

**Answering Local Wetlands Boards
Needs Regarding Guidance in
Investigating Wetlands Violations**

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Virginia Institute of Marine Science
College of William and Mary

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**Final Report
to the
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**Violation Procedure Guidance for Wetlands Boards:
A Handbook**

June, 2000

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Introduction

Virginia's system of managing tidal wetlands resources is through local (city/county/town) Wetlands Boards comprised of volunteer citizens. A local government interested in managing its wetlands resources adopts a model ordinance and appoints a five or seven member citizen board.

Most Wetlands Boards have limited administrative resources and, in many cases, the board members themselves perform much of the work that would normally fall to staff.

In situations involving violations to the Wetlands Act, the boards generally lack experience and instruction on how to proceed on what is usually a legal and very technical issue.

This Handbook is designed to provide guidance to Wetlands Boards and their staff in dealing with violations. Within this Handbook you will find a step-by-step violation procedure, Chapter 13 of the Code of Virginia (Wetlands), the Virginia Tidal Wetlands Guidelines, Attorneys General Opinions related to wetlands issues, and form letters for various necessary communications. You will also find a diskette with the form letters stored as both Wordperfect and Microsoft Word documents. You can access these forms and modify them for your city, town, or county. *It is important to remember that a majority of problems associated with noncompliance with the Wetlands Act can be avoided by requiring a complete application prior to scheduling the public hearing.* Accordingly, a checklist for permit application completeness has also been provided.

It is recommended that you ask your city, town, or county attorney to review the forms to insure that they conform to local ordinances.

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Checklist for Wetlands Permit Application

When the application is received.

Check for:

All questions on Pages 3-7 of the application should be completed.



All information required by the appropriate appendices should be provided (**not just checked off - specifically check to see if the information required in the appendix has been provided**).

Double Check for:

1. Applicant's name, address, phone number.
2. Detailed directions to site, including vicinity map.
3. Scaled plan-view drawing or adequate structure dimensions specific to site.
4. Scaled cross-sectional drawing or adequate structure dimensions specific to site.
5. Depiction of Mean High Water and Mean Low Water on plan-view and cross-sectional drawings specific to site.
6. Benchmarks with tie-down distances measured from maximum seaward encroachment to permanent reference points on the upland.

Check before placing application on public hearing

agenda:

1. Is the application complete? See above checklist.
2. VMRC permit number?
3. Permit fee paid?
4. Advertising complete?



WETLANDS AND COASTAL PRIMARY SAND DUNE VIOLATION PROCEDURES

- I. Violation Observed or Referred by Citizen or Governmental Agency
- II. Initial Site Inspection
 - A. Prior to inspection, notice is given to the owner, occupier, or operator.
 - B. Refer to aerial photographs and topographic maps.
 - C. Obtain measurements from ground reference points.
 - D. Photograph site.
- III. No Violation Observed
 - A. Staff sends a potential violation letter to the property owner if fill material or equipment is adjacent to a jurisdictional area.
 - B. Advise referral party or agency of determination.
- IV. Violation Observed
 - A. Minor permit violations:
 1. Board Chair Designee shall serve a compliance notice to the permittee (and designated agent). The notice shall detail measures needed to bring the project into compliance. A time period for completion shall be specified.
 2. Failure to comply may result in the issuance of a Sworn Complaint by the designated enforcement officer and a stop work order by the Board Chair Designee. The Board may revoke the permit and/or issue a restoration order to gain compliance.
 - B. Unauthorized activities or substantial permit violations:
 1. Designated Enforcement Officer completes a sworn complaint outlining the violation specifics and forwards it to the Board Chair Designee.
 2. Board Chair Designee sends a stop work order to the property owner (or permittee). The order is mailed certified-return receipt. If unclaimed, the stop-work order is served personally on the permittee or the person supervising the work.

- a. The stop work order directs the violator to cease additional activities within the jurisdictional area and to contact the City/County/Town within seven days to arrange for an on-site meeting.
 3. Staff advises other City/County/Town departments (e.g., Building Official, Public Works, Environmental Health, Parks and Forestry) that may have code violations as a result of the activity.
- C. Violation of stop work order:
1. Staff shall advise the Board Chair.
 2. The Wetlands Board legal counsel immediately seeks injunctive relief or the Board Chair Designee sends a show cause letter to the violator, which directs an appearance before the Board.
 3. If the violator fails to show up or shows up and fails to comply with the order issued from the show cause hearing Wetlands Board legal counsel may immediately seek injunctive relief.

V. Site Meeting With Violator

- A. Invite U.S. Army Corps of Engineers, VMRC, and VIMS representatives, as appropriate.
- B. Determine the purpose of the project and past filling or grading dates.
- C. Determine the names of any contractors or parties involved.
- D. Document the violation with field measurements and photographs and include in documentation any pre-violation measurements and photographs (if available) as a baseline to demonstrate the violation.
- E. Inform violator of regulations, violation procedures, and permit requirements (in cases involving permit violations).

VI. Staff Investigation

- A. Verify property ownership since 1972 (wetlands) and 1980 (dunes).
- B. Determine approximate square footage of wetlands or dunes displaced or impacted:
 1. Refer to aerial photographs and topographic maps, Army Corps aerial photographs and VIMS shoreline assessment photographs.

2. Perform additional site inspections (following notice procedures). Include Wetlands Board's technical advisor from VIMS, as necessary.
- C. Board Chair Designee sends show cause letter (certified-return receipt) to property owner and/or permittee. If unclaimed, letter is served personally on the property owner and/or permittee.

The letter details:

1. Results of the staff investigation.
 2. Requests that the property owner or permittee appear before the Board (after a thirty-day notice) to show cause why they should not be held in violation of the wetlands or dunes ordinances.
- D. As provided for in <Enter City/County/Town Code Citation> of the <Choose City/County/Town> Code, The Board's Chair directs legal counsel to notify the Circuit court to issue a summons for the appearance of the alleged violator or other witnesses in those cases where staff will be recommending that the Board consider the assessment of a civil charge (based on the civil charge policy in section XI). If the summoned party notifies legal counsel of a conflict with attending the hearing on the specified date, legal counsel will notify the City/County/Town Wetlands Board Staff. Staff will contact the chair for instructions on whether to grant a deferral of the case to a future date. Legal counsel will notify the summoned party of the Chair's decision.

VII. Staff Assistance with Voluntary Restoration

- A. In voluntary restoration cases, staff will provide assistance in identifying the damaged resource and appropriate measures needed to restore the site. If the Board Chair Designee determines that the unauthorized activities resulted in minimal impacts and voluntary restoration is completed in a timely manner, then he/she may, at his/her discretion, choose not to bring the violation before the Board for final approval. If the unauthorized activities resulted in more than minimal impacts, constitute a knowing violation, or if the area was restored after a show cause letter has been sent, the violation must be brought before the Board for final approval.
- B. In certain cases, a violation site may be voluntarily restored so that a permit application may be submitted to solve a bona fide erosion problem. Staff is authorized in these cases to accept and process the application provided that restoration is achieved prior to the public notice deadline. In these situations, a violation may be closed out and a permit application considered at the same public hearing.

VIII. Public Hearing

- A. Staff presentation of violation.
- B. Provide staff recommendation based on a review of the State Guidelines and/or consultation with the Board's technical advisor and legal counsel.
- C. Board Action:
 - 1. Submission of an after-the-fact permit application.
 - 2. Restoration order with time period for compliance.
 - 3. Civil Charges

IX. After-the-Fact Applications

- A. Follow prescribed notice and public hearing procedures.

X. Restoration Orders

- A. Restoration order as approved by the Board is prepared and issued by the Board Designee (sent certified-return receipt).
- B. Site inspection by staff (following notice procedures), as required.
- C. Non-compliance may result in appropriate legal action by the Board's legal counsel.

XI. Civil Charges

As specified in Sections 28.2-1320 and 28.2-1420 of the Code of Virginia, the Board may order, with the consent of the person in violation, a one-time payment of civil charges for each violation not to exceed \$10,000. Civil charges shall be in lieu of any appropriate civil penalty that could be imposed by the Circuit Court. Civil charges may be in addition to the cost of any restoration ordered by the Wetlands Board.

- A. The policy of the <Enter City/County/Town Name> Wetlands Board is to consider the assessment of a civil charge for violations of the <Choose City/County/Town>'s Wetlands and Coastal Primary Sand Dune ordinances which meet one of the following criteria:
 - 1. As determined by the Board, the violation was knowingly or intentionally committed. Factors to consider include, but are not limited to, evidence of prior consultation or site meetings with Wetlands Board staff, testimony or evidence presented at the violation hearing, issuance of a prior wetlands or dune permit. Failure to comply with the conditions of an authorized wetlands or dune permit shall constitute a knowing violation.

2. The violator has been served notice to appear before the Wetlands Board on prior violation(s).
 3. Significant and/or irreparable damage has occurred to the wetlands or primary dunes as a result of the subject violation.
- B. There is a presumption by the Board that all persons, engaged in the business of constructing shoreline defense structures or conducting land-disturbing activities, are aware of permitting requirements. Therefore, the Board will consider the assessment of a civil charge against such persons even though they may not have had any prior contact with Wetland Board staff.
- C. The policy of the Board is to determine the civil charge amount based on the degree of environmental impact and non-compliance.

Environmental impacts shall be based on supporting documentation provided within the State's guidelines and/or an evaluation by the Board's technical advisor from the Virginia Institute of Marine Science.

The degree of non-compliance shall be a further consideration in determining the civil charge amount. Relative degree of deviation or non-compliance refers to the extent, or magnitude, of a violation. Other factors to be considered are the violator's degree of good faith, willfulness, history of non-compliance, and cooperation.

- D. The above factors and specific circumstances of the violation shall govern the establishment of an appropriate civil charge. However, in order to defray administrative costs of pursuing a civil charge, it shall be the policy of the Board not to establish a charge of less than <Enter Minimum Charge Amount>.
- E. In cases of unauthorized activity or permit violation, staff shall provide a recommendation on whether to assess a civil charge based on the policy criteria. In cases where a civil charge is recommended, staff will provide a recommended charge amount based on an evaluation of environmental impact, degree of noncompliance, and other appropriate factors.

XII. Designated Officers

Wetlands Board Chair - <Enter Name>
Board Chair Designee - <Enter Name>
Enforcement Officers - <Enter Names>

VIOLATION PROCEDURES STATEMENT

(Chair reads the following:)

At this time the Board will be considering violations. Our procedure is to have staff present the specifics of the violation and make a recommendation to the Board on either to order the restoration of the site or submission of an after-the-fact permit application.

After the recommendation, the Board will take testimony from those that are present in the room.

The Board will then take action.

Following that action, the Board will decide whether or not civil charges should be assessed. As specified in the State Code, this wetlands board may, with the consent of the person in violation, assess a civil charge of up to \$10,000 for each violation. I wish to reinforce that a person in violation may, at their option, agree or not agree to pay the civil charge.

If agreement is not reached concerning the civil charge, however, our Board may seek civil penalties in the <Enter City/County/Town Name> Circuit Court in the amount not to exceed \$25,000 per day for each violation.

With that explanation of our violation procedure, I would ask staff to present the first violation for consideration.

Conduct Hearing – Action Taken

Now that the Board has taken action on this violation, what is staff's recommendation on the assessment of a civil charge?

Staff recommends whether a civil charge is warranted based on an evaluation of the Board's civil charge policy. If a charge is warranted, staff provides an evaluation of the degree of environmental impact and non-compliance. The Board may use their discretion at arriving at a charge. The objective should be consistency without being unyielding.

Will <Violator> please come forward and address the Board.

(This provides the Board an opportunity to determine the facts of the case before arriving at a civil charge amount.)

Once the facts of the case have been determined, the Board will discuss the matter and arrive at a civil charge amount.

Will <Violator> please come forward.

The Board is considering a civil charge in the amount of <Enter Dollar Amount> dollars. To reiterate, it is your option whether or not to pay this amount. Paying the civil charge, however, will close this case today. If you decide not to pay the charge, this Board has the authority under State law to seek civil penalties of a much greater amount in the <Enter City/County/Town Name> Circuit Court.

Do you have any questions? If not, do you agree to pay the civil charge?

If the violator **agrees** to the charge, Board votes to order the payment of the civil charge in the amount of _____ dollars within 30 days (or as determined by the Board). The motion should also provide that if payment is not received within the specified time period, legal counsel is directed to seek civil penalties in Circuit Court.

If the violator **doesn't agree** to the charge, Board votes on referring matter to counsel for legal action to recover charges under the civil penalties provision.

A

Permit Fee Letter

(Used to notify applicant that a wetlands permit will be required and that a permit processing fee must be tendered to the locality)

<Enter Date>

<Enter Applicant's Title> <Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: <Enter Type of Permit Application> #<Enter Permit Number>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

Our office has completed a review of your application to <Enter Project Description, Project Address Waterway>. Based on <.....>, the project will impact an area of <.....> wetlands. A permit will therefore be required from the <Enter City/County/Town Name> Wetlands Board before you commence construction.

In order to complete the application, please forward a <Enter Fee Amount> processing fee (make check payable to <Enter City/County/Town Name> Treasurer). Upon receipt of the requested item, our office will schedule the application for a public hearing. Please be advised that we must have a completed application by <Enter Deadline Date> in order to schedule you for the <Enter Hearing Date> public hearing.

If you require additional information, please contact <Enter Contact Name> at <Enter Phone, Fax and/or E-mail>.

Sincerely,

<Enter Name>
<Enter Title>

B

Receipt of Permit Fee Letter

(Used to acknowledge receipt of the permit processing fee and notify applicant of public hearing date, time, and location)

<Enter Date>

<Enter Applicant's Title> Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: <Enter Type of Application> #<Enter Application Number> <Enter (After-the Fact)>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

This will acknowledge receipt of the <Enter Fee Amount> fee required for processing of the above-referenced application by the <Enter City/County/Town Name> Wetlands Board. The application will be considered by the Board during a public hearing scheduled for <Enter Day, Date, Time, Location & Address>.

The Board requests that you or your designated agent attend the hearing and be prepared to offer testimony in support of the application. If you intend to submit documentary evidence during the public hearing, e.g., photographs, site plans, relevant correspondence, please present this material to the Board's staff for inclusion in the record and distribution to Board members. Copies should be provided to the Board's staff if you wish to retain any original material.

As required by ordinance, our office will prepare a public notice containing a brief description of the project and scheduled hearing date and publish it in the <Enter Newspaper> once a week for two weeks. Please be advised that after notice has been given any substantive changes made in the project may result in the application being deferred until the next monthly meeting.

If I may provide any additional information prior to the public hearing, please contact me at <Enter Phone, Fax and/or E-mail>.

Sincerely,

<Enter Name>
<Enter Title>

C

48 Hour Notice of Board's Decision Letter

(Used to notify applicant of the status of the application within 48 hours of the Board's decision)

<Enter Date>

<Enter Applicant's Title> <Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: Wetlands Permit Application #<Enter Application Number> <Enter (After-the Fact)>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

The <Enter City/County/Town Name> Wetlands Board during its meeting on <Enter Hearing Date> considered your <Enter after-the-fact> application to impact <Enter Square Footages & Wetland Type> with the <Enter Project Description> at <Enter Project Address and Waterway>.

The following determination has been made on your permit request:

- approval as submitted
- approval in a modified form with special conditions
- construction surety bond or letter of credit required
- denial without prejudice
- permit application is incomplete
- applicant to provide more information prior to final action
- defer a decision until the meeting of <Enter Hearing Date>

If your application has been approved, a permit will be forwarded to you for signature within 14 days. Please be advised that construction on the above-referenced project may not commence until the applicant and the Chair of the Wetlands Board has properly executed a permit.

If your application has been denied, the Board upon review of the record and testimony presented during the public hearing finds that (1) the public and private benefit from the proposed project is exceeded by the public and private detriment and/or (2) the project would violate the purposes and intent of <Enter City/County/Town Wetlands Ordinance Code Section>.

<Enter Applicant's Name>

Page 2

<Enter Hearing Date>

Please be advised that a decision of the Wetlands Board may be appealed to the Virginia Marine Resources Commission, P.O. Box 756, 2401 West Avenue, Newport News, Virginia 23607, within ten (10) days from the date of the determination. You should contact <Enter Contact Name> (tel: <Enter Phone>) for additional information on appeal procedures and requirements.

Please direct any additional questions on this matter to <Enter Name>, <Enter Address> <Enter Phone, Fax and/or E-mail>.

Sincerely,

<Enter Name>
Chair, <Enter City/County/Town Name>
Wetlands Board

cc: U. S. Army Corps of Engineers, <Enter District>
Mr. William A. Pruitt, Commissioner
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Agent's Name>, Agent

D

Enclosed is Your Permit and 48 Hour Prior Notification Letter

(Used to notify applicant of the expiration date of the permit and that notification must be given to the Board 48 hours prior to project construction)

<Enter Date>

<Enter Applicant's Title> <Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: Wetlands Permit #<Enter Application Number><Enter (After-the-Fact)>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

Please find enclosed a wetlands permit issued by the <Enter City/County/Town Name> Wetlands Board for your proposed <Enter Project Description> <Enter Project Address and Waterway>.

The work authorized by this permit shall be completed by <Enter Deadline Date> after which time this permit becomes null and void. The Board in its discretion may extend the completion date.

It is requested that you review the general conditions of the permit and any special requirements that may apply. You are asked to pay particular attention to standard permit condition #5. Our office relies on your advance notification of project commencement in order to schedule an inspection. The Wetlands Board may consider an assessment of civil charges of up to \$10,000 if notification is not given. In addition, please be advised that the granting of this permit does not release you from the responsibility of obtaining all other local, state, or federal permits.

If a question arises during your review of the permit document, please contact <Enter Contact Name> at <Enter Phone, Fax, and/or E-mail>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District >
Virginia Marine Resources Commission
Virginia Institute of Marine Science

E

You Must Sign and Return the Permit Letter

(Used to notify the applicant that the permit must be signed and returned)

<Enter Date>

<Enter Applicant's Title> <Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: Wetlands Permit #<Enter Application Number> <Enter (After-the Fact)>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

Enclosed is the <Enter City/County/Town Name> Wetlands Board permit for your project involving the <Enter Project Description> <Enter Project Address, Project Waterway>.

- (1) Please review these documents.
- (2) Sign two (2) copies before a Notary Public.
- (3) Return all copies to this office in the enclosed self-addressed envelope.

Upon receipt of the above signed documents bearing the proper signatures, the Board will execute your permit and return it to you. The permit is not valid until signed and notarized by the Permittee and the Chair of the Wetlands Board.

Please be advised that the issuance of a wetlands permit does not release you from the responsibility of obtaining all other local, state or federal permits.

If you require additional information, please contact <Enter Contact Name> at <Enter Phone, Fax, and/or E-mail>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U. S. Army Corps of Engineers,
<Enter District>

F

Wetlands Permit

(The actual wetlands permit with a description of the project, the amount of permitted wetlands impact and the permit expiration date)

WETLANDS PERMIT

<Enter Application Number> <Enter (After-the-Fact)>

Pursuant to <Enter City/County/Town Wetlands Ordinance Code Citation>, the Wetlands Board of the <Enter City/County/Town Name>, (hereinafter referred to as the "Board") on this <Enter Date>, hereby grants unto <Enter Permittee's Full Name>, <Enter Permittee's Street Address>, <Enter Permittee's City, State Zip> (hereinafter referred to as the "Permittee") permission to:

<Enter Project Description> with the <Enter Square Footages & Wetland Type> <Enter Project Address and Waterway>

in conformance with the plans and drawings dated, <Enter Date of Project Drawings> which are attached hereto and made a part of this permit.

This permit is granted subject to the following terms and conditions:

- (1) The work authorized by this permit shall be completed by <Enter Deadline Date> after which time this permit shall become null and void. The completion date may be extended by the Board in its discretion. Any such application for extension of time shall be in writing prior to the above completion date and shall specify the reason for such extension and the expected date of completion of construction. All other conditions remain in effect unless revoked by the Board.
- (2) Except as specifically authorized herein, the Permittee agrees not to undertake any activity which would impair the natural function of the wetlands; physically alter the contours of the wetlands; or, destroy vegetation growing thereon as listed in the Wetlands Guidelines promulgated by the Virginia Marine Resources Commission.
- (3) The duly authorized agents of the Wetlands Board and Marine Resources Commission shall have the right to enter upon the premises at reasonable times, for the purposes of inspecting the work being done pursuant to this permit.
- (4) This permit shall not be transferred without the prior written approval of the Board.
- (5) **THE PERMITTEE OR AUTHORIZED AGENT SHALL CONTACT THE CITY OF <ENTER CITY/COUNTY/TOWN NAME> (TEL: <Enter Phone>) AT LEAST 48 HOURS PRIOR TO THE START OF THE PROJECT. FAILURE TO NOTIFY WILL CONSTITUTE A PERMIT VIOLATION AND MAY SUBJECT THE PERMITTEE TO AN ASSESSMENT OF CIVIL CHARGES OF UP TO \$10,000.**
- (6) This permit may be revoked at any time by the Board upon the failure of the Permittee to comply with any of the terms and conditions herein.

Application: #<Enter Application Number> <Enter (After-the Fact)>
Applicant: <Enter Permittee's Full Name>

IN WITNESS WHEREOF, the <Enter City/County/Town Name> Wetlands Board has caused these presents to be executed in its behalf by <Enter Name>. The Permittee's signature is affixed hereto as evidence of acceptance of all the terms and conditions herein.

WETLANDS BOARD

____ day of _____ 20__ by _____
<Enter Name of Wetlands Board Representative>

State of Virginia
<Choose City/County/Town> of <Enter City/County/Town Name>, to wit:

I, _____, a Notary Public in and for said state and <Choose city/county/town> hereby certify that <Enter Name of Wetlands board Representative>, whose name is signed to the foregoing, has acknowledged the same before me in my state and <Choose city/county/town> aforesaid.

Given under my hand this ____ day of _____ 20__

Notary Public _____

My commission expires on <Enter Expiration Date>

PERMITTEE

____ day of _____ 20__ by _____
Permittee's Signature

State of Virginia
<Choose City/County/Town> of <Enter City/County/Town Name>, to wit:

I, _____, a Notary Public in and for said state and <Choose city/county/town> hereby certify that _____, whose name is signer to the foregoing, has acknowledged the same before me in my state and <Choose city/county/town> aforesaid.

Given under my hand this ____ day of _____ 20__

Notary Public _____

My commission expires on the ____ day of _____ 20__

G

Final Site Inspection Letter

(Used to notify the applicant that a final inspection of the completed project has taken place and that the project is in compliance with the wetlands permit)

<Enter Date>

<Enter Applicant's Title> <Enter Applicant's Name>
<Enter Applicant's Street Address>
<Enter Applicant's City, State Zip>

Re: <Enter Type of Application> Permit #<Enter Application Number><Enter (After-the-Fact)>

Dear <Enter Mr./Mrs. Applicant's Last Name>:

This is in regards to the final site inspection that was performed on <Enter Date> to confirm that your shoreline project was completed in the manner that was approved of by the <Enter City/County/Town Name> Wetlands Board.

Please be advised that the activities that have occurred on your property have been completed in conformance with the permit and project drawings. Wetlands Board staff now consider your project completed.

If I may provide any additional information, please contact <Enter Contact Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
<Enter Agent's Name>, Agent

H

Sworn Complaint Form

(Used to serve notice to the Board that a substantial violation of the Wetlands Act has taken place)

SWORN COMPLAINT

Pursuant to <Enter City/County/Town Wetlands Ordinance Citation>, I hereby certify that a substantial violation of <Enter City/County/Town Code Citation for Wetlands or Dunes> has occurred at the following address: <ENTER ADDRESS & WATERWAY>. The property is owned by: <Enter Violator's Name>.

I have personally inspected the site on <Enter Inspection Date> and noted the following unauthorized activity: <Enter Description of Violation>.

(Date)

(Designated Enforcement Officer)

State of Virginia
<Choose City/County/Town> of <Enter City/County/Town Name>, to wit:

I, _____, a Notary Public in and for said state and <Choose city/county/town> hereby certify

that _____, a designated enforcement officer, whose name is signed to the foregoing, has acknowledged the same before me in my state and <Choose city/county/town> aforesaid.

Given under my hand this ____ day of _____ 20____

Notary Public _____

My commission expires on the ____ day of _____ 20____

I

Stopwork Order Form

(Used to notify the applicant that a potential violation has been observed on the property and that all associated activity shall cease and desist)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

This letter is in reference to certain filling activities, which have been observed by our field personnel at <Enter Project Address & Waterway> and a Sworn Complaint has been submitted regarding this activity. Our office is concerned that these activities have impacted an area of wetlands. <Enter City/County/Town Wetlands Ordinance Citation> of <Enter City/County/Town Name>, states that any use or development of wetlands within the city requires a permit issued by the <Enter City/County/Town Name> Wetlands Board.

In order for our office to assess the situation, you are directed to cease any additional filling activities in the wetlands area under the provisions of <Enter City/County/Town Wetlands Ordinance Citation>. Please contact our office within forty eight (48) hours from the date of receipt of this letter so we may arrange a mutually convenient time to meet on site within one week.

If you would like to discuss this matter prior to the site meeting, please call <Enter Contact's Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

J

Show Cause Form

(Used to request that a property owner appear before the Board to discuss a potential violation observed on his/her property)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

This letter is in reference to the filling activities that have occurred on your property at <Enter Project Address & Waterway>. As discussed with you during <Enter Phone or Site Visit> on <Enter Date of Phone or Site Visit>, these activities have displaced an area of wetlands without a permit from the Wetlands Board. The impacted wetlands are predominately <Enter Major Vegetation Type>.

Our investigation indicates that these activities have displaced approximately <Enter Square Feet> square feet of <Choose vegetated or nonvegetated> wetlands as defined in <Enter City/County/Town Wetland Ordinance Code Citation>, and this use and alteration is in violation of the <Choose City/County/Town>'s Wetlands Ordinance <Enter Code Citation>. In addition, please be advised that the Wetlands Board has the authority to order restoration and/or assess a civil charge of up to \$10,000 for each violation.

The Wetlands Board shall consider this matter during their next scheduled meeting on <Enter Day, Date> at <Enter Time> <Enter Meeting Location & Address>. You are hereby requested to appear before the Board at that time.

Please be advised that any information submitted during the meeting, e.g., photographs, physical surveys, or relevant correspondence, should be presented to the Board's staff for inclusion in the record and distribution to Board members. Copies must be provided if you wish to retain any original material.

<Enter Violator's Name>
Page 2
<Enter Date>

For additional information on this matter, please contact <Enter Contact Name>
at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Enter City/County/Town> Attorney

K

Subpoena Form

(Used to notify the Clerk of Court that the Board requests that a subpoena be issued to compel an individual to appear before the Board to give testimony)

<Enter Date>

<Enter Clerk of the Court Name>, Clerk
<Enter Street Address>
<Enter City, State Zip>

Dear <Enter Mr./Mrs. Clerk's Last Name>:

On behalf of the <Choose City/County/Town> of <Enter City/County/Town Name> Wetlands Board, and at the request of the Chair on the Wetlands Board, pursuant to <Enter City/County/town Wetlands Ordinance Code Citation>, please issue a subpoena to the below-named individual, requiring <Choose him/her> to appear and testify at the <Enter Month> Wetlands Board Public Hearing scheduled for <Enter Day, Date, Time, Location & Address>:

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Assessment of Civil Charge for Wetlands Violation at
<Enter Project Address & Waterway>

Please forward the subpoena to the appropriate Sheriff, requesting service in accordance with <Enter City/County/Town Code>. The Sheriff should be instructed to make his return to the <Enter City/County/Town Name> Wetlands Board, c/o <Enter Name>, <Choose City/County/Town> Attorney's Office, <Enter Address>, <Enter Phone, Fax and/or Email>.

Thank you for your assistance in this matter.

Sincerely,

<Enter Name>
<Choose City/County/Town> Attorney

cc:

L

Restoration Order Letter

(Used by the Board to direct the restoration of an impacted wetlands area)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

The Wetlands Board considered the above-referenced violation during their monthly meeting on <Enter Hearing Date>. Based on our staff report and the evidence presented during the meeting, the Board determined that the unauthorized activities undertaken on your property are contrary to the policy, standards and guidelines contained within the <Choose City/County/Town>'s Wetlands Ordinance. The unauthorized activity(ies) include: <Enter Unauthorized Activity(ies)>

This letter serves as official notice that the Wetlands Board has ordered you to restore <Enter Square Footage and Type> with adherence to the following requirements and specifications:

- 1) <Enter Requirements>

Additional information on this matter may be obtained by contacting <Enter Contact Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Choose City/County/Town> Attorney

M

Closed Meeting Procedure

(Used when the Board needs to convene a meeting closed to the public)

Closed Meetings

I. When to Convene a Closed Meeting:

When the chair or members of the board have particular questions or matters involving actual or probable litigation, or require the provision of legal advice by counsel, the chair can ask for a vote to convene a closed meeting.

No closed meeting shall be held unless the public body proposing to convene such meeting has taken an affirmative recorded vote in an open meeting approving a motion which (i) identifies the subject matter, (ii) states the purpose of the meeting and (iii) makes specific reference to the applicable exemption from open meeting requirements provided in § 2.1-343 or subsection A of § 2.1-344. The matters contained in such motion shall be set forth in detail in the minutes of the opening meeting. A general reference to the provisions of this chapter, the authorized exemptions from open meeting requirements or the subject matter of the closed meeting shall not be sufficient to satisfy the requirements for holding a closed meeting.

II. How to Convene a closed meeting:

- (a) The chair should state: “Do we have a motion to convene in closed meeting to discuss this matter <state specifically the subject matter, the purpose of the meeting, and the applicable exemption from open meeting requirements> with counsel?”
- (b) A board member would make the motion, and the motion would be seconded.
- (c) The chair should state: “All those in favor of convening in closed meeting to discuss this matter with counsel?”
- (d) A vote should then be taken and recorded on the transcript. If a majority agree affirmatively to go into closed meeting, the chair should then say, “The board will convene in executive session to discuss this matter with counsel in accordance with Chapter 2.1 Section 2.1-340.1 through 346.1 of the Code of Virginia.”
- (e) The board should then proceed to a separate closed room to discuss legal matters and receive the advice of counsel.
- (f) Informal notes may be taken during the closed meeting.
- (g) At the conclusion of the closed meeting, the board will come back out into council chambers.

At the conclusion of any closed meeting, the public body holding such meeting shall immediately reconvene in an open meeting and shall take a roll call or other recorded vote to be included in the minutes of that body, certifying that to the best of each member's knowledge (i) only public business matters lawfully exempted from open meeting requirements under this chapter and (ii) only such public business matters as were identified in the motion by which the closed meeting was convened were heard, discussed or considered in the meeting by the public body. Any member of the public body who believes that there was a departure from the requirements of subdivisions (i) and (ii), shall so state prior to the vote, indicating the substance of the departure that, in his/her judgement, has taken place. The statement shall be recorded in the minutes of the public body.

- (h) The chair should then take a vote that only matters pertaining to legal advice or litigation were discussed in the closed meeting. The chair should state: "to the best of each member's knowledge, only matters pertaining to the provision of legal advice by counsel were discussed in the closed meeting. All those in agreement?"
- (i) A recorded vote should then be taken.
- (j) The normal wetlands public hearing can then resume.

N

No Restoration Has Taken Place Letter

(Used to notify an individual that the restoration order of the Board has not been undertaken and that the individual is requested to appear before the board at the next scheduled meeting)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

The Wetlands Board issued you an order on <Enter Date of Order> requiring the restoration of <Enter Square Footage> of <Choose vegetated or nonvegetated> wetlands at the above-referenced property. The order expired on <Enter Expiration Date>. Our office notified you in previous correspondence on the pending expiration and scheduled a final inspection date. A site inspection on <Enter Inspection Date>, revealed that the restoration has not been undertaken.

The Wetlands Board shall consider this matter during their next scheduled meeting on **<Enter Day, Date> at <Enter Time> at <Enter Hearing Location & Address>**. **You are hereby requested to appear before the Board at that time. Please be advised that our office will recommend to the Board that they take legal action in this case.**

Additional information on this matter may be obtained by contacting <Enter Contact Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Choose City/County/Town> Attorney

0

You Have An Extra Ten Days to do the Restoration Letter

(Used to notify an individual that the Board's restoration order has expired and that 10 additional days have been granted for completion of the restoration)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

This letter is in reference to the <Enter City/County/Town Name> Wetlands Board order issued <Enter Order Issue Date>. The order directed you to restore <Choose vegetated or nonvegetated> wetlands at your property identified as <Enter Project Address & Waterway>.

A <Enter Number of Days> day time limit was included for the completion of the restoration with an additional <Enter Number of Days> days for the establishment of a vegetative cover over the disturbed area. This time period has now elapsed and a final site inspection is scheduled for ten (10) days from the date of this letter. All aspects of the restoration are to be complete by <Enter Date Ten Days in the Future>.

Please be advised that failure to comply with a restoration order from the <Enter City/County/Town Name> Wetlands Board is a misdemeanor offense with criminal as well as civil penalties and may result in further legal action by the <Choose City/County/Town> of <Enter City/County/Town Name>.

Should you have any further questions regarding this matter, please contact <Enter Contact Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Choose City/County/Town> Attorney

P

The Site Has Been Satisfactorily Restored Letter

(Used to notify an individual that the site has been restored to the Board's satisfaction)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

The <Enter City/County/Town Name> Wetlands Board reviewed the above-referenced violation during their monthly meeting on <Enter Hearing Date>. Based on our staff report, the Wetlands Board determined that you have satisfactorily restored the area and now considers this matter closed.

