRANT PROJECT PAPER  
VPI-SG-77-07

Department of Agricultural Economics  
Virginia Polytechnic Institute and State University  
Blacksburg, Virginia 24061

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FOREWORD

Funds for this project were provided under grants (04-6-158-44086 and 04-7-158-44086) from The Office of Sea Grant, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

The results of the study are in a series of project papers under the general title: "Alternative Management Strategies for Virginia's Coastal Wetlands" with subtitles as follows:

	<u>Sea Grant Project #</u>
1. Alternative Management Strategies for Virginia's Coastal Wetlands: A Program of Study	VPI-SG-77-04
2. Economic Implications of Environmental Legislation for Wetlands	VPI-SG-77-05
3. Estimating the Economic Value of Natural Coastal Wetlands: A Cautionary Note	VPI-SG-77-06
4. Existing Legal Framework for Management of Virginia's Coastal Wetlands	VPI-SG-77-07

Additional publications concerning development and preservation values of coastal wetlands as well as alternative wetlands management strategies will be forthcoming.

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TABLE OF CONTENTS

	<u>Page</u>
List of Abbreviations . . . . .	iv
Introduction . . . . .	1
Direct Regulation of Wetlands Alteration . . . . .	1
Virginia Wetlands Act . . . . .	1
The Local Role . . . . .	3
The State Role . . . . .	5
Federal Water Pollution Control Act Amendments of 1972 . . . . .	7
External Constraints on Regulatory Agency Decisions . . . . .	10
Environmental Protection Agency Responsibilities	
Under Section 404 of FWPCA . . . . .	10
Water Quality Certification Required by FWPCA . . . . .	12
Review for Consistency with the Coastal Zone	
Management Act of 1972 . . . . .	12
General Environmental Review . . . . .	12
Review for Impact on Fish and Wildlife . . . . .	13
Review for Impact on Wild and Scenic Rivers . . . . .	14
Review for Impact on Historic Sites . . . . .	14
Review for Consistency with State Regulatory Action . . . . .	15
Review for Compatibility with State and Local Planning . . . . .	15
Procedures for Wetlands Preservation Through	
Creation of Sanctuaries . . . . .	16
Coastal Zone Management Act of 1972 . . . . .	16
Marine Protection, Research and Sanctuaries	
Act of 1972 . . . . .	17
Wild and Scenic Rivers Act . . . . .	17
Wilderness Act . . . . .	17
Estuarine Studies . . . . .	18
Wildlife Refuges and Management Areas . . . . .	18
General Recreation Lands . . . . .	19
Water Resources Development Act of 1976 . . . . .	19
Other Preservation Programs . . . . .	20
Footnotes . . . . .	21

LIST OF ABBREVIATIONS

CZMA Coastal Zone Management Act of 1972  
EIS Environmental impact statement  
EPA Environmental Protection Agency  
ESA Endangered Species Act of 1973  
FWCA Fish and Wildlife Coordination Act  
FWPCA Federal Water Pollution Control Act Amendments of 1972  
MPRSA Marine Protection, Research and Sanctuaries Act of 1972  
NEPA National Environmental Policy Act of 1969  
NHPA National Historic Preservation Act of 1966  
NWRS National Wildlife Refuge System  
OMB Office of Management and Budget  
RHA River and Harbor Act of 1899  
VCGIF Virginia Commission of Game and Inland Fisheries  
VCOE Virginia Council on the Environment  
VCOR Virginia Commission of Outdoor Recreation  
VDCED Virginia Department of Conservation and Economic Development  
VDSP Virginia Division of State Parks  
VIMS Virginia Institute of Marine Science  
VMRC Virginia Marine Resources Commission  
VSRA Virginia Scenic Rivers Act  
VWA Virginia Wetlands Act  
WA Wilderness Act  
WMA Wildlife Management Area  
WRDA Water Resources Development Act of 1976  
WSRA Wild and Scenic Rivers Act

## EXISTING LEGAL FRAMEWORK FOR MANAGEMENT OF VIRGINIA'S COASTAL WETLANDS

William E. Cox

### INTRODUCTION

Virginia's coastal wetlands presently are subject to a complex legal framework that controls utilization and establishes the basis for substantial public involvement in managerial decision-making. This legal framework can be viewed as consisting of three fundamental components. The most direct of these is governmental regulation of private wetlands alteration. A second closely related component consists of the various environmental and other mandatory review procedures that constrain decision-making by the agencies directly involved in regulation. The third component of the legal framework consists of several provisions of law that serve as potential mechanisms for preservation of wetlands through public acquisition or control as sanctuaries.

### DIRECT REGULATION OF WETLANDS ALTERATION

One of the most significant aspects of the institutional framework for wetlands management consists of direct governmental regulation of wetlands modification. In Virginia, there are two specific controls that regulate conversion of wetlands from the natural to a developed state: the Virginia Wetlands Act<sup>1</sup> (VWA) and section 404 of the Federal Water Pollution Control Act Amendments of 1972<sup>2</sup> (FWPCA).

#### Virginia Wetlands Act

The Virginia Wetlands Act, enacted in 1972, is based on the premise that wetlands constitute ". . . an irreplaceable natural resource which in its natural state, is essential to the ecological systems of the tidal rivers, bays and estuaries of the Commonwealth."<sup>3</sup> Legislative recognition is given to a number of adverse consequences associated with continuing wetlands destruction, including water pollution; a decrease in flora and fauna as sources of food, employment, and recreation; an increase in costs and hazards associated with floods and tidal storms; and an acceleration in erosion and loss of productive lands. Thus the VWA declares that the policy of the state is ". . . to preserve the wetlands and to prevent their despoliation and destruction and to accommodate necessary economic development in a manner consistent with wetlands preservation."<sup>4</sup>

In order to implement this policy, VWA establishes a regulatory program that subjects certain types of wetlands modifications to governmental control by requiring that an authorizing permit be obtained prior to alteration of the natural condition. The scope of this regulatory program is defined in terms of 1) the physical wetlands characteristics and 2) the type of modifying activity.