We appreciate your efforts to remedy the violation in a diligent and timely manner. If there are any additional questions pertaining to this matter, please contact <Enter Contact Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Choose City/County/Town> Attorney

Q

You Are Required to Submit an After-the-Fact Permit Application Letter

(Used to notify an individual that the Board has required the submittal of an After-the-Fact application for work that has been, or is being, conducted in wetlands on his/her property)

<Enter Date>

<Enter Violator's Title> <Enter Violator's Name>
<Enter Violator's Street Address>
<Enter Violator's City, State Zip>

Re: Wetlands Violation - <ENTER PROJECT ADDRESS & WATERWAY>

Dear <Enter Mr./Mrs. Violator's Last Name>:

The <Enter City/County/Town Name> Wetlands Board reviewed the above-referenced violation during their monthly meeting on <Enter Hearing Date>. Please be advised that the Wetlands Board has required that you submit an after-the-fact permit application within thirty (30) days for the unauthorized activities for which you were originally cited.

Our office will be glad to assist you in completing the enclosed permit application. In addition to the application, please forward a <Enter Fee Amount> processing fee (make check payable to <Enter City/County/Town Name> Treasurer). Upon receipt of the requested items, our office will schedule the application for a public hearing. Please be advised that you must submit a completed application by <Enter Deadline Date> to be in compliance with the Board's order.

If this office can be of further assistance, please contact <Enter Contact's Name> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: U.S. Army Corps of Engineers,
<Enter District>
Virginia Marine Resources Commission
Virginia Institute of Marine Science
<Enter Name>, <Choose City/County/Town> Attorney
<Enter Other Agencies>

R

Surety Bond Form

(Used to insure that a project is conducted as authorized by the Board)

<CHOOSE CITY/COUNTY/TOWN> OF <ENTER CITY/COUNTY/TOWN NAME>
WELANDS
CONSTRUCTION SURETY BOND FOR PERMIT
#<Enter Application Number> <Enter (After-the Fact)>

KNOW ALL MEN BY THESE PRESENTS that I/We, <Enter Permittee's Full Name> as principal, and _____ a corporation duly authorized to transact business in the State of Virginia, as surety, are held and firmly bound unto the <Choose City/County/Town> of <Enter City/County/Town Name> as obligee, in the sum of <Enter Dollar Amount> Dollars, for payment whereof well and truly to be made, the principal and the surety unconditionally bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the principal, pursuant to <Enter City/County/Town Wetlands Ordinance Citation>, has obtained a wetlands permit #<Enter Application Number> <Enter (After-the Fact)> dated <Enter Date>, from the Wetlands Board of the <Choose City/County/Town> of <Enter City/County/Town Name>; and pursuant to <Enter City/County/Town Code Citation>, the applicant has been required by the Wetlands Board of the <Choose City/County/Town> of <Enter City/County/Town Name> to file a surety bond for the faithful performance of the wetlands permit in conformity with the requirements of <Enter City/County/Town Wetlands Ordinance Citation>, Code of the <Choose City/County/Town> of <Enter City/County/Town Name>.

Now, therefore, the condition of the obligation is such, that if the said principal shall faithfully perform the obligation in strict conformity with the aforementioned permit and <Enter City/County/Town Wetland Ordinance Citation>, Code of the <Choose City/County/Town> of <Enter City/County/Town Name>, Virginia, to the satisfaction and written approval of the Wetlands Board or its agent then this obligation shall be null and void, otherwise the obligation shall remain in full force and effect.

In witness whereof, the principal and surety have affixed their names and seals this ____ day of _____, 20____.

PRINCIPAL CORPORATION
SEAL (When Applicable)

Principal

By _____
Corporation Officer

SURETY CORPORATION SEAL

Surety

By _____
Attorney-In-Fact

COUNTERSIGNED BY:

Licensed Resident Agent

Mailing Address

City or County, State & Zip

Telephone Number

NOTE: POWER OF ATTORNEY MUST BE ATTACHED

Enclosure

Page 2 of 2

S

Irrevocable Letter of Credit Form

(Used to insure that a project has been conducted as authorized by the Board)

IRREVOCABLE LETTER OF CREDIT

<Enter City/County/Town Name>

<Enter Address>

<Enter City, State Zip>

Attn: <Enter Name>

Gentlemen:

We hereby establish our Irrevocable Credit No. _____, in your favor, for the account of <Enter Permittee's Full Name>, <Enter Applicant's Street Address>, <Enter Applicant's City, State Zip> and thereby undertake to honor your drafts at sight on us, not exceeding in the aggregate US \$<Enter Dollar Amount and 00/100>United States Dollars, each such draft to be accompanied by:

1. Your written statement certifying that "<Enter Permittee's Full Name> has defaulted in the performance of the terms and conditions of its agreement with you, dated <Enter Date> pertaining to Permit #<Enter Application Number> <Enter (After-the-Fact)> and that you are in consequence, entitled to the amount of the accompanying draft, no part of which has been paid by <Enter Permittee's Full Name>, although duly demanded".

All drafts drawn under this credit must be marked "Drawn under <Enter Bank's Name>, letter of Credit No. _____, dated <Enter Date>," and the amounts drawn hereunder must be endorsed on the reverse hereof by the negotiating bank or bankers.

This credit is valid until <Enter Elapse Date>, and drafts drawn hereunder, if accompanied by documents as specified above will be honored if presented to <Enter Bank's Name> <Enter Bank's Address>.

This Letter of Credit shall be deemed automatically extended without amendment for six months from the present or any future maturity date unless at least thirty (30) days prior to such maturity date we shall notify you in writing by registered mail that we elect not to consider this Letter of Credit renewed for such additional six-month period.

Except as may be provided herein, this Letter of Credit is subject to Article Five of the Uniform Commercial Code as adopted by the State of Virginia.

Sincerely,

<Enter Bank's Name>

by: _____

Authorized Signature

T

Letter of Credit Conditions Met Letter

(Used to notify a bank or lender that the applicant has satisfied all the conditions required by the Board and that the remaining monies can be released)

<Enter Date>

<Enter Name of Bank or Lender>
Attn: <Enter Name of Loan Officer>
<Enter Street Address>
<Enter City, State Zip>

Re: <Choose Sand Dune/Wetlands> Permit #<Enter Number> - Letter of Credit #<Enter Number>

Dear <Enter Loan Officer's Name>:

This serves as notice that <Enter Applicant's Name> has satisfied all of the conditions contained within <Choose Sand Dune/Wetlands> Permit #<Enter Permit Number>. Accordingly, the remaining \$<Enter Dollar Amount> may be released at this time.

If there are any questions, please contact <Enter Contact Person> at <Enter Phone, Fax and/or Email>.

Sincerely,

<Enter Name>
<Enter Title>

cc: <Enter Applicant's Name>

Closed Meeting

§ 2.1-343

Meetings to be public; notice of meetings; recordings; minutes

A. All meetings of public bodies shall be open, except as provided in § 2.1-344.

B. No meeting shall be conducted through telephonic, video, electronic or other communication means where the members are not physically assembled to discuss or transact public business, except as provided in §§ 2.1-343.1, 2.1-343.1:1 or as may be specifically provided in Title 54.1 for the summary suspension of professional licenses.

C. Every public body shall give notice of the date, time, and location of its meetings by placing the notice in a prominent public location at which notices are regularly posted; in the office of the clerk of the public body, or in the case of a public body which has no clerk, in the office of the chief administrator. Publication of meeting notices by electronic means shall be encouraged. The notice shall be posted at least three working days prior to the meeting. Notices for meetings of state public bodies on which there is at least one member appointed by the Governor shall state whether or not public comment will be received at the meeting and, if so, the approximate point during the meeting when public comment will be received.

D. Notice, reasonable under the circumstance, of special or emergency meetings shall be given contemporaneously with the notice provided members of the public body conducting the meeting.

E. Any person may annually file a written request for notification with a public body. The request shall include the requester's name, address, zip code, daytime telephone number, electronic mail address (if available), and organization, if any. The public body receiving such request shall provide notice of all meetings directly to each such person. Without objection by the person, the public body may provide electronic notice of all meetings in response to such requests.

F. At least one copy of all agenda packets and, unless exempt, all materials furnished to members of a public body for a meeting shall be made available for public inspection at the same time such documents are furnished to the members of the public body.

G. Nothing in this chapter shall be construed to prohibit the gathering or attendance of two or more members of a public body (i) at any place or function where no part of the purpose of such gathering or attendance is the discussion or transaction of any public business, and such gathering or attendance was not called or prearranged with any purpose of discussing or transacting any business of the public body or (ii) at a public forum, candidate appearance, or debate, the purpose of which is to inform the electorate and not to transact public business or to hold discussions relating to the transaction of public business, even though the performance of the members individually or collectively in the conduct of public business may be a topic of

discussion or debate at such public meeting. The notice provisions of this chapter shall not apply to informal meetings or gatherings of the members of the General Assembly.

H. Any person may photograph, film, record or otherwise reproduce any portion of a meeting required to be open. The public body conducting the meeting may adopt rules governing the placement and use of equipment necessary for broadcasting, photographing, filming or recording a meeting to prevent interference with the proceedings.

I. Minutes shall be recorded at all open meetings. However, minutes shall not be required to be taken at deliberations of (i) standing and other committees of the General Assembly, (ii) legislative interim study commissions and committees, including the Virginia Code Commission, (iii) study committees or commissions appointed by the Governor, or (iv) study commissions or study committees, or any other committees or subcommittees appointed by the governing bodies or school boards of counties, cities and towns, except where the membership of any such commission, committee or subcommittee includes a majority of the governing body of the county, city or town or school board. Minutes, including draft minutes, and all other records of open meetings, including audio or audio/visual records shall be deemed public records and subject to the provisions of this chapter. Audio or audio/visual records of open meetings shall be public records which shall be produced in accordance with § 2.1-342.

Closed meetings authorized for certain limited purposes

A. Public bodies may hold closed meetings only for the following purposes:

1. Discussion, consideration or interviews of prospective candidates for employment; assignment, appointment, promotion, performance, demotion, salaries, disciplining or resignation of specific public officers, appointees or employees of any public body; and evaluation of performance of departments or schools of public institutions of higher education where such evaluation will necessarily involve discussion of the performance of specific individuals. Any teacher shall be permitted to be present during a closed meeting in which there is a discussion or consideration of a disciplinary matter which involves the teacher and some student and the student involved in the matter is present, provided the teacher makes a written request to be present to the presiding officer of the appropriate board.
2. Discussion or consideration of admission or disciplinary matters concerning any student of any public institution of higher education or any state school system. However, any such student, legal counsel and, if the student is a minor, the student's parents or legal guardians shall be permitted to be present during the taking of testimony or presentation of evidence at a closed meeting, if such student, parents or guardians so request in writing and such request is submitted to the presiding officer of the appropriate board.
3. Discussion or consideration of the acquisition of real property for a public purpose, or of the disposition of publicly held real property, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the public body.
4. The protection of the privacy of individuals in personal matters not related to public business.
5. Discussion concerning a prospective business or industry or the expansion of an existing business or industry where no previous announcement has been made of the business' or industry's interest in locating or expanding its facilities in the community.
6. The investing of public funds where competition or bargaining is involved, where, if made public initially, the financial interest of the governmental unit would be adversely affected.
7. Consultation with legal counsel and briefings by staff members or consultants pertaining to actual or probable litigation, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body; and consultation with legal counsel employed or retained by a public body regarding specific legal matters requiring the provision of legal advice by such counsel. For the purposes of this subdivision, "probable litigation" means litigation which has been specifically threatened or on which the public body or its legal counsel has a reasonable basis to believe will be commenced by or against a known party. Nothing in this subdivision shall be construed to permit the closure of a meeting merely because an attorney representing the public body is in attendance or is consulted on a matter.

8. In the case of boards of visitors of public institutions of higher education, discussion or consideration of matters relating to gifts, bequests and fund-raising activities, and grants and contracts for services or work to be performed by such institution. However, the terms and conditions of any such gifts, bequests, grants and contracts made by a foreign government, a foreign legal entity or a foreign person and accepted by a public institution of higher education shall be subject to public disclosure upon written request to the appropriate board of visitors. For the purpose of this subdivision, (i) "foreign government" means any government other than the United States government or the government of a state or a political subdivision thereof; (ii) "foreign legal entity" means any legal entity created under the laws of the United States or of any state thereof if a majority of the ownership of the stock of such legal entity is owned by foreign governments or foreign persons or if a majority of the membership of any such entity is composed of foreign persons or foreign legal entities, or any legal entity created under the laws of a foreign government; and (iii) "foreign person" means any individual who is not a citizen or national of the United States or a trust territory or protectorate thereof.

9. In the case of the boards of trustees of the Virginia Museum of Fine Arts and The Science Museum of Virginia, discussion or consideration of matters relating to specific gifts, bequests, and grants.

10. Discussion or consideration of honorary degrees or special awards.

11. Discussion or consideration of tests, examinations or other records excluded from this chapter pursuant to § 2.1-342.01 A 11.

12. Discussion, consideration or review by the appropriate House or Senate committees of possible disciplinary action against a member arising out of the possible inadequacy of the disclosure statement filed by the member, provided the member may request in writing that the committee meeting not be conducted in a closed meeting.

13. Discussion of strategy with respect to the negotiation of a siting agreement or to consider the terms, conditions, and provisions of a siting agreement if the governing body in open meeting finds that an open meeting will have an adverse effect upon the negotiating position of the governing body or the establishment of the terms, conditions and provisions of the siting agreement, or both. All discussions with the applicant or its representatives may be conducted in a closed meeting.

14. Discussion by the Governor and any economic advisory board reviewing forecasts of economic activity and estimating general and nongeneral fund revenues.

15. Discussion or consideration of medical and mental records excluded from this chapter pursuant to § 2.1-342.01 A 5, and those portions of disciplinary proceedings by any regulatory board within the Department of Professional and Occupational Regulation or Department of Health Professions conducted pursuant to § 9-6.14:11 or § 9-6.14:12 during which the board deliberates to reach a decision.

16. Discussion, consideration or review of State Lottery Department matters related to proprietary lottery game information and studies or investigations exempted from disclosure under subdivisions 37 and 38 of subsection A of § 2.1-342.01.

17. Those portions of meetings by local government crime commissions where the identity of, or information tending to identify, individuals providing information about crimes or criminal activities under a promise of anonymity is discussed or disclosed.

18. Discussion, consideration, review and deliberations by local community corrections resources boards regarding the placement in community diversion programs of individuals previously sentenced to state correctional facilities.

19. Those portions of meetings in which the Board of Corrections discusses or discloses the identity of, or information tending to identify, any prisoner who (i) provides information about crimes or criminal activities, (ii) renders assistance in preventing the escape of another prisoner or in the apprehension of an escaped prisoner, or (iii) voluntarily or at the instance of a prison official renders other extraordinary services, the disclosure of which is likely to jeopardize the prisoner's life or safety.

20. Discussion of plans to protect public safety as it relates to terrorist activity.

21. In the case of corporations organized by the Virginia Retirement System, discussion or consideration of (i) proprietary information provided by, and financial information concerning, coventurers, partners, lessors, lessees, or investors and (ii) the condition, acquisition, disposition, use, leasing, development, coventuring, or management of real estate the disclosure of which would have a substantial adverse impact on the value of such real estate or result in a competitive disadvantage to the corporation or subsidiary.

22. Those portions of meetings in which individual child death cases are discussed by the State Child Fatality Review team established pursuant to § 32.1-283.1, and those portions of meetings in which individual child death cases are discussed by a regional or local child fatality review team established pursuant to § 32.1-283.2, and those portions of meetings in which individual death cases are discussed by family violence fatality review teams established pursuant to § 32.1-283.3.

23. Those portions of meetings of the University of Virginia Board of Visitors and those portions of meetings of any persons to whom management responsibilities for the University of Virginia Medical Center have been delegated, in which there is discussed proprietary, business-related information pertaining to the operations of the University of Virginia Medical Center, including its business development or marketing strategies and its activities with existing or future joint venturers, partners, or other parties with whom the University of Virginia Medical Center has formed, or forms, any arrangement for the delivery of health care, if disclosure of such information would adversely affect the competitive position of the Medical Center.

24. In the case of the Medical College of Virginia Hospitals Authority, discussion or

**Official Attorney General
Opinions On Matters
Related To Wetlands And
Dunes Issues**

CONTENTS

- May 25, 1978 Opinion by AG Coleman to Commissioner Douglas on use or encroachment on state-owned wetlands of the Eastern Shore — Public right to fish, fowl or hunt.
- June 20, 1979 Opinion by AG Coleman to Commissioner Douglas on LWB ability to modify permits at administrative meetings.
- February 9, 1981 Opinion by AG Coleman to Dan Stuck (County Attorney for New Kent) on repeal of local ordinance.
- May 25, 1982 Opinion by AG Baliles to Commissioner Douglas on adoption of local ordinance by towns more than a year after adoption by county of which they are a part.
- September 1, 1982 Opinion by AG Baliles to Commissioner Douglas on the meaning of terms plan or plan of development.
- September 1, 1982 Opinion by AG Baliles to Commissioner Douglas on LWB authority over federal activities in wetlands and dunes (Update requested August 25, 1989 and May 31, 1991).
- September 28, 1982 Opinion by AG Baliles to Deh McClanan concerning readvertisement and a second application fee for modified applications.
- December 16, 1982 Opinion by AG Baliles to Deh McClanan on LWB members appearance and testifying before Commission.
- January 10, 1983 Opinion by AG Baliles to Del. Pickett on LWB permit requirements for houses on pilings.
- January 18, 1983 Opinion by AG Baliles to Sen. Parker on exemption for governmental activities in wetlands.
- February 27, 1984 Opinion by AG Baliles to Del. Pickett on parliamentary procedures.
- October 31, 1984 Opinion by AG Baliles to Commissioner Pruitt on LWB authority to regulate groin length.
- December 19, 1984 Opinion by AG Baliles to John Foote (County Attorney for Prince William) regarding permit requirements for bulkhead maintenance and repair/replacement.
- October 22, 1985 Opinion by AG Broaddus to Del. Murphy on local government's authority to regulate private piers.
- August 5, 1988 Opinion by AG Terry to Del. Tata concerning time requirements in the Act and pending enforcement actions.
- June 19, 1991 Opinion by AG Terry to Senator Joseph V. Gartlan, Jr. on wetlands as part of "waters of the state" and as part of State Water Control Law.
- October 7, 1999 Opinion by AG Early to Speaker Thomas W. Moss, Jr. on the State Water Control Board's authority to regulate non-tidal wetlands.

Wetlands Act And Land Office Act— Use or Encroachment Upon State-owned Wetlands of Eastern Shore— Public Right to Fish, Fowl or Hunt.

May 25, 1978

**The Honorable James E. Douglas, Jr.
Commissioner, Marine Resources Commission**

You ask whether § 41.1-4 of the Code of Virginia (1950), as amended, which is a provision of the Land Office Act, would prevent the Virginia Marine Resources Commission from permitting any use or encroachment upon the State-owned wetlands of the Eastern Shore.

Section 41.1-4 requires that the ungranted marsh or meadowlands of the Eastern Shore remain in public ownership and that they remain accessible to the public for fishing, fowling or hunting.¹ The Wetlands Act is directed primarily at the use and development of privately-owned wetlands by private property owners. The Act also permits, however, the granting of permits to use or develop ungranted, publicly-owned wetlands areas. Thus, § 62.1-13.9 provides that if “an applicant desires to use or develop wetlands owned by the Commonwealth, he shall apply for a permit directly to the Commission.”

Sections 41.1-4 and 62.1-13.9 both address the same subject matter—activities which may take place on wetlands. Statutes relating to the same subject or object must be construed together so that, if it can reasonably be done, effect is given to every provision of each. The provisions of one statute should not be construed to control those of another on the same subject matter unless, upon comparison, they are in irreconcilable conflict. II Sutherland, *Statutory Construction* § 5201 (1943); 73 Am. Jur.2d *Statutes* §§ 187-190 (1974).

I am of the opinion that these statutes do not conflict and that effect may be given to each. The Marine Resources Commission may grant a permit to “use or develop” the wetlands of the Eastern Shore. See § 62.1-13.9. Because no use may be permitted on any ungranted wetlands which would injure their public character, only limited activities or uses which do not require development of a private character may be authorized. Furthermore, no permit may be issued for an activity which would interfere with the public right to fish, fowl or hunt in the Eastern Shore marsh or meadowlands protected by § 41.1-4. Accordingly, the Commission should review each permit application for the use or development of these wetlands to determine that such interference will not occur. Any use listed in subsection 3 of § 62.1-13.5 must also be denied if it would interfere with public fishing, fowling, or hunting.

¹Section 41.1-4 provides as follows:

“All unappropriated marsh or meadowlands lying on the Eastern Shore of Virginia, which have remained ungranted, and which have been used as a common by the people of this state, shall continue as such common, and remain ungranted. Any of the people of this State may fish, fowl or hunt on any such marsh or meadowlands.

Wetlands Act. Public Notice and Hearing Required When Permittee Seeks Modification in Conditions and Limitations of Permit.

June 20, 1979

**The Honorable James E. Douglas, Jr., Commissioner
Marine Resources Commission**

You ask whether a local wetlands board followed lawful procedure when it modified a permit at an "administrative" meeting. The permit had been granted over a year earlier after a public hearing held pursuant to §§ 6 and 7 of the Wetlands Zoning Ordinance prescribed by § 62.1-13.5 of the Code of Virginia (1950), as amended.

You have advised me that the board follows the practice of holding an administrative meeting on the first Tuesday of each month. These meetings are scheduled on the annual calendar of the local government as to date and location, and are open to the public. There is no compliance, however, with § 6 of the Ordinance, as no agenda items are advertised for these meetings. The board also holds a public hearing or meeting on the third Tuesday of each month. Agenda items for these meetings are advertised in compliance with § 6 of the Ordinance.

The permit in question had been granted over a year earlier, but changed circumstances now prevent the permittees from complying with the conditions and limitations of the permit. At two recent administrative meetings, the permittees requested modifications in spoil sites and bond requirements. There was to be no change in the encroachment on the wetlands. At the first administrative meeting, the board decided to set the matter for public hearing. At the second administrative meeting, the board reconsidered and granted the modification. Appeal has been taken to the commission by 25 or more freeholders pursuant to § 62.1-13.11(3), alleging the modification was made upon unlawful procedure. *See* § 62.1-13.13(2)(c). I am advised that these appellants were not at the second administrative meeting, and did not know the modification was then under consideration.

Section 8 of the Ordinance provides that if a permittee fails to comply with the conditions and limitations in an issued permit, the permittee is entitled to a hearing before the permit can be suspended or revoked. Also, under § 9(a) of the Ordinance, the board may grant applications in modified form, but in so doing the board shall base its decision on matters raised through testimony of any person in support of or in rebuttal to the permit application. *See* Ordinance § 9(a)(1). Without notice pursuant to § 6 of the Ordinance, there may be no opportunity for rebuttal testimony.

Accordingly, I find that the decision of the board was made upon unlawful procedure. The commission should modify or reverse the decision of the board if the commission finds that the substantial rights of appellants have been prejudiced because of the unlawful procedure. *See* § 62.1-13.13(2).

Wetlands Act. Counties, Cities and Towns. Ordinances. Authority to Repeal Standard Wetlands Zoning Ordinance Once Adopted.

February 9, 1981

The Honorable Daniel M. Stuck
County Attorney for New Kent County

You ask whether a county, city or town is authorized to repeal the standard Wetlands Zoning ordinance provided for in § 62.1-13.5 of the Code of Virginia (1950), as amended, once the governing body has adopted the ordinance.

Section 62.1-13.5 provides that any county, city or town may adopt a standard Wetlands Zoning Ordinance, as set out in the statute. I find no specific provision in the wetlands law (Ch. 2.1 of Title 62.1) that authorizes repeal, but at the same time, I find no specific provision that prohibits repeal.

The adoption of ordinances is a legislative act, and ordinarily the legislative power of a local governing body is not limited or exhausted by one exercise, and an ordinance once adopted may be amended or repealed.¹

Accordingly, in the absence of any express statutory prohibition against repeal, I find that a county, city or town is authorized to repeal the standard Wetlands Zoning Ordinance provided for in § 62.1-13.5.²

¹See Opinion to the Honorable Stephen C. Harris, Commonwealth's Attorney for Louisa County, dated March 24, 1976, found in Report of the Attorney General (1975-1976) at 26; Opinion to the Honorable J. Richmond Low, Jr., Commonwealth's Attorney for King George County, dated July 14, 1980 (copy enclosed).

²Section 62.1-13.9 provides that when a county, city or town has not adopted the standard ordinance, applications for permits shall be made directly to the Marine Resources Commission, and the Commission shall process such applications in accordance with the standard ordinance. In the event a county, city or town repeals the standard ordinance, applications for permits shall again be made directly to the Commission under § 62.1-13.9.

Wetlands Act. Towns Do Not Have Option of Adopting Their Own Wetlands Zoning Ordinance Where County of Which They are a Part Has Had Wetlands Zoning Ordinance In Effect For Over One Year and Amends Such Laws To Conform With 1982 Amendments of § 62.1-13.5.

May 25, 1982

**The Honorable James E. Douglas, Jr., Commissioner
Marine Resources Commission**

You ask whether towns which previously lost their option to adopt a wetlands ordinance pursuant to § 62.1-13.6(b) of the Code of Virginia (1950), as amended, will again, in view of changes made in § 62.1-13.5, Ch. 300 [1982] Acts of Assembly, have authority to adopt their own ordinances if the county of which they are a part (1) amends its ordinance to conform with the recently enacted form of ordinance in § 62.1-13.5, or (2) fails to so amend its ordinance.

Chapter 300 requires the conformation of existing wetlands zoning ordinances to the new Act. Any non-conforming wetlands zoning ordinances will become ineffective January 1, 1983.

Section 62.1-13.6(b) provides that a town which "does not enact a wetlands zoning ordinance within one year from the time the county in which such town is found enacts a wetlands zoning ordinance, application for wetlands found in such town shall be made to the county wetlands board." It is keyed to enactment of "a wetlands zoning ordinance." It says nothing about later amendment. Towns were given an option by the original legislation to choose to administer their own programs, but this option was of limited duration. The provisions of § 62.1-13.6(b) suggest that, once a decision on local administration of the wetlands program was made, the need for certainty precluded leaving the town option perpetually available.

The fact that new legislation requires the conformance of all wetlands zoning ordinances to the amended law does not change this situation. Chapter 300 does not amend § 62.1-13.6(b). That provision clearly refers to enactment, not amendment. I am, therefore, of the opinion that your first question must be answered in the negative. A town does not have the option of adopting its own wetlands zoning ordinance merely because the county of which it is a part amends its wetlands zoning ordinance, as is required by the recent amendments to § 62.1-13.5.

The situation would be different, however, in the case posed by your second question. If the county should fail to bring its wetlands zoning ordinance into compliance with the amended law, that county would have no wetlands zoning ordinance in effect as of January 1, 1983. Section 62.1-13.6(b) only limits the adoption of town wetlands zoning ordinances where a county has enacted such an ordinance. Where a county enactment is no longer valid, there is nothing to prevent the town from enacting its own wetlands zoning ordinance. Because the obvious intent of the Wetlands Act is that the wetlands program be ultimately administered at the local level (*see* §§ 62.1-13.5 and 62.1-13.9), and because there would be no county regulations governing wetlands, the town would then be able to enact a wetlands zoning ordinance.

I am, therefore, of the opinion that your second question must be answered in the affirmative. If the county of which a town is a part does not amend its wetlands zoning ordinance to conform to the recent amendments to § 62.1-13.5, it will cease to have a wetlands zoning ordinance and a town may, at that time, adopt its own wetlands zoning ordinance.

Wetlands Act. Subdivision Plat is Not a Plan as Contemplated By Exemption Provision of Wetlands Act Unless it is a Monument to Developer's Intention Diligently Pursued and it Represents Substantial Expenditure.

September 1, 1982

**The Honorable James E. Douglas, Jr., Commissioner
Marine Resources Commission**

You have asked that I reconsider a previous Opinion of this Office, found in the 1972-1973 Report of the Attorney General at 513, which discussed the meaning of the term "plan or plan of development" as used in the Wetlands Act.¹ Section 62.1-13.20 of the Code of Virginia provides, in pertinent part, that

"[n]othing in this chapter shall affect...(2) any project or development...for which, prior to July 1, 1972... a plan or plan of development thereof has been filed pursuant to ordinance or other lawful enactment...."

The 1973 Opinion stated that "a subdivision plat which clearly indicates lot lines and streets, the confines of which are identifiable, would constitute a plan or plan of development..." required for the exemption. You point out that a recent decision of the Circuit Court of Virginia Beach, in a case styled *City of Virginia Beach v. Virginia Marine Resources Commission, et al.* (C81-Z366-A), found a subdivision plat not to be a plan or plan of development for purposes of the above-quoted exemption from the provisions of the Wetlands Act.

The circuit court, in its Memorandum opinion issued May 19, 1982, interpreted "plan or plan of development" to mean either a "plan of development" submitted under a zoning ordinance adopted pursuant to § 15.1-491,² or a plan which would be equivalent to a plan of development, such as a site plan which had been filed and diligently pursued.

¹The Wetlands Act, § 62.1-13.1, *et seq.*, provides generally that all development of wetlands shall require prior permit from either a local wetlands board or the Marine Resources Commission.

²When the plat which was the subject of that case was recorded, State law did not require localities to enact subdivision ordinances, and Princess Anne County, which is now a part of the City of Virginia Beach, did not enact such an ordinance until December 22, 1952.

See Fairfax County v. Medical Structures, Inc., 213 Va. 355, 357-358, 192 S.E.2d 799, 801 (1972). The court reserved decision on whether a subdivision plat meeting the necessary criteria would be regarded as a "plan" for purposes of § 62.1-13.20.

The court's test for equivalency to a plan of development was a document filed pursuant to law, diligently pursued, which represented (1) a monument to the developer's intention (that is, his intended use of the property), and (2) a substantial good faith expense. The court determined the plat in the Virginia Beach case was only a schematic representation of land divided and had no purposes other than to facilitate the transfer of ownership of land within the plat. The developer was free to vacate the plat, resubdivide the property, or convey all or part of the parcels identified on it. The court further noted that the plat in that case did not dedicate property or serve to meet any of the other commitments required of developers recording subdivision plats under modern subdivision ordinances. Hence, it did not satisfy either the requirement of showing what the developer intended to build, or the requirement of a substantial expense. Accordingly, it was not exempt from the provisions of the wetlands ordinance.

The court's opinion limits the exemption from regulation to those projects for which developers have filed plans which represent a monument to the developer's intention diligently pursued and for which the developer has expended a substantial sum. This construction is sufficiently restrictive to accomplish the protection of undisturbed wetlands intended by the Wetlands Act. It also provides the protection intended by § 62.1-13.20(2) for those who have not yet begun construction but have so altered their position that in fairness they should be permitted to construct their project.

I am, therefore, of the opinion that a subdivision plat, standing alone, is not a plan or plan of development for purposes of the exemption provided in § 62.1-13.20(2), unless it is a monument to the developer's intention which has been diligently pursued and it represents a substantial good faith expense. This Opinion supersedes the Opinion found in the 1972-1973 Report of the Attorney General at 513 to the extent that the two Opinions are inconsistent.

Wetlands Act. Marine Resources Commission and Local Wetlands Boards Have No Authority to Regulate Federal Activities Affecting Federally Owned Wetlands.

September 1, 1982

**The Honorable James E. Douglas, Jr., Commissioner
Marine Resources Commission**

You have asked for my opinion as to whether, under the Wetlands Act and the Coastal Primary Sand Dune Protection Act, §§ 62.1-13.1, *et seq.*, and 62.1-13.21, *et seq.*, of the Code of Virginia, respectively,¹ local wetlands boards or the Marine Resources Commission can exercise jurisdiction over vegetated and non-vegetated wetlands and coastal primary sand dunes on lands owned by the federal government.

Article VI of the United States Constitution provides that federal law is the supreme law of the land. Thus, states cannot regulate or control the functioning of the federal government within their boundaries in any manner to impede the execution of constitutionally granted federal power, except where the federal government has voluntarily subjected itself to state regulatory processes. 1978-1979 Report of the Attorney General at 174. As pointed out in that Opinion, the 1977 Clean Water Act amended § 404 of the Federal Water Pollution Control Act, 33 U.S.C. § 1344(t), to expressly require that federal agencies comply with all substantive and procedural state requirements concerning the discharge of dredged or fill material. Therefore, to the extent that any project involves the discharge of dredged or fill material in any portion of the navigable waters within Virginia's jurisdiction, that activity is subject to regulation by State law.

The Coastal Zone Management Act of 1972, 16 U.S.C. § 1451, *et seq.*, does not waive federal immunity from state requirements, but § 1456(c)(2) directs federal agencies to ensure that any development project in the coastal zone is consistent, to the maximum extent practicable, with *approved* state coastal zone management programs. The requirements or approval are found in 16 U.S.C. § 1455(c). Because Virginia elected not to have an approved coastal zone management program, this provision is not applicable.*

¹Both acts require permits for use or development of "wetlands" and "coastal primary sand dunes" from either the Virginia Marine Resources Commission, or a wetlands board created pursuant to § 62.1-13.6. See §§ 62.1-13.5 §4(a) and 62.1-13.26.

*Virginia now has an "approved" coastal zone management plan and thus the directive to be consistent with state plans now applies in Virginia.—*Editor*

I am unaware of any federal laws which specifically waive federal immunity from state regulations for wetlands and primary sand dunes, as was done in the Clean Water Act of 1977. I am, therefore, of the opinion that the Marine Resources Commission and the local wetlands boards have no jurisdiction to regulate federal activities on federally owned wetlands and primary sand dunes unless (1) such activities involve the discharge of dredged or fill materials in any portion of the navigable waters within Virginia's jurisdiction or (2) federal immunity from state environmental requirements has been specifically waived in the legislation authorizing the project in question.

Fees. Local Wetlands Board May Charge Second Fee for Processing Modified Permit Application Where Justified By Cost of Processing Such Modified Application.

September 28, 1982

The Honorable Glenn B. McClanan
Member, House of Delegates

You have asked two questions concerning the processing of an application before a local wetlands board. You first ask whether an applicant for a permit from a local wetlands board must pay a second application fee for processing a modified application following the local board's denial of the first permit application, which denial was with leave to resubmit in modified form. The applicant appealed the ruling to the Marine Resources Commission, which, in turn, remanded the application to the local board for a review on the merits of the modified application.

The Wetlands Act, § 62.1-13.1, *et seq.*, of the Code of Virginia, provides generally that all non-exempt development of wetlands requires a prior permit from either a local wetlands board or the Marine Resources Commission. Section 62.1-13.5 provides the only form of Wetlands Zoning Ordinance allowed. Section 4(c) of that form deals with fees as follows:

“A nonrefundable processing fee to cover the cost of processing the application, set by the applicable governing body with due regard for the services to be rendered, including the time, skill, and administrator's expense involved, shall accompany each application.”

Section 9(b) provides that if the local board denies the application, it shall do so “with leave to the applicant to resubmit the application in modified form.”

The statute authorizes the applicable governing body to set a fee to cover the cost of processing the application including the time, skill and administrator's expense involved. I am of the opinion that, if the amended application is equivalent to a new application which must be processed, the local wetlands board can determine that the cost involved in processing such amended application justifies the imposition of an additional fee.

You also ask whether consideration of the modified proposal must be readvertised. Sections 6 and 7 of the Wetlands Zoning Ordinance, as provided in § 62.1-13.5, require a hearing on each application after newspaper publication and mailed notification to certain designated persons. Any person may be heard at the hearing. This provision is clearly intended to

allow anyone interested to be heard, and to provide them with notice of their opportunity to be heard.

Because the modified application in the case referred to in your letter proposes to use pilings rather than fill, I assume that it is equivalent to a new application for purposes of advertising the hearing. The public has not had the statutorily required opportunity to be heard on the new proposal. *See* 1978-1979 Report of the Attorney General at 326. I am, therefore, of the opinion that a hearing on a modified application, which substantially differs from the original, must be advertised as required by the Wetlands Zoning Ordinance, as provided in § 62.1-13.5 (§ 6).

Wetlands Act. Members of Local Wetlands Board May Appear and Testify Before Marine Resources Commission Where Such Commission, in its Discretion, Decides to Hear Such Evidence.

December 16, 1982

The Honorable Glenn B. McClanan
Member, House of Delegates

You have asked whether it is appropriate for members of a local wetlands board to (1) appear and (2) testify before the Marine Resources Commission (the "Commission") in connection with a hearing of an appeal from a denial of an application by such local board where the local board members appearing and testifying previously participated in the vote to deny the application.

Decisions of a local wetlands board are subject to review by the Commission under the circumstances enumerated in § 62.1-13.11 of the Code of Virginia. The Commission is empowered by § 62.1-13.13 to modify, remand or reverse the decision of the wetlands board.¹

If the review by the Commission could be equated with appeals from lower courts, or limited to the record prepared by the board, I would be inclined to view as improper an appearance by a board member before the Commission. However, appeals from the board are not so limited. The procedure for review by the Commission is provided in § 62.1-13.12, which provides in pertinent part as follows:

¹Section 62.1-13.13 provides: "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."

“The Commission shall hear the appeal or conduct the review on the record transmitted by the board...and such additional evidence as may be necessary to resolve any controversy as to the correctness of the record. And the Commission, in its discretion, may receive such other evidence as the ends of justice require.”

This section gives the Commission full discretion to receive any evidence which the ends of justice require. If the Commission decides that testimony of members of the local wetlands board which adopted the position being challenged on appeal would be helpful, the Commission has the discretion to receive it. As long as the appellant has an opportunity to be present to hear and to rebut any adverse evidence presented, he will not be improperly prejudiced by such testimony.

I am, therefore, of the opinion that it is not inappropriate for members of a local wetlands board who participated in a vote denying an application to appear and testify in the appeal of such application before the Commission, provided the Commission, in its discretion, determines that such evidence is appropriate to permit it to render a proper decision.

Wetlands Act. Wetlands Permit Required for Setting of Pilings, for Construction of Residence on Pilings, for Construction on Pilings of Adjoining Open Wooden Deck.

January 10, 1983

The Honorable Owen B. Pickett
Member, House of Delegates

You have inquired whether the Wetlands Act (§ 62.1-13.1, *et seq.*, of the Code of Virginia) requires that a permit be obtained from the local wetlands board under the following fact situation: An owner of a parcel of wetlands proposes to improve his parcel by constructing a two-story frame residence on pilings with an adjoining open wooden deck on pilings. No fill dirt will be placed in the wetlands, and the pilings will permit the reasonably unobstructed flow of the tide and preserve the natural contour of the wetlands. The Army Corps of Engineers has advised that no Department of Army permit will be required.

You ask the following three questions: (1) Is a permit required for setting the pilings? (2) Is a permit required for construction of the dwelling on pilings? (3) Is a permit required for construction on pilings of the open wooden deck adjoining the dwelling?

Section 62.1-13.9 of the Wetlands Act requires a permit for any activity in wetlands if the local wetlands zoning ordinance contained in § 62.1-13.5 requires a permit for such activity. Section 4(a) of the local wetlands zoning ordinance requires a permit for “[a]ny person who desires to *use or develop* any wetland...other than for those activities specified in § 3 above....” (Emphasis added.) Section 3 sets forth the uses and activities on wetlands which are permitted without a permit. The pertinent portion of § 3 is subsection (a) which exempts:

“The construction and maintenance of non-commercial 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 wetlands[.]”

I will address your first and second questions together, inasmuch as the pilings are to be set as part of the construction of a residence. The setting of pilings for a residence, and the construction of the house built on pilings, would clearly be a use or development of wetlands. Because no exemption is provided for such use or development, I am of the opinion that set-

ting pilings and building a house on pilings over wetlands would require a permit from the local wetlands board.

The last question is whether the construction on pilings of an open wooden deck adjoining the dwelling would be exempted. Section 3(a) permits the construction of observation decks and similar structures as long as they are built on pilings so as to permit the flow of the tide and preserve the contour of the wetlands. The exemptions listed describe small, isolated structures which are used intermittently and which would have minimal effect on the wetlands. The exemptions are not applicable to decks constructed in conjunction with residential development, where the effects of the pilings and the covering of wetlands by the deck would have to be added to the effects resulting from the construction of the dwelling house. I am, therefore, of the opinion that a permit must be obtained for the construction of an open wooden deck adjoining a residence.

Wetlands Act. Political Subdivision's Ownership of Easement or Right-of-Way Over Wetlands Exempts Its Governmental Activity Therein from Requirement to Get Wetlands Permit.

January 18, 1983

The Honorable William T. Parker
Member, Senate of Virginia

You have asked if a political subdivision undertaking governmental activities in wetlands through which it has an easement or right-of-way is exempt from the permit requirements of the Wetlands Act, § 62.1-13.1, *et seq.*, of the Code of Virginia.

Section 3(i) of the local wetlands zoning ordinance contained in § 62.1-13.5 reads as follows:

“§ 3. The following uses of and activities on wetlands are permitted, if otherwise permitted by law:

* * *

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

The question is whether wetlands subject to a political subdivision's easement or right-of-way are wetlands “owned or leased” by a political subdivision for the purpose of being permitted by this section. While your letter did not describe the easement or right-of-way, I will assume that such easement or right-of-way has been obtained by properly recorded deed or condemnation proceedings. I further assume that the proposed activity falls within the permissible limits of the terms of the deed.

An easement or right-of-way is a different estate from that which an “owner” is normally thought to have. Possession of an easement or right-of-way is, however, ownership of some of the rights to the land. The owner of an easement or right-of-way is the “dominant” tenant and has a right to use the land, thus making the record owner a servient tenant. In tax cases, the word “owner” has covered various types of ownership.

“The word ‘owner’ includes any person who has the usufruct, control or occupation of the land, whether his interest in it is an absolute fee, or an estate less than a fee,” *Stark v. City of Norfolk*, 183 Va. 282, 289, 32 S.E.2d 59 (1944), quoting from *Powers v. Richmond*, 122 Va. 328, 335, 94 S.E.803 (1918).

Interpreting "owned or leased by...a political subdivision" to include the ownership of an easement or right-of-way will not subvert the legislative purpose expressed in § 62.1-13.1, because the Commonwealth's political subdivisions will necessarily be guided by the wetlands policy established by the General Assembly.

For the foregoing reasons, I am of the opinion that local governmental activity on wetlands over which the local government has an easement or right-of-way is authorized by § 3(i) of the local wetlands zoning ordinance contained in § 62.1-13.5.¹

¹As previously stated, this conclusion is based upon an assumption that the activity falls within the permissible limits and terms of a properly recorded deed or condemnation proceeding.

**Parliamentary Procedure. local Wetlands Board May Adopt
Procedures Not Inconsistent With Local Ordinances or State Law.**

February 27, 1984

**The Honorable Owen B. Pickett
Member, House of Delegates**

You have requested my opinion on the Virginia Beach Wetlands Board's proposed procedure for acting on permit applications under Chapter 2.1 (§ 62.1-13.1 *et seq.*) of Title 62.1 of the Code of Virginia (the "Wetlands Act").

Virginia Beach has adopted the wetlands ordinance found in § 62.1-13.5 and has recently expanded its wetlands board to seven members as authorized by § 62.1-13.6. Section 62.1-13.5(4)(a) provides that anyone wishing to use or develop wetlands for purposes not otherwise permitted must file an application for a permit with the local wetlands board. Section 62.1-13.5(6) requires the wetlands board to hold a public hearing within 60 days of receipt of the application. Section 62.1-13.7 provides that a quorum of four members of a seven-member board is required for conducting a hearing or "taking of any action." Section 62.1-13.5(7) provides that:

"In *acting* on any application for a permit, the board shall grant the application upon the concurring vote of...four members of a seven-member board.... The board shall *make its determination* within thirty days from the hearing. If the board *fails to act* within such time, the application shall be deemed approved." (Emphasis added.)

Before considering the proposed procedure, it is helpful to consider the legislature's policy in the Wetlands Act. Section 62.1-13.1 sets forth this policy as one of preserving an irreplaceable resource and accommodating necessary development in a manner consistent with such preservation. To ensure this protection, the legislature required a majority vote of the whole board rather than just a majority vote of a quorum, for permits to alter wetlands. At the same time, the legislature wished to protect wetlands owners from indefinite procedural delays, by providing in § 62.1-13.5(7) for the automatic approval of applications not acted on within thirty days after the hearing. With the legislative intent in mind, I turn to the proposal.

As I understand the proposed procedure enclosed with your request, the chairman of the Virginia Beach Wetlands Board will call for a vote on an application after all persons have been heard and all deliberations completed. If four members of the seven-member board vote favorably, the application is approved, and the permit will issue. If less than four members vote favorably, even if there should be a 3-2 or a 3-1 majority for approval, or a 3-3 or

2-2 tie, the application will be deemed to be denied because of the lack of the statutorily required four concurring votes.

The taking of a vote on the application will be considered "acting" on the application, and the resulting approval or non-approval will be considered the "determination" of the board. If the application receives less than four concurring votes, this will be considered a board determination to deny the permit, and the board will so notify the applicant within forty-eight hours of its determination as required by SS 62.113.5(7). The vote on the application must, of course, be taken when there is a quorum present and must be taken within the applicable time limits.

Section 62.1-13.7 provides in part that "the board may make, alter and rescind rules and forms for its procedures, consistent with ordinances of the county, city or town and general laws of the Commonwealth, including this chapter." Inasmuch as this section specifies that wetlands boards may make their own rules, the procedures selected by the Virginia Beach Wetlands Board will comply with statutory requirements if they are consistent with local ordinances, general laws of the Commonwealth and Chapter 2.1 of Title 62.1. The procedures are not inconsistent with any requirements of local ordinances or general law of which I am familiar. They are also consistent with the requirements of the Wetlands Act.

The procedures meet the requirement of § 62.1-13.5(7) that the board grant the application upon the concurring votes of four members of the seven-member board. Even if there is no such concurring vote, the procedures are sufficient to comply with the § 62.1-13.5(7) requirement of taking action or making a determination within thirty days of the public hearing. The "action" is the board's vote. The "determination" required by that section is the action of granting or denying the application.

Section 62.1-13.5(7) contains no language expressly referring to the denial of an application. Nevertheless, I think it is clear that an application which is not approved by at least four concurring votes is necessarily denied. There is a third possibility, however, and that is when the board does not bring an application to a vote with a quorum present within the time limit. In that case the board has not taken any action, and the application is deemed approved 30 days after the hearing.

I am, therefore, of the opinion that the procedure proposed by the Virginia Beach Wetlands Board is consistent with its authority to form its own procedures and complies with the general laws of the Commonwealth including the Wetlands Act.

Wetlands. Local Wetlands Board May Consider Effects on Wetlands of Portions of Project Beyond Jurisdiction.

October 31, 1984

**The Honorable William A. Pruitt
Commissioner, Marine Resources Commission**

You have requested my opinion regarding the authority of a local wetlands board to regulate the length of structures known as groins (structures built out from a shore to prevent erosion) and other similar structures constructed as part of a single project extending beyond the wetlands in both the intertidal zone and below mean low water.

The Wetlands Act, § 62.1-13.1 *et seq.* of the Code of Virginia, provides for local wetlands boards and gives them authority to regulate wetlands which are contiguous to and above mean low water, including the intertidal zone.

The lands below mean low water, unless previously conveyed away, are owned by the Commonwealth. *See* § 62.1-1. Section 62.1-3 allows certain uses of these lands and gives the Marine Resources Commission (the "Commission") authority to permit other uses. *See* 1981-1982 Report of the Attorney General at 242.

The Wetlands Act prohibits any use or development of wetlands without a wetlands permit issued by a wetlands board. *See* §§ 62.1-13.9 and 62.1-13.5(4)(a). A wetlands board must base its decision to issue or deny a permit on the impact the use or development will have on the public health and welfare as expressed by the Act's policy of preserving wetlands. Sections 62.1-13.5(9) and 62.1-13.1. The Commission is empowered by § 62.1-13.13 to modify, remand or reverse the decision of the wetlands board. *See* 1982-1983 Report of the Attorney General at 761.

In granting or denying any permit for the use of State-owned bottom lands, the Commission must consider the effect of the project "upon the wetlands of the Commonwealth, except when its effect upon said wetlands has been or will be determined under the provisions of Chapter 2.1 (§ 62.1-13.1 *et seq.*) [The Wetlands Act]...." Section 62.1-3, ¶ 6.

By reading a wetlands board's authority to carry out the Commonwealth's strong policy favoring wetlands preservation, together with the deference to Wetlands Act decisions contained in § 62.1-3, I conclude that a local wetlands board should consider the impact on wetlands from the total project, including that portion of the project resting on subaqueous lands beyond the wetland. Although not expressly authorized to do so by statute, regulation of the length of a structure is vital to exercising the authority to regulate the use of wet-

lands. Whether such consideration will require imposition of a limitation on the length of structures located below mean low water is a factual determination which must be made on a case-by-case basis. That decision is subject to review by the Commission. If the wetlands board does not consider the wetlands impact of the total project, the Commission must consider, pursuant to § 62.1-3, the effect of such a subaqueous project on wetlands, when it determines whether or not to grant a permit to use subaqueous lands.

I am, therefore, of the opinion that a local wetlands board is authorized to regulate the length of a structure which is constructed through both the intertidal zone and channelward of mean low water, subject to superior jurisdiction of the Commission to modify or reverse the decision.

Wetlands. Repair or Replacement of Bulkheads Exempt from Permit Requirements as Long as No Additional Wetlands Covered.

December 19, 1984

The Honorable John H. Foote
County Attorney for Prince William County

This letter is in response to your request for an interpretation of the Wetlands Act, § 62.1-13.1 *et seq.* of the Code of Virginia, as it pertains to bulkheads and their repair. Your inquiries are motivated by a proposal to completely remove an existing wooden bulkhead and replace it with new metal materials. Such operation will disturb nonvegetated wetlands. You did not indicate if additional wetlands will be covered by the construction.

Section 62.1-13.5 authorizes counties, cities and towns to adopt a wetlands zoning ordinance. The provisions are specified in the statute. Section 3 of the ordinance exempts certain uses of wetlands from the necessity of obtaining a wetlands permit. It reads, in pertinent part, as follows:

“The following uses of and activities on wetlands are permitted, if otherwise permitted by law:

* * *

(h) *The normal maintenance, 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....*” (Emphasis added.)

Your first inquiry is whether bulkheads are “facilities,” as described in SS 3(h) of an ordinance authorized in § 62.1-13.5. When reading a statute, the general rule is that its words should be given their usual, commonly understood meaning. See *The Covington Virginian v. Woods*, 182 Va. 538, 29 S.E.2d 406 (1944); 1980-1981 Report of the Attorney General at 58. The commonly understood meaning of “facility” is “something...that is built...installed, or established to perform some particular function....” *Webster’s Third New International Dictionary* 812 (1968). The same publication defines “bulkhead” as a device designed to resist pressure or shut off water, especially “the retaining wall along a waterfront.” A bulkhead is commonly used to perform a particular function: to prevent the erosion of the bank of a waterway or to contain fill material; accordingly, a bulkhead comes within the broad definition of “facility.” I am, therefore, of the opinion that bulkheads are included within the word

“facilities” in § 3(h), and that the normal maintenance, repair or additions to a bulkhead would be permitted under that section if no further wetlands were covered.

Your second question is whether the phrase “normal maintenance, repair or addition to” in § 3(h) would include the complete replacement or reconstruction of a bulkhead in the same location. It is my understanding that such replacement may disturb existing nonvegetated wetlands, but you did not state whether it will result in the *covering of any additional wetlands*. The answer to your inquiry hinges upon that fact.

The exemption contained in § 3(h) applies not only to maintenance and repair but also to an “addition to” a facility, the key condition being that “no additional wetlands are covered.” I am advised that when a bulkhead begins to suffer serious deterioration, a common practice is to completely replace it. The replacement may occupy the exact location or it may be constructed seaward of the existing bulkhead. If not built on the same location, it would necessarily mean that additional wetlands will be covered by the facility.

I am, therefore, of the opinion that replacement of a bulkhead is within the contemplation of “normal maintenance, repair or addition to presently existing...facilities....” If, however, any additional wetlands will be covered, such replacement will require a wetlands permit inasmuch as it would not then be exempted as provided in § 3(h) of the wetlands ordinance.

Counties, Cities and Towns. Zoning. Restrictions on Private, Noncommercial Piers Constructed By Riparian Landowners. Permissible Exercise of Zoning Power.

October 22, 1985

The Honorable W. Tayloe Murphy, Jr.
Member, House of Delegates

You inquire as to a local governing body's authority to regulate, by zoning ordinance, private, noncommercial piers constructed by riparian landowners beyond the mean low water line of their properties into State waters. You also inquire as to other sources of regulation affecting riparian landowners who wish to construct private, noncommercial piers.

There are three possible sources of regulation at the State and local level, including the local governing body, the Virginia Marine Resources Commission ("VMRC"), and the local Wetlands Board.¹

Comprehensive zoning powers have been delegated by statute to counties and municipalities. See Art. 8, Ch. 11, Title 15.1 of the Code of Virginia, § 15.1-486 *et seq.* Section 15.1-486 authorizes local governing bodies to restrict and otherwise regulate:

- "(a) The use of land, buildings, structures and other premises for agricultural, business, industrial, residential, flood plain and other specific uses;
- (b) The size, height, area, bulk, location, erection, construction, reconstruction, alteration, repair, maintenance, razing, or removal of structures;
- (c) *The areas and dimensions of land, water, and air space to be occupied by buildings, structures and uses....*" (Emphasis added.)

¹A riparian landowner must also comply with the general permit requirements of the United States Army Corps of Engineers.

The purpose of zoning ordinances is to promote the health, safety or general welfare of the public. Among the purposes to be considered by such ordinances are:

“(1) to provide for adequate light, air, convenience of access, and safety from fire, flood and other damages;

* * *

(3) to facilitate the creation of a convenient, attractive and harmonious community;

* * *

(6) to protect against one or more of the following: overcrowding of land, undue density of population in relation to the community facilities existing or available, obstruction of light and air, danger and congestion in travel and transportation, or loss of life, health, or property from fire, flood, panic or other dangers....”

Section 15.1-489.

A prior Opinion of this Office addressed the similar question of whether a local government may enact a zoning ordinance restricting the erection of structures on the beaches and shores of the locality. The Opinion concludes that such a restriction is permissible and consistent with the purposes for which a zoning ordinance may be enacted. See 1977-1978 Report of the Attorney General at 518.² In my opinion, a local government may, by ordinance, *reasonably* regulate the construction of private, noncommercial piers, consistent with the purposes for which zoning ordinances may be enacted.³

²Compare 1983-1984 Report of the Attorney General at 475 (flood plain regulations in local zoning ordinances which restrict property development not facially invalid).

³As described in the concluding paragraph of this Opinion, the locality's zoning regulations must be reasonable. They may not be arbitrary. If a landowner believes the zoning ordinance to be arbitrary, he may seek judicial review in an appropriate proceeding.

Accord People v. Anton, 431 N.Y.S.2d 807, 105 Misc.2d 124 (1980); *Harbor Island, Etc. v. Bd. of Cty. Com'rs*, 407 A.2d 738 (Md. 1979); *Itasca County v. Rodenz*, 268 N.W.2d 423 (Minn. 1978); *Town of Islip v. Powell*, 358 N.Y.S.2d 985, 78 Misc.2d 1007 (1974); *Brady v. Board of Appeals of Westport*, 204 N.E.2d 513 (Mass. 1965).⁴

The General Assembly also has enacted in Title 62.1 a comprehensive statutory scheme concerning the uses of watercourses and wetlands, and the Commonwealth's policies concerning such uses. Certain of the materials which were provided to you suggest that a local governing body has no authority to regulate private, noncommercial piers because such structures are statutorily authorized and exempted from regulation by any local wetlands board. See § 62.1-13.5. I do not share that conclusion.

A riparian landowner has a common law right to construct a pier or wharf opposite his riparian lands, subject to reasonable regulation by the State. See *Grinels v. Daniel*, 110 Va. 874, 877, 67 S.E. 534 (1910); *Taylor v. Commonwealth*, 102 Va. 759, 771, 47 S.E. 875 (1904); 1975-1976 Report of the Attorney General at 215. This common law right has been codified in § 62.1-164 as the right to erect a private, noncommercial pier or wharf in a watercourse opposite the land, subject to the conditions that navigation not be obstructed nor the private rights of any person injured. The existence of a riparian landowner's right to "wharf out" is not absolute under the common law or under § 62.1-164. Where the legislature has delegated to localities the authority to regulate the rights of riparian landowners, such regulation is not inconsistent with § 62.1-164.

Section 62.1-3(10) provides statutory authorization for "the placement of private piers for noncommercial purposes by owners of the riparian lands in the waters opposite such riparian lands, *provided such private shall not extend beyond the navigation line or lawful private pier lines established by proper authority.*" (Emphasis added.) This authority operates to exempt private piers from the permit requirements of VMRC for encroachments on subaqueous beds which are the property of the Commonwealth.

⁴Section 15.1-1031 provides that the boundary of every county, city or town bordering on the Chesapeake Bay and its tidal tributaries or the Atlantic Ocean shall embrace all wharves, piers and docks. See also § 15.1-11.3, which authorizes counties, cities and towns to adopt ordinances requiring the removal, repair or securing of wharves and piers which might constitute an obstruction or hazard.

Section 62.1-13.5 sets out a "Wetlands Zoning Ordinance" which may be adopted by a local governing body. Section 3 of the Wetlands Zoning Ordinance provides, in pertinent part, as follows:

"The following uses of and activities on wetlands are permitted, *if otherwise permitted by law*:

(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 wetlands...." (Emphasis added.)

Those uses permitted by § 3 of the Wetlands Zoning Ordinance are exempted from the application and permit process set out in § 4. The exemption of private piers from the permit requirements of VMRC and the permit process under a local Wetlands Zoning Ordinance is based on the legislative determination that piers and other structures built on pilings permit the continued flow of the tide and preserve the contour of the wetlands. Also, such structures are generally small, isolated structures which are used intermittently and which would have minimal effect on the wetlands. See 1982-1983 Report of the Attorney General at 765. Finally, they must be otherwise permitted by law.

To summarize, in enacting § 62.1-164, the General Assembly intended to preserve the common law right of riparian landowners to erect private, noncommercial piers and wharves, subject to reasonable State regulation. Private piers are exempted by § 62.1-3(10) from VMRC permit requirements which restrict most uses which encroach on subaqueous beds owned by the Commonwealth. Under a Wetlands Zoning Ordinance adopted by a locality, a private pier is a use of right and, therefore, is exempt from the application and permit procedure of that particular ordinance. See § 62.1-13.5 (§§ 3 and 4). In § 15.1-486(c), however, the General Assembly has delegated to localities the authority through zoning ordinances to regulate water space to be occupied by structures and uses.

It is a basic rule of statutory construction that when construing statutes on the same subject matter *in pari materia*, the statutes should be harmonized if possible. See, e.g., 1982-1983 Report of the Attorney General at 484. Construing the above statutes together in accordance with this basic rule, I am of the opinion that the regulation of private, noncommercial piers and wharves is a permissible exercise of a locality's zoning power, subject to the same requirements as to reasonableness and constitutional limitations as are other zoning restrictions.⁵ See generally 1983-1984 Report of the Attorney General, *supra* note 2. In the event a riparian landowner is subject to arbitrary or unreasonable action by zoning officers or subject to an arbitrary or unreasonable provision of a zoning ordinance, he may apply for judicial review. See *City of Richmond v. County Board*, 199 Va. 679, 687, 101 S.E.2d 641 (1958).

⁵A related question is whether local limitations on a riparian landowner's right to construct private, noncommercial piers are inconsistent with the principle that the property of the Commonwealth is not subject to local zoning restrictions. See Reports of the Attorney General: 1981-1982 at 467; 1971-1972 at 103. As noted above, the subaqueous beds of the bays, rivers, creeks and shores of the sea are the property of the Commonwealth unless conveyed by special grant. See § 62.1-1. Riparian landowners, however, have substantial property rights derived from their status. These rights include the right to "wharf out," discussed above, and to sever and alienate riparian rights as a separate property interest. See *Marine Resources Commission v. Forbes*, 214 Va. 109, 197 S.E.2d 195 (1973); *Thurston v. City of Portsmouth*, 205 Va. 909, 140 S.E.2d 678 (1965). The character of an area could not be preserved if a riparian landowner were to be permitted to use property rights derived from his status to circumvent other validly enacted limitations on his property rights. Compare *Harbor Island, Etc.*, 407 A.2d at 747. In other words, the State's use of State-owned bottom is not subject to local regulation, but the exercise of a riparian landowner's property rights which encroach on State-owned bottom is validly subject to local regulation.

Waters, Ports And Harbors: Wetlands - Coastal Primary Sand Dune Protection Act.

No conflict exists between compliance with time requirements to hold hearing and make decision on application under Wetlands Act and concurrent prosecution of violations; issuance of permit and decision to prosecute separate issues.

August 5, 1988

The Honorable Robert Tata
Member, House of Delegates

You ask two questions concerning how the Virginia Beach Wetlands Board (the "Board") should administer the Wetlands Act, §§ 62.1-13.1 through 62.1-13.20 of the Code of Virginia, and the Coastal Primary Sand Dune Protection Act, §§ 62.1-13.21 through 62.1-13.28, in light of the time requirements established in these Acts and the need to take enforcement action against persons who are in violation of either Act.

1. Applicable Statutes

The Wetlands Act and the Sand Dune Protection Act are similar in structure, and § 62.1-13.27 provides for enforcement of the Sand Dune Protection Act under Wetlands Act provisions.

Section 62.1-13.9 of the Wetlands Act prohibits any person from conducting "any activity which would require a permit under a wetlands zoning ordinance unless he has a permit therefor." Section 4(a) of the Wetlands Zoning Ordinance in § 62.1-13.5 (the "Ordinance") provides that "[a]ny person who desires to use or develop any wetland ... other than for those activities specified in § 3 ... shall first file an application for a permit with the wetlands board." The activities specified in § 3 of the Ordinance are exempted from the permit requirement. Section 6 of the Ordinance requires the Board to hold a public hearing not later than sixty days after receipt of the application. Section 7 requires the Board to make its decision within thirty days of the hearing. If the Board fails to act in thirty days, the application is deemed approved.

Section 62.1-13.18 provides for the enforcement of certain violations of the Wetlands Act.

Any person who knowingly, intentionally, negligently or continually violates . . . any provision of this chapter or of a wetlands zoning ordinance enacted pursuant to this chapter or any provision of a permit granted by a wetlands board or the [Virginia Marine Resources] Commission pursuant to this chapter shall be guilty of a misde-

meanor. Following a conviction, every day the violation continues shall be deemed a separate offense.

II. No Conflict Exists Between Compliance with Time Requirements to Hold Hearing and Make Decision on Application Under Wetlands Act and Concurrent Prosecution of Violations

You first ask whether the Board is required to hear applications within the time limits in §§ 6 and 7 of the Ordinance if the application is for a nonexempt use or development of a wetland which has already been completed or begun without a permit.

It is important to separate the regulatory provisions of the Wetlands Act from its enforcement provision. The regulatory provisions require in evaluation of the project, as described in the application, under the standards in the Wetlands Act. Nonexempt construction without a permit is a violation of this Act. *See* § 62.1-13.18. The enforcement provision authorizes criminal punishment for such a violation, to encourage compliance with the Wetlands Act and to vindicate and maintain the authority of the wetlands program.

Except in § 4(a) of the Ordinance, which specifies that an application shall "first" be filed, the Wetlands Act provides for applications without referring to whether the application is filed before or after any nonexempt use or development is begun. Nevertheless, this Act clearly requires that an application be filed and a permit issued before any nonexempt use or development of a wetland is begun. *See* § 62.1-13.9. It is my opinion, however, that nothing in the Wetlands Act requires that the Board treat a particular application differently because it was untimely filed. It is further my opinion, therefore, that when an application is filed after any nonexempt use or development of a wetland is begun, the Board must consider that application under the time schedules set forth in §§ 6 and 7 of the Ordinance, but that such consideration does not prevent and should not delay any prosecution of the nonexempt use or development under § 62.1-13.18.¹

¹I am aware that the United States Army Corps of Engineers does not accept applications for such an after-the-fact permit where legal action is deemed appropriate until such legal action has been completed. *See* 33 C.F.R. § 326.3(e)(1)(ii) (1987). A similar policy by the Board, in my opinion, would serve to delay a final resolution of the application and would be contrary to the intent of the Wetlands Act that decisions are to be made within the times specified.

You next ask whether the Board is required to hear an application to amend a permit where the permittee is alleged to have violated the permit and court action is pending. As discussed above, there is nothing in the Wetlands Act to exempt this type of application from the time limits placed on applications in general. It is my opinion, therefore, that acting on the application within the time limits specified in §§ 6 and 7 of the Ordinance should have no effect on the court action, since court action concerns a violation which is alleged to have occurred previously.

III. Issuance of Permit and Decision to Prosecute Are Separate Issues

In summary, the failure to secure the necessary permits in the facts you present is a violation of the Wetlands Act which may be referred for prosecution pursuant to § 62.1-13.18. Whether a permit should issue is a separate question which should be determined in the most efficient manner possible as provided in the Wetlands Act. If the application is denied, and the violation is not corrected, a suit may be brought pursuant to SS 62.1-13.18:1 to enjoin the violation.²

²I also note that § 8 of the Ordinance grants the Board, after a hearing, the authority to suspend or revoke a permit if the permittee has not complied with its terms and conditions. See 1978-1979 Att'y Gen. Ann. Rep. 326, 327.

Waters of the State, Ports and Harbors: State Water Control Law.

State Water Control Board may define surface water by regulation to include wetlands. Authority to regulate wetlands in water quality management program limited to extent allowable under § 401 of federal Clean Water Act of 1977 and State Water Control Law. When granting without condition or denying § 401 water quality certification, Board must consider those water quality considerations found in § 401; when issuing conditional § 401 certifications, Board may apply § 401 water quality considerations and any other state law requirements consistent with water quality standards.

June 19, 1991

The Honorable Joseph V. Gartlan Jr.
Member, Senate of Virginia

You ask three questions about the authority of the State Water Control Board (the "State Board") to regulate wetlands in Virginia:

1. May the State Board define "state waters" or "surface water" by regulation to include wetlands?
2. May the State Board establish a comprehensive wetlands regulatory program pursuant to either §401 of the federal Clean Water Act of 1977 (the "Clean Water Act"), 33 U.S.C.A. § 1341 (West 1986) ("§ 401")¹ or existing state authority?
3. Does the State Board have the authority, pursuant to § 401, to certify or refuse to certify on a basis other than water quality those permits issued by federal agencies pursuant to § 404 of the Clean Water Act, 33 U.S.C.A. § 1344 (West 1986 & Supp. 1991) ("§ 404")?²

1. Applicable Statutes and Regulations

A. State Water Control Law

The State Water Control Law, §§ 62.1-44.2 through 62.1-44.34:28 of the Code of Virginia, establishes the responsibilities of the State Board. Its purpose is set forth in § 62.1-44.2:

It is the policy of the Commonwealth of Virginia and the purpose of this law to: (1) protect existing high quality state waters and restore all other state waters to such condition of quality that any such waters will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them, (2) safeguard the clean waters of the Commonwealth from pollution, (3) prevent any increase in pollution, (4) reduce existing pollution, and (5) promote water resource conservation, management and distribution, and encourage water consumption reduction in order to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth.