With regard to physical characteristics of the wetlands encompassed by the Act, VWA contains general criteria that apply to all wetlands except specially designated areas, including Back Bay, North Landing River, and the tributaries of these two bodies of water. In the case of these special areas, wetlands subject to the act include all marshes that are 1) subject to regular or occasional flooding by tides, including wind tides but excluding hurricane or tropical storm tides and 2) that contain certain specified vegetation on or after July 1, 1973.<sup>5</sup> In all other areas, wetlands are encompassed by VWA if they are 1) contiguous to mean low water and lie between this line and an upper elevation equal to 1.5 times the mean tide range at the site in question and 2) contain certain specified vegetation on July 1, 1972, or thereafter.<sup>6</sup>

VWA applies to all alterations of wetlands that are not specifically exempted by the act. The following activities are specifically exempted:

(a) The construction and maintenance of noncommercial catwalks, piers, boathouses, boat shelters, fences, duckblinds, wildlife management shelters, footbridges, observation decks and shelters and other similar structures; provided that such structures are so constructed on pilings as to permit the reasonably unobstructed flow of the tide and preserve the natural contour of the marsh;

(b) The cultivation and harvesting of shellfish, and worms for bait;

(c) Noncommercial outdoor recreational activities, including hiking, boating, trapping, hunting, fishing, shellfishing, horseback riding, swimming, skeet and trap shooting, and shooting preserves; provided that no structure shall be constructed except as permitted in subsection (a) of this section;

(d) The cultivation and harvesting of agricultural or horticultural products; grazing and haying;

(e) Conservation, repletion and research activities of the Virginia Marine Resources Commission, the Virginia Institute of Marine Science, Commission of Game and Inland Fisheries and other related conservation agencies;

(f) The construction or maintenance of aids to navigation which are authorized by governmental authority;

(g) Emergency decrees of any duly appointed health officer of a governmental subdivision acting to protect the public health;

(h) The normal maintenance, repair or addition to presently existing roads, highways, railroad beds, or the facilities of any person, firm, corporation, utility, federal, State, county, city or town abutting on or crossing wetlands, provided that no waterway is altered and no additional wetlands are covered;

(i) Governmental activity on wetlands owned or leased by the Commonwealth of Virginia, or a political

subdivision thereof;

(j) The normal maintenance of man-made drainage ditches, provided that no additional wetlands are covered; and provided further, that this paragraph shall not be deemed to authorize construction of any drainage ditch.<sup>7</sup>

In addition to these categorical exemptions, VWA also contains a grandfather provision that excludes from its regulatory provisions certain projects that were initiated, or in connection with which certain action had been taken, prior to the effective dates of the act.<sup>8</sup>

In furtherance of the premise that wetlands are essential to the ecological systems of the state's tidal waters, VWA establishes the following standards for the use and development of wetlands;

(1) Wetlands of primary ecological significance shall not be altered so that the ecological systems in the wetlands are unreasonably disturbed;

(2) Development in Tidewater Virginia, to the maximum extent possible, shall be concentrated in wetlands of lesser ecological significance, in wetlands which have been irreversibly disturbed before July one, nineteen hundred seventy-two, and in areas of Tidewater Virginia apart from the wetlands.<sup>9</sup>

The regulatory program established by VWA to insure application of these standards and implementation of its other provisions involves both the state and local levels of government. The act contains provisions for administration of the mandated permit program by local government, with the state to provide general guidelines for administration and review of local permit decisions. However, provision is made for direct state administration where local programs are not developed.

#### The Local Role

VWA provides authority for the governing body of any county, city, or town to adopt a wetlands zoning ordinance as presented in the act. Where this option is exercised, the locality must create a wetlands board consisting of five residents of the locality (the City of Poquoson is authorized to appoint a seven member board).<sup>10</sup> The following political subdivisions have established wetlands boards:<sup>11</sup>

Accomack County	Middlesex County
Charles City County	New Kent County
Chesapeake	Newport News
Essex County	Northhampton County
Gloucester County	Northumberland County
Hampton	Poquoson
Hopewell	Prince William County
Isle of Wight County	Richmond County
James City County	Stafford County
King George County	Virginia Beach

King William County  
Lancaster County  
Mathews County

West Point  
Williamsburg  
York County

Once a local wetlands board is established, it is unlawful for any person to conduct a non-exempted wetlands modification without a permit from the local board. When a permit application is filed with a local board, copies must be sent to the Virginia Marine Resources Commission (VMRC) and the Virginia Institute of Marine Science (VIMS). Within 60 days after receipt of an application, the local board must hold a public hearing at which any person may appear and be heard. A record of the proceedings, including a summary of the statements of all witnesses, is required. The decision to grant or deny the permit must be made within 30 days of the hearing, with notice of the decision to be given the applicant and the Commissioner of Marine Resources within 48 hours.<sup>12</sup>

The decision of a local board on each application is to be based on testimony regarding the application and the board's assessment of the impact of the development with regard to the policy and standards of VWA and guidelines promulgated by VMRC. After considering these factors, the board is required to grant the permit if it finds that the purposes and intent of VWA will not be violated and ". . . that the anticipated public and private benefit of the proposed activity exceeds the anticipated public and private detriment. . . ." <sup>13</sup> Otherwise, the permit is denied.

Permits may be granted subject to any reasonable condition or modification. The local board after hearing may suspend a permit if the applicant does not comply with terms and conditions set forth in the application.

Another local control mechanism not related to VWA but directly affecting wetlands use consists of authority concerning land use planning and control. State legislation requires each county and municipality to create a planning commission,<sup>14</sup> to consist of at least five but not more than 15 members.

The principal duty of each local planning commission is the preparation of a comprehensive plan for the physical development of land within its jurisdiction. Statutory guidelines for such plans provide for a survey of natural resources during plan preparation and specify that the plan may include "[t]he designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, conservation, recreation, public service, flood plain and drainage, and other areas . . . ." <sup>15</sup> This provision appears to authorize incorporation of natural resource considerations such as wetlands management into the planning process but leaves such matters largely to the discretion of the local commissions.

In addition to authority to conduct planning, authority to adopt and implement controls over land use is also delegated to local governmental units.<sup>16</sup> The governing body of any county or municipality may enact a zoning ordinance through which special controls can be enforced. Provisions of the enabling legislation for zoning specifying the purposes of such ordinances and the extent of regulatory authority delegated provide that consideration

is to be given to ". . . conservation of natural resources. . . ."17 Thus it appears that zoning could be used as a wetlands control mechanism to supplement VWA.

#### The State Role

State government performs three primary functions under VWA: inventory and evaluation of wetlands, review of the decisions of local wetlands boards, and administration of the wetlands permit program under special conditions. These responsibilities are carried out primarily through interaction between VMRC and VIMS.

VMRC is the state's management agency in the area of marine resources and consists of six members and a chairman, all appointed by the Governor.<sup>18</sup> The chairman serves as Commissioner of Marine Resources, the chief administrative officer of the agency. The traditional jurisdiction of VMRC has been management of commercial fisheries and use of the beds of state-owned tidal waters. VMRC authority in these areas has included leasing of tidal beds; projects to improve fisheries, especially shellfish; and regulation of commercial fisheries operations. Authority relating to wetlands was conferred in 1972 when wetlands legislation was first enacted.