¹Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, § 401, 86 Stat. 816, 877-80 (1973), amended and commonly referred to as the Clean Water Act of 1977, Pub. L. No. 95-217, §§61(b), 64, 91 Stat. 1566, 1598-99 (1980), codified at 33 U.S.C. § 1341 (1989).

²*Id.* §404, 86 Stat. at 884, amended *supra* note 1, § 67(a)-(b), 91 Stat. at 1600, codified at 33 U.S.C. § 1344 (1989).

Under § 62.1-44.5, it is unlawful for any person to discharge wastes or otherwise alter water quality except as authorized by a permit. That section provides:

Except in compliance with a certificate issued by the [State] Board, it shall be unlawful for any person to (1) discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances, or (2) otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, or for recreation, or for other uses. [Emphasis added.]

In order to achieve these purposes, the State Board is authorized, among other things, to “issue certificates for the discharge of sewage, industrial wastes and other wastes into or adjacent to or the alteration otherwise of the physical, chemical or biological properties of state waters under prescribed conditions.” Section 62.1-44.15(5). The State Board, therefore, has the power to limit water pollution, in part, by issuing certificates to allow such discharges into, or alteration of, state waters.

B. State and Federal Definitions of “Waters”

Section 62.1-44.3 defines “state waters” as “all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction.” (Emphasis added.)

One State Board regulatory program, which implements the State Board’s water pollution control permit program under the national pollutant discharge elimination system (“NPDES”), 33 U.S.C.A. § 1342 (West 1986 & Supp. 1991), uses a definition of “surface water” that includes wetlands. While this definition does not have direct application to the § 401 state certification program, it nonetheless demonstrates the extent to which the State Board has regulated wetlands in another water quality program.

In that program, “surface water” means

- (i) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (ii) all interstate waters, including interstate “wetlands”;
- (iii) all other waters such as inter/intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie pot-holes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (iv) all impoundments of waters otherwise defined as surface waters under this definition;

- (v) tributaries of waters identified in paragraphs (i)-(iv) of this definition;
- (vi) the territorial sea; and
- (vii) "Wetlands" adjacent to waters, other than waters that are themselves wetlands, identified in paragraphs (i)-(vi) of this definition.

St. Water Control Bd. Regs., Permit Reg. VR 680-14-01 § 1.1 (eff. Sept. 27, 1989) ("Permit Regulation" or "Permit Reg.") (emphasis added).

In a definition that is virtually identical to the State Board's definition of state "surface water," both the United States Environmental Protection Agency ("EPA") and the United States Army Corps of Engineers (the "Corps") define "waters of the United States" to include wetlands.

The EPA definition, which relates to the administration of the NPDES program, is set forth in 40 C.F.R. § 122.2 (1990):

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands;"
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of [the Clean Water Act] (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. [Emphasis added.]

The Corps definition, relating to the §404 permitting program, is set forth in 33 C.F.R. § 328.3 (1990):

- (a) The term "waters of the United States" means

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie pot-holes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
- (5) Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
- (6) The territorial seas;
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of [the Clean Water Act] (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States. [Emphasis added.]

C. Water Quality Certification Program Administered by State Board

As part of its program to control pollution, the State Board, as the designated state certifying agency under the Clean Water Act, administers the water quality certification program established under § 401. Section 401 authorizes the State Board to consider the effects of certain projects requiring a federal license on water quality. Specifically, the State Board is authorized to grant or deny a water quality certification for federally licensed activities that may result in a discharge to navigable waters. Under § 401, the State Board may place conditions on a water quality certification to ensure compliance with Clean Water Act limitations and standards and with "any other appropriate requirement of State law." 33 U.S.C.A. § 1341(d). The State Board has issued a number of these § 401 water quality certifications that include wetland protection measures as a condition of certification.

The State Board acts on these water quality certifications in connection with, among other matters, water pollution permits issued by the EPA, 33 U.S.C.A. § 1342, and hydroelectric projects licensed by the Federal Energy Regulatory Commission, 18 C.F.R. § 4.38(e)(2) (1990). The most common water quality certification applications considered by the State Board, however, are those reviewed under § 404 in connection with dredge and fill permits issued by the Corps. Those permits allow the Corps to manage the discharge of dredged or fill material into navigable waters. The Clean Water Act defines "navigable waters" as "waters of the United States" 33 U.S.C.A. § 1362(7) (West 1986). As noted above, the Corps, in turn, defines "waters of the United States" by regulation to include wetlands. 33 C.F.R. § 328.3(a). In conjunction with this permit program, the State Board certifies whether dredge and fill per-

mits, issued under § 404, comply with certain provisions of the Clean Water Act and any other appropriate requirement of state law.

In 1989, the General Assembly enacted § 62.1-44.15:5 requiring the State Board to issue a Virginia Water Protection Permit ("State Permit") to serve as the Commonwealth's § 401 certification. Section 62.1-44.15:5(A) authorizes the State Board to implement the State Permit program by adopting regulations. When issuing a State Permit, the State Board must assure that the proposed activity is consistent with the provisions of the Clean Water Act and will protect instream beneficial uses under state law. Section 62.1-44.15:5(B). "Beneficial uses" of state waters are defined in the State Board regulation establishing water quality standards to include "recreational uses, e.g., swimming and boating; and production of edible and marketable natural resources, e.g., fish and shellfish." St. Water Control Bd. Regs., Water Quality Standard VR 680-21-01.2(A) (eff. July 1, 1988) ("Water Quality Standard"); see also § 62.1-44.2. To implement the State Permit, the State Board has proposed regulations, but has not yet promulgated final regulations that establish a comprehensive management scheme for the protection of nontidal wetlands in Virginia. The proposed regulations include "wetlands" within their definition of "state waters."

II. State Board May Define Surface Water by Regulation to Include Wetlands

The definition of "state waters" in the State Water Control Law includes "all water, on the surface and under the ground." Section 62.1-44.3 (emphasis added). The State Water Control Law contains no definition, however, of "surface water." In another regulatory program, not directly related to § 401 state certification, the State Board has defined "surface water" to include wetlands. Permit Reg., *supra* Pt. I(B), § 1.1. The Permit Regulation was promulgated, as authorized by 1972 amendments to the State Water Control Law, to conform to EPA's requirements for Virginia to assume responsibility for the NPDES program. 33 U.S.C.A. § 1342. EPA also requires periodic amendments to the Permit Regulation in order for Virginia to maintain its authority to administer the NPDES program. As noted above, the definition of "surface water" was included in the Permit Regulation in 1988 to conform to EPA's regulatory definition of "waters of the United States," which includes "wetlands."³ This same definition appears in the proposed State Permit regulations.

The Supreme Court of Virginia has recognized a presumption in favor of an administrative agency's regulatory interpretation of the statutes that agency implements. *Commonwealth v. Wellmore Coal*, 228 Va. 149, 320 S.E.2d 509 (1984); *Peyton v. Williams*, 206 Va. 595, 145 S.E.2d 147 (1965); *Aetna Ins. Co. v. Commonwealth*, 160 Va. 698, 169 S.E. 859 (1933). It is well within an administrative agency's power to interpret statutory terms of doubtful meaning. *Huffman Co. v. Unemploy. Comm.*, 184 Va. 727, 36 S.E.2d 641 (1946). Regulations are required, however, to be consistent with the provisions of the statute, and an agency may not issue regulations that are arbitrary, unreasonable or inconsistent with the controlling statute. *Dickerson v. Comm.*, 181 Va. 313, 24 S.E.2d 550 (1943), *aff'd sub nom. Carter v. Virginia*, 321 U.S. 131 (1944).

In this instance, the State Water Control Law defines "state waters" broadly to include "all" waters in the state, including surface water. The Corps' counterpart definition of "waters of the United States" includes wetlands and has been upheld by the Supreme Court of the United States. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). Since 1974, the State Board has had a written policy to protect wetlands⁴. Wetlands involve "water" to some

³ 40 C.F.R. § 122.2.

⁴ St. Water Control Bd. Regs., Wetlands Policy (eff. June 23, 1974).

degree,⁵ and the State Board is charged with control of all the waters of the Commonwealth. Section 62.1-44.3. Since 1988, the reference to "surface water" contained in the definition of "state waters" in § 62.1-44.3 has been construed in the Permit Regulation to include wetlands. Based on the statutory construction principles and cases discussed above, that interpretation is entitled to great weight. See *Lee v. Employment Commission*, 1 Va. App. 82, 335 S.E.2d 104 (1985).

Based on the above, it is my opinion that the State Board has the authority to define "surface water" by regulation to include "wetlands."

III. State Board May Regulate Wetlands in State Permit Regulatory Program Only to Extent Allowed by § 401 and State Water Control Law

The language of § 62.1-44.15:5 requiring the State Board to issue the State Permit does not, on its face, provide any additional authority to the State Board regarding wetlands. Section 62.1-44.15:5 can be read, moreover, as a legislative affirmation of the State Board's previous regulatory determination that preservation of instream flows is a beneficial use of state waters. That determination was made by the State Board in 1988 when it adopted regulations establishing water quality standards. Those standards provide that "[m]anmade alterations in stream flow shall not contravene reasonable, beneficial uses including protection of the propagation and growth of aquatic life." Water Quality Standard, *supra* Pt. I(C), VR 680-21-01.4; see also § 62.1-44.5. Section 62.1-44.15:5(C) requires an interagency consultation to ensure a full analysis of the effect of an activity receiving a State Permit on these instream beneficial uses.

The legislative history of § 62.1-44.15:5 supports the conclusion that it grants the State Board no additional power. In a 1989 report, the State Water Commission recommended establishment of a state water quality permit to "clarify the state legislature's emphasis on protecting a range of instream values [and] give Virginia a higher profile in the regulatory process and . . . bring those state agencies with jurisdiction over water use into a cooperative relationship." 4 H. & S. Docs., *Report of the State Water Commission*, H.D. No. 69, at 10 (1989 Sess.). The Commission indicated, however, that the new permit "would not expand the current [§ 401 certification] procedure or create a new administrative process," and further acknowledged that the permit "may not add to the authority of the [State Board], since it may already have been delegated such authority under federal law." *Id.* (emphasis added). This report supports the conclusion that the General Assembly did not intend § 62.1-44.15:5 to provide the State Board with any broader authority than it possesses under § 401.

This conclusion is further supported by actions of the General Assembly involving proposed nontidal wetlands legislation.⁶ In 1988, legislation was introduced in the House of Delegates which, if enacted, would have established a comprehensive regulatory program to protect nontidal wetlands, H.B. No. 1037 (1988 Reg. Sess.). The program was to be administered by the Departments of Forestry and Conservation and Historic Resources. That legislation passed the House but was carried over to the 1989 Session by the Senate Committee on Agriculture, Conservation and Natural Resources. The bill was not acted upon by the 1989 General Assembly. The failure of the General Assembly to enact proposed legislation granting an entity

⁵ See *Riverside Bayview Homes, Inc.*, 474 U.S. at 132-35. See generally Odum, *Non-Tidal Freshwater Wetlands in Virginia*, 7 Va. J. Nat. Resources L. 421 (1988).

⁶ The General Assembly previously enacted wetland management legislation for tidal wetlands. Va. Code Ann. §§ 62.1-13.1 to 62.1-13.20. Although subject to a separate state permit, development in these wetlands also may be subject to § 404 federal permits and, therefore, § 401 state certification by the State Board.

authority for a particular action can raise an inference that the General Assembly did not intend the entity to have that authority. See *Commonwealth v. Arlington County Bd.*, 217 Va. 558, 580-81, 232 S.E.2d 30, 44 (1977); see also 1974-1975 Att'y Gen. Ann. Rep. 77, 77-78; 2A Norman J. Singer, *Sutherland Statutory Construction* § 48.14 (Sands 4th ed. 1984). In my opinion, therefore, it would be inconsistent with the intent of the General Assembly to construe § 62.1-44.15:5 of the State Water Control Law to authorize the State Board to implement by regulation the kind of comprehensive nontidal wetlands program the General Assembly impliedly rejected when it failed to enact House Bill No. 1037.

Because the State Permit is intended to serve as the § 401 certification, it is necessarily limited in scope. Because wetlands may properly be a component of "surface water" and, therefore, constitute "state waters," it is my opinion that the State Board is entitled to grant, deny, or grant conditionally, certifications for those projects affecting Virginia wetlands that require § 401 certification. For these reasons, and based on the legislative history discussed above, however, it is further my opinion that the State Board is not empowered by § 62.1-44.15:5 to expand its regulation of wetlands beyond the scope contemplated by § 401 and the State Water Control Law, and, therefore, that the State Board may regulate wetlands in its State Permit program only to the extent allowed by those statutes.

IV. State Board Must Relate Any Grant, Denial or Conditional Grant of Certification to Authority Granted It by Statute

Section 401 allows state regulatory agencies to consider several water quality issues specified in the Clean Water Act when making the determination whether to grant or deny certification. 33 U.S.C.A. § 1341(a). As the § 401 certifying agency in Virginia, the State Board also is allowed to consider "any other appropriate requirement of State law" when conditioning a certification. 33 U.S.C.A. § 1341(d). The scope of water quality certifications under this latter provision, therefore, must be determined by examining the authority granted to the State Board by state law.

Courts in other states have addressed the proper scope of § 401 water quality certifications. In *Arnold Irrigation Dist. v. DEQ*, 79 Or. App. 136, 717 P.2d 1274 (1986), the Oregon Court of Appeals held that the Oregon Department of Environmental Quality, in deciding whether to grant or deny certification, is limited to considering sections of the Clean Water Act related to effluent limitations, water quality standards and other water protection provisions listed in § 401(a)(1) (33 U.S.C.A. § 1341(a)(1)). The Oregon court held, however, that the state agency could condition certification under §401(d) (33 U.S.C.A. § 1341(d)) on any provision of state law relating to water quality. The court emphasized that "an 'other appropriate requirement of State law'" in §401(d) (33 U.S.C.A. § 1341(d)) refers only to those Oregon laws related to water quality. 79 Or. App. at 142, 717 P.2d at 1279. Courts in other states, however, have taken the opposite view, approving the imposition of conditions that reach beyond traditional water quality concerns.⁷ In my opinion, the Oregon Court of Appeals' opinion is the better view.

The water quality duties of the State Board appear in the State Water Control Law⁸. Under Virginia law, agencies may not act beyond the authority granted them by the General Assembly.

⁷ See *Hollis v. Tenn. Water Quality Control Bd.*, slip op. No. 83-1352-1 (Tenn. Ch. App. Feb. 28, 1984); *Marmac Corp. v. Dep't Nat. Resources W. Va.*, slip op. No. 81-1792 (Cir. Ct. Kanawha Co., W. Va., June 9, 1982).

⁸The State Board implements several statutes in addition to the State Water Control Law, including Conservation of Water Resources (§§ 62.1-44.36 to 62.1-44.44); the Groundwater Act of 1973 (§§ 62.1-44.83 to 62.1-44.107); and Surface Water Management Areas (§§ 62.1-242 to 62.1-253), but these statutes are not part of Virginia's water quality management program.

Segaloff v. City of Newport News, 209 Va. 259, 163 S.E.2d 135 (1968). The State Board is bound, therefore, by the State Water Control Law when conditioning permits under § 401. The State Water Control Law empowers the State Board to “adopt such regulations as it deems necessary to enforce the general water quality management program of the [State] Board,” § 62.1-44.15(10), and to “establish... standards and policies for any state waters consistent with the general policy set forth in [the State Water Control Law].” Section 62.1-44.15(3a) (emphasis added). The purpose of State Board’s “water quality management program” and the stated policy of the Commonwealth includes protecting public uses of water, protecting propagation and growth of all aquatic life, preventing and reducing pollution of state waters, and promoting water resource conservation, management and distribution, all for the protection of the health, safety and welfare of the citizens of the Commonwealth. Section 62.1-44.2.

In response to your third question, therefore, it is my opinion that the State Board may consider the impact on surface water of a federally permitted project requiring a § 401 certification, based upon those water quality related considerations found in 401(a)(1) (33 U.S.C.A. § 1341(a)(1)), when granting without condition, or denying, a certification. It is further my opinion that the State Board also may condition certification on “any other appropriate requirement of State law” under the State Water Control Law, consistent with its water quality management program. 33 U.S.C.A. § 1341(d). That program includes water quality, maintenance of instream flows, maintenance of recreational uses, support of propagation and growth of all aquatic life, and other uses identified by the State Water Control Law and its implementing regulations.

V. Summary

In summary, it is my opinion that the State Board is authorized to define “surface water” by regulation to include “wetlands.” The State Board authority to regulate wetlands is limited, however, to those federally permitted activities that require § 401 certification. Neither § 401 nor § 62.1-44.15:5 authorizes establishment of a comprehensive nontidal wetlands program beyond the authority granted in § 401. When granting without condition or denying a § 401 certification, the State Board may consider only those water quality considerations found in § 401(a)(1). When issuing a conditional § 401 certification, the State Board may apply those water quality considerations found in § 401(d) and “any other appropriate requirement of State law” included in the State Water Control Law that is consistent with its water quality management program. 33 U.S.C.A. § 1342(d).

The Honorable Thomas W. Moss, Jr.
Speaker of the House of Delegates
403 Boush Street, Suite 360
Norfolk, Virginia 23510

My dear Speaker Moss:

You inquire regarding the authority of the State Water Control Board ("Board") to regulate non-tidal wetlands. You express concern regarding nontidal wetland destruction in the Commonwealth resulting from a June 1998 decision of the United States Court of Appeals for the District of Columbia Circuit that limits federal authority to regulate the ditching and draining of nontidal wetlands. You relate that the Virginia Institute of Marine Science estimates that nearly 8,000 acres of nontidal wetlands may be impacted by ditching.

You note that a 1991 opinion of the Attorney General¹ addresses the regulatory authority granted the Board under § 62.1-44.15:5 of the *Code of Virginia*.² You state that § 62.1-44.15:5, a portion

¹1991 Op. Va. Att'y Gen. 307, 311, 312-13 (Board authority to regulate wetlands is limited to those federally permitted activities that require § 401 certification).

²Section 62.1-44.15:5 provides:

"A. After the effective date of regulations adopted by the Board pursuant to this section, issuance of a Virginia Water Protection Permit shall constitute the certification required under § 401 of the Clean Water Act.

"B. The Board shall issue a Virginia Water Protection Permit for an activity requiring § 401 certification if it has determined that the proposed activity is consistent with the provisions of the Clean Water Act and will protect instream beneficial uses. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural, and aesthetic values is a beneficial use of Virginia's waters. Conditions contained in a Virginia Water Protection Permit may include, but are not limited to, the volume of water which may be withdrawn as a part of the permitted activity. Domestic and other existing beneficial uses shall be considered the highest priority uses. When a Virginia Water Protection Permit is conditioned upon compensatory mitigation for adverse impacts to wetlands, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from any wetlands mitigation bank, including any banks owned by the permit applicant, that has been approved and is operating in accordance with applicable federal and state guidance, laws or regulations for the establishment, use and operation of mitigation banks as long as: (1) the bank is in the same U.S.G.S. cataloging unit, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), or an adjacent cataloging unit within the same river watershed, as the impacted site, or it meets all the conditions found in clauses (i) through (iv) and either clause (v) or (vi) of this subsection; (2) the bank is ecologically preferable to practicable on-site and off-site individual mitigation options, as defined by federal wetland regulations; and (3) the banking instrument, if approved after July 1, 1996, has been approved by a process that included public review and comment. When the bank is not located in the same cataloging unit or adjacent cataloging unit within the same river watershed as the impacted site, the purchase or use of credits shall not be allowed unless the applicant demonstrates to the satisfaction of the Department of Environmental Quality that (i) the impacts will occur as a result of a Virginia Department of Transportation linear project or as the result of a locality project for a locality whose jurisdiction crosses multiple river watersheds; (ii) there is no practical same river watershed mitigation alternative; (iii) the impacts are less than one acre in a single and complete project within a cataloging unit; (iv) there is no significant harm to water quality or fish and wildlife resources within the river watershed of the impacted site; and either (v) impacts within the Chesapeake Bay watershed are mitigated within the Chesapeake Bay watershed as close as possible to the impacted site or (vi) impacts within U.S.G.S. cataloging units 02080108, 02080208, and 03010205, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), are mitigated in-kind within those hydrologic cataloging units, as close as possible to the impacted site. After July 1, 2002, the provisions of clause (vi) shall apply only to impacts within subdivisions of the listed cataloging units where overlapping watersheds exist, as determined by the Department of Environmental Quality, provided the Department has made such a determination by that date.

"C. Prior to the issuance of a Virginia Water Protection Permit, the Board shall consult with, and give full consideration to the written recommendations of, the following agencies: the Department of Game and Inland Fisheries, the Department of Conservation and Recreation, the Virginia Marine Resources Commission, the Department of Health, the Department of Agriculture and Consumer Services and any other interested and affected agencies. Such consultation shall include the need for balancing instream uses with offstream uses. Agencies may submit written comments on proposed permits within forty-five days after notification by the Board. The Board shall assume that if written comments are not submitted by an agency within this time period, the agency has no comments on the proposed permit.

"D. No Virginia Water Protection Permit shall be required for any water withdrawal in existence on July 1, 1989; however, a permit shall be required if a new § 401 certification is required to increase a withdrawal.

"No Virginia Water Protection Permit shall be required for any water withdrawal not in existence on July 1, 1989, if the person proposing to make the withdrawal has received a § 401 certification before January 1, 1989, with respect to installation of any necessary withdrawal structures to make such withdrawal; however, a permit shall be required before any such withdrawal is increased beyond the amount authorized by the certification."

of the State Water Control Law,³ was adopted to implement § 401 of the Clean Water Act of 1977⁴ You indicate that a recent federal court decision removes the basis for the Commonwealth to require a permit pursuant to §62.1-44.15:5 for certain activities related to the ditching of nontidal wetlands.⁵ You relate that the 1991 opinion of the Attorney General does not address the right of the Commonwealth to act absent a federal mandate or prohibition. You note that § 62.1-44.15(3a) explicitly acknowledges that the Board may enact standards of quality or policies “which are more restrictive than applicable federal requirements.” Such standards must be forwarded to the appropriate standing committee of the General Assembly, “together with the reason why the more restrictive provisions are needed.”⁶

The Congress of the United States has enacted laws, and federal agencies have promulgated regulations, protecting water quality in the United States.⁷ The Secretary of the Army, acting through the Army Corps of Engineers, issues federal permits for the discharge of dredged or fill material into waters of the United States, including nontidal wetlands.⁸ The Commonwealth does not issue permits for such discharge; however, in such instances, § 401 of the Clean Water Act requires that the applicant for the federal permit obtain from the state in which the discharge originates (1) a certification that the discharge will comply with applicable requirements; or (2) a waiver of such certification.⁹

The 1989 Session of the General Assembly created a separate mechanism for such certifications. Section 62.1-44.15:5(A) provides that, “[a]fter the effective date of regulations adopted by the Board pursuant to [§ 62.1-44.15:5], issuance of a Virginia Water Protection Permit shall constitute the certification required under § 401 of the Clean Water Act.” The applicable Board regulation became effective May 20, 1992.¹⁰

You first ask whether the Board has the authority under state law to define “state waters” or “surface water” to include “wetlands.” The 1991 opinion concludes that the “Board has the authority to define ‘surface water’ by regulation to include ‘wetlands.’”¹¹ The presumption in favor of an administrative agency’s regulatory interpretation of the statutes that agency implements remains applicable, and, therefore, I agree with the conclusion of the 1991 opinion.¹²

You next ask whether the Board’s regulations defining “wetlands” as “state waters”¹³ were lawfully adopted pursuant to this authority. The regulations to which you refer are the Virginia Pollutant discharge Elimination System Permit Regulation¹⁴ and the Virginia Water Protection Permit Regulation.¹⁵ It is my view that these regulations, which have been in effect for some time, appear to have been lawfully adopted.

You next ask whether nontidal wetlands are encompassed within the Board’s definition of “wetlands.” Both sets of regulations adopted by the Board¹⁶ contain the same definition of “wetlands”:

³Tit. 62.1, ch. 4.2, §§ 62.1-44.2 to 62.1-44.34:28.

⁴33 U.S.C.A. § 1341 (West 1986).

⁵National Min. Ass’n v. U.S. Army Corps of Engineers, 145 F.3d 1399 (D.C. Cir. 1998) (holding that Corps of Engineers exceeded scope of its regulatory authority, under Clean Water Act by regulating incidental “fallback.” i.e., *de minimis* redeposit of dredged material, including excavated material, at its point of removal from water).

⁶Section 62.1-44.15(3a).

⁷33 U.S.C.A. ch. 26, §§ 1251 to 1387 (West 1986 & Supp. 1999).

⁸33 U.S.C.A. § 1344(a), (d) (West 1986).

⁹33 U.S.C.A. § 1341(a)(1)(West 1986).

¹⁰See Virginia Water Protection Permit Regulation, 9 VAC 25-210-10 to 25-210-260 (Law. Coop. 1996).

¹¹1991 Op. Va. Att’y Gen., *supra* note 1, at 312.

¹²See Commonwealth v. Wellmore Coal, 228 Va. 149, 154, 320 S.E.2d 509, 511 (1984) (construction of statute by official charged with its administration is entitled to great weight).

¹³See 9 VAC 25-31-10 (West Supp. 1999); 9 VAC 25-210-10.

¹⁴See 9 VAC 25-31-10 to 25-31-940 (West Supp. 1999) (*eff.* July 24, 1996).

¹⁵See *supra* note 10.

¹⁶See *supra* notes 10 & 14 and accompanying text.

“Wetlands” means those areas that are inundated or saturated by surface or groundwater 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. Wetlands generally include swamps, marshes, bogs, and similar areas.¹⁷¹

Although the term “nontidal wetlands” is not a precise term, it appears to fall within this definition.

Your final questions focus on whether the Board has the authority, other than by § 62.1-44.15:5, to regulate wetlands.¹⁸ The 1991 opinion concludes that the Board’s authority over wetlands is limited to those activities requiring a § 401 certification¹⁹-- a Virginia Water Protection Permit under §62.1-44. 15:5. In reaching this conclusion, the 1991 opinion relies on the refusal of the General Assembly to pass legislation that would have established a comprehensive regulatory program concerning nontidal wetlands. At the 1988 Session of the General Assembly, legislation was introduced which would have authorized the Director of the Department of Conservation and Historic Resources to promulgate regulations protecting nontidal wetlands and to grant permits for activities proposed in or anticipated to adversely affect nontidal wetlands.²⁰ The bill was carried over to the 1989 Session by the Senate Committee on Agriculture, Conservation and Natural Resources.²¹ The Committee proposed substitute legislation in 1989 that would have created a Nontidal Wetlands Study Commission to evaluate existing programs and legislation related to nontidal wetlands.²² The General Assembly did not pass the substitute bill. However, the Virginia Nontidal Wetlands Roundtable was created, and it reported to the Governor and General Assembly in 1990.²³ In the executive summary the report states, “Roundtable members concluded that while effective management of nontidal wetlands should be of immediate and continuing concern to the Commonwealth, creation of a new regulatory program for the resource may be premature at this time.”²⁴ I, therefore concur with the 1991 opinion which inferred from the legislative *decisions* declining to act that the General Assembly did not intend for the Board to have authority beyond the § 401 certification over nontidal wetlands.

Furthermore, the General Assembly has taken no action in eight years to alter the conclusions of the 1991 opinion. In *Deal v. Commonwealth*, the Supreme Court of Virginia has stated that “[t]he legislature is presumed to have had knowledge of the Attorney General’s interpretation of the statutes, and its failure to make corrective amendments evinces legislative acquiescence in the Attorney General’s view.”²⁵

¹⁷See *cites supra* note 13.

¹⁸Specifically, you ask: (1)whether ditching and draining of nontidal wetlands constitute an alteration of “the physical, chemical or biological properties of ... state waters,” which is prohibited under § 62.1-44.5, “[e]xcept in compliance with a certificate issued by the Board”; (2) whether the Board has the authority under § 62.1-44.15(5) to require a permit for the ditching and draining of nontidal wetlands as an “alteration ... of the physical, chemical or biological properties of state waters;” (3)whether the Board has the authority under § 62.1-44.15(3a) and 9 VAC 25-380-30(B) to establish standards and policies and to “take all appropriate steps” to prevent ditching and dredging of nontidal wetlands; and (4) whether the Board has the authority under § 62.1-44.15(8a) to issue a cease and desist order to parties currently engaged in ditching and draining of nontidal wetlands or to seek injunctive relief against such actions.

¹⁹1991 Op. Va. Att’y Gen., *supra* note 1, at 313.

²⁰See H.B. 1037 (introduced Mar. 7, 1988) (§§ 10-262.3(2), 10-262.4).

²¹See *Id.*

²²See *id.* (proposed Jan. 16, 1989).

²³3 H. & S. Doc., *Report of the Virginia Nontidal Wetlands Roundtable*, H. Doc. No. 54 (1990).

²⁴*Id.* at 2.

²⁵224 Va. 618, 622, 299 S.E.2d 346, 348 (1983).

The 1991 opinion focuses on the general authority of the Board concerning nontidal wetlands. Your inquiry specifically addresses the ditching and draining of wetlands in connection with development.²⁶ You further inquire whether the ditching and draining of wetlands may be regulated pursuant to other provisions of the State Water Control Law.²⁷ Where, as here, the General Assembly has enacted several statutes that appear to bear on the same issue, the task is to ascertain the legislative intent. In its enactment of the Virginia Water Protection Permit statute, § 62.1-44.15:5, the legislature directed a particular program to comply with the § 401 certifications. The Supreme Court repeatedly has affirmed that it is a presumption of statutory construction that, where both general and specific statutes appear to address a matter, the General Assembly intends the specific statute to control the subject.²⁸ Accordingly, I must conclude that the legislature intended the activity you describe to be regulated by the Board to the extent authorized by § 62.1-44.15:5.

There is yet another indication of legislative intent on this matter. The 1988 Session of the General Assembly created the Chesapeake Bay Preservation Act.²⁹ The Act establishes the Chesapeake Bay Local Assistance Board³⁰ to “promulgate regulations which establish criteria for use by local governments to determine the ecological and geographic extent of Chesapeake Bay Preservation Areas.”³¹ The Chesapeake Bay Preservation Act further directs that, “[i]n developing and amending the criteria, the (Chesapeake Bay Local Assistance) Board shall consider all factors relevant to the protection of water quality from significant degradation as a result of the use and development of land.”³² Statutes should not be construed to frustrate their purpose.³³ In addition, the use of the word “shall” in a statute generally implies that its terms are intended to be mandatory, rather than permissive or directive.³⁴ Finally, when a statute creates a specific grant of authority, the authority exists only to the extent specifically granted in the statute.³⁵ The express legislative intent is for local governments, with the assistance of the Chesapeake Bay Local Assistance Board, to protect water quality from the effects of land development, at least in the Chesapeake Bay Preservation Areas.

²⁶In particular, your inquiry arises from the decision in *National Mining Association v. U.S. Army Corps of Engineers*, which invalidated an effort by the U.S. Army Corps of Engineers to require a § 404 permit for any discharge, including the “incidental fallback” that accompanies dredging operations. One example of “incidental fallback” occurs “during dredging, ‘when a bucket used to excavate material from the bottom of a river, stream, or wetland is raised and soils or sediments fall from the bucket back into the water.’” 145 F.3d at 1403 (quoting plaintiff briefs). The court held that the excavation of material is not a discharge where only a small portion of the material happens to fall back. *Id.* at 1404. For the five years from the Corps’ promulgation of a rule regulating incidental fallback until the decision in this case, the federal government required a § 404 permit; state certification under § 401 also was required. During that interim, the activity about which you inquire required a Virginia Water Protection Permit under § 62.1-44.15:5. I note that the *National Mining Association* decision addresses the situation where excavated material is hauled away; the filling of wetlands, e.g., the placement of excavated material into wetlands, without a permit remains prohibited.

²⁷See, e.g., § 62.1-44.15(3a), (5), (8a).

²⁸See *Dodson v. Potomac Mack Sales & Service*, 241 Va. 89, 400 S.E.2d 178 (1991); *Barr v. Town & Country Properties*, 240 Va. 292, 396 S.E.2d 672 (1990); *Va. National Bank v. Harris*, 220 Va. 336, 257 S.E.2d 867 (1979).

²⁹See 1988 Va. Acts ch. 608, at 784, 792-96 (enacting earlier provisions of tit. 10.1, ch. 21, §§ 10.1-2100 to 10.1-2116).

³⁰Section 10.1-2102.

³¹Section 10.1-2107(A).

³²Section 10.1-2107(B) (emphasis added).

³³See 1982-1983 Op. Va. Att’y Gen. 309, 311 (illogical result frustrates purpose of statute).

³⁴See *Andrews v. Shepherd*, 201 Va. 412, 414-15, 111 S.E. 2d 279, 281-82 (1959); see also *Schmidt v. City of Richmond*, 206 Va. 211, 218, 142 S.E.2d 573, 578 (1965); *Op. Va. Att’y Gen.*: 1998 at 56, 58; 1996 at 178, 178:1991 at 238, 240; 1989 at 250, 251-52; 1985-1986 at 133, 134.

³⁵See 2A Norman J. Singer, *Sutherland Statutory Construction* §§ 47.23 (5th ed. 1992 & Supp 1999); *Op. Va. Att’y Gen.*: 1992 at 145, 146; 1989 at 252, 253; 1980-1981 at 209, 209-10.

³⁶Section 10.1-2113.