VIMS is the state's principal research agency in the area of marine science. The operation of VIMS is under the supervision of a Board of Administration, consisting of the Commissioner of Marine Resources and eight other citizens of the Commonwealth appointed by the Governor.<sup>19</sup> A Director, the chief administrative officer, is appointed by the Board. In addition to research, the mandate of the agency includes advisory services and education. Advisory services are provided to VMRC, other state agencies, and the Governor and State Legislature. Educational programs are conducted in affiliation with certain of the state's colleges and universities.

The inventory and evaluation of wetlands is the responsibility of VMRC with the advice and assistance of VIMS. VWA provides for a continuing wetlands inventory and the development of guidelines which evaluate wetlands by type and set forth the consequences of use.<sup>20</sup> A primary purpose of this activity is to assist the localities in evaluating the potential losses associated with wetlands development.

Guidelines have been developed by VMRC on the basis of studies conducted by VIMS that classify wetlands by type and set forth the environmental consequences of their alteration. Factors used in the evaluation process consisted of vegetative production and detritus availability, waterfowl and wildlife utilization, erosion buffering, water quality control, and flood buffering. With regard to alteration of wetlands, criteria are presented which are designed to reduce the adverse environmental impact associated with such alteration.<sup>21</sup>

The second state function involves the review of local permit decisions and is the responsibility of VMRC. The act lists three situations in which reviews are to be conducted.<sup>22</sup> The first arises whenever an appeal is taken from the local decision by the applicant for a permit or by the county, city

or town where the wetlands are located. The second situation for review is upon the request of the Commissioner of Marine Resources who conducts a preliminary review of all decisions of local wetlands boards for the purpose of identifying those that should be viewed by the Commission. In order to request a review, the Commissioner must believe that the action violates the policy and standards of VWA or the VMRC guidelines, and procedural requirements for notice to affected parties must be met. The third situation calling for Commission review is where 25 or more freeholders of property within the political subdivision where the proposed project is located submit a petition to the Commission alleging that the local board did not follow policy, standards or guidelines under VWA. With the exception of an applicant, individuals or groups not owning property within the political subdivision involved have no right to request a review of local decisions by the Commission.

Procedural requirements for the review process provide that the request for review or appeal must be made within ten days of the date of the local boards determination. The Commission must reach its decision to uphold or alter the local decision within 45 days after notice of the review or appeal is received; however, provision is made for the Commission to grant a continuance upon the motion of the applicant, the 25 or more freeholders, or the political subdivision involved.<sup>23</sup>

The Commission may alter the local decision or require further consideration by the local board only under the following conditions:

The Commission shall modify, remand or reverse the decision of the wetlands board:

- (1) If the decision of the wetlands board will not adequately achieve the policy and standards of this chapter or will not reasonably accommodate any guidelines which may have been promulgated by the Commission hereunder; or
- (2) If the substantial rights of the appellant or the applicant have been prejudiced because the findings, conclusions or decisions are
  - (a) In violation of constitutional provisions; or
  - (b) In excess of statutory authority or jurisdiction of the wetlands board; or
  - (c) Made upon unlawful procedure; or
  - (d) Affected by other error of law; or
  - (e) Unsupported by the evidence on the record considered as a whole; or
  - (f) Arbitrary, capricious, or an abuse of discretion.<sup>24</sup>

The third function of state government under VWA, the administration of the wetlands permit program, is exercised by VMRC under two conditions. The first is the situation where an applicant desires to use or develop wetlands owned by the Commonwealth. In addition to the VMRC wetlands permit, the applicant desiring to use state-owned wetlands is subject to the general regulatory authority of VMRC concerning use of state-owned tidal bottoms. State ownership generally begins at low water mark and encompasses the beds of the state's tidal waters. With the exception of specified exemptions, use

of such beds requires a VMRC permit. In its disposition of a permit application, the agency is required by statute to evaluate

. . . the effect of the proposed project upon other reasonable and permissible uses of State waters and state-owned bottom lands, its effect upon the marine and fisheries resources of the Commonwealth, its effect upon the wetlands of the Commonwealth, except when its effect upon said wetlands has been or will be determined under . . . [VWA], and its effect upon adjacent or nearby properties, its anticipated public and private benefits, and, in addition thereto, the Commission shall give due consideration to standards of water quality as established by the State Water Control Board.<sup>25</sup>

The second situation where the wetlands permit program is administered by VMRC is where the governing body of a political subdivision has not adopted the wetlands zoning ordinance contained in VWA. VMRC is required to process applications for wetlands permits in accordance with the provisions of the ordinance.<sup>26</sup> As of August 21, 1975, the following political subdivisions had not adopted the ordinance:<sup>27</sup>

Alexandria County	Norfolk
Arlington County	Petersburg
Caroline County	Portsmouth
Chesterfield County	Prince George County
Colonial Heights	Prince William County
Fairfax County	Southampton County
Falls Church	Spotsylvania County
Frederick County	Suffolk
Hanover County	Surry
Henrico County	Sussex County
King and Queen County	Westmoreland County
City of Nansemond	

Decisions of VMRC concerning permit applications originally processed by the agency, or concerning the review of the decisions of local wetlands boards, are subject to appeal to the circuit or corporation court having jurisdiction in the governmental subdivision in which the wetlands involved are located. The right of appeal is granted to a permit applicant, 25 or more freeholders of property in the political subdivision where the proposed project is located, and the political subdivision in which the project is proposed. VWA provides for the court to modify or reverse the decision, or to remand the case for further proceedings under the same conditions quoted above for VMRC modification of local decisions. Decisions of the circuit or corporation court may be appealed to the Virginia Supreme Court of Appeals.<sup>28</sup>

Federal Water Pollution Control Act  
Amendments of 1972

Although the federal government has a long-standing program of control over navigable waters under the River and Harbor Act of 1899<sup>29</sup> (RHA), the principal legal basis for federal control of wetlands at present consists of

FWPCA.<sup>30</sup> Since the protection of navigation is the major objective of RHA, this objective traditionally has been the main emphasis of the Corps regulatory program and areas above the high water mark previously have been considered outside regulatory jurisdiction.

FWPCA does not explicitly address the wetlands issue, but section 404<sup>31</sup> gives the Corps of Engineers the responsibility of issuing permits for proposed disposals of dredged or fill material into "navigable waters." FWPCA defines this term simply as ". . . the waters of the United States, including the territorial seas."<sup>32</sup> This definition contains no qualifications with regard to actual physical suitability for navigation and therefore constitutes a major expansion in federal jurisdiction.

Current Corps regulations<sup>33</sup> for dredge and fill activities became effective July 19, 1977, and supercede the original regulations<sup>34</sup> adopted under FWPCA that became effective July 25, 1975. They reflect the scope of the authority granted by FWPCA and encompass a wide range of previously uncontrolled waters and specifically include adjacent wetlands, which are defined to mean

. . . those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.<sup>35</sup>

The term "adjacent" is defined to mean "bordering, contiguous, or neighboring" and encompasses wetlands that may be separated from water by man-made barriers.<sup>36</sup> Thus the landward limit of Corps jurisdiction where wetlands are present is determined by vegetative conditions and not by the location of the high water mark.

The regulations apply to the discharge of both dredged and fill materials. The term "dredged material" means ". . . material that is excavated or dredged from waters of the United States."<sup>37</sup> The term "discharge of dredged material" does not include ". . . plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products."<sup>38</sup> The term "fill material" means ". . . any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody."<sup>39</sup>

Although essentially all types of dredge and fill activities fall within Corps regulatory jurisdiction, not all such projects require an individual permit. In addition to the individual permit, "general"<sup>40</sup> and "nationwide"<sup>41</sup> permits are also established by the regulations. General permits are blanket authorizations granted by Corps District Engineers for specific geographical areas that encompass certain discharges of dredged or fill materials that cause only minimal individual and cumulative environmental impact. Nationwide permits are blanket authorizations for certain discharges throughout the country. Although individual approval of projects covered by general and nationwide permits is unnecessary, special restrictions do apply.

Nationwide permits have been established for three categories of discharges of dredged or fill material: (1) discharges occurring before

specified dates,<sup>42</sup> (2) discharges into certain types of waters,<sup>43</sup> and (3) specific types of discharges.<sup>44</sup> The grandfather provision applies to projects completed prior to specified dates in the phased implementation schedule established in the July 25, 1975, regulations. The types of waters that are included in the nationwide permit are limited to small waterbodies such as the section of non-tidal streams above the point where the average flow is less than five cubic feet per second and certain natural lakes that are less than ten acres in surface area when adjacent wetlands are included. Therefore no tidal wetlands would be encompassed by this designation of waters encompassed in the nationwide permit. Specific types of discharges subject to nationwide permits include material placed as backfill or bedding for certain utility line crossings; material used in certain bank stabilization projects, provided that no material is placed in wetland areas or placed such that surface water flow into or out of any wetland area is impaired; certain minor road crossing fills involving a non-tidal waterbody; fills incidental to bridge construction across tidal waters; and the repair or replacement of currently authorized fill.

In addition to the specific regulatory provisions that apply to projects encompassed by general and nationwide permits, individual permit requirements can be imposed on any such project under special conditions. Corps District Engineers are vested by the regulations with authority to require individual permits upon the determination that such action is indicated because of individual or cumulative adverse impact on the affected waters.<sup>45</sup>

With regard to the evaluation of individual permit applications for dredge or fill projects, the Corps regulations establish the policy that

[w]etlands are vital areas that constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest.<sup>46</sup>

Wetlands that are classified as performing functions important to the public interest include those wetlands that serve important natural biological functions such as food chain production, wetlands that have been set aside for study or as sanctuaries, wetlands whose destruction would detrimentally affect natural drainage patterns or other environmental characteristics, wetlands that protect other areas from wave or other damage, wetlands which serve as storage areas for flood or storm waters, wetlands that are prime recharge areas, and wetlands that purify water through natural filtration processes.<sup>47</sup>

Accordingly, the regulations provide that the Corps will not grant permits for alteration of such wetlands unless an analysis indicates ". . . that the benefits of the proposed alteration outweigh the damage to the wetlands resource and the proposed alteration is necessary to realize those benefits."<sup>48</sup> Guidelines for this analysis provide the following criteria for evaluation of each permit application.

- (i) the relative extent of the public and private need for the proposed structure or work;
- (ii) the desirability of using appropriate

alternative locations and methods to accomplish the objective of the proposed structure or work;

(iii) the extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work may have on the public and private uses to which the area is suited; and

(iv) the probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated structures or work in the general area.<sup>49</sup>

#### EXTERNAL CONSTRAINTS ON REGULATORY AGENCY DECISIONS

Exercise of the regulatory responsibilities concerning wetlands alterations that are created by VWA and FWPCA is constrained by a number of provisions for review and input from agencies other than those with the licensing authority. Although there are certain external constraints that apply to the state regulatory program under VWA, a greater number applies to the federal program under FWPCA.

#### Environmental Protection Agency Responsibilities Under Section 404 of FWPCA

Issuance of section 404 permits by the Corps is subject to the exercise of two functions assigned by the act to the U.S. Environmental Protection Agency (EPA): 1) the development of guidelines for approval of sites for discharge of dredged or fill materials<sup>50</sup> and 2) the authority to prohibit any discharge under specified conditions.<sup>51</sup>

The EPA guidelines,<sup>52</sup> published on September 5, 1975, apply to the discharge of dredged or fill materials by the general public and by federal agencies, including operations of the Corps itself. The guidelines contain detailed provisions for consideration of physical and chemical-biological effects in the evaluation of a proposed discharge of dredged or fill material. With regard to the evaluation of the physical effects of filling wetlands, the EPA guidelines make the following statement:

From a national perspective, the degradation or destruction of aquatic resources by filling operations in wetlands is considered the most severe environmental impact covered by these guidelines. Evaluation procedures for determining the environmental effects of fill operations in wetlands are relatively straight forward. The guiding principle should be that destruction of highly productive wetlands may represent an irreversible loss of a valuable aquatic resource.<sup>53</sup>

More specific criteria for determining when dredged or fill material may be discharged into wetlands are given by the following provision:

(i) Discharge of dredged material in wetlands may

be permitted only when it can be demonstrated that the site selected is the least environmentally damaging alternative; provided, however, that the wetlands disposal site may be permitted if the applicant is able to demonstrate that other alternatives are not practicable and that the wetlands disposal will not have an unacceptable adverse impact on the aquatic resources. Where the discharge is part of an approved Federal program which will protect or enhance the value of the wetlands to the ecosystem, the site may be permitted.

(ii) Discharge of fill material in wetlands shall not be permitted unless the applicant clearly demonstrates the following:

(a) the activity associated with the fill must have direct access or proximity to, or be located in, the water resources in order to fulfill its basic purpose, or that other site or construction alternatives are not practicable; and

(b) that the proposed fill and the activity associated with it will not cause a permanent unacceptable disruption to the beneficial water quality uses of the affected aquatic ecosystem, or that the discharge is part of an approved Federal program which will protect or enhance the value of the wetlands to the ecosystem.<sup>54</sup>

Although the Corps must apply the EPA guidelines to permit applications under section 404 and to its own operations involving the discharge of dredged or fill material,<sup>55</sup> the legislation provides for other considerations to enter the decision where application of the EPA guidelines alone would prohibit approval of a given site for discharge operations. In this situation, the Corps must also evaluate the economic impact on navigation and anchorage which would occur if the proposed site is not utilized.<sup>56</sup>

In addition to the control which EPA asserts through its guidelines, the agency also possesses the final authority to prohibit any discharge of dredged or fill material under certain conditions as specified in the following provision:

The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult with the Secretary of the Army. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.<sup>57</sup>

Water Quality Certification  
Required by FWPCA

In addition to the responsibilities granted to EPA by FWPCA, the legislation also conditions the Corps permit on state approval based on water quality considerations. Section 401<sup>58</sup> of FWPCA provides that no federal license or permit for an activity with a potential discharge to navigable waters shall be issued unless the state water quality management agency certifies that any such discharge will comply with applicable effluent limitations and other specified provisions of FWPCA. Thus the State Water Control Board is in a position to veto wetlands alteration projects where the threat of water quality degradation is posed.