The Chesapeake Bay Preservation Act provides additional guidance concerning the authority granted local governments to protect water quality and that granted under the State Water Control Law:

No authority granted to a local government by [the Chesapeake Bay Preservation Act] shall affect in any way the authority of the State Water Control Board to regulate industrial or sewage discharges under Articles 3 (§ 62.1-44.16 et seq.) and 4 (§ 62.1-44.18 et seq.) of the State Water Control Law (§ 62.1-44.2 et seq.).¹³⁶¹

Under generally accepted principles of statutory construction, the mention of one thing in a statute implies the exclusion of another.³⁷ The clear implication is that the grant of authority to localities does affect the Board's authority under other articles of the State Water Control Law. The statutes about which you inquire are found in those other articles. This further demonstrates the intent of the General Assembly that the Board's authority in this area be limited to that demanded by the § 401 certification process.

The 1991 opinion concludes that the Board does not have authority to regulate wetlands beyond that contemplated by the § 401 certification process.³⁸ In light of the indication of legislative intent on which the 1991 opinion relies and the eight-year acquiescence of the General Assembly in that opinion, accepted principles of statutory construction, and the express directive to the Chesapeake Bay Local Assistance Board, I concur in that opinion. Accordingly, the answers to your final four questions are identical: at the present time, the Board may regulate nontidal wetlands only to the extent necessary to carry out its responsibility under § 401 of the Clean Water Act.

With kindest regards, I am

Very truly yours,
Mark L. Earley
Attorney General

5:73; 5:74/54-094

³⁷See 1992 Op. Va. Att'y Gen. 145, 146, and opinions cited therein.

³⁸1991 Op. Va. Att'y Gen., *supra* note I, at 313.

Laws of Virginia
Relating to the
Marine Resources of the
Commonwealth of Virginia

Chapter 13. Wetlands.

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Article 1. General Provisions.

§ 28.2-1300. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Back Bay and its tributaries" means the following, as shown on the United States Geological Survey Quadrangle Sheets for Virginia Beach, North Bay, and Knotts Island: Back Bay north of the Virginia-North Carolina state line; Capsies Creek north of the Virginia-North Carolina state line; Deal Creek; Devil Creek; Nawney Creek; Redhead Bay, Sand Bay, Shipps Bay, North Bay, and the waters connecting them; Beggars Bridge Creek; Muddy Creek; Ashville Bridge Creek; Hells Point Creek; Black Gut; and all coves, ponds and natural waterways adjacent to or connecting with the above-named bodies of water.

"County, city, or town" means the governing body of the county, city, or town.

"Governmental activity" means any of the services provided by the Commonwealth or a county, city, or town to its citizens for the purpose of maintaining public facilities, including but not limited to, such services as constructing, repairing and maintaining roads; providing street lights and sewage facilities; supplying and treating water; and constructing public buildings.

"Nonvegetated wetlands" means unvegetated lands lying contiguous to mean low water and between mean low water and mean high water, including those unvegetated areas of Back Bay and its tributaries and the North Landing River and its tributaries subject to flooding by normal and wind tides but not hurricane or tropical storm tides.

"North Landing River and its tributaries" means the following, as shown on the United States Geological Survey Quadrangle Sheets for Pleasant Ridge, Creeds, and Fentress: the North Landing River from the Virginia-North Carolina line to Virginia Highway 165 at North Landing Bridge; the Chesapeake and Albemarle Canal from Virginia Highway 165 at North Landing Bridge to the locks at Great Bridge; and all named and unnamed streams, creeks and rivers flowing into the North Landing River and the Chesapeake and Albemarle Canal except West Neck Creek north of Indian River Road, Pocaty River west of Blackwater Road, Blackwater River west of its forks located at a point approximately 6400 feet due west of the point where Blackwater Road crosses the Blackwater River at the Village of Blackwater, and Millbank Creek west of Blackwater Road.

"Vegetated wetlands" means lands lying between and contiguous to mean low water and an elevation above mean low water equal to the factor one and one-half times the mean tide range at the site of the proposed project in the county, city, or town in question, and upon which is growing any of the following species: saltmarsh cordgrass (*Spartina alterniflora*), saltmeadow hay (*Spartina patens*), saltgrass (*Distichlis spicata*), black needlerush (*Juncus roemerianus*), saltwort (*Salicornia* spp.), sea lavender (*Limonium* spp.), marsh elder (*Iva frutescens*), groundsel bush (*Baccharis halimifolia*), wax myrtle (*Myrica* sp.), sea oxeye (*Bor-*

richia frutescens), arrow arum (*Peltandra virginica*), pickerelweed (*Pontederia cordata*), big cordgrass (*Spartina cynosuroides*), rice cutgrass (*Leersia oryzoides*), wildrice (*Zizania aquatica*), bulrush (*Scirpus validus*), spikerush (*Eleocharis* sp.), sea rocket (*Cakile edentula*), southern wildrice (*Zizaniopsis miliacea*), cattail (*Typha* spp.), three-square (*Scirpus* spp.), buttonbush (*Cephalanthus occidentalis*), bald cypress (*Taxodium distichum*), black gum (*Nyssa sylvatica*), tupelo (*Nyssa aquatica*), dock (*Rumex* spp.), yellow pond lily (*Nuphar* sp.), marsh fleabane (*Pluchea purpurascens*), royal fern (*Osmunda regalis*), marsh hibiscus (*Hibiscus moscheutos*), beggar's tick (*Bidens* sp.), smartweed (*Polygonum* sp.), arrowhead (*Sagittaria* spp.), sweet flag (*Acorus calamus*), water hemp (*Amaranthus cannabinus*), reed grass (*Phragmites communis*), or switch grass (*Panicum virgatum*).

"Vegetated wetlands of Back Bay and its tributaries" or "vegetated wetlands of the North Landing River and its tributaries" means all marshes subject to flooding by normal and wind tides, but not hurricane or tropical storm tides, and upon which is growing any of the following species: saltmarsh cordgrass (*Spartina alterniflora*), saltmeadow hay (*Spartina patens*), black needlerush (*Juncus roemerianus*), marsh elder (*Iva frutescens*), groundsel bush (*Baccharis halimifolia*), wax myrtle (*Myrica* sp.), arrow arum (*Peltandra virginica*), pickerelweed (*Pontederia cordata*), big cordgrass (*Spartina cynosuroides*), rice cutgrass (*Leersia oryzoides*), wildrice (*Zizania aquatica*), bulrush (*Scirpus validus*), spikerush (*Eleocharis* sp.), cattail (*Typha* spp.), three-square (*Scirpus* spp.), dock (*Rumex* sp.), smartweed (*Polygonum* sp.), yellow pond lily (*Nuphar* sp.), royal fern (*Osmunda regalis*), marsh hibiscus (*Hibiscus moscheutos*), beggar's tick (*Bidens* sp.), arrowhead (*Sagittaria* sp.), water hemp (*Amaranthus cannabinus*), reed grass (*Phragmites communis*), or switch grass (*Panicum virgatum*).

"Wetlands" means both vegetated and nonvegetated wetlands.

"Wetlands board" or "board" means a board created pursuant to § 28.2-1303.

"Wetlands zoning ordinance" means the ordinance set forth in § 28.2-1302. (1972, c. 711, § 62.1-13.2; 1973, c. 388; 1974, c. 297; 1975, c. 268; 1979, c. 524; 1982, c. 300; 1992, c. 836.)

Effective date. - Title 28.2 is effective October 1, 1992.

Law Review. - For note on purposes and types of wetlands regulation, see 58 Va. L. Rev. 876 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973).

§ 28.2-1301. Powers and duties of the Commission.

A. The Commission may receive gifts, grants, bequests, and devises of wetlands and money which shall be held for the uses prescribed by the donor, grantor, or testator and in accordance with the provisions of this chapter. The Commission shall manage any wetlands it receives so as to maximize their ecological value.

B. The Commission shall preserve and prevent the despoliation and destruction of wetlands while accommodating necessary economic development in a manner consistent with wetlands preservation.

C. The Commission shall manage all unappropriated marsh or meadowlands lying on the Eastern Shore of Virginia which remain ungranted pursuant to the provisions of § 41.1-4.

D. In order to perform its duties under this section and to assist counties, cities, and towns in regulating wetlands, the Commission shall promulgate and periodically update guidelines which scientifically evaluate vegetated and nonvegetated wetlands by type and describe the consequences of use of these wetlands types. The Virginia Institute of Marine Science shall provide advice and assistance to the Commission in developing these guidelines by evaluating wetlands by type and continuously maintaining and updating an inventory of vegetated wetlands.

E. In developing guidelines or regulations under this chapter the Commission shall consult with all affected state agencies. Consistent with other legal rights, consideration shall be given to the unique character of the Commonwealth's tidal wetlands which are essential for the production of marine and inland wildlife, waterfowl, finfish, shellfish and flora; serve as a valuable protective barrier against floods, tidal storms and the erosion of the Commonwealth's shores and soil; are important for the absorption of silt and pollutants; and are important for recreational and aesthetic enjoyment of the people and for the promotion of tourism, navigation and commerce. (1972, c. 711, §§ 62.1-13.1, 62.1-13.4, 62.1-13.17; 1982, c. 300; 1990, c. 811; 1992, c. 836.)

Cross references. - As to application of the Open-Space Land Act to wetlands. see § 10.1-1700.

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972). For article assessing the adequacy of Virginia's water policy, see 14 Wm. & Mary L. Rev. 312 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973). For comment on nonpoint pollution control in Virginia, see 13 U. Rich. L. Rev. 539 (1979). For article, "The Unresolved Structure of Property Rights in the Virginia Shore," see 24 Wm. & Mary L. Rev. 727 (1983).

Article 2. Wetlands Zoning Ordinance and Wetlands Boards.

§ 28.2-1302. Adoption of wetlands zoning ordinance; terms of ordinance.

Any county, city or town may adopt the following ordinance, which, after October 1, 1992, shall serve as the only wetlands zoning ordinance under which any wetlands board is authorized to operate. Any county, city, or town which has adopted the ordinance prior to October 1, 1992, shall amend the ordinance to conform it to the ordinance contained herein by October 1, 1992.

Wetlands Zoning Ordinance

§ 1. The governing body of _____ acting pursuant to Chapter 13 (§ 28.2-1300 et seq.) of Title 28.2 of the Code of Virginia, adopts this ordinance regulating the use and development of wetlands.

§ 2. As used in this ordinance, unless the context requires a different meaning:

"Back Bay and its tributaries" means the following, as shown on the United States Geological Survey Quadrangle Sheets for Virginia Beach, North Bay, and Knotts Island: Back Bay north of the Virginia-North Carolina state line; Capsies Creek north of the Virginia-North Carolina state line; Deal Creek; Devil Creek; Nawney Creek; Redhead Bay, Sand Bay, Shipp's Bay, North Bay, and the waters connecting them; Beggars Bridge Creek; Muddy Creek; Ashville Bridge Creek; Hells Point Creek; Black Gut; and all coves, ponds and natural waterways adjacent to or connecting with the above-named bodies of water.

"Commission" means the Virginia Marine Resources Commission.

"Commissioner" means the Commissioner of Marine Resources.

"Governmental activity" means any of the services provided by this _____ (county, city, or town) to its citizens for the purpose of maintaining this _____ (county, city, or town) including but not limited to such services as constructing, repairing and maintaining roads; providing sewage facilities and street lights; supplying and treating water; and constructing public buildings.

"Nonvegetated wetlands" means unvegetated lands lying contiguous to mean low water and between mean low water and mean high water, including those unvegetated areas of Back Bay and its tributaries and the North Landing River and its tributaries subject to flooding by normal and wind tides but not hurricane or tropical storm tides.

"North Landing River and its tributaries" means the following, as shown on the United States Geological Survey Quadrangle Sheets for Pleasant Ridge, Creeds, and Fentress: the North Landing River from the Virginia-North Carolina line to Virginia Highway 165 at North Landing Bridge; the Chesapeake and Albemarle Canal from Virginia Highway 165 at North Landing Bridge to the locks at Great Bridge; and all named and unnamed streams, creeks and rivers flowing into the North Landing River and the Chesapeake and Albemarle Canal except West Neck Creek north of Indian River Road, Pocaty River west of Blackwater Road, Blackwater River west of its forks located at a point approximately 6400 feet due west of the point where Blackwater Road crosses the Blackwater River at the village of Blackwater, and Millbank Creek west of Blackwater Road.

"Person" means any individual, corporation, partnership, association, company, business, trust, joint venture, or other legal entity.

"Vegetated wetlands" means lands lying between and contiguous to mean low water and an elevation above mean low water equal to the factor one and one-half times the mean tide range at the site of the proposed project in the county, city, or town in question, and upon which is growing any of the following species: saltmarsh cordgrass (*Spartina alterniflora*), saltmeadow hay (*Spartina patens*), saltgrass (*Distichlis spicata*), black needlerush (*Juncus roemerianus*), saltwort (*Salicornia* spp.), sea lavender (*Limonium* spp.), marsh elder (*Iva frutescens*), groundsel bush (*Baccharis halimifolia*), wax myrtle (*Myrica* sp.), sea oxeye (*Borrchia frutescens*), arrow arum (*Peltandra virginica*), pickerelweed (*Pontederia cordata*), big cordgrass (*Spartina cynosuroides*), rice cutgrass (*Leersia oryzoides*), wildrice (*Zizania aquatica*), bulrush (*Scirpus validus*), spikerush (*Eleocharis* sp.), sea rocket (*Cakile edentula*), southern wildrice (*Zizaniopsis miliacea*), cattail (*Typha* spp.), three-square (*Scirpus* spp.), buttonbush (*Cephalanthus occidentalis*), bald cypress (*Taxodium distichum*), black gum (*Nyssa sylvatica*), tupelo (*Nyssa aquatica*), dock (*Rumex* spp.), yellow pond lily (*Nuphar* sp.), marsh fleabane (*Pluchea purpurascens*), royal fern (*Osmunda regalis*), marsh hibiscus (*Hibiscus moscheutos*), beggar's tick (*Bidens* sp.), smartweed (*Polygonum* sp.), arrowhead (*Sagittaria* spp.), sweet flag (*Acorus calamus*), water hemp (*Amaranthus cannabinus*), reed grass (*Phragmites communes*), or switch grass (*Panicum virgatum*).

"Vegetated wetlands of Back Bay and its tributaries" or "vegetated wetlands of the North Landing River and its tributaries" means all marshes subject to flooding by normal and wind tides but not hurricane or tropical storm tides, and upon which is growing any of the following species: saltmarsh cordgrass (*Spartina alterniflora*), saltmeadow hay (*Spartina patens*), black needlerush (*Juncus roemerianus*), marsh elder (*Iva frutescens*), groundsel bush (*Baccharis halimifolia*), wax myrtle (*Myrica* sp.), arrow arum (*Peltandra virginica*), pickerelweed (*Pontederia cordata*), big cordgrass (*Spartina cynosuroides*), rice cutgrass (*Leersia oryzoides*), wildrice (*Zizania aquatica*), bulrush (*Scirpus validus*), spikerush (*Eleocharis* sp.), cattail (*Typha* spp.), three-square (*Scirpus* spp.), dock (*Rumex* sp.), smartweed (*Polygonum* sp.), yellow pond lily (*Nuphar* sp.), royal fern (*Osmunda regalis*), marsh hibiscus (*Hibiscus moscheutos*), beggar's tick (*Bidens* sp.), arrowhead (*Sagittaria* sp.), water hemp (*Amaranthus cannabinus*), reed grass (*Phragmites communis*), or switch grass (*Panicum virgatum*).

"Wetlands" means both vegetated and nonvegetated wetlands.

"Wetlands board" or "board" means a board created pursuant to § 28.2-1303 of the Code of Virginia.

§ 3. The following uses of and activities in wetlands are authorized if otherwise permitted by law:

1. 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 wetlands;
 2. The cultivation and harvesting of shellfish, and worms for bait;
 3. Noncommercial outdoor recreational activities, including hiking, boating, trapping, hunting, fishing, shellfishing, horseback riding, swimming, skeet and trap shooting, and shooting on shooting preserves, provided that no structure shall be constructed except as permitted in subdivision 1 of this section;
 4. Other outdoor recreational activities, provided they do not impair the natural functions or alter the natural contour of the wetlands;
 5. Grazing, haying, and cultivating and harvesting agricultural, forestry or horticultural products;
 6. Conservation, repletion and research activities of the Commission, the Virginia Institute of Marine Science, the Department of Game and Inland Fisheries and other conservation-related agencies;
 7. The construction or maintenance of aids to navigation which are authorized by governmental authority;
 8. Emergency measures decreed by any duly appointed health officer of a governmental subdivision acting to protect the public health;
 9. The normal maintenance and repair of, or addition to, presently existing roads, highways, railroad beds, or facilities abutting on or crossing wetlands, provided that no waterway is altered and no additional wetlands are covered;
 10. Governmental activity in wetlands owned or leased by the Commonwealth or a political subdivision thereof; and
 11. The normal maintenance of manmade drainage ditches, provided that no additional wetlands are covered. This subdivision does not authorize the construction of any drainage ditch.
- § 4. A. Any person who desires to use or develop any wetland within this _____ (county, city, or town), other than for the purpose of conducting the activities specified in § 3 of this ordinance, shall first file an application for a permit directly with the wetlands board or with the Commission.

B. The permit application shall include the following: the name and address of the applicant; a detailed description of the proposed activities; a map, drawn to an appropriate and uniform scale, showing the area of wetlands directly affected, the location of the proposed work thereon, the area of existing and proposed fill and excavation, the location, width, depth and length of any proposed channel and disposal area, and the location of all existing and proposed structures, sewage collection and treatment facilities, utility installations, roadways, and other related appurtenances or facilities, including those on adjacent uplands; a description of the type of equipment to be used and the means of equipment access to the activity site; the names and addresses of owners of record of adjacent land and known claimants of water rights in or adjacent to the wetland of whom the applicant has notice; an estimate of cost; the primary purpose of the project; any secondary purposes of the project, including further projects; the public benefit to be derived from the proposed project; a complete description of measures to be taken during and after the alteration to reduce detrimental offsite effects; the completion date of the proposed work, project, or structure; and such additional materials and documentation as the wetlands board may require.

C. A nonrefundable processing fee shall accompany each permit application. The fee shall be set by the applicable governing body with due regard for the services to be rendered, including the time, skill, and administrator's expense involved.

§ 5. All applications, maps, and documents submitted shall be open for public inspection at the office designated by the applicable governing body and specified in the advertisement for public hearing required under § 6 of this ordinance.

§ 6. Not later than sixty days after receipt of a complete application, the wetlands board shall hold a public hearing on the application. The applicant, local governing body, Commissioner, owner of record of any land adjacent to the wetlands in question, known claimants of water rights in or adjacent to the wetlands in question, the Virginia Institute of Marine Science, the Department of Game and Inland Fisheries, the Water Control Board, the Department of Transportation, and any governmental agency expressing an interest in the application shall be notified of the hearing. The board shall mail these notices not less than twenty days prior to the date set for the hearing. The wetlands board shall also cause notice of the hearing to be published at least once a week for two weeks prior to such hearing in a newspaper of general circulation in this _____ (county, city, or town). The published notice shall specify the place or places within this _____ (county, city, or town) where copies of the application may be examined. The costs of publication shall be paid by the applicant.

§ 7. A. Approval of a permit application shall require the affirmative vote of three members of a five-member board or four members of a seven-member board.

B. The chairman of the board, or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. Any person may testify at the public hearing. Each witness at the hearing may submit a concise written statement of his tes-

timony. The board shall make a record of the proceeding, which shall include the application, any written statements of witnesses, a summary of statements of all witnesses, the findings and decision of the board, and the rationale for the decision.

C. The board shall make its determination within thirty days of the hearing. If the board fails to act within that time, the application shall be deemed approved. Within forty-eight hours of its determination, the board shall notify the applicant and the Commissioner of its determination. If the board fails to make a determination within the thirty-day period, it shall promptly notify the applicant and the Commission that the application is deemed approved. For purposes of this section, "act" means taking a vote on the application. If the application receives less than four affirmative votes from a seven-member board or less than three affirmative votes from a five-member board, the permit shall be denied.

D. If the board's decision is reviewed or appealed, the board shall transmit the record of its hearing to the Commissioner. Upon a final determination by the Commission, the record shall be returned to the board. The record shall be open for public inspection at the same office as was designated under § 5 of this ordinance.

§ 8. The board may require a reasonable bond or letter of credit in an amount and with surety and conditions satisfactory to it, securing to the Commonwealth compliance with the conditions and limitations set forth in the permit. The board may, after a hearing held pursuant to this ordinance, suspend or revoke a permit if the applicant has failed to comply with any of the conditions or limitations set forth in the permit or has exceeded the scope of the work described in the application. The board may, after a hearing, suspend a permit if the applicant fails to comply with the terms and conditions set forth in the application.

§ 9. In fulfilling its responsibilities under this ordinance, the board shall preserve and prevent the despoliation and destruction of wetlands within its jurisdiction while accommodating necessary economic development in a manner consistent with wetlands preservation.

§ 10. A. In deciding whether to grant, grant in modified form or deny a permit, the board shall consider the following:

1. The testimony of any person in support of or in opposition to the permit application;
2. The impact of the proposed development on the public health, safety, and welfare; and
3. The proposed development's conformance with standards prescribed in § 28.2-1308 of the Code of Virginia and guidelines promulgated pursuant to § 28.2-1301 of the Code of Virginia.

B. The board shall grant the permit if all of the following criteria are met:

1. The anticipated public and private benefit of the proposed activity exceeds its anticipated public and private detriment.

2. The proposed development conforms with the standards prescribed in § 28.2-1308 of the Code of Virginia and guidelines promulgated pursuant to § 28.2-1301 of the Code of Virginia.

3. The proposed activity does not violate the purposes and intent of this ordinance or Chapter 13 (§ 28.2-1300 et seq.) of Title 28.2 of the Code of Virginia.

C. If the board finds that any of the criteria listed in subsection B of this section are not met, the board shall deny the permit application but allow the applicant to resubmit the application in modified form.

§ 11. The permit shall be in writing, signed by the chairman of the board, and notarized. A copy of the permit shall be transmitted to the Commissioner.

§ 12. No permit shall be granted without an expiration date established by the board. Upon proper application, the board may extend the permit expiration date.

§ 13. No permit granted by a wetlands board shall in any way affect the applicable zoning and land use ordinances of this _____ (county, city, or town) or the right of any person to seek compensation for any injury in fact incurred by him because of the proposed activity. (1972, c. 711, §§ 62.1-13.1, 62.1-13.5; 1973, cc. 382, 388; 1975, c. 268; 1979, c. 418; 1982, c. 300; 1985, c. 541; 1988, c. 587; 1989, c. 360; 1992, c. 836.)

Cross references - As to application of the Open-Space Land Act to wetlands, see § 10.1-1700. As to adoption of coastal primary sand dune zoning ordinance, see § 28.2-1403.

Law Review - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972). For article assessing the adequacy of Virginia's water policy, see 14 Wm. & Mary L. Rev. 312 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973). For comment on nonpoint pollution control in Virginia, see 13 U. Rich. L. Rev. 539 (1979). For article, "Public Access to Virginia's Tidelands: A Framework for Analysis of Implied Dedications and Public Prescriptive Rights," see 24 Wm. & Mary L. Rev. 669 (1983). For article, "The Unresolved Structure of Property Rights in the Virginia Shore," see 24 Wm. & Mary L. Rev. 727 (1983).

§ 28.2-1303. Appointment, terms, compensation, etc., of local wetlands boards; jurisdiction of county wetlands board over wetlands in town.

A. Every county, city, or town which enacts a wetlands zoning ordinance pursuant to this chapter shall create a wetlands board, consisting of five or seven residents of that jurisdiction appointed by the local governing body. All board members' terms shall be for five years, except that the term of at least one of the original appointments shall expire during each of the succeeding five years. The chairman of the board shall notify the local governing body at

least thirty days prior to the expiration of any member's term and shall promptly notify the local governing body if any vacancy occurs. Vacancies shall be filled by the local governing body without delay upon receipt of such notice. Appointments to fill vacancies shall be for the unexpired portion of the term. Members may serve successive terms. A member whose term expires shall continue to serve until his successor is appointed and qualified. Members of the board shall hold no public office in the county or city other than membership on the local planning or zoning commission, the local erosion commission, the local board of zoning appeals, or as director of a soil and water conservation board. When members of these local commissions or boards are appointed to a local wetlands board, their terms of appointment shall be coterminous with their membership on those boards or commissions.

B. Upon a hearing with at least fifteen days' notice thereof, any board member may be removed for malfeasance, misfeasance, or nonfeasance in office, or for other just cause, by the local governing body.

C. If a town does not enact a wetlands zoning ordinance within one year of its enactment by the surrounding county, application for permits to use and develop wetlands within the town shall be made to the county wetlands board.

D. Any county, city, or town which creates a local wetlands board pursuant to this section may compensate the members of the board in accordance with such terms and conditions as the locality may prescribe.

E. Notwithstanding any other provision of this section, the Town of Dumfries in Prince William County may enact a wetlands zoning ordinance pursuant to the provisions of this chapter. (1972, c. 711, §§ 62.1-13.6, 62.1-13.8; 1977, c. 15; 1978, c. 585; 1982, cc. 300, 446; 1983, c. 87; 1987, c. 62; 1992, c. 836.)

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972). For article, "Virginia Natural Resource Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973).

§ 28.2-1304. Officers, meetings, rules, etc., of wetlands boards; records and reports.

The board shall annually elect from its membership a chairman and such other officers as it deems necessary for terms of one year. For the conduct of any hearing and the taking of any action, a quorum shall be not less than three members of a five-member board nor less than four members of a seven-member board. The board may make, alter, and rescind rules and forms for its procedures, provided they are consistent with state law and local ordinances. The board shall keep a full public record of its proceedings and shall submit a report of its activities to the local governing body at least once each year. The board shall forward a copy of each report to the Commission. (1972, c. 711, § 62.1-13.7; 1977, c. 15; 1982, c. 446; 1992, c. 836.)

§ 28.2-1305. Local governing body to supply meeting space and services for wetlands board.

Every county, city, or town creating a wetland board shall supply the board with reasonable meeting space and necessary secretarial, clerical, legal, and consulting services. The local governing body is authorized to expend the public funds necessary to comply with the provisions of this section. (1972, c. 711, § 62.1-13.8; 1992, c. 836.)

Law Review. - For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973).

Article 3. Permits and Review.

§ 28.2-1306. Permits required for certain activities; issuance of permits by Commission.

A. It shall be unlawful for any person to conduct any activity which would require a permit under a wetlands zoning ordinance without such a permit. Until the county, city, or town in which a person proposes to conduct an activity which would require a permit under a wetlands zoning ordinance adopts the wetlands zoning ordinance, the person shall apply for a permit directly to the Commission, except as provided in subsection C of § 28.2-1303. If an applicant desires to use or develop wetlands owned by the Commonwealth, he shall apply for a permit directly to the Commission, and in addition to the application fee required by the wetlands zoning ordinance, he shall pay those fees and royalties assessed under § 28.2-1206.

B. Upon notification by any county, city, or town that it has adopted the wetlands zoning ordinance, the Commission shall immediately forward to that jurisdiction's wetlands board any pending permit application over which that board would have had jurisdiction if the ordinance had been in effect at the time the application was filed. However, if requested by the applicant, the application shall remain within the Commission's jurisdiction.

C. The Commission shall process permit applications in accordance with the provisions of the wetlands zoning ordinance and the Commissioner shall sign such permit; however, the Commission may designate one or more hearing officers who may, in lieu of the Commission, conduct public hearings as required under § 28.2-1302, and thereafter report their findings and recommendations to the Commission. (1972, c. 711, §§ 62.1-13.5, 62.1-13.9; 1973, cc. 382, 388; 1975, c. 268; 1979, c. 418; 1982, c. 300; 1985, c. 541; 1988, c. 587; 1989, c. 360; 1992, c. 836.)

Cross references. - As to adoption of coastal primary sand dune zoning ordinance, see § 28.2-1403.

Effective date. - Title 28.2 is effective October 1, 1992.

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973). For article, "Public Access to Virginia's Tidelands: A Framework for Analysis of Implied Dedications and Public Prescriptive Rights," see 24 Wm. & Mary L. Rev. 669 (1983). For article, "The Unresolved Structure of Property Rights in the Virginia Shore," see 24 Wm. & Mary L. Rev. 727 (1983).

§ 28.2-1307. Administrative procedures.

The Commission may, in conjunction with local wetlands boards and other affected state and federal agencies, develop administrative procedures to expedite the processing of applications for permits required under this chapter. Whenever an application is received by the Commission for a permit over which a local board has jurisdiction under a wetlands zoning ordinance, the Commission shall forward a copy of the application to that board within seven days. (1982, c. 300, § 62.1-13.5:2; 1992, c. 836.)

§ 28.2-1308. Standards for use and development of wetlands; utilization of guidelines.

A. The following standards shall apply to the use and development of wetlands and shall be considered in the determination of whether any permit required by this chapter should be granted or denied:

1. Wetlands of primary ecological significance shall not be altered so that the ecological systems in the wetlands are unreasonably disturbed; and
2. Development in Tidewater Virginia, to the maximum extent practical, shall be concentrated in wetlands of lesser ecological significance, in vegetated wetlands which have been irreversibly disturbed before July 1, 1972, in nonvegetated wetlands which have been irreversibly disturbed prior to January 1, 1983, and in areas of Tidewater Virginia outside of wetlands.

B. The provisions of guidelines promulgated by the Commission pursuant to § 28.2-1301 shall be considered in applying the standards listed in subsection A of this section. (1972, c. 711, § 62.1-13.3; 1982, c. 300; 1992, c. 836.)

Law Review. - For note on purposes and types of wetlands regulation, see 58 Va. L. Rev. 876 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973). For article, "The Unresolved Structure of Property Rights in the Virginia Shore," see 24 Wm. & Mary L. Rev. 727 (1983).

Violation of Wetlands Act as pendent state claim. - It was proper for aggrieved riparian owner to allege a violation of the Wetlands Act as a pendent state claim to its suit brought pursuant to the Clean Water Act, 33 U.S.C. § 1251 et seq. *City of Norfolk v. Harold*, 662 F. Supp. 959 (E.D. Va. 1987) (decided under former § 62.1-13.3).

§ 28.2-1309: Not set out.

Editor's note. - This section, relating to emergency sand grading activities on nonvegetated wetlands located on the Atlantic Shoreline of Virginia Beach, was enacted by Acts 1984, c. 518, as amended by Acts 1992, c. 836. In furtherance of the general policy of the Virginia Code Commission to include in the Code only provisions having general and permanent application, this section, which is limited in its purpose and scope, is not set out here, but attention is called to it by this reference.

§ 28.2-1310. Commissioner to review all decisions of wetlands boards.

The Commissioner shall review all decisions of wetlands boards and request the Commission to review a decision only when he believes the board failed to fulfill its responsibilities under the wetlands zoning ordinance. (1972, c. 711, § 62.1-13.10; 1992, c. 836.)

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972). For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act." see 30 Wash. & Lee Rev. 19 (1973).

§ 28.2-1311. When Commission to review decision of wetlands board.

A. The Commission shall review a decision of a wetlands board when any of the following events occur:

1. An appeal is taken from the decision by the applicant or the county, city, or town where the wetlands are located.
2. The Commissioner requests the review. In order to make the request, the Commissioner shall notify the board, applicant, and the county, city, or town where the wetlands are located within ten days of receiving notice of the board's decision.
3. Twenty-five or more freeholders of property within the county, city, or town in which the proposed project is located sign and submit a petition to the Commission requesting the review. The petition shall indicate those specific instances where the petitioners allege that the board failed to fulfill its responsibilities under the wetlands zoning ordinance.

B. All requests for review or appeal shall be made within ten days of the date of the board's decision. The Commission shall hear and decide the review or appeal within forty-five days of receiving the request for review or notice of appeal. A continuance may be granted by the Commission on a motion of the applicant, the freeholders specified in subsection A of this section, or the county, city, or town where the wetlands are located. (1972, c. 711, § 62.1-13.11; 1992, c. 836.)

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972).

§ 28.2-1312. Procedure for review; notice of decision.

A. The Commissioner shall cause notice of the review or appeal to be given to the board, the applicant, the county, city, or town where the wetlands are located, and where applicable, to the freeholders specified in § 28.2-1311.

B. The Commission shall hear the appeal or conduct the review of the record transmitted by the board to the Commissioner. The Commission may take such additional evidence as may be necessary to resolve any controversy as to the correctness of the record. The Commission, in its discretion, may also receive such other evidence as the ends of justice require.

C. The Commission shall notify the parties of its decision within forty-eight hours of the appeal or review hearing. (1972, c. 711, §§ 62.1-13.12, 62.1-13.14; 1992, c. 836.)

Law Review. - For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973).

§ 28.2-1313. When Commission to modify, remand, or reverse decision of wetlands board.

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

1. The wetlands board, in reaching its decision, failed to fulfill its responsibilities under the wetlands zoning ordinance; or

2. The substantial rights of the appellant or the applicant have been prejudiced because the findings, conclusions, or decisions of the board are:

a. In violation of constitutional provisions;

b. In excess of statutory authority or jurisdiction of the wetlands board;

c. Made upon unlawful procedure;

d. Affected by other error of law;

e. Unsupported by the evidence on the record considered as a whole; or

f. Arbitrary, capricious, or an abuse of discretion. (1972, c. 711, § 62.1-13.13; 1975, c. 467; 1992, c. 836.)

Law Review. - For survey of Virginia administrative law for the year 1971-1972, see 58 Va. L. Rev. 1159 (1972).

§ 28.2-1314. Time for issuance of permit.