Review for Consistency with the Coastal Zone  
Management Act of 1972

The Coastal Zone Management Act of 1972<sup>59</sup> (CZMA) establishes procedures and provides funding for the states to develop and implement plans for management of coastal resources. Once a state management program is approved by the Secretary of Commerce, CZMA provides that each federal agency conducting or supporting activities directly affecting the coastal zone shall assure the consistency of such activities with the approved state management program. Applicants for federal licenses for activities affecting land or water use in the coastal zone must certify that the proposed activity complies with the state management program. Such licenses cannot be granted over the objection of the state unless the Secretary of Commerce finds that the activity is consistent with CZMA or is otherwise necessary in the interest of national security.<sup>60</sup>

General Environmental Review

Proposals for wetlands alterations are potentially subject to federal and state environmental review procedures. The federal review process has its basis in the National Environmental Policy Act of 1969<sup>61</sup> (NEPA). NEPA imposes no direct impediments to project approval in the form of mandatory consent of other agencies, but the Act establishes a national policy of environmental protection and mandates certain procedural requirements concerning assessment of environmental consequences and alternative plans of development. Under certain conditions, NEPA requires the preparation of an environmental impact statement (EIS) prior to final action on a permit request.<sup>62</sup>

Corps regulations<sup>63</sup> provide that the determination as to whether an EIS is required be made by the District Engineer on the basis of a preliminary assessment of environmental impact. The basic criterion is whether significant impact is expected. If the District or Division Engineer is in doubt, Corps regulations provide that guidance be requested from the Washington headquarters office.<sup>64</sup> The regulations require that a negative determination be brought to the attention of the public by publication in a three year schedule maintained by each Corps District office indicating involvement in EIS preparation.<sup>65</sup> Such determination is subject to change as dictated by public response or other factors.

In addition to the federal environmental review under NEPA, a state environmental review<sup>66</sup> may apply in certain situations. The state review process is narrower in scope and only applies to proposed construction of "major state facilities," defined as all facilities exceeding \$100,000 in cost except highway construction projects. Coordination of the state review is the responsibility of the Virginia Council on the Environment (VCOE), a state agency consisting of ten members and an Administrator. Three of the members and the Administrator are appointed by the Governor, with the remainder of the membership composed of designated representatives of the state's environmentally oriented agencies.<sup>67</sup> For projects that are subject to review, VCOE disseminates relevant information to appropriate agencies and other parties for review. After the individual reviews are complete, VCOE synthesizes their contents into a report to the Governor. Construction funds for state projects covered by this review cannot be authorized without the written approval of the Governor after his consideration of VCOE's report.<sup>68</sup>

The exemption of highway construction projects from the state environmental review process apparently was an attempt to prevent duplicate reviews since such projects generally invoke the federal review process due to federal funding and/or federal licensing such as Corps permits under section 404 of FWPCA.

#### Review for Impact on Fish and Wildlife

Several federal statutes have been adopted to protect fish and wildlife. One of the most important is the Fish and Wildlife Coordination Act<sup>69</sup> (FWCA) which declares the policy that wildlife conservation should receive equal consideration with other features of water resource development. FWCA provides for consultation with federal and state fish and wildlife agencies whenever any federal agency proposes a water development project or receives an application for a federal license for such a project.<sup>70</sup>

In order to fulfill this obligation, Corps regulations provide for consultation with the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the state agency responsible for fish and wildlife.<sup>71</sup> Procedures for coordination with the Interior Department were established in a memorandum of understanding<sup>72</sup> between the Secretary of the Army and the Secretary of Interior approved in 1967, prior to enactment of FWPCA. This agreement makes provision for Corps District Engineers to consider the advice of the Regional Directors of the Interior Department on fish and wildlife and recreation problems associated with proposed projects. In any case where the District Directors advise that a proposed project will impair natural resources, the agreement further provides that the Corps District Engineer must encourage the applicant to take steps to resolve the objections to the project. Unless such objections are resolved, the District Engineer cannot approve the permit. In this event, the agreement requires that the case be forwarded to the Chief of Engineers and the Washington headquarters of the Department of Interior agency involved. Failure to resolve the issues at this level results in referral to the Secretary of the Army for decision in consultation with the Secretary of Interior.

Another basic statute for protection of fish and wildlife is the

Endangered Species Act of 1973<sup>73</sup> (ESA) which provides for the conservation of endangered and threatened species and the ecosystems upon which they depend. ESA provides that each federal agency shall carry out programs for the conservation of endangered species and take such action as is necessary

. . . to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species. . . .<sup>74</sup>

#### Review for Impact on Wild and Scenic Rivers

Legislation exists at both the federal and state levels of government with regard to protection of certain streams possessing exceptional value in their natural state.

The Wild and Scenic Rivers Act<sup>75</sup> (WSRA) establishes federal policy that certain streams should be preserved in their natural conditions and establishes procedures for designation and protection. WSRA provides that no federal agency may assist or license any water resource project that would have a direct adverse effect on the values for which a wild and scenic river was designated. This restriction also applies temporarily to streams that are designated as potential additions to the system.<sup>76</sup>

The Virginia Scenic Rivers Act<sup>77</sup> (VSRA) provides for designation of streams as scenic rivers by the General Assembly subsequent to study and recommendation by the Virginia Commission of Outdoor Recreation (VCOR). VSRA provides that dams or other flow-impeding structures cannot be constructed in any stream designated as a scenic river without specific authorization by the Virginia General Assembly.<sup>78</sup>

#### Review for Impact on Historic Sites

The National Historic Preservation Act of 1966<sup>79</sup> (NHPA) requires federal agencies to consider the effects of projects proposed for construction, assistance, or licensing on property listed in the National Register or eligible for listing because of its historical significance. NHPA provides that the agency must give the Advisory Council on Historic Preservation an opportunity to comment with regard to the project.<sup>80</sup>

Other legislation<sup>81</sup> provides for notice to the Secretary of Interior whenever federal agencies plan to undertake construction of certain dams or other projects that may result in the loss of historical data.<sup>82</sup> Provision is made for the Secretary to coordinate investigations and recovery operations where such data appears significant.<sup>83</sup>

Review for Consistency with  
State Regulatory Action

Corps regulations provide that

[p]ermits will not be issued where certification or authorization of the proposed work is required by Federal, State, and/or local law and that certification or authorization has been denied.<sup>84</sup>

This provision establishes the permit from the local wetlands board, or from VMRC where appropriate, as a condition to be met before the Corps permit can be issued. In addition, the Corps also conditions its permit on a positive expression of overall state consent<sup>85</sup> prepared by VCOE. The state position is formulated after consideration of the views of all interested state agencies and other parties. A negative determination by VCOE would preclude issuance of the Corps permit although permits required under VWA had been obtained.

Review for Compatibility with  
State and Local Planning

In the event that a wetlands alteration project involves federal funding, another external review procedure that applies is the "A-95" project notification and review process required by the Office of Management and Budget<sup>86</sup> (OMB). This review is designed to insure the compatibility of federal actions with state and local planning. The OMB requirements provide that all federal agencies solicit the views of appropriate federal, state, and local agencies and that such views be considered in the project evaluation process. The negative view of one or more agencies does not preclude project funding, but the expression of substantial opposition through the review process could be expected to decrease the probability of approval.

For purposes of coordinating the review process, the OMB requirements provide for establishment of regional and state clearinghouses, which in Virginia consist respectively of the planning district commissions and the Virginia Department of Intergovernmental Affairs.<sup>87</sup> With regard to projects subject to the "A-95" process (partially enumerated below), the potential applicant for federal funds must notify the state and appropriate regional clearinghouses at least 30 days before a formal application is submitted. The clearinghouses then coordinate a review among interested agencies with regard to possible conflicts between the application and state and regional policies and plans. If conflicts exist which cannot be resolved through consultation with the applicant, the clearinghouses prepare a formal comment which must be submitted with the application when forwarded to the funding agency.<sup>88</sup>

The "A-95" project notification and review system applies to a wide range of federal grant programs. Covered programs related to water resources include irrigation, drainage, and other soil and water conservation loans; water and waste disposal systems for rural communities; watershed protection and flood prevention projects and loans; beach erosion control projects; flood control projects; navigation projects; snagging and clearing for flood control; outdoor recreation planning, acquisition, and development; irrigation

distribution system loans; small reclamation projects; water resources planning; and EPA programs for water pollution control.<sup>89</sup>

As of July 1, 1972, a project notification and review system became effective regarding applications to state agencies for grants or loans. Legislation<sup>90</sup> requires submittal of such applications to the appropriate planning district commission before formal application is made. If the commission determines that the proposed project does not have district-wide significance, it certifies that such proposal is not in conflict with the district plan or policies. A finding that district-wide significance exists requires a determination as to whether conflicts exist, and the commission may also consider whether the proposed project is properly coordinated with other existing or proposed projects within the district. The existence of conflicts or lack of coordination becomes a factor to be considered in final disposition of an application.

#### PROCEDURES FOR WETLANDS PRESERVATION THROUGH CREATION OF SANCTUARIES

In addition to regulation of private development activity, another basic institutional factor affecting wetlands management consists of governmental programs that control wetlands use through public acquisition or control of property for creation of sanctuaries. In some of these programs, preservation of wetlands in the natural condition may constitute a primary objective. In certain others having a different primary objective, preservation of wetlands may be fundamental to the achievement of the main purpose of the sanctuary. For example, wildlife refuges maintained for the benefit of waterfowl generally encompass wetlands. In addition, general recreation lands located in coastal areas are likely to contain wetlands.

#### Coastal Zone Management Act of 1972

One of the provisions of CZMA with possible implications for wetlands preservation is the requirement that state coastal management programs contain procedures ". . . whereby specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological, or esthetic values."<sup>91</sup>

Another relevant provision in CZMA is the requirement that state programs include an inventory and designation of "areas of particular concern within the coastal zone."<sup>92</sup> Regulations<sup>93</sup> promulgated by the National Oceanic and Atmospheric Administration for implementation of CZMA indicate that such areas are likely to encompass wetlands. For example, areas identified for possible designation include "[a]reas of high natural productivity or essential habitat for living resources, including fish, wildlife, and the various trophic levels in the food web critical to their well-being."<sup>94</sup> This provision and the previous one for preservation of specific areas establish a procedure by which significant wetlands can be identified and protected from adverse modification.

CZMA also provides for grants to the states for creation of estuarine sanctuaries for the purpose of creating natural field laboratories for study

of coastal zone processes.<sup>95</sup> However, this provision is not intended to provide a general means of preserving wetlands but is limited to the purpose of wetlands protection in the interest of research and education.

#### Marine Protection, Research and Sanctuaries Act of 1972

The Marine Protection, Research and Sanctuaries Act of 1972<sup>96</sup> (MPRSA) provides for the Secretary of Commerce with the approval of the President and subject to the veto of an affected state to designate areas of the ocean as marine sanctuaries. Such sanctuaries are to be located between the high tide line and the outer edge of the continental shelf. The scope of the MPRSA sanctuaries program is somewhat broader than in the case of estuarine sanctuaries under CZMA and includes preservation for the purposes of protecting habitats representative of important marine systems; maintenance of particular species by protection of such areas as migratory pathways, spawning grounds, and nursery grounds; establishing research areas to establish ecological baselines against which to compare and predict the effect of man's activities; augmenting public lands for recreation and esthetic enjoyment; and protecting unique geological, oceanographic, or living resource features.<sup>97</sup> After sanctuary designation, activities within its boundaries are subject to regulations of the Secretary of Commerce,<sup>98</sup> with each day of violation subject to a maximum fine of \$50,000.<sup>99</sup>

#### Wild and Scenic Rivers Act

WSRA has been considered in a previous section as a regulatory constraint with regard to alteration of wetlands, but it also authorizes the Secretary of Interior and Secretary of Agriculture to acquire land or interests in land within the boundaries of a component of the national wild and scenic river system.<sup>100</sup> Fee title acquisition under this provision cannot exceed an average of 100 acres per mile on both sides of a given river. It is conceivable that a substantial portion of such acquisitions could consist of wetlands in some situations. However, none of Virginia's coastal streams have been designated for inclusion in the wild and scenic river system to date.