No permit shall be issued until the period within which a request for review or an appeal to the Commission may be made has expired. If a request for review is made or an appeal is noted, no activity for which the permit is required shall be commenced until the Commission has notified the parties of its determination. (1973, c. 65, § 62.1-13.14:1; 1992, c. 836.)

§ 28.2-1315. Judicial review.

An appeal from any Commission decision granting or denying a permit or from any Commission decision on the review of or appeal from a board decision may be taken by the applicant, any of the freeholders specified in subsection A of § 28.2-1311, or the county, city, or town where the wetlands are located. Judicial review shall be pursuant to the provisions of the Administrative Process Act (§ 9-6.14:1 et seq.). (1972, c. 711, § 62.1-13.15; 1982, c. 300; 1986, c. 615; 1992, c. 836.)

Law Review. - For article, "Virginia Natural Resources Law and the New Virginia Wetlands Act," see 30 Wash. & Lee L. Rev. 19 (1973).

Article 4. Enforcement and Penalties.

§ 28.2-1316. Investigations and prosecutions.

The Commission may investigate all projects, whether proposed or ongoing, which alter wetlands. The Commission may prosecute all violations of any order, rule, or regulation of the Commission or of a wetlands board, or violation of any provision of this chapter. Wetlands boards may investigate all projects, whether proposed or ongoing, which alter wetlands located within their jurisdiction. Wetlands boards may prosecute all violations of their orders and any violation of the wetlands zoning ordinance under which they were established. (1972, c. 711, § 62.1-13.16; 1975, c. 467; 1992, c. 836.)

Effective date. - Title 28.2 is effective October 1, 1992.

§ 28.2-1317. Monitoring, inspections, compliance, and restoration.

A. The Commissioner or board chairman may require a permittee to implement monitoring and reporting procedures they believe are reasonably necessary to ensure compliance with the provisions of the permit and this chapter.

B. The Commissioner or board chairman may require such on-site inspections as he believes are reasonably necessary to determine whether the measures required by the permit are being properly performed, or whether the provisions of this chapter are being violated. Prior to conducting any inspection, the Commissioner or board chairman shall provide no-

tice to the resident owner, occupier, or operator, who shall be given an opportunity to accompany the site inspector. If it is determined that there is a failure to comply with the permit, the Commissioner or board chairman shall serve notice upon the permittee at the address specified in his permit application or by delivery at the site of the permitted activities to the person supervising those activities and designated in the permit to receive the notice. The notice shall describe the measures needed for compliance and the time within which these measures shall be completed. Failure of the person to comply within the specified period is a violation of this section.

C. Upon receipt of a sworn complaint of a substantial violation of this chapter from the designated enforcement officer, the Commissioner or board chairman may, in conjunction with or subsequent to a notice to comply as specified in subsection B of this section, issue an order requiring all or part of the activities on the site to be stopped until the specified corrective measures have been taken. In the case of an activity not authorized under this chapter or where the alleged permit noncompliance is causing, or is in imminent danger of causing, significant harm to the wetlands protected by this chapter, the order may be issued without regard to whether the person has been issued a notice to comply pursuant to subsection B of this section. Otherwise, the order may be issued only after the permittee has failed to comply with the notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for a period of seven days from the date of service pending application by the enforcing authority, permittee, resident owner, occupier, or operator for appropriate relief to the circuit court of the jurisdiction where the violation was alleged to have occurred. Upon completion of corrective action, the order shall immediately be lifted. Nothing in this section shall prevent the Commissioner or board chairman from taking any other action specified in § 28.2-1316.

D. Upon receipt of a sworn complaint of a substantial violation of this chapter from a designated enforcement officer, the Commission or a wetlands board may order that the affected site be restored to predevelopment conditions if the Commission or board finds that restoration is necessary to recover lost resources or to prevent further damage to resources. The order shall specify the restoration necessary and establish a reasonable time for its completion. The order shall be issued only after a hearing with at least thirty days' notice to the affected person of the hearing's time, place, and purpose, and shall become effective immediately upon issuance by the Commission or board. The Commission or board shall require any scientific monitoring plan they believe necessary to ensure the successful reestablishment of wetlands protected by this chapter and may require that a prepaid contract acceptable to the Commission or board be in effect for the purpose of carrying out the scientific monitoring plan. The Commission or board may also require a reasonable bond or letter of credit in an amount and with surety and conditions satisfactory to it securing to the Commonwealth compliance with the conditions set forth in the restoration order. The appropriate court, upon petition by the Commission or board, may enforce any such restoration order by injunction, mandamus, or other appropriate remedy. Failure to complete the required restoration is a violation of this chapter.

E. The duties of the Commissioner or the board chairman under this section may be delegated to their respective designees; however, these designees shall not be designated enforcement officers. (1987, c. 436, § 62.1-13.16:1; 1990, c. 811; 1992, c. 836.)

§ 28.2-1318. Violations; penalty.

Any person who knowingly, intentionally, or negligently violates any order, rule, or regulation of the Commission or of a wetlands board established pursuant to this chapter, any provision of this chapter or of a wetlands zoning ordinance enacted pursuant to this chapter, or any provision of a permit granted pursuant to this chapter is guilty of a Class 1 misdemeanor. Following a conviction, every day the violation continues is a separate offense. (1972, c. 711, § 62.1-13.18; 1992, c. 836.)

Cross references. - As to punishment for Class 1 misdemeanors, see § 18.2-11.

§ 28.2-1319. Injunctions.

Upon the petition of the Commission or a wetlands board to the circuit court of the county or city where any act is done or threatened which is unlawful under this chapter, the court may enjoin the unlawful act and order the defendant to take any steps necessary to restore, protect, and preserve the wetlands involved. This remedy shall be exclusive of and in addition to any criminal penalty which may be imposed under § 28.2-1318. (1973, c. 65, § 62.1-13.18:1; 1992, c. 836.)

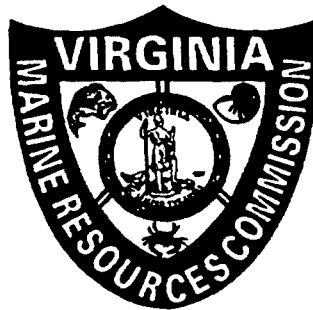
§ 28.2-1320. Penalties.

A. Without limiting the remedies which may be obtained under this chapter, any person who violates any provision of this chapter or who violates or fails, neglects, or refuses to obey any Commission or wetlands board notice, order, rule, regulation, or permit condition authorized by this chapter shall, upon such finding by an appropriate circuit court, be assessed a civil penalty not to exceed \$25,000 for each day of violation. Such civil penalties may, at the discretion of the court assessing them, be directed to be paid into the treasury of the county, city, or town in which the violation occurred for the purpose of abating environmental damage to or restoring wetlands therein, in such a manner as the court may, by order, direct, except that where the violator is the county, city, or town itself, or its agent, the court shall direct the penalty to be paid into the state treasury.

B. Without limiting the remedies which may be obtained under this chapter, and with the consent of any person who has violated any provision of this chapter or who has violated or failed, neglected, or refused to obey any Commission or wetlands board order, rule, regulation, or permit condition authorized by this chapter, the Commission or wetlands board may provide, in an order issued by the Commission or wetlands board against such person, for the one-time payment of civil charges for each violation in specific sums, not to exceed

\$10,000 for each violation. Civil charges shall be in lieu of any appropriate civil penalty which could be imposed under subsection A of this section. Civil charges may be in addition to the cost of any restoration ordered by the Commission or a wetlands board. (1990, c. 811, § 62.1-13.18:2; 1992, c. 836.)

Wetland Guidelines



Prepared by

**The Department of Wetlands Ecology
Virginia Institute of Marine Science
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and

**The Habitat Management Division
Virginia Marine Resources Commission**

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Section I

Introduction

Virginia's coastal zone is composed of many different but highly interrelated ecological systems. Below the low tide limits are found the vast areas of submerged bottomland which are vitally important as fish and shellfish feeding, spawning and nursery habitat. These areas not only help support Virginia's highly valuable commercial catch but also the myriad of species which the average Virginian never directly encounters but nevertheless are as important ecologically as the commercially sought organisms.

Between the high water line and the low water line are found the nonvegetated intertidal flats and beaches. These areas, though uncovered and seemingly devoid of life during a portion of each tidal cycle, provide important habitat for a host of different marine organisms, aquatic birds and many mammals.

Beginning approximately at the elevation we call mean sea level are found the various vegetated communities known as marshes. Best known for their high plant production on the order of tons per acre per year, marshes have other valuable functions. They are a buffer between the estuary and the upland; interacting with both.

With the passage of House Bill 400, which adds nonvegetated intertidal areas to the existing wetlands protection mechanism, the General Assembly has not only recognized the value of intertidal flats and beaches to the Commonwealth but also the interrelated and interdependent nature of the vegetated and nonvegetated wetlands systems. All wetland resources of the Commonwealth will now be managed under a single, unified program. Moving landward from mean low water (the Marine Resources Commission controls the bottomland seaward of mean low water) wetland jurisdiction now extends to mean high water where no emergent vegetation exists, and to 1.5 times the mean tide range where marsh is present. All intertidal areas are now called wetlands and can be managed holistically under a single permit system.

The purpose of this document is to revise the existing Wetlands Guidelines, which deal only with marshes, to include beaches, tidal flats and subaqueous lands as well. Although scientific research has yet to clearly define and quantify all aspects of wetlands function and importance within the estuary, there are few in the scientific community who would argue that these areas are not highly significant systems whose conservation is very important to the Commonwealth. The policy stated by the legislature when it passed the vegetated wetlands act in 1972 is as relevant today as it was then:

"Therefore, in order to protect the public interest, promote the public health, safety and the economic and general welfare of the Commonwealth, and to protect public and private property, wildlife, marine fisheries and the natural environment, it is declared to be the public policy of this Commonwealth to preserve the wetlands, and to prevent their despoliation and destruction and to accommodate necessary economic development in a manner consistent with wetlands preservation."

In the pages that follow, the value of the wetlands to the Commonwealth and its citizens is described. This is followed by a brief description of each community type and then by an environmental value ranking system. In this section the community types are ranked relative to each

other according to their environmental values. It should be noted that all wetlands are important but where management decisions must be made regarding necessary economic development in wetlands, this ranking system may help in guiding development into the lesser value wetland communities.

The ranking system is followed by the general and specific guidelines for wetland disturbing activities. These guidelines have been expanded to cover the nonvegetated area and to deal with issues that have arisen since the adoption of the original guidelines in 1974. It is intended that these guidelines aid wetland managers in preserving the wetlands while accommodating necessary economic development along Virginia's 5000 miles of shoreline.

Section II

Wetlands Types and Properties

Wetlands, as defined in Chapter 13 of Title 28.2 of the Code of Virginia, fall into two major groupings: vegetated (tidal marshes and swamps) and nonvegetated (intertidal flats, bars and beaches). Although seldom recognized by the general public except as exhibited in the desire to live on or near the water, wetlands have a variety of both tangible and intangible values which place them in a position of inestimable importance to the Commonwealth.

This section of this document first identifies the primary values of the wetlands, then describes the general wetland types found in "Tidewater" Virginia, and finally ranks these types relative to each other in terms of these primary values.

Each wetland type is evaluated in accordance with five general values.

These are:

A. Production and detritus availability. Marshes and tidal flats are major sites of primary production in the marine ecosystem. When this plant material dies and begins to decay (detritus) it becomes the basis of a major marine food pathway. The productivity of all the major marsh community types is well documented and ranges from one to six tons per acre per year. Generally, the lower the elevation of the marsh, the greater its contribution of detritus and the greater its value to the aquatic environment.

Plant productivity on tidal flats is typically less than that of tidal marshes but higher than the bottom in deeper open water areas due to the greater supply of light and nutrients available. Plant productivity in intertidal areas is dominated by nonvascular plants (bottom-dwelling, one-celled micro- and macroalgae). Probably the most important function of the nonvegetated wetlands is that of mediating the breakdown of detritus produced on the vegetated marshes. Tidal flats located adjacent to extensive marsh areas may therefore be more biologically valuable than more isolated tidal flats. As mediators of detrital breakdown, nonvegetated wetlands are often the sites of large, diverse invertebrate populations and are often major feeding sites and spawning and nursery grounds for estuarine organisms of sport and commercial value to man.

B. Waterfowl and Wildlife Utilization. Long before wetlands were discovered to be detritus producers and feeding areas for marine organisms, they were known as rich habitats for various mammals, marine birds and migratory waterfowl. Some wetland types are more important than others in this regard but in many cases distinctions may not be clear-cut. A species, for example, may appear to be dependent on vegetated marsh for cover and breeding but without the adjacent tidal flats may not use a certain marsh at all. Wetlands offering a variety of habitats and plant types are generally the more valuable from a habitat perspective.

C. Erosion Buffer. Erosion is a common problem throughout coastal Virginia and is by no means limited to ocean beaches. Vegetated wetlands do erode but by virtue of their ability to establish dense root systems, trap and accumulate sediments, and baffle wave energy they are buffers against erosion and sea level rise. Among the vegetated wetlands the freshwater communities are less effective in this regard.

Nonvegetated wetlands are also effective erosion buffers although they function in a different manner from the marshes. For example, a broad, gently sloping sand beach is an excellent wave energy dissipator and large intertidal bars and flats serve to "trip" waves as they move shoreward thus reducing their energy before they strike the shoreline. The disruption of nearshore intertidal areas may increase wave energy striking the adjacent shoreline thus accelerating erosion there.

D. Water Quality Control. The dense growth of some marshes acts as a filter, trapping upland sediment before it reaches waterways and thus protecting shellfish beds and navigation channels from siltation. Marshes can also filter out sediments that are already in the water column. The ability of marshes to filter sediments and maintain water clarity is of particular importance to the maintenance of clam and oyster production. Some marshes have been shown to act as sinks or traps for other pollutants and marsh plants take up nutrients deposited in marsh soils. Excess nutrient levels in an estuary can be a problem but the exact role of marshes in nutrient removal is not yet fully understood.

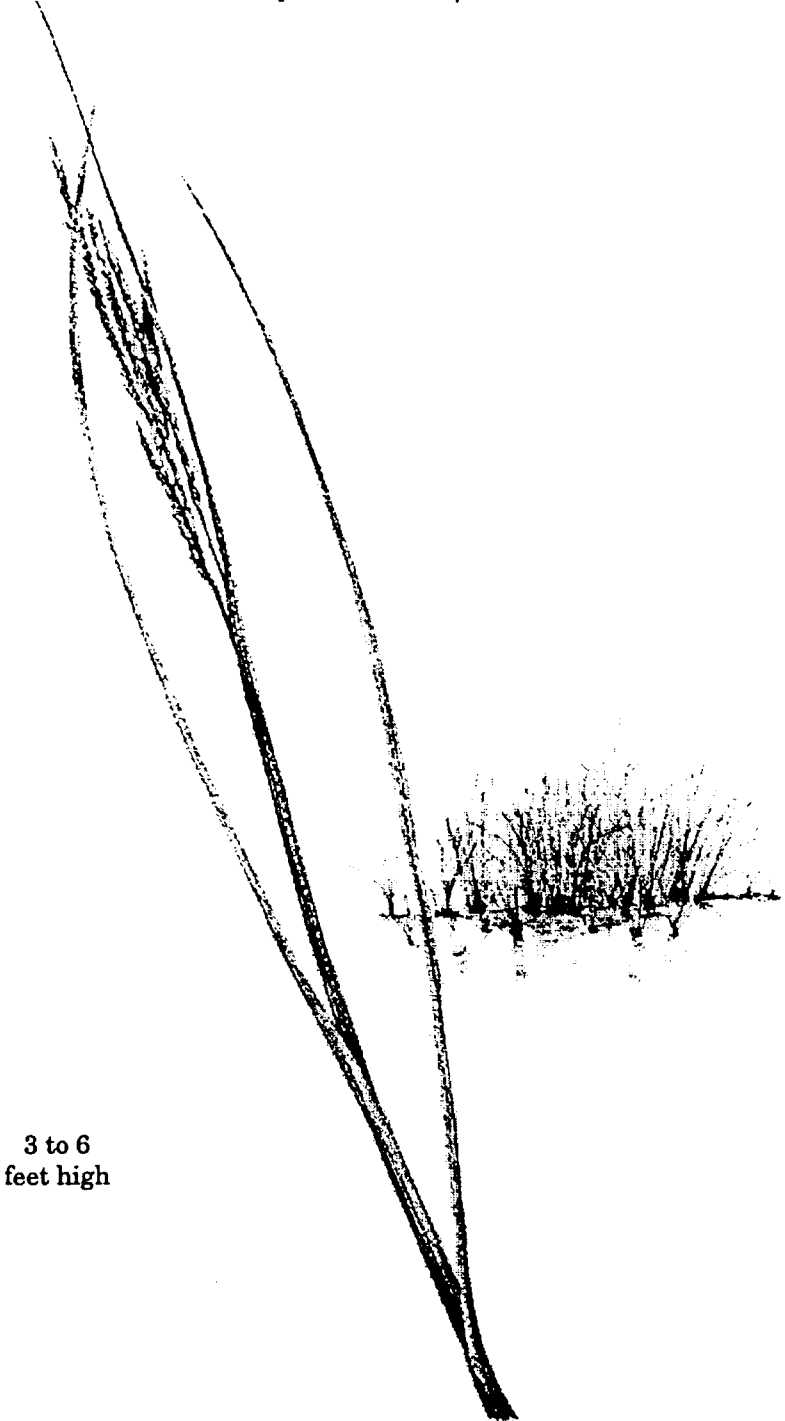
Nonvegetated wetlands are also important in the cycling of nutrients in the estuary and the filter feeding organisms present, particularly on tidal flats, remove suspended solids from the water column in amounts that may significantly affect water clarity.

E. Flood Buffer. The peat substratum of some marshes acts as a giant sponge in receiving and releasing water. This characteristic is an effective buffer against coastal flooding, the effectiveness of which is a function of marsh type and size. The higher elevation marshes are the more effective flood buffers. Nonvegetated wetlands, because of their intertidal location have little value in this regard.

The following descriptions of wetland community types are identified and presented for management purposes. The first twelve of these are the vegetated wetlands and of these the first ten are characterized by a single dominant species of emergent vegetation. The term "dominant" is defined here to mean at least 50% of the vegetated surface of the marsh is covered by a single plant species. Types eleven and twelve are brackish and freshwater marshes which have no clearly dominant species of vegetation.

The five types of nonvegetated wetlands described here are identified mainly by physiographic position and sediment composition. No attempt is made to quantitatively separate the communities by particle size dominance since this is not necessary for value judgements on the level described in this publication.

SALTMARSH CORDGRASS
Spartina alterniflora



3 to 6
feet high

Type I. Saltmarsh Cordgrass Community

Dominant vegetation: Saltmarsh cordgrass (*Spartina alterniflora* Loisel).

Associated vegetation: Saltmeadow hay, saltgrass, black needlerush, saltwort, sea lavender, marsh elder, groundsel tree, sea oxeye.

Growth habit: Stout, erect grass; long, smooth leaves, often with attached periwinkle snails; located at the waters edge. Tall form 4 to 6 feet along the water; short form 1 to 2 feet at or slightly higher than MHW.

Physiographic position: Ranges from mean sea level to approximately mean high water.

Average density: Usually 20 plants per square foot. Can range from 10 to 50 plants.

Annual production and detritus availability: Average yield is about 4 tons per acre per annum; optimum growth up to 10 tons per acre. Daily tides flux nearly throughout this community. Available detritus to the marine environment is optimum. This type of marsh is recognized as an important spawning and nursery ground for fish.

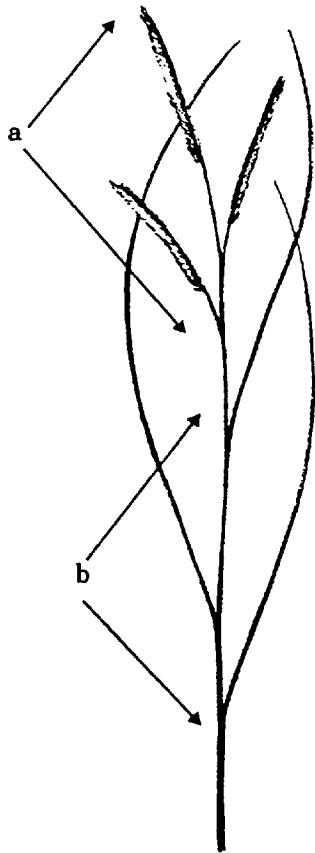
Waterfowl and wildlife utility: Roots and rhizomes eaten by waterfowl. Stems used in muskrat lodge construction. Nesting material for Forsters tern, clapper rail and willet.

Potential erosion buffer: Most salt marshes and brackish water marshes are bordered by saltmarsh cordgrass along the waters edge. A marsh/water interface of this type is highly desirable as a deterrent to shoreline erosion. Underlying peat with a vast network of rhizomes and roots is very resistant to wave energy.

Water quality control and flood buffer: Marshes of this type can also serve as traps for sediment that originate from upland runoff. This also includes large debris that may accumulate on the marsh surface.

SUMMARY: Considering the many attributes of this type of marsh community, its conservation should be of highest priority.

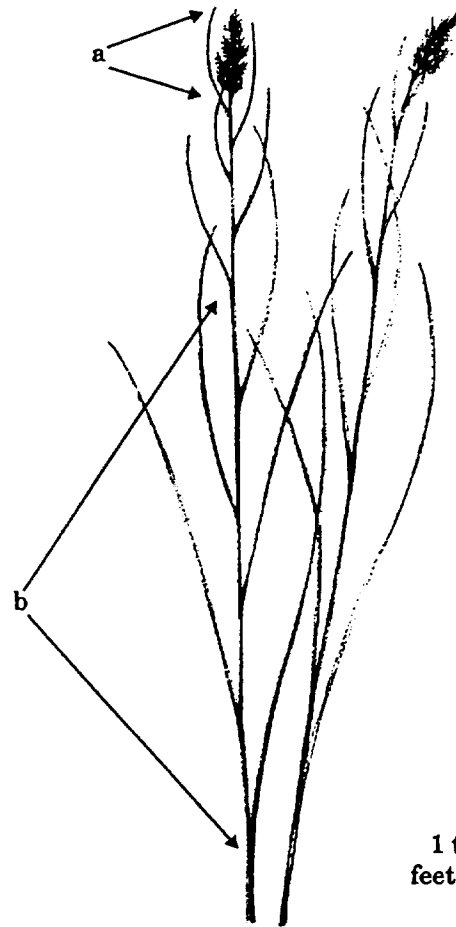
SALTMEADOW HAY
or
SALTMEADOW CORDGRASS
Spartina patens



1 to 3
feet high

- a. Flowering or fruiting head.
- b. Leaves arranged in 3 or more planes.

SALT GRASS
Distichlis spicata



1 to 3
feet high

- a. Flowering or fruiting head.
- b. Leaves arranged in one plane.

Type II. Saltmeadow Community

Dominant vegetation: Saltmeadow hay (*Spartina patens* (L.) Greene) Saltgrass (*Distichlis spicata* (L.) Greene).

Associated vegetation: Saltmarsh cordgrass, black needlerush, marsh elder, groundsel tree, saltwort, sea oxeye.

Growth habit: Matted meadow-like stands with swirls or "cowlicks," individual plants wiry in appearance; saltgrass 1-2 feet high.

Physiographic position: About mean high tide to the limit of spring tides; saltgrass at lower elevations, saltmeadow hay predominates at the higher end of the range.

Average density: Mixed populations; 50-150 stems per square foot.

Annual production and detritus availability: Ranges from 1-3 tons per acre annum. Only small amounts of dead plant material are flushed out during storms and spring tides.

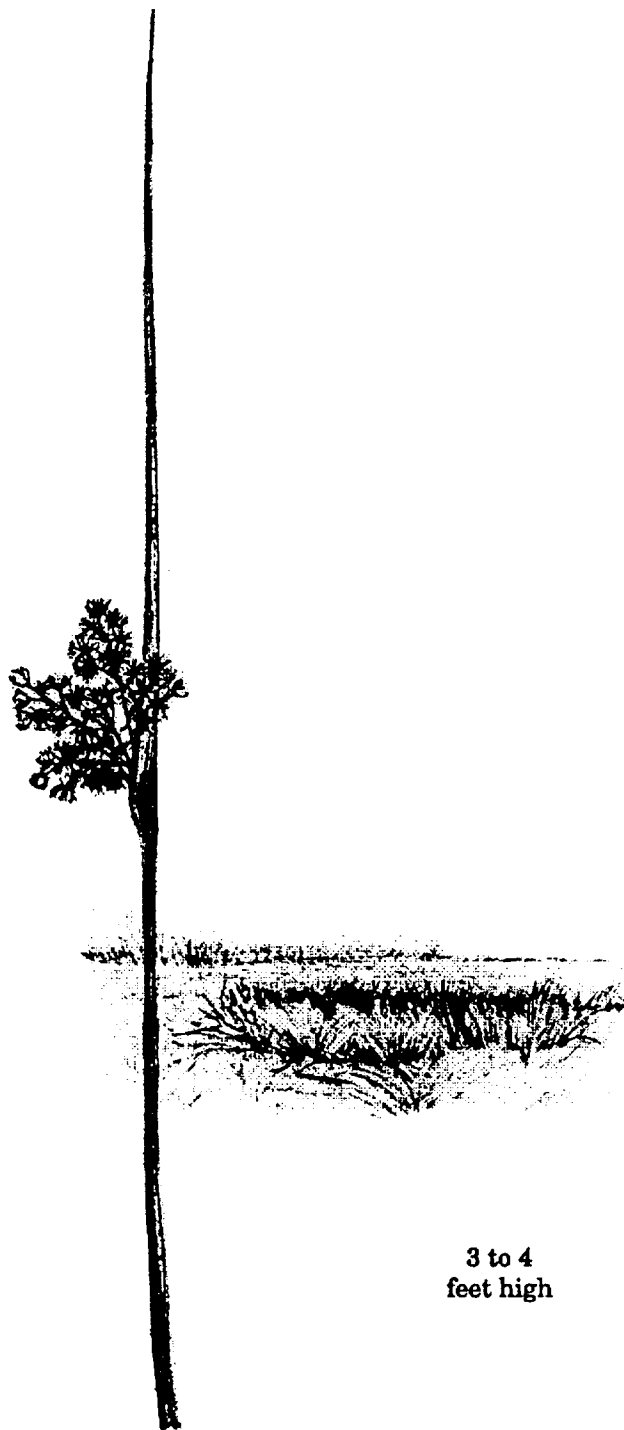
Waterfowl and wildlife utility: Seeds eaten by birds; provides nesting area. Habitat for a snail (*Melampus*) important as food for birds.

Potential erosion buffer: Effective erosion deterrent at higher elevations.

Water quality control and flood buffer: In many cases, this community represents the oldest part of a marsh system. Peat may accumulate to great depths, making this type of marsh act as a giant sponge when flood waters wash over it. Denseness of vegetation and deep peat filter sediments and waste material.

SUMMARY: This system is an excellent buffer, filtering out sediments and wastes and absorbing runoff water originating in the uplands. Production and detritus are less important to the marine environment than in Type I communities. Its contributions tend to favor the upland environment. Its values rank somewhat below Type I but, nevertheless, a Type II marsh should not be unnecessarily disturbed.

NEEDLERUSH
Juncus roemerianus



3 to 4
feet high

Type III. Black Needlerush Community

Dominant vegetation: Black needlerush (*Juncus roemerianus* Scheele.)

Associated vegetation: Usually pure stands with saltmarsh cordgrass, saltgrass and salt-meadow hay near the margin.

Growth habit: Dense monospecific stands; plant leafless, cylindrical hard stems tapering to a sharp pointed tip; brown to dark green in color, 3 to 5 feet high.

Physiographic position: About mean high water to somewhat below spring tide limit. Seems to prefer sandy substratum.

Average density: 30 to 50 stems per square foot.

Annual production and detritus availability: 3 to 5 tons per acre per annum, decomposes more slowly than most of the marsh grasses. Not flushed daily by tides.

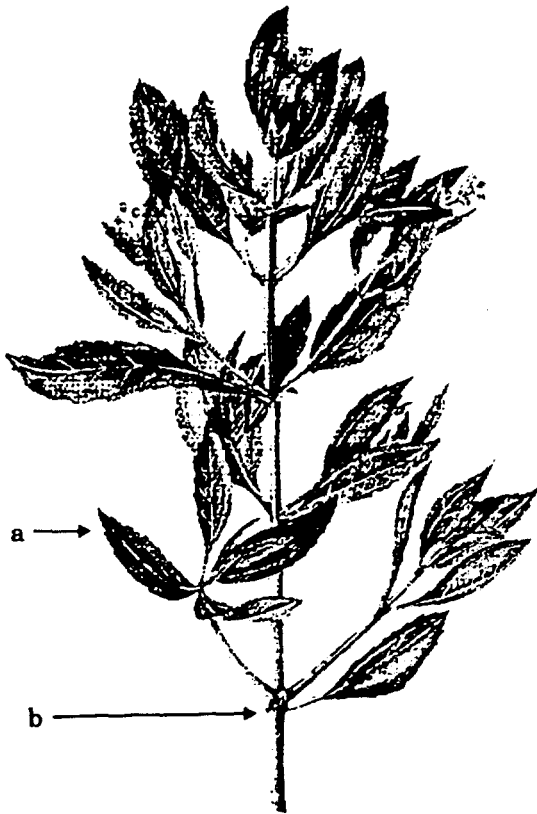
Waterfowl and wildlife utility: There is no evidence that waterfowl or wildlife utilize this type of plant directly as a food. Because of the dense, stiff stands, it has little wildlife value except for limited cover.

Potential erosion buffer: The dense system of rhizomes and roots of black needlerush are highly resistant to erosion. On sandy shores and low sand berms which support this community type, this characteristic is of high value.

Water quality control and flood buffer: An effective trap for suspended sediments, but less effective than the densely matted saltmeadow community. Provides effective absorbent areas to buffer coastal flooding.

SUMMARY: As a single monospecific community this type would support less wildlife diversity than Type I and II. It functions well as a sediment trap and erosion deterrent but ranks lower than the preceding types. The rhizomes of black needlerush are harder and tougher than the grasses that dominate Types I and II communities; therefore, needlerush is useful as an erosion deterrent. Overall, the values of this marsh type rank below Types I and II.

MARSH ELDER
Iva frutescens



3 to 10 feet high

- a. Leaves thick and fleshy.
- b. Leaves opposite each other on the stem.

GROUNDSEL TREE
Baccharis hamiflora



3 to 10 feet high

- a. Leaves alternate on stem.

Type IV. Saltbush (Gallbush) Community

Dominant vegetation: Groundsel tree, highwater bush (*Baccharis halimifolia* L.), marsh elder saltwater bush (*Iva frutescens* L.)

Associated vegetation: Saltmeadow hay, saltgrass, wax myrtle, sea oxeye.

Growth habit: Shrubs 3 to 10 feet high along the margin of the marsh and upland plant communities.

Physiographic position: Lower limit is approximately the upper limit of marsh (marsh-upland ecotone).

Average density: May provide dense canopy over marsh. Individual shrub trunks usually spaced 3 to 10 feet apart.

Annual production and detritus availability: Probably less than 2 tons per acre per annum. Detritus of little value.

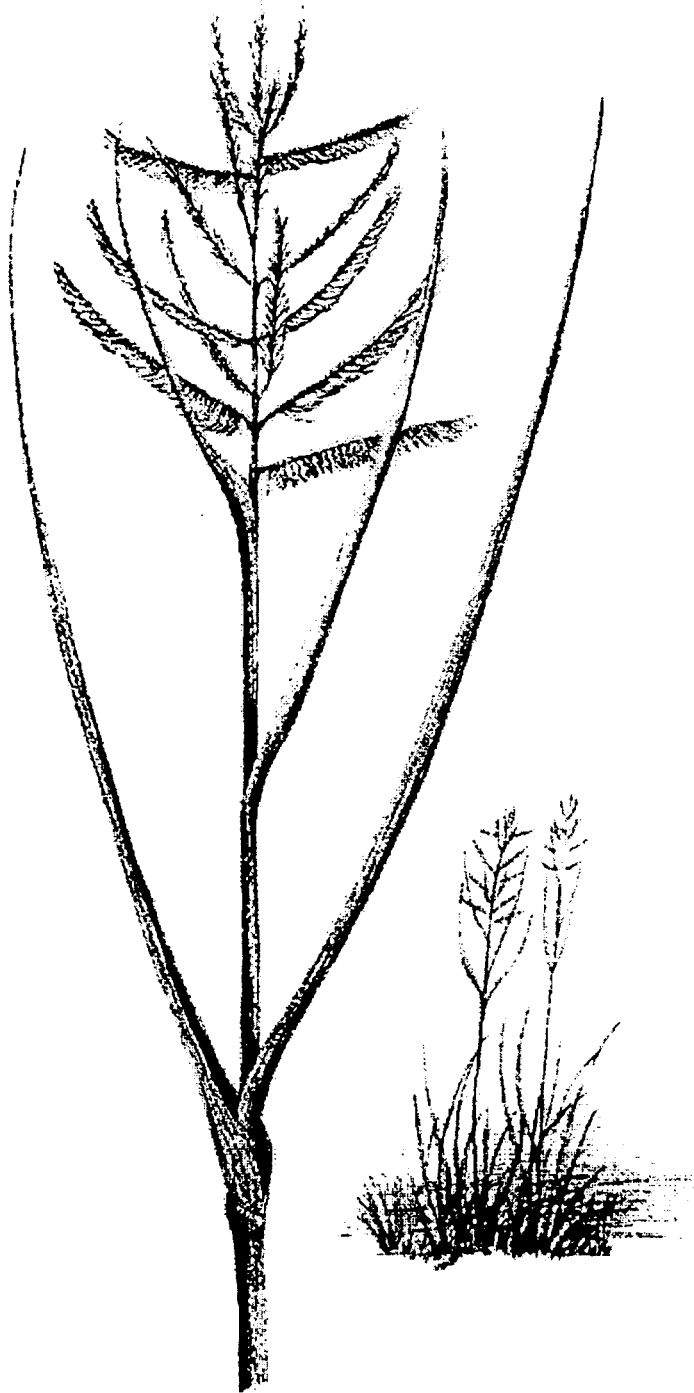
Waterfowl and wildlife utility: Provides diversity for wildlife in general and especially as a nesting area for small birds. No significant food value.