#### Wilderness Act

The National Wilderness Preservation System created by the Wilderness Act<sup>101</sup> (WA) is primarily intended to consist of specially designated lands already under federal ownership. However, the Secretary of Agriculture is authorized to acquire privately owned land within the perimeter of a designated wilderness area if the owner concurs in such acquisition and it is specifically authorized by Congress.<sup>102</sup>

At present there are two designated wilderness areas in Virginia, but both have inland locations (one in Jefferson National Forest and the other in Shenandoah National Park<sup>103</sup>). The primary federal areas containing wetlands that may have potential for wilderness designation consist of wildlife refuges managed by the U.S. Fish and Wildlife Service. Such designation would require that the areas in question meet specified criteria, the most basic of which is

that the land must have retained its primeval character without permanent improvements or human habitation. Such areas generally must contain at least 5000 acres or be of ". . . sufficient size as to make practicable its preservation and use in an unimpaired condition. . . ."104 Areas within wildlife refuges have been designated as components of the wilderness preservation system in other states (e.g., Swanquarter Wilderness in Swanquarter Wildlife Refuge, North Carolina<sup>105</sup>), but such areas in Virginia have not been formally proposed for inclusion.

#### Estuarine Studies

Legislation<sup>106</sup> approved in 1968 provides for the Secretary of Interior to conduct a study of estuary areas with regard to their value both in the natural state and for development for urban, commercial, and industrial uses. One purpose of the study is the determination of the need for acquiring land or water areas for administration by a governmental entity. This program has never received significant funding but is a potential mechanism for estuary preservation.

#### Wildlife Refuges and Management Areas

Both the federal and state governments operate programs for acquisition and ownership of land and water areas for purposes of wildlife management. In the case of the federal government, such lands are collectively referred to as the National Wildlife Refuge System (NWRS) while such lands owned by the Commonwealth are generally known as Wildlife Management Areas (WMA's).

The NWRS encompasses various categories of areas administered by the Secretary of Interior for the conservation of fish and wildlife. Specifically included are

. . . all lands, waters, and interests therein administered by the Secretary as wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, or waterfowl production areas . . . .<sup>107</sup>

In Virginia, the U.S. Fish and Wildlife Service (previously known as the Bureau of Sport Fisheries and Wildlife) manages more than 8800 acres of land as wildlife refuges.<sup>108</sup> All these refuges are in the coastal region and most contain substantial wetlands areas.

At the state level, the Virginia Commission of Game and Inland Fisheries (VCGIF) has the authority ". . . to purchase, lease or otherwise acquire lands and waters for game and fish refuges, preserves or public shooting and fishing . . ."109 Pursuant to this authority, it has acquired a number of tracts of land which are operated as WMA's. A 1970 report by VCOR indicates that VCGIF owns 23 WMA's encompassing a total of 151,072 acres.<sup>110</sup> Several of these areas are outside the coastal region, but some are located in coastal areas and contain marine wetlands. For example, Mockhorn Island, a WMA exceeding 9100 acres in size, consists entirely of wetlands.<sup>111</sup>

A variety of funding sources are utilized for land acquisition purposes, including federal sources. The most prominent of these are the Federal Aid in Wildlife Restoration Fund<sup>112</sup> and the Federal Aid in Fish Restoration Fund,<sup>113</sup> from which up to three-fourths of the costs of approved projects may be met. VCGIF has also received money for land acquisition from the Federal Land and Water Conservation Fund,<sup>114</sup> administered at the state level by VCOR.

#### General Recreation Lands

Both the federal and state governments also operate programs of land acquisition and management for purposes of general recreation. The National Park System and the State Park System are of primary interest.

The National Park System is administered by the National Park Service of the Department of the Interior and includes, in addition to areas designated as "national parks," other areas such as national historic parks, monuments, and recreation areas. In Virginia, the primary area of interest relative to wetlands preservation is the 9021 acre section of Assateague Island National Seashore located within the Commonwealth. This area currently is operated as Chincoteague National Wildlife Refuge by the U.S. Fish and Wildlife Service<sup>115</sup> along with the other acreage previously mentioned.

The State Park System is administered by the Virginia Division of State Parks (VDSP) of the Virginia Department of Conservation and Economic Development (VDCED). VDCED is authorized to acquire

. . . areas, properties, lands or any estate or interest therein, of scenic beauty, recreational utility, historical interest, remarkable phenomena or any other unusual features which in the judgment of the Board [of Conservation and Economic Development] should be acquired, preserved and maintained for the use, observation, education, health and pleasure of the people of Virginia  
. . . .<sup>116</sup>

Pursuant to this authority, a number of recreational areas have been acquired across the state. A few of these areas, such as False Cape State Park in Virginia Beach and Wreck and Bone Natural Area on the Eastern Shore, contain marine wetlands.

Although VDSP is responsible for operation of the State Park System, planning relating to outdoor recreation lands and facilities is the primary responsibility of VCOR.<sup>117</sup> VCOR is directly involved in decisions concerning acquisitions of land for additions to the state park system since it is responsible for allocation of state appropriations for outdoor recreation and money coming to the Commonwealth from the Land and Water Conservation Fund.

#### Water Resources Development Act of 1976

The Water Resources Development Act of 1976<sup>118</sup> (WRDA) contains a provision that goes beyond preservation of existing wetlands by authorizing the

Corps to create wetland areas as part of water resource development projects.<sup>119</sup> Such wetland creation is viewed as a means of disposing of dredged material resulting from the development project and is limited to those cases where the Chief of Engineers finds that the environmental, economic, and social benefits of the wetland justifies the additional cost above that associated with alternative measures of disposal. This additional cost is limited to \$400,000. A further restriction imposed by WRDA is the requirement for evidence indicating that the wetland area to be created will not be substantially altered or destroyed by natural or man-made causes.

#### Other Preservation Programs

In addition to federal and state programs, other public and private efforts to acquire property exist that may result in wetlands preservation. Local and regional acquisitions for recreational areas constitute one example. Another relevant program is that of the Nature Conservancy. This organization has acquired substantial acreage of islands and marsh along the Eastern Shore<sup>120</sup> and therefore has become a significant force for wetlands preservation.

FOOTNOTES

1. VWA, Va. Code Ann., sec. 62.1-13.1 et seq. (1973), as amended (Supp. 1977).
2. FWPCA, 33 U.S.C.A. 1251 et seq., sec. 1344 (Supp. 1977).
3. VWA, Va. Code Ann., sec. 62.1-13.1 (1973).
4. Id.
5. Id., sec. 62.1-13.2(f, j, k) (Supp. 1977).
6. Id.
7. Id., sec. 62.1-13.5(3) (Supp. 1977).
8. Id., sec. 62.1-13.20.
9. Id., sec. 62.1-13.3 (1973).
10. Id., sec. 62.1-13.6 (Supp. 1977).
11. From a list furnished by VMRC, Feb., 1977. Subsequent to preparation of this list, Westmoreland County has established a wetlands board (personal communication from Norm Larsen, Assistant Commissioner for Environmental Affairs, VMRC, September 8, 1977).
12. Va. Code Ann., sec. 62.1-13.5(4-7) (1973), as amended (Supp. 1977).
13. Id., sec. 62.1-13.5(9)(b) (1973).
14. Id., sec. 15.1-427.1 (Supp. 1977).
15. Id., sec. 15.1-446.1.
16. Id., sec. 15.1-486.
17. Id., sec. 15.1-490.
18. Id., sec. 28.1-4 (1973).
19. Id., sec. 28.1-197.
20. Id., sec. 62.1-13.4.
21. VMRC, "Wetlands Guidelines," 1974.
22. VWA, Va. Code Ann., sec. 62.1-13.11 (1973).
23. Id., sec. 62.1-13.11(4).
24. Id., sec. 62.1-13.13 (Supp. 1977).

25. Id., sec. 62.1-3.
26. Id., sec. 62.1-13.9 (1973).
27. From a list furnished by VMRC, Feb., 1977 (See note 11 supra).
28. VWA, Va. Code Ann., sec. 62.1-13.15 (1973).
29. RHA, 33 U.S.C.A. 401 et seq. (1970).
30. FWPCA, 33 U.S.C.A. 1251 et seq. (Supp. 1977).
31. Id., sec. 1344.
32. Id., sec. 1362(7).
33. 42 F.R. 37144 (1977).
34. 40 F.R. 31320 (1975).
35. 42 F.R. 37144, part 323.2(c) (1977).
36. Id., part 323.2(d).
37. Id., part 323.2(k).
38. Id., part 323.2(l).
39. Id., part 323.2(m).
40. Id., part 323.3(c).
41. Id., part 323.4 to 323.4-3.
42. Id., part 323.4-1.
43. Id., part 323.4-2.
44. Id., part 323.4-3.
45. Id., part 323.4-4.
46. 42 F.R. 37133, part 320.4(b)(1) (1977).
47. Id., part 320.4(b)(2).
48. Id., part 320.4(b)(4).
49. Id., part 320.4(a)(2).
50. FWPCA, sec. 1344(b) (Supp. 1977).
51. Id., sec. 1344(c).

52. 40 F.R. 41291 (1975) (40 C.F.R. 230 (1976)).
53. Id., part 230.4-1(a)(1).
54. Id., part 230.5(b)(8).
55. Id., part 230.1(b)(2).
56. FWPCA, sec. 1344(b)(2) (Supp. 1977).
57. Id., sec. 1344(c).
58. Id., sec. 1341(a)(1).
59. CZMA, 16 U.S.C.A. 1451 et seq. (1974), as amended (Supp. 1977).
60. Id., sec. 1456(c).
61. NEPA, 42 U.S.C.A. 4321 et seq. (1977).
62. Id., sec. 4332(c).
63. 33 C.F.R. 209.410 (1976).
64. Id., sec. 209.410(d)(2)(ii).
65. Id., sec. 209.410(f).
66. Va. Code Ann., sec. 10-17.107 et seq. (Supp. 1977).
67. Id., sec. 10-181.
68. Id., sec. 10-17.110.
69. FWCA, 16 U.S.C.A. 661 et seq. (1974).
70. Id., sec. 662.
71. 42 F.R. 37133, part 320.4(c) (1977).
72. Memorandum of Understanding between the Secretary of the Interior and the Secretary of the Army, July 13, 1967.
73. ESA, 16 U.S.C.A. 1531 et seq. (1974), as amended (Supp. 1977).
74. Id., sec. 1536 (1974).
75. WSRA, 16 U.S.C.A. 1271 et seq. (1974), as amended (Supp. 1977).
76. Id., sec. 1278 (Supp. 1977).
77. VSRA, Va. Code Ann., sec. 10-167 et seq. (1973).
78. Id., sec. 10-174.

79. NHPA, 16 U.S.C.A. 470 et seq. (1974), as amended (Supp. 1977).
80. Id., sec. 470(f) (1977).
81. 16 U.S.C.A. 469 et seq. (1974).
82. Id., sec. 469a, 469a-1.
83. Id., sec. 469a-2.
84. 42 F.R. 37133, part 320.4(j)(6) (1977).
85. Id., part 320.4(j)(3).
86. OMB, Circular No. A-95, Revised (1976).
87. 42 F.R. 2231 (1977).
88. OMB, Circular No. A-95, Revised (1976).
89. Id., Attachment D.
90. Va. Code Ann., sec. 15.1-1410 (1973).
91. CZMA, 16 U.S.C.A. 1451 et seq. (1974), as amended (Supp. 1977), sec. 1455(c)(9) (Supp. 1977).
92. Id., sec. 1454(b)(3) (Supp. 1977).
93. 15 C.F.R. 920 (1977).
94. Id., sec. 920.13(2).
95. CZMA, sec. 1461 (Supp. 1977).
96. MPRSA, 16 U.S.C.A. 1431 et seq. (1974), as amended (Supp. 1977).
97. 15 C.F.R. 922.10 (1977).
98. MPRSA, sec. 1432(f) (1974).
99. Id., sec. 1433(a).
100. WSRA, 16 U.S.C.A. 1277 (1974).
101. WA, 16 U.S.C.A. 1131 et seq. (1974), as amended (Supp. 1977).
102. Id., sec. 1134(c) (1974).
103. Id., sec. 1132 (Supp. 1977).
104. Id., sec. 1131(c) (1974).
105. Id., sec. 1132 (Supp. 1977).

106. 16 U.S.C.A. 1221 et seq. (1974).
107. 16 U.S.C.A. 668 dd(a) (1974).
108. VCOR, "The Virginia Outdoors Plan, 1970," p. 33 (1970). Another 9021 acres of Assateague National Seashore is operated as Chincoteague National Wildlife Refuge.
109. Va. Code Ann., sec. 29-11 (1973).
110. VCOR, "The Virginia Outdoors Plan, 1970," p. 29 (1970).
111. VCGIF, "Wildlife Management Areas," (1971).
112. 16 U.S.C.A. 669 et seq. (1974), as amended (Supp. 1977).
113. 16 U.S.C.A. 777 et seq. (1974), as amended (Supp. 1977).
114. 16 U.S.C.A. 460L-4 et seq. (1974), as amended (Supp. 1977).
115. VCOR, "The Virginia Outdoors Plan, 1970," p. 33 (1970).
116. Va. Code Ann., sec. 10-21 (1973).
117. Id., sec. 10-21.4.
118. WRDA, 16 U.S.C.A. 460 ee (Supp. 1977); 33 U.S.C.A. 59L-59o, 419a, 426j to 426m, 540 note, 544c, 547a, 577, 579, 701s (Supp. 1977); 42 U.S.C.A. 1962d-5, 1962d-5d to 1962d-5g, 1962d-11a, 1962d-14a, 1962d-16, 1962d-18 (Supp. Pamph. 1974-76).
119. Id., sec. 1962d-5e (Supp. Pamph. 1974-76).
120. VCOR, "The Virginia Outdoors Plan, 1974," p. 137 (1974).