Potential erosion buffer: Although not structurally suited as an assimilator of sediment and flood waters, it serves somewhat as a buffer to erosion on sand berms that often front small pocket marshes. Also functional as a trap for larger flotsam.

Water quality control and flood buffer: Of minor consequence, but does trap larger material. (See above).

SUMMARY: Useful as an indicator of upper limits of marshes as defined in the Wetlands Act. Values of this type rank below that of the preceding types. However, this community does add diversity to the marsh ecosystem.

BIG CORDGRASS
Spartina cynosuroides



Type V. Big Cordgrass Community

Dominant vegetation: Big cordgrass (*Spartina cynosuroides* (L.) Roth.)

Associated vegetation: Usually pure stands.

Growth habit: Very tall (6-12 feet), heavily stemmed, leafy grass with distinct branched fruiting head in the fall.

Physiographic position: At or slightly above mean high water and extending to the upland margin. Most common in brackish or lower salinity marshes.

Average density: 10 to 15 stems per square foot.

Annual production and detritus availability: 3 to 6 tons per acre per annum. Detritus accessible only on spring or wind tide, however is rivaled only by saltmarsh cordgrass, which gives big cordgrass a higher value in the context of production than other grasses found above mean high tide. Decomposes more slowly than saltmarsh cordgrass.

Waterfowl and wildlife utility: Utilized as a habitat by small animals, often used for muskrat lodges. Geese often eat its rhizomes.

Potential erosion buffer: The large, coarse rhizomes and intertwining roots stabilize peat along marsh edges.

Water quality control and flood buffer: Usually this community type occupies the older parts of a marsh system where peat may be deeper increasing its capacity as a flood water assimilator. It is also useful in trapping flotsam.

SUMMARY: Although the elevation occupied by this community type is similar to that of the saltmeadow community, big cordgrass has a much higher yield of organic matter which likely contributes to the marine food web. It is also relatively high in value as a wildlife food as well as a buffer to erosion.

COMMON or BROAD-LEAVED CATTAIL
Typha latifolia



NARROW-LEAVED CATTAIL
Typha angustifolia



Type VI. Cattail Community

Dominant vegetation: Narrowleaf cattail (*Typha angustifolia* L.)

Associated vegetation: Broadleaf cattail (*Typha latifolia* L.), sedges, bulrushes, arrow arum, pickerel weed, smartweed, other fresh or brackish water plants.

Growth habit: Characteristic "Wiener on a stick" fruiting heads, long strap-like leaves, somewhat blunted tips. 4 to 6 feet tall.

Physiographic position: Very wet sites, sometimes in standing water, often at the margin of marsh and uplands. Does well in seepage areas resulting from upland runoff.

Average density: 2 to 6 stalks per square foot.

Annual production and detritus availability: 2 to 4 tons per acre. Detritus usually not readily accessible to the marine environment.

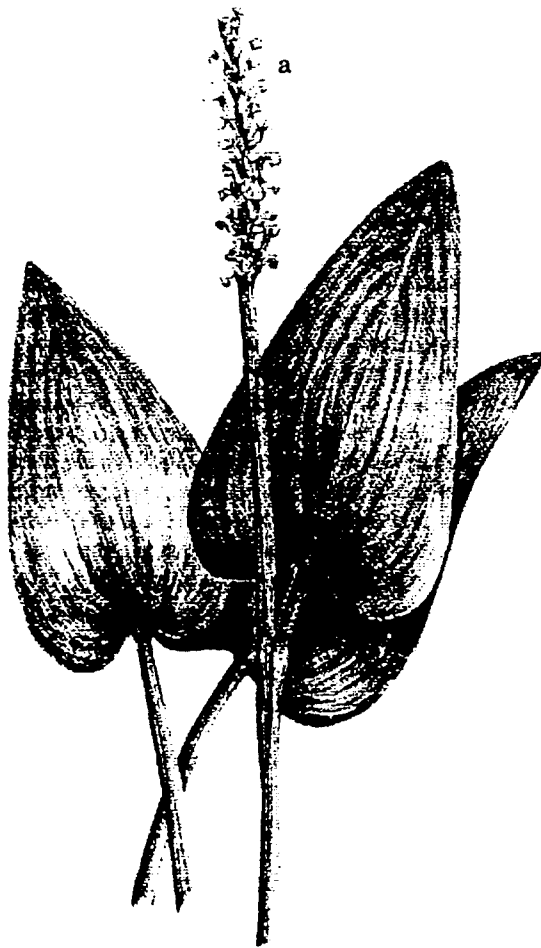
Waterfowl and wildlife utility: Provides habitat for certain birds; roots consumed by muskrats.

Potential erosion buffer: Because of its preferred habitat and its characteristic shallow root system, Type VI is only a minor buffer to erosion.

Water quality control and flood buffer: Its usual habitat along the upland margins in soft muddy areas ranks this marsh type high as a sediment trap despite its shallow rooted condition. Very few species will grow in these areas either because of the stagnant condition of the substratum or because they are inhibited by toxin release of the cattail roots or a combination of the two factors.

SUMMARY: Because of its value as a wildlife food and habitat, its function as a sediment trap, its relatively high production and the usual soft substratum, this type of marsh community should not be indiscriminately used as a development site. As far as overall value is concerned it compares with a saltmeadow marsh (Type II).

PICKEREL WEED
Pontederia cordata



a. Blue flower head.

ARROW ARUM
Peltandra virginica



a. Flower head.
b. Fruiting head.

Type VII. Arrow Arum-Pickerel Weed Community

Dominant vegetation: Arrow arum (*Peltandra virginica* (L.) Kunth.) Pickerel weed *Pontederia cordata* L.)

Associated vegetation: Sedges, smartweeds, bulrushes, ferns, cattails, pond lily.

Growth habit: Many broad leaved clumps growing from a thick, cylindrical rhizome; arrow or heart shaped leaves. Clumps 2 to 6 feet tall, average height 3 feet.

Physiographic position: On tidal mud flats from mean sea level to about mean high tide in low salinity or freshwater marshes.

Average density: 1 or 2 clumps per 10 square feet.

Annual production and detritus availability: 2 to 4 tons per acre. Detritus readily available to the marine food web because of daily tide fluxes. In the fall of the year these species decompose quite rapidly and completely except for the root stock.

Waterfowl and wildlife utility: Seeds and shoots of both species are eaten by ducks. Arrow arum seeds float after the pod decays and are readily available for wood ducks. Often associated with confirmed spawning and nursery areas for herring and shad.

Potential erosion buffer: Although this community type lacks the vast network of rhizomes, roots and peat substratum typical of a saltmarsh cordgrass community, this marsh/water interface vegetation is often the only vegetative buffer to shoreline erosion in freshwater areas. The substratum in a marsh such as this is typically often, unstable mud. After the vegetation has decayed in the winter time, the mud flats are highly susceptible to erosion due to winter rains.

Water quality control and flood buffer: Slows the flow of flood waters, causing some suspended sediment to settle out.

SUMMARY: Under natural conditions the marsh of this type is relatively stable but is highly sensitive to development and activities such as excessive boat traffic. Because of its many attributes this marsh ranks similar to that of Type 1.

REED GRASS
Phragmites australis



Type VIII. Reed Grass Community

Dominant vegetation: Reed grass (*Phragmites australis*) formerly (*Phragmites communes* Trinius)

Associated species: Switch grass, saltbushes, a few others.

Growth habit: Tall stiff grass with short, wide leaves tapering abruptly to a point; soft plume-like seed head. 6 to 10 feet high.

Physiographic position: Usually above mean high tide, drier areas on disturbed sites.

Average density: 3 to 6 stems per square foot.

Annual production and detritus availability: 4 to 6 tons per acre, detritus seldom available except in storm conditions.

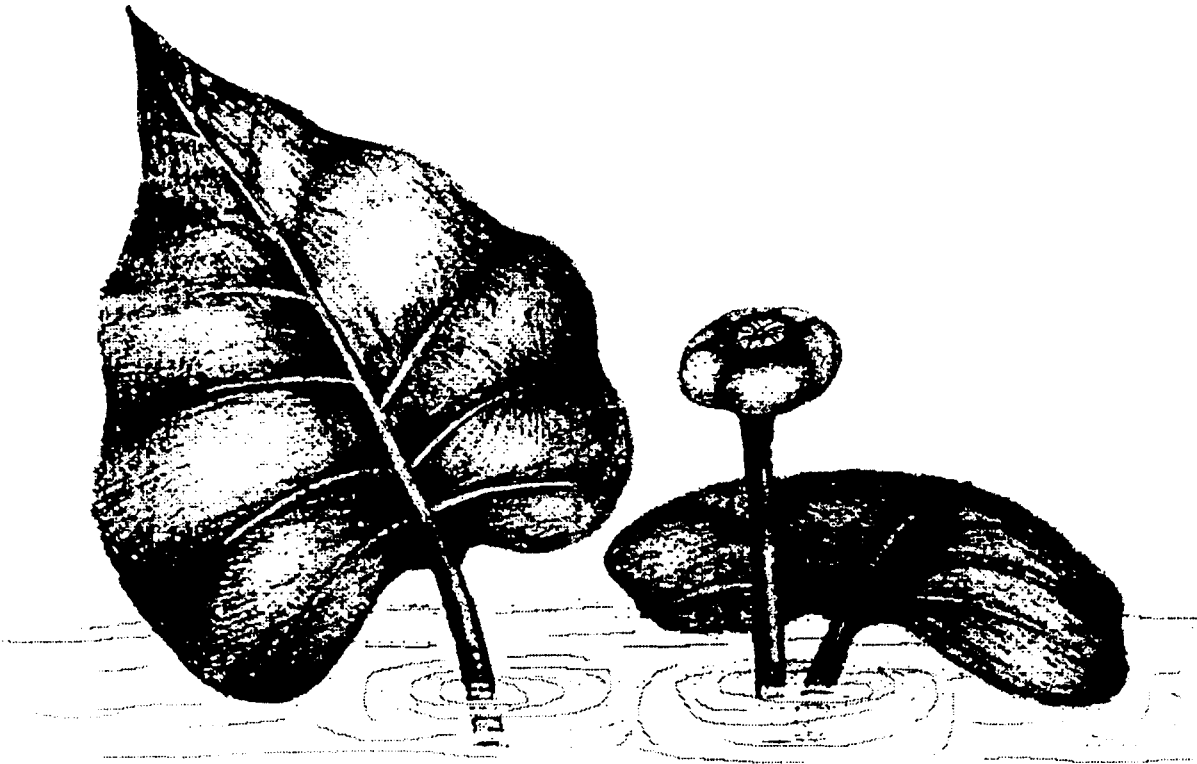
Waterfowl and wildlife utility: Little direct value to wildlife except as cover. May have a detrimental effect in that it can invade areas of a marsh and compete with desirable species. It appears to be replacing big cordgrass and other plants in freshwater marshes of the Pamunkey River.

Potential erosion buffer: Good erosion deterrent on disturbed sites, especially on spoil.

Water quality control and flood buffer: Valuable as a buffer to erosion. Potential as sediment trap and flood deterrent appears to be minimal.

SUMMARY: This plant is a relatively recent invader in Virginia but is spreading rapidly, often displacing more important marsh plants. It has little or no value to wildlife in general. Its only important value would be its function as a stabilizer on dredge spoil. This community type ranks below a Type III marsh, the black needlerush community.

YELLOW POND LILY
Naphur luteum



Type IX. Yellow Pond Lily Community

Dominant vegetation: Yellow pond lily, spatter-dock (*Nuphar luteum* (L. Sibthorp and Smith))

Associated vegetation: Pickerel weed, arrow arum.

Growth habit: Saucer shaped leaves with a narrow notch, floating on water; large, leathery yellow flower. 2 to 4 feet high from submerged root stalk.

Physiographic position: Submerged except for floating leaves at high tide. Found in freshwater areas.

Average density: One plant (cluster of leaves) for every 3 to 5 square feet.

Annual production and detritus availability: To 1 ton per acre; detritus readily available but not a significant contributor to the food chain.

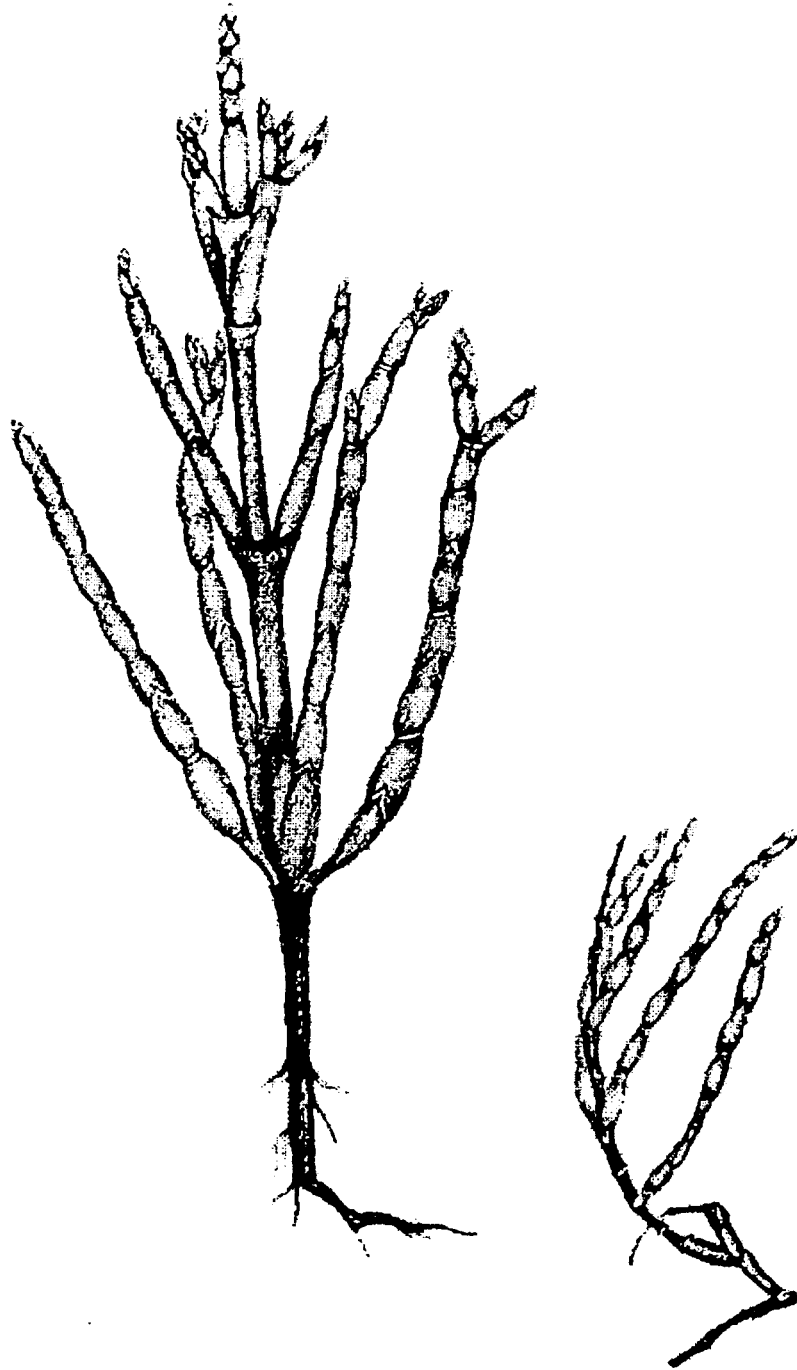
Waterfowl utility: Excellent cover and attachment site for aquatic animals and algae. Feeding territory for aquatic birds and fish.

Potential erosion buffer: While lacking the stiffness of grasses and sedges, these plants do reduce wave action from wind and boats. This has been noted in freshwater streams and boat channels.

Water quality control and flood buffer: Although not a direct assimilator of sediments and flood waters, the flow of flood water is slowed somewhat and sediments can settle out. This function is minimal because the community is submerged completely in flood conditions.

SUMMARY: Destruction of the community would result in a decrease in number and diversity of aquatic animal life in the immediate area. The greatest value the community has is its habitat for aquatic biota. This type should be ranked with or slightly higher than a Type III (black needlerush) marsh.

SALTWORT
Salicornia sp.



Type X. Saltwort Community

Dominant vegetation: Saltwort, glasswort (*Salicornia* sp.)

Associated vegetation: Saltmarsh cordgrass, saltgrass, sea lavender.

Growth habit: Leafless green fleshy-stemmed plant, red in color in fall; 8 inches to 1 feet tall.

Physiographic position: Above mean high tide in pannes or sparsely vegetated areas.

Average density: 10 to 15 stems per square foot.

Annual production and detritus availability: Less than 1/2 ton per acre. Exerts very little influence on the marine environment.

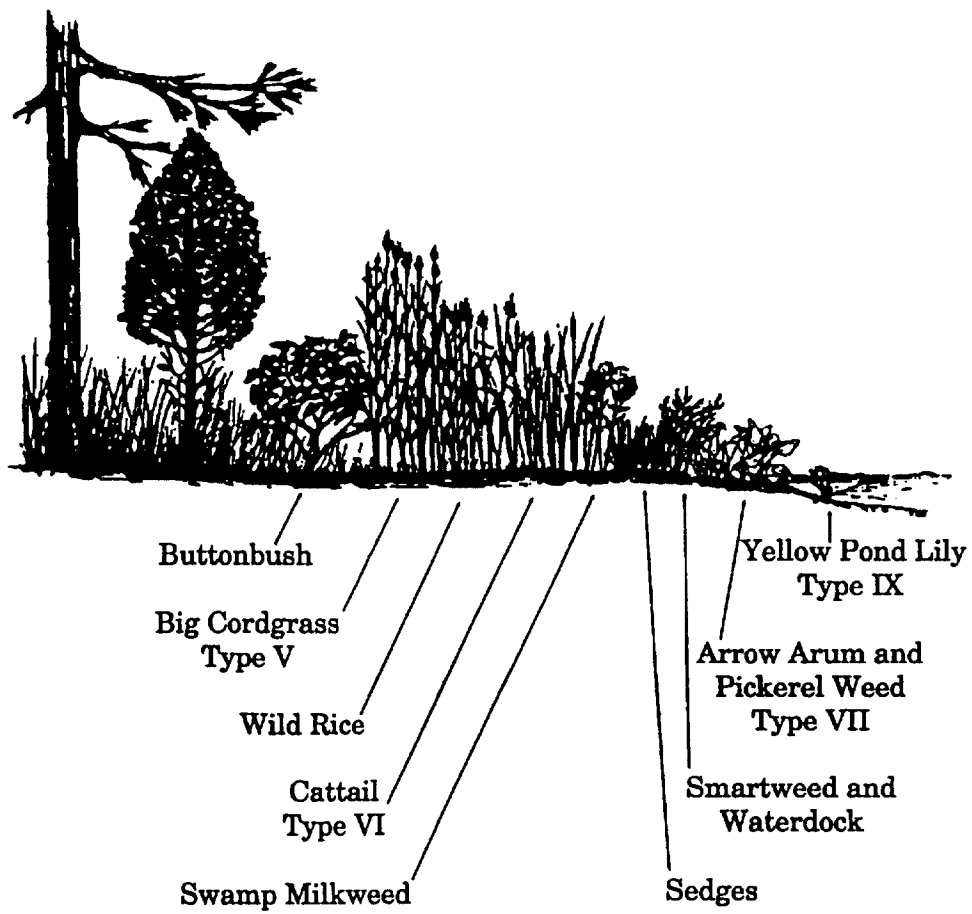
Wildlife and waterfowl utility: Some evidence that stems are eaten by ducks. May be a feeding area for other marsh birds.

Potential erosion buffer: Has very little value as an erosion deterrent.

Water quality control and flood buffer: Because of the character of the stem, a shallow root system and the usual small sizes of the populations, these community types have little or no value in this category.

SUMMARY: This community is not high in value. It usually occupies small areas within larger more productive marshes and can be used as an indicator of higher marsh elevations.

FRESHWATER MIXED COMMUNITY - TYPE XI
(excluding upland species - pines, cedars, etc.)



Type XI. Freshwater Mixed Community

Dominant vegetation: No single species covers more than 50% of the site.

Associated vegetation: Bulrushes, sedges, waterdock, smartweeds, ferns, pickerel weed, arrow arum, wildrice beggar's ticks, rice cutgrass.

Growth habit: Heterogeneous mixture of plants.

Physiographic position: From submerged to the upper limits of the wetlands.

Average density: Highly variable.

Annual production and detritus availability: 3 to 5 tons per acre. Detritus of species such as arrow arum, pickerel weed and yellow pond lily would be available in the intertidal zone.

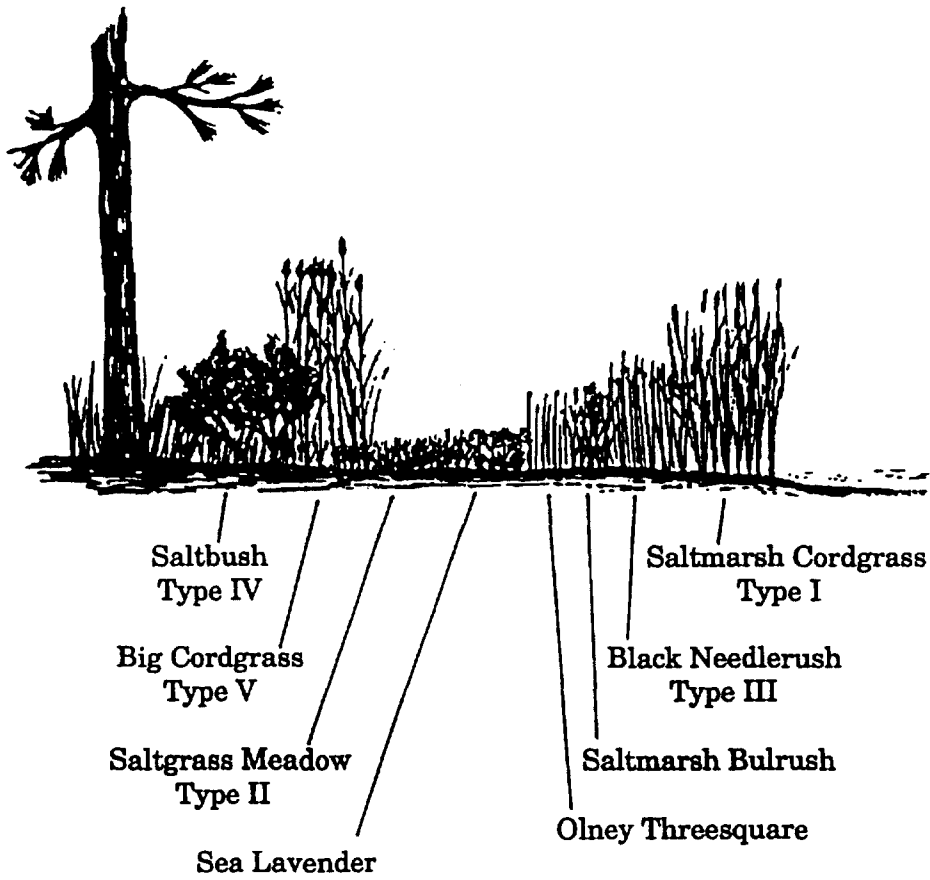
Waterfowl and wildlife utility: A highly valuable marsh for a broad diversity in wildlife species. Plant species such as smartweeds, waterdock, wildrice and others are prime waterfowl and sora rail foods. Waters adjacent to these type marshes are also known as spawning and nursery grounds for striped bass, shad and river herring.

Potential erosion buffer: Shoreline erosion protection provided by this type of marsh is equivalent to Type VII, arrow arum - pickerel weed community.

Water quality control and flood buffer: This ranks somewhat higher as a sediment trap and flood deterrent than an arrow arum - pickerel weed community. The presence of the stiffer, more resilient grasses, sedges and rushes and peaty-type substratum increases the ability of this type of community over a Type VII marsh as an assimilator of sediments and flood waters.

SUMMARY: These are very valuable marshes and the aim should be to keep them in a natural state. This type of marsh would be ranked equivalent to a saltmarsh cordgrass marsh (Type I) and an arrow arum - pickerel weed (Type VII) marsh.

BRACKISH WATER MIXED COMMUNITY - TYPE XII
(excluding upland species - pines, cedars, etc.)



Type XII. Brackish Water Mixed Community

Dominant vegetation: No single species covers more than 50% of the site.

Associated vegetation: Saltmarsh cordgrass, saltmeadow hay, saltgrass, black needlerush, saltbushes, threesquares, big cordgrass, cattails.

Growth habit: Heterogeneous mixture of plants in wet areas.

Physiographic position: Extending from about mean sea level to the upland margin.

Average density: Highly variable.

Annual productivity and detritus availability: 3 to 4 tons per acre, detritus readily available in the intertidal zone.

Waterfowl and wildlife utility: Wide diversity of vegetation provides a variety of wildlife food. Waterfowl foods are plentiful, such as the generous seed heads of saltmarsh bulrush.

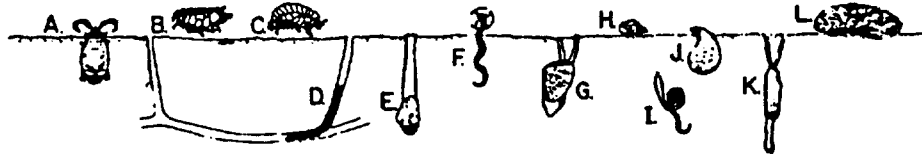
Potential erosion buffer: Shoreline erosion protection is the same as that of a Type I marsh (saltmarsh cordgrass). Most brackish water marshes are bordered by saltmarsh cordgrass.

Water quality control and flood buffer: Ranks high in this category, having similar attributes as a Type II marsh (saltmeadow).

SUMMARY: This marsh is a microcosm of all the communities found in saline waters. Brackish water marshes are known spawning and nursery grounds. This community type contains valuable food and habitat for a wide diversity of wildlife species. Ranks with a Type I (saltmarsh cordgrass) marsh.

DOMINANT BENTHIC SPECIES OF THE
NON-VEGETATED WETLAND COMMUNITIES

	Intertidal Beach Community	Tidal Flat Community	Intertidal Oyster Reef Community		
SEDIMENT TYPE	SAND	SAND	SAND/MUD	MUD	SHELL
DOMINANT SPECIES	Amphipods	Amphipods	Mud snails	Mud snails	Oysters
	Mole crabs	Bloodworms	Soft clams	Bloodworms	Hard clams
	Donax clams	Soft clams	Razor clams	Razor clams	Curved mussels
		Razor clams Sandworms	Spionid worms Hard clams	Spionid worms	Amphipods Mud crabs



SPECIES INDEX	A. Mole crab (<i>Emerita talpoida</i>)	F. Spionid worm (<i>Polydora ligni</i>)
	B. Haustorid amphipod (<i>Parahaustorius</i>)	G. Donax clam (<i>Donax variabilis</i>)
	C. Haustorid amphipod (<i>Parahaustorius</i>)	H. Mud snail (<i>Ilyanassa obsoleta</i>)
	D. Sandworm (<i>Nereid polycheate</i>)	I. Bloodworm (<i>Glycera dibranchiata</i>)
	E. Soft clam (<i>Mya arenaria</i>)	J. Curved mussel (<i>Isochodium recurvus</i>)
		K. Razor clam (<i>Tagelus plubeus</i>)
		L. Oyster (<i>Crassostrea virginica</i>)

Type XIII. Intertidal Beach Community

Dominant species:

Ocean Beach - Mole crabs, Donax clam, Haustorid amphipods

Bay Beach - Haustorid amphipods, oligochaete worms, beach fleas

Associated species: Ghost crabs, polychaete worms, razor clams

Growth habit: Most organisms buried just below the sand surface. Constantly being uncovered by waves and burrowing back into sand. Most species are annuals.

Average density: Highly variable, animals move up and down beach with tide level. In warmer months densities can average 100 to 5000 individuals/m². Annual production is very high.

Primary production and nutrient cycling: Relatively low compared to marshes and tidal flats because of high wave energy.

Habitat value: Very important foraging area for many shorebirds areas above mean high water are used as nesting sites by terns and skimmers. Fish utilize area for feeding during high tide.

Erosion buffer: Beach is an ideal natural wave-energy dissipator. It interacts with nearshore sand bars and dunes. Its most important ecological function to man is to buffer the effects of storm waves.

SUMMARY: Beach systems deserve the highest order of protection particularly when associated with extensive dunes and nearshore sandbars.

Type XIV. Sand Flat Community

Dominant species: Sandworm, bloodworm, amphipods, soft clams, razor clams.

Associated species: Other polychaete worms, mollusks and phoronid worms.

Growth habit: Most of the inhabitants are surface and deep burrowing species; some are permanent tube builders. Most species are annuals or biannuals, several reproduce throughout the warm weather period. There is a fairly rapid turnover of individuals due to predation so the average size of organisms is small.

Average density: Highly variable with polychaete worms reaching higher densities than other groups. Densities of major invertebrate groups range from 330 to 3000 ind./m².

Primary production: Annual production ranges from 100 to 200 g C/m². This is lower than that of marshes but only slightly less than other tidal flats. The primary production of this community enters the estuarine food web directly via grazing. This is more efficient than the detrital food chain where decomposition is an intermediate step. The large particle size of sand and lower percentage of organics reduces the role of this community type in nutrient recycling.

Habitat value: Very important as nursery and feeding area for fishes and blue crabs. Important shorebird feeding area. May support high shellfish populations.

Erosion buffer: Important in reducing wave energy and thus erosion potential on adjacent shorelines.

SUMMARY: Overall, the ecological value of this community rates only slightly below beaches, oyster reefs and Group I marshes.

Type XV. Sand/Mud Mixed Flat Community

Dominant species: Hard clams, parchment worms, Spionid polychaetes, soft clams, razor clams and mud snails.

Associated species: Other polychaetes, molluscs, crustaceans, acorn worms, Phoronid worms.

Growth habit: This community is populated in general by many surface and deep burrowers, and permanent tube builders. Otherwise similar to sand flats.

Average density: Highly variable but overall higher than sand flats or mud flats. Densities range from 5300 to 8300 individuals/m².

Primary production and nutrient cycling: Primary production in this community is very similar to sand flats. Since the organic matter content of the sediments is higher than that of sand flats, secondary, microbial production may be higher and this augments the primary production. This community probably interacts with estuarine nutrient cycles to a greater extent than sand flats.

Habitat value: This community is a very important area for wading birds, shorebirds and other migratory waterfowl. It is heavily used by important commercial and sports fishes for feeding and is important blue crab habitat. The habitat value may increase in importance when a marsh is adjacent due to higher organic content in the sediments and the habitat variety provided by the marsh.

Erosion buffer: Slows wave velocity and thus may reduce wave erosion impinging on adjacent shoreline.

SUMMARY: Overall this community has very high habitat values especially if associated with marshes. Ranks only slightly below beaches and intertidal oyster reefs.

Type XVI. Mud Flat Community

Dominant species: Spionid worms, mud snails, razor clams, bloodworms.

Associated species: Other polychaetes, molluscs and crustaceans.

Growth habit: Surface and shallow burrowing organisms predominate in this community type. Some permanent tube builders may be present. Problems with sediment stability limit species to mainly surface detrital feeders.

Average density: Highly variable; Generally densities are slightly lower than mixed flats but higher than sand/flats with a range of 50 to 5000 individuals/m².

Primary production and nutrient cycling: The areal extent of mud flats is probably equal to or greater than the total for marshes. Primary production is probably the highest of the nonvegetated communities. Mud flats interact significantly with adjacent vegetated areas in the cycling of nutrients. Where mudflats and marshes occur together they are mutually dependent. Ecologically, each is an extension of the other.

Habitat value: Highly important foraging area for waterfowl, sports and commercial fishes and many other species of food chain value in the marine ecosystem.

Erosion buffer: Since this community is generally only found in quiescent areas it has less value in this regard than sand or mixed flats.

SUMMARY: The overall ecological value of mud flats is comparable to sand flats and mixed flats. It is probably most important in nutrient cycling of the three.

Type XVII. Intertidal Oyster Reef Community

Dominant species: Oysters, hard clams, sand worms, amphipods, mud crabs.

Associated species: Other polychaetes, mud snails, curved mussels, barnacles, sponges, hydroids, razor clams, other molluscs and crustaceans.

Growth habit: Oyster shells provide increased diversity of habitats for a variety of estuarine species. This community is characterized by high diversity of attached and associated organisms.

Average density: Oysters dominate when area managed by man. Otherwise the reef is dominated by fouling organisms as listed above. Highly variable density but generally greater than other flats.

Primary productivity and nutrient cycling: Very little data are available concerning the primary production of oyster reefs. Given the high habitat and animal diversity however, it is probable that primary production is at least as high as other nonvegetated communities.

Habitat value: Very high; many important food chain organisms associated. This community is heavily utilized by blue crabs and fishes during high tides. Very high diversity and secondary productivity.

Erosion buffer: Shells cemented together may be important in dissipating waves and may resist shoreline erosive forces.

SUMMARY: Overall ecological value very high. This community is an excellent habitat with high diversity.

Section III

Evaluation of Wetlands Types

For management purposes, the twelve types of vegetated wetlands (marshes) and five types of nonvegetated wetlands (tidal flats and beaches) identified in Section II are grouped into five classifications based on the estimated total environmental value of an acre of each type. The reader is cautioned however that these groupings are based on average values and case-by-case analysis may yield differing results. One must also exercise restraint when comparing vegetated vs. non-vegetated communities.

Group One: Vegetated communities
Saltmarsh cordgrass (Type I)
Arrow arum-pickereel weed (Type VII)
Freshwater mixed (Type XI)
Brackish water mixed (Type XII)

Nonvegetated communities
Intertidal beaches (Type XIII)
Intertidal oyster reef (Type XVII)

The vegetated community types in Group One have the highest values in productivity and wildlife utility and are closely associated with fish spawning and nursery areas. They also have high values as erosion inhibitors, are important to shellfish populations and are important factors in nutrient cycling.

Intertidal beaches and sand bars have the highest relative values as buffers to shoreline erosion. In addition, they rank very high as marine habitat and in secondary productivity. Intertidal oyster reefs, which occur primarily on the seaside of the Eastern Shore, have their highest values in terms of productivity, habitat and commercial importance.

All of the communities in the Group One classification merit the highest order of protection.

Group Two: Vegetated communities
Big cordgrass (Type V)
Saltmeadow (Type II)
Cattail (Type VI)

Nonvegetated communities
Sand/flats (Type XIV)
Sand/mud mixed flats (Type XV)
Mud/flats (Type XVI)

The marshes in Group Two are only slightly less valuable than those in the Group One classification. The major differences being the reduced availability of detritus from the Group Two marshes due to physiographic factors. The detritus produced on the Group Two marshes is more likely to accumulate in the marsh and is less available to marine organisms. Group Two

marshes have high values in maintaining water quality, buffering coastal flooding, and as habitat.

The Group Two nonvegetated communities have high general productivity values and play an essential role in nutrient cycling in the estuary. They are very important foraging areas for marine birds and many mobile marine organisms of commercial and recreational importance. They have less value than the Group One communities from an erosion and flood buffering standpoint.

Group Two wetlands communities rank only slightly below those of Group One in overall environmental importance. They deserve an order of protection only slightly below that of the Group One wetlands. Since there are many variables involved in any evaluation scheme, it is highly likely that some Group Two wetlands may on occasion outrank some Group One communities. This may be particularly true of the nonvegetated communities which exhibit a great deal more variability than the vegetated communities.

Group Three: Yellow pond lily (Type IX)
Black needlerush (Type III)

The two marshes in the Group Three category are quite dissimilar in properties. The yellow pond lily marsh is not a significant contributor to the food web but it does have high values to wildlife and waterfowl. Black needlerush has a high productivity factor but a low detritus availability value. Black needlerush has little wildlife value but it ranks high as an erosion and flood buffer. Group Three marshes are important, though their total values are less than Group One and Two marshes. If development in wetlands is considered necessary, it would be better to alter Group Three marshes than Group One or Two.

Group Four: Saltbush (Type IV)

The saltbush community is valued primarily for the diversity and bird nesting habitat it adds to the marsh ecosystem. To a lesser extent it also acts as an erosion buffer. Group Four marshes should not be unnecessarily disturbed but it would be better to concentrate necessary development in these marshes rather than disturb any of the marshes in the preceding groups.

Group Five: Saltwort (Type X)
Reedgrass (Type VIII)

Based on present information Group Five marshes have only a few values of significance. While Group Five marshes should not be unreasonably disturbed, it is preferable to develop in these marshes than in any of the other types.

The ranking system above is only a partial tool for use in making decisions to alter wetlands for it measures only one wetland type against another. Other factors, involving a total view of the creek or river system involved, should be considered in the decision making process.

Acreage is obviously one important factor to consider when evaluating a specific wetland. A large wetland is inherently more valuable than a smaller wetland of the same type. Many creeks and rivers in Virginia however, contain vegetated and nonvegetated wetland areas which are quite small and/or fragmented. The cumulative value of these small areas may be as great or greater than that of a single wetland of the same type and acreage.

Any marsh which is 2 feet or more in average width is considered to have significant values as an erosion deterrent and in filtering sediments coming from the uplands. It may also have other values depending upon the total acreage of the marsh parcel. Any marsh which is greater than 1/10 of an acre in size may have, depending on type and viability, significant values in terms of productivity, detritus availability and wildlife habitat. Depending on its location, it may also have value as an erosion buffer.

In Virginia wetlands represent a little over 1% of the total acreage in the state yet they play a vital role in sustaining the important commercial and recreational fisheries which millions of east coast citizens enjoy. Population and development pressures in the tidal portion of Virginia pose a subtle but constant threat to these marine resources. Habitat losses are generally counted in small portions rather than catastrophic leaps. It is very important to note that although the large scale projects attract greater publicity, the total resource loss due to many small projects may be of equal or greater importance from an environmental viewpoint.

Because of the essential functions performed by wetlands in the marine environment and the limited extent of this resource, it is necessary to limit the activities which adversely affect wetlands to those considered highly essential. If the activity proposed can be accommodated while preserving all or most of the wetlands involved, a proper balance has been struck. In cases where development and preservation are mutually exclusive the necessity of the activity must be weighed against the value of the resource involved and the degree of adverse impact the activity will have on the wetland.

Section IV

Criteria for Evaluating Alterations of Wetlands

The legislature established a policy "to preserve the wetlands and to prevent their despoliation and destruction and to accommodate necessary economic development in a manner consistent with wetlands preservation." This section addresses the foregoing policy. Many proposed uses of the shoreline can be accommodated with little or no loss of wetlands if the following criteria are applied. There are times, of course, when these criteria may not apply in specific cases. The conscientious application of these criteria will, however, materially reduce adverse environmental impacts of man's activities on the shoreline.

The individual criteria contained in this section are supported by brief statements explaining the basic reasons behind adoption of the particular criterion. It is emphasized that these rationales are of necessity very brief and do not encompass all aspects of the given subject. Persons desiring further details should contact either the Virginia Marine Resources Commission, Habitat Management Division or the Virginia Institute of Marine Science, Department of Wetlands Ecology.

General Criteria

- A. Provided significant marine fisheries, wetlands and wildlife resources are not unreasonably detrimentally affected, alteration of the shoreline or construction of shoreline facilities may be justified in order to:**

1. Gain access to navigable waters by:
 - a. Commercial, industrial, and recreational interests for which it has been clearly demonstrated that waterfront facilities are required.
 - b. Owners of land adjacent to waters of navigable depth or waters which can be made navigable with only minimal adverse impact on the environment.
2. Protect property from significant damage or loss due to erosion or other natural causes.

B. Alteration of the shoreline is ordinarily not justified:

1. For purposes or activities which can be conducted on existing fastlands and which have no inherent requirement for access to water resources.
2. For purposes of creating waterfront property from lots and subdivisions which are not naturally contiguous to waters of navigable depth or waters which can only be made navigable by substantial alteration or destruction of marine resources.
3. When damage to properties owned by others is a likely result of the proposed activity.
4. When the alteration will result in discharge of effluents which impair wetlands, water quality or other marine resources.
5. When there are viable alternatives which can achieve the given purpose without adversely affecting marshes, oyster grounds or other natural resources.

Rationale: These criteria recognize riparian rights and reserve the shoreline for those uses or activities which require water access. These criteria also point out that activities such as dredging into the fastlands for housing developments often have a significant and long term adverse impact on the marine environment through such effects as changed upland hydrology, sedimentation, changes in water current patterns near the shoreline, and the introduction of pollutant discharges which frequently lead to closure of shellfish grounds. The dredging of channels into fastlands may also lead to deterioration of ground water by salt water intrusion into aquifers.

- C. Utilization of open-pile type structures for gaining access to adequate water depths is generally preferred over the construction of solid structure, dredging or filling.**

Rationale: The construction of solid structures, or the conduct of dredging and filling operations, often causes irretrievable loss of wetlands through their direct displacement or by indirect effects of sedimentation or altered water currents. Open-pile type structures permit continued tidal flow over existing wetlands and subtidal areas, avoid potential sedimentation problems, future maintenance dredging, and have less effect on existing water current patterns.

- D. Channels, fills and structures should be designed to withstand the maximum stresses of the marine environment and also to minimize the frequency of future maintenance activities.**

Rationale: Shoreline alterations often change currents, affect shoreline stability and cause biological damage. Unsuccessful structures or channels generate demands for remedial action which can compound initial adverse effects. Designs which minimize the dredging frequency in channels are particularly important. Dredging destroys or displaces bottom-dwelling organisms of value to the aquatic food web. Organisms can be expected to recolonize a dredged area after a period of time, however, too frequent dredging can inhibit recolonization.

- E. High density development in or immediately adjacent to wetlands and/or other flood plains is discouraged.

Rationale: Development in low-lying areas and on high energy coastlines has historically created costly flood control and flood-relief problems including claims for indemnification. Additionally, hydrological changes in surface run-off patterns are caused by the paving over of formerly absorbent soil. The usual effect is an increase in both the amount and the rate of surface water-flow, often contributing to shoreline erosion and other problems. Finally, high-density development leads to a concentration of contaminating constituents in urban surface water runoff which can severely stress receiving waters in the adjacent marine environment. There appears to be a direct relationship between population density in a watershed and increased bacterial levels in adjacent waters. This may lead to the imposition of long term restrictions on the direct marketing of shellfish.

Specific Criteria

The following specific criteria are established for use in the design, evaluation or modification of individual projects.

A. Shoreline Protection Strategies

1. Shoreline protection structures are justified only if there is active, detrimental shoreline erosion which cannot be otherwise controlled; if there is rapid sedimentation adversely affecting marine life or impairing navigation which cannot be corrected by upland modifications; or if there is a clear and definite need to accrete beaches.

Rationale: The design and placement of shoreline protection structures is a highly technical subject and often the precise or long-term effects of such structures on littoral processes cannot be predicted. A study of one county's shoreline shows that nearly 50% of the existing shoreline protection systems are ineffective or poor in performance. Shoreline protection structures disrupt natural forces and drive a shoreline away from a natural equilibrium state. In short, all protective structures have the potential to adversely affect marine resources directly or through indirect means. Needless shoreline modification is therefore discouraged.

2. For shorelines experiencing mild to moderate erosion, the planting of marsh grasses is a preferred means of stabilization. **Note:** The planting of marsh grasses is not appropriate on all shorelines and requires some technical expertise. Free advice is available from the Virginia Shoreline Advisory Service and the Virginia Institute of Marine Science.

Rationale: Fringing marshes buffer erosion through their dense root systems and ability to collect sand and sediments moving along the shoreline. When a fringe marsh is established, it not only provides food and habitat for marine birds and other organisms but also minimizes the adverse effects to adjacent shoreline properties which are often associated with other types of erosion control measures.

3. When an erosion control structure, such as a bulkhead or seawall, is deemed necessary, it should ordinarily be placed landward of any existing and productive marsh vegetation. A line of saltbushes, if existing, can usually indicate the seaward limit of the vertical structure. Along shorelines where no marsh vegetation exists, the retaining structure should ordinarily be placed far enough landward of mean high water so as to minimize exposure to wave action.

Rationale: A vertical retaining structure behind a marsh not only preserves the marsh for its biological productivity but also utilizes the marsh's capabilities of aiding water quality and deterring erosion.

Placing a vertical retaining structure landward of mean high water minimizes its exposure to wave action and reduces erosion or scour along the toe which could jeopardize the integrity of the structure. Landward placement also preserves intertidal bottom, maintaining habitat diversity and associated functions of this area within the marine ecosystem.

4. Sloped rock or riprap revetments and gabions are generally preferred over vertical structures.

Rationale: Vertical retaining structures tend to reflect wave energy and often transfer a problem to neighboring properties. Coastal waves, whether from natural causes or from boat wakes, are better absorbed or dissipated by riprap revetments or gabions. In addition, the slope and open spaces in riprap or gabion structures may provide suitable habitat for crabs and small fish. In some cases, sediment may be trapped in riprap or gabion structures and subsequently become vegetated with marsh species.

5. The placement of offshore breakwater or submerged, nearshore sills parallel to a portion of shoreline in order to attempt to elevate the height of a beach or dampen wave energy is generally acceptable only in areas with a good sand supply in the nearshore zone or where there is active detrimental erosion. Sill structures are usually constructed of properly filled sandbags, gabions or mortar filled bags. Although not a general rule, the sill is usually most effective when placed at or near the mean low water line. Both breakwaters and sills must be specifically designed for the shoreline segment in question.

Rationale: The placement of sill structures where there is an insufficient supply of sand to the beach may cause harmful effects to the shorelines of adjacent downdrift properties. Placing the sills at, or near the mean low water line will usually ensure sufficient backshore height. Placement of the sill structure too far offshore may result in insufficient filling and ultimately failure of the system. Sills may also not be suitable for high use beaches because of the potential hazard to swimmers.

6. The placement of a groin or series of groins on eroding shorelines in an effort to trap sand and build up a beach is justified only when there is sufficient sand in the littoral drift system or if properly functioning groins already exist in the section of shoreline in question.

Rationale: Groins are designed to trap sand and build beaches. When they function properly, they necessarily deprive downdrift shorelines of sand and thus may accelerate erosion to adjacent properties particularly if there is only a small amount of sand available in the system.

7. When groins are considered justified they should be low profile in design and only as long as is necessary to trap sand drifting in the littoral zone. Ideal groin length can be determined by examining the sand fillets in existing groins along the same shoreline reach or can be based on the width of the local beach.

Rationale: The low profile groin is designed to resemble the natural beach slope and allow sand to by-pass and thus nourish downstream properties once the groin has filled. Groins which are too long for the existing beach may shunt sand out to deeper water thus making it unavailable to downdrift properties.

8. The use of jetties at the entrance of a channel in order to maintain navigable depths or protect the entrance from wave attack is justified only when there is a clear and demonstrated need for such a structure and adjacent properties will not be significantly adversely affected.

Rationale: jetties attempt to prevent the littoral drift from entering the channel by trapping sediment moving along the shoreline. Sand tends to accumulate on the updrift side of a jetty and sediments are transported away from the jetty on the downdrift side. This can often result in accelerated erosion of the downdrift shoreline.

B. Filling and Dredged Material Disposal.

1. Filling in wetlands or subaqueous areas for the singular purpose of creating waterfront upland property is generally undesirable.

Rationale: Marine resources are finite, provide many valuable services and products and are delicately balanced in an intricate web of biological and physical interactions. Permanent loss of these resources and unnecessary alterations jeopardize this delicate ecological balance.

2. When filling along a shoreline is necessary, the activity should be confined to the area landward of any wetlands. If suitable non-wetland areas are not available and it is necessary to locate the fill further seaward, locations in Group 3-5 wetlands should be selected if possible (reed grass, saltwort, saltbush, black needlerush, yellow pond lily). Every reasonable effort should be made to preserve existing Group 1 and 2 wetlands communities. In nonvegetated wetlands, fill should be contained at or above the mean high water line. In cases where some encroachment beyond mean high water is justified (e.g. where an

eroding bluff is being graded down to stop erosion), the encroachment channelward of mean high water should be limited to the minimum required to achieve the desired goal.

Rationale: The values of the more important wetland communities are preserved, thus somewhat lessening the undesirable impact of destroying marshes and in the case of non-vegetated areas, minimizing encroachment conserves these shallow areas to function as described in Section II of this document.

3. Fill material, whether on wetlands or nearby fastlands, should not contain contaminants which may leach into adjacent waters. Upland source material is generally preferable to dredged material for use as fill.

Rationale: Oil or other contaminants can leach off the surface of filled areas and travel to adjacent waters via surface runoff. In some instances, they may also leach downward into the water table. In either case, water quality is impaired. Most dredged material is composed of silts and clays which when dry and compacted do not allow the free flow of water and thus may cause hydraulic flow problems behind a bulkhead.

4. Where feasible, controlled disposal of dredged material on highland property is the preferred method.

Rationale: There are many difficulties inherent in controlling dredged material in the marine environment. Marine resources are finite and subject to significant disruption from such activities since the water column can act as a vector carrying sediments well beyond the immediate disposal point.

5. Dredged material disposal areas should meet the following criteria:

- a. Disposal by the bucket or dragline method:

- (1) Build an earth-tight bulkhead along the perimeter of the disposal area sufficient to confine the dredge spoil. The bulkhead or dike (berm) should have a top elevation at least 3 feet above the average upper limit of spring tides.
- (2) Earthen dikes (berms) should be compacted as they are constructed, have side slopes no steeper than 1 horizontal to 3 vertical, a top width of at least 3 feet, and the toe of the slope should be at least 15 feet from existing marsh grasses. Spillway boxes or release pipes should be provided to prevent water from eroding or over-topping the dike. As soon as possible after completion of the project, the disposal area should be graded and vegetative cover established.
- (3) In some projects involving small volumes of generally sandy material, a double line of staked straw bales may provide suitable containment.

b. Disposal by hydraulic methods:

- (1) Earthen dikes should be constructed by dragline or land fill methods to the specifications as described in 3 (1) above. The volume of the disposal area lying below the elevation of the spillway crest should, at all times during the dredging, be sufficient to provide a retention time long enough to clarify the discharge water to meet applicable water quality standards. The spillway should be placed as far as possible from the discharge end of dredging pipes.
- (2) The dredge pipeline should have tight joints to prevent leaks. Grading and vegetative cover should be accomplished as soon as possible. (It is recognized that hydraulically filled areas may take many months to dry sufficiently for people or equipment to move across them. Seeding may have to be delayed for periods possibly as long as a year. The spillway should therefore be maintained until the area is permanently seeded and vegetation is well established and providing adequate ground cover to retain the soil).

Rationale: Control of sedimentation is accomplished if the above criteria is maintained during the entire dredging period.

6. Dredged material should not ordinarily be deposited in adjacent marsh as a convenience. If it becomes necessary to place spoil on a marsh, consideration should be given to placing it on those portions of lower value or to scattering the material in a thin layer rather than containing it behind a berm. Berms in marshes should be used to contain fill only when absolutely necessary and when they will not impair tidal flow to other wetlands areas.

Rationale: A continuous berm often cuts off water supply to a marsh. Selective piling allows continued water supply to uncovered portions of a marsh and may enhance habitat for wildfowl and animals. Scattering of dredged material in a thin layer can sometimes maintain basic marsh values though it may ultimately lead to changes in vegetative species if the marsh surface is significantly raised in elevation. The depth of the soil layer must be evaluated in each case.

7. Whenever feasible, displaced marsh vegetation and peat should be used to reconstitute marsh in the vicinity of the activity site and particularly along the banks of newly cut canals. The practice of compensating for marsh loss in one area by building marsh in another is theoretically viable but because of significant technical difficulties is not always recommended.

Rationale: This procedure, when successful, aids in maintaining marsh inventory and will deter shoreline erosion and enhance water quality conditions.

8. When under specific case by case analysis it is determined that marsh creation is an acceptable means of compensating for an unavoidable marsh loss, one marine habitat (e.g. tidal flats) should ordinarily not be sacrificed to create another (marsh). Resource compensation through marsh creation is not a panacea and should be limited to cases where the

loss of existing marsh is unavoidable and significant and there is a high probability of success.

Rationale: There is at present no conclusive evidence that the trading of one marine habitat for another results in a net gain for the environment. The creation of marsh from upland or other habitat is technically feasible in many cases. It is however a complex activity that generally cannot be successfully accomplished without technical knowledge and expertise.

9. Overboard disposal of dredged material is generally undesirable unless the deposits are basically clean sand, the disposal area is devoid of commercially important bottom organisms, and the deposits will have a beneficial effect on shoreline erosion problems. There may be occasions when overboard disposal of silty spoil can be used to create marsh. This will probably also entail the planting or seeding of marsh vegetation under closely controlled conditions.

Rationale: Silty soils tend to stay in the water column longer than the heavier sands and may therefore drift to other areas resulting in damage to bottom organisms outside the selected spoil area. Pollutants may likewise drift with the currents. In some cases, good quality sand can be beneficial in nourishing starved or eroding beaches and this possibility should be considered.

10. Whenever overboard disposal is permitted, the operation should be located and conducted so as to minimize impacts on commercially important bottom dwelling (benthic) organisms such as clams and oysters, submerged aquatic vegetation, and other unique or highly productive habitats.

Rationale: Because water is the link which ties all different marine habitats together and can transport pollutants over large areas, care must be taken to localize the impacts of overboard disposal to the maximum extent practical.

11. The overboard disposal of good quality sand in order to replenish beaches is generally acceptable so long as the beach sand and dredged sand are size-compatible.

Rationale: The placement of material of smaller particle size than that found on the natural beach will only serve to increase turbidity since it will be resuspended by wave action and carried away very quickly resulting in little benefit for the sand-starved beach.

C. Dredging

1. When possible, open pile piers should be lengthened to reach necessary water depths in order to minimize the amount of dredging required.

Rationale: Open pile piers have a minimal adverse impact on the marine environment. Dredging is a significant, though temporary, disruption which must be repeated in order to maintain water depths. Every dredging project, whether new dredging or maintenance

requires an approved disposal area and this can be a major problem particularly in developed areas.

2. Dredging for the singular purpose of obtaining fill is ordinarily not justified.

Rationale: Although dredged areas are repopulated to a degree by organisms after cessation of dredging, they generally never return to their predredge productivity levels if water depths are greatly increased. The result is a chronic degradation of habitat quality and reduction in system productivity.

3. For relatively small projects (2000 c.y. or less), dredging by dragline or bucket method is generally preferred.

Rationale: Control of sedimentation is much simpler with the bucket dredge in that there is a higher ratio of soil to water as the dredged material is transferred from the dredging area. Dredged material disposal is less complicated and more easily subject to productive use. Hydraulic dredging is preferred for large dredging projects particularly when the dredged material is to be placed in an area remote from the dredged site.

4. The practice of "double handling" dredged material in a waterway is generally undesirable.

Rationale: This activity, which involves the interim placement of dredged material in the waterway effectively doubles the adverse effects of bottom disruption and turbidity associated with dredging activities.

5. Dredging in shellfish areas, beds of subaquatic vegetation and other areas of singularly high productivity should be avoided if possible.

Rationale: These areas generally have very high values to both commercial and sport fisheries and to the organisms that support them. In addition their recovery period from dredging is measured in years rather than months as is the case for other bottom types. In many cases the new depth involved after dredging may preclude any recovery of these particular biotic communities.

6. In oyster and clam growing areas (brackish and saline water) dredging should be avoided during the months of July, August, September, December, January and February, whenever possible. This is particularly important when the dredging is to be performed within 500 yards of, or overboard disposal is within one mile of, productive public or privately leased oyster ground. In anadromous fish spawning and nursery areas (i.e. freshwater), dredging and overboard disposal operations should be avoided, when possible, during the period of mid-March through October. Particularly critical is the actual spawning period, mid-March through June. Concern is heightened when overboard disposal is involved.

Rationale: The majority of oyster spawning and spatfall occurs during the months of July, August and September in most areas of Virginia. Higher than normal suspended solids levels, which can occur in proximity to large dredging and disposal activities, can inter-

ferre with the development and survival of oyster larvae. Resultant sedimentation can also adversely affect the setting of oyster larvae by covering clean hard substrates thus making them unavailable to the larvae. During the coldest months of the year, oysters are more susceptible to siltation because their pumping activity is reduced and they are less able to clear away rapidly accumulating silt. During the spring spawning run (mid-March through June) anadromous fish eggs and larvae can be adversely affected by higher than normal levels of suspended sediments. Adult migrations can be impeded especially in narrow streams and rivers where turbidity may reach from bank to bank. The period July through October is the nursery period when the larvae develop into juveniles before beginning their migration back to the ocean. **Note:** This guideline is not subject to blanket application in the salinity regimes where it is applicable. Careful case-by-case analysis is required.

7. In relatively large water bodies, overdredging to reduce the frequency of maintenance dredging, should not exceed an additional two feet and this should be based on the anticipated sedimentation rate. In narrow canals and other water bodies subject to poor flushing, the dredged depth should not exceed one foot below that of the connecting waters.

Rationale: This guideline balances the benefits of reduced maintenance frequency and thus environmental disturbance with the creation of stagnant or "dead" water which can occur when artificially deep holes are created.

Specialized Structures and Activities

D. Channeling into Fastland or Marshes

1. Where feasible, community piers and launching facilities are preferable to channeling into fastlands or marshes for water access in conjunction with urban development.

Rationale: Studies have shown that such channeling leads to water quality problems. Poor water circulation and flushing, combined with contaminating constituents and high nutrient loads from adjacent development often leads to reduced dissolved oxygen levels, noxious odors, uncontrolled algal growth and fish kills.

2. While environmentally objectionable, there may be times when channels into marshes or uplands are permitted. When this is the case, the following criteria should be applied in order to reduce adverse effects:
 - a. Channels should be short in length and preferably no longer than twice the width.
 - b. Channels should not be dredged more than 1 foot deeper than the depth of the waterway to which they are to be connected.
 - c. Channels should not be box-cut but should be dredged with slopes that approximate the natural angle of repose of soils of the area, usually on the order of 3 feet horizontal for every 1 foot vertical.

- d. The top banks of channels should be graded to a slight incline anywhere between mean sea level and mean high tide for an inland distance of at least 10 feet. This area should then be planted with marsh vegetation appropriate to the soils and the salinity of waters in the area.
- e. Channels should be significantly shallower at their heads than at their mouths in order to promote better exchange with the natural waterway.
- f. Channel curves and angles should be avoided.

Rationale: The foregoing criteria reduce the potential adverse impacts of channelization by providing for better water circulation and bank stability. The marsh vegetation aids in preventing upland spoils and contaminants from lowering water quality.

E. Dams and Impoundments

- 1. Dams and impoundments should ordinarily not be located in tidal wetland areas. If some encroachment into such areas is deemed necessary every effort should be made to limit the encroachment as much as possible and restrict marsh loss to Group 3-5 marshes.

Rationale: Impounding an upland area generally involves a tradeoff of one set of upland habitat values (e.g. hardwood forest) for another set (lake or pond). When tidal wetlands are lost to this same type of development, the loss to the marine environment can be severe and is generally irreplaceable.

- 2. When a dam or impoundment is constructed in, or adjacent to, a tidal stream, provisions should be incorporated into the design to maintain a flow of freshwater into the estuary.

Rationale: Maintaining a flow will minimize the upstream movement of salt water in the stream and thus reduce large scale aquatic habitat changes due to salinity shift.

- 3. Dams should incorporate the use of fish ladders in order to minimize the loss of upstream spawning and nursery grounds for marine species.

Rationale: Many commercial and sports fishes are spawned and develop to adult stages above the tidal estuary. These areas are critical to the maintenance of population levels in these species.

- 4. Techniques which will minimize the possibility of mudwave creation adjacent to the dam site should be implemented when wetlands are present.

Rationale: This guideline limits wetland losses due to impoundments to that immediately in and upstream of the dam site. A mudwave effectively destroys wetlands in its path by raising the substrate elevation above the range of tide.

- 5. Whenever possible, impoundments should be designed to incorporate shallow water areas capable of supporting emergent vegetation and water tolerant timber.

Rationale: Shallow water habitat within the impoundment can help offset the loss of tidal wetland habitat due to dam construction.

F. Marinas

1. Dry storage type facilities are encouraged in preference to wet slip complexes.

Rationale: Such facilities minimize adverse impacts to the marine environment and do not occupy space in the water which could be used for recreation by all citizens of the Commonwealth.

2. When siting and designing a marina facility in a coastal waterway, the following should be considered:
 - a. All structures should be open-pile or floating with any permanent loss of aquatic habitat limited to that which is absolutely necessary.
 - b. If sited in a small tributary or other poorly circulating body of water, the marina should be situated near the mouth rather than the headwaters.
 - c. The structures should encroach no more than one third the distance across the waterway except in unusual channel configurations.
 - d. Marinas should be sited away from productive or actively worked oyster and clam grounds.
 - e. Consideration should be given to the size and depth of the existing waterway and to the number of boats already housed in the vicinity.
 - f. Slips for deep draft vessels should be located in the naturally deeper waters of the marina.
 - g. If the site involves a marsh, all structures except those needed for access (ramps, railways, etc.) should be located landward of or channelward of marsh vegetation.
 - h. Design of any necessary breakwaters should permit adequate water circulation within the facility to help prevent an accumulation of pollutants. Floating tire or other non-permanent type breakwaters should be considered.

Rationale: The foregoing criteria reduce the potential adverse impacts of marinas by providing for better water circulation, minimizing marine habitat loss, and reducing initial and maintenance dredging requirements.

G. Drainage and mosquito ditches

1. Drainage and mosquito ditches should be designed according to a master plan which will maximize their effectiveness while minimizing their extent as much as possible.

Wetland Guidelines

2. Ditches designed along conventional grid patterns are discouraged in favor of ditches which link identified mosquito producing areas within the marsh with tidal waters. Drainage ditches should also be designed to connect to specifically identified areas of poor drainage.
3. Depths should be limited to no more than 1 foot deeper than the connecting waters.
4. Depending on the size of the ditch, dredging should be accomplished "in the dry" (landside to seaward).
5. If dredge spoil must be placed in the marsh, it should be spread or broadcast as thinly as possible over a broad area with no effective elevation change on the marsh surface. If this is not possible, the dredged material should be placed in small widely separated mounds creating plant diversity and allowing water to circulate over the remaining marsh.
6. Where maintenance dredging is to be accomplished, the dredged material should be placed, to the maximum extent possible, on the old spoil area. If this is in the form of a continuous berm paralleling the ditch, the berm should be breached periodically to promote inundation of the remaining marsh.
7. Rotary ditchers are the preferred means of constructing mosquito ditches and small drainage ditches.

Rationale: Adherence to the above procedures will maximize the effectiveness of the ditches while minimizing adverse impacts to the wetlands.

H. Submarine pipeline crossings

1. Whenever feasible, pipelines should be placed on piles or attached to existing structure.
2. When a pipeline must be buried in the river bottom, the stockpiling of excavated material adjacent to the trench should be avoided.
3. When a pipeline must be buried in a marsh, material may be temporarily placed along side the trench if upon completion all excess material is removed from the marsh, the original elevation is restored, and all denuded areas are sprigged with appropriate vegetation.

Rationale: These guidelines minimize construction impacts to the wetlands and allow for the fastest possible recovery of the natural system after the disturbance.

Glossary

ALGAE - Simple marine or freshwater photosynthetic plants. May be single or multicelled.

ANNUALS - Invertebrates which generally spawn once a year and live about a year.

BENTHIC - Pertaining to any plant or animal living in or on the bottom sediment of a river, ocean, lake or other aquatic system.

BERM - A wall or mound built around a low-lying area to contain a spoil material.

BIANNUALS - Invertebrates which generally spawn twice a year and live less than a year.

BRACKISH - Pertaining to the waters of bays and estuaries, salty but of lower salinity than seawater.

BULKHEAD - A structure or partition, usually running parallel to the shoreline, for the purpose of protecting fastlands from wave action or protecting channels from upland sedimentation.

COMMUNITY - Ecological term for any naturally occurring group of different organisms inhabiting a common environment, interfacing with each other relatively independent of other groups. Communities may vary in size and larger communities may contain smaller ones.

DETRITUS - Organic matter (primarily marsh plants) which while decaying in the aquatic system forms the basis of major marine food web. The organic matter and its rich growth of microbes are fed on by many estuarine species.

DOMINANT - For purposes of classifying marshes in this report, any organism which makes up at least 50% by volume of the organisms present in a given area.

DRAGLINE - The method of dredging employing a crane and large metal bucket to remove accumulated sediment.

DREDGING IN THE DRY - A technique of dredging used where new channels or canals are being cut. The canal is dredged from the landward end toward the seaward end and the last step is to open the new canal to the existing waterway.

DIKE - A wall or mound built around a low-lying area to prevent flooding.

ECOLOGY - The overall relationships between organisms and their environment.

FASTLANDS - The zone extending from the landward limits of wetlands to at least 400 feet inland.

FRESH WATER - Waters containing no appreciable salt, usually less than .5 parts per thousand.

FOOD WEB - The complex interactions of organisms in a natural community involving organisms feeding on one another to obtain energy.

GABION - A container filled with stone, brick, shells or other material to give it a heavy weight suitable for use in constructing bulkheads or groins. In the marine environment, usually made of galvanized steel wire mesh with a PVC (polyvinyl chloride) coating over the galvanizing.

GROIN - A shore protection structure built (usually perpendicular to the shoreline) to trap sand and other material moving along the shoreline and thus retard erosion of the shore.

HETEROGENEOUS - Being composed of many different forms of something. Specifically, a heterogeneous marsh is one composed of many different species without any one being dominant.

- HYDROLOGICAL** - Pertaining to water, its properties and distribution especially with reference to water on the surface of the land, in the soil and underlying rock.
- INTERTIDAL** - Area on a shoreline between mean high water and mean low water.
- JETTY** - On open seacoast, a structure extending into a body of water designed to prevent shoaling of a channel by sand or other materials. Usually placed along side channels at entrances.
- LINE OF SALT BUSHES** - Refers to the characteristic growth of salt marshes at the upper limit of the highest high tides. When present in a line along the inland side of a marsh it often indicates the upper limits of wetlands as defined in the Virginia Wetlands Act.
- LITTORAL PROCESSES** - Those physical features and characteristics of the intertidal area which determine the type of shoreline present.
- MICROCOSM** - A small community regarded as having all the characteristics of the biosphere or the world.
- MONOSPECIFIC** - Being composed entirely of one species or one type of organism. In this case a marsh vegetated by one type of grass.
- MEAN HIGH WATER** - The average height of high waters over a nineteen year period.
- MEAN LOW WATER** - The average height of low waters over a nineteen year period.
- PERENNIAL** - A plant which produces new growth year after year according to the seasons. In the case of nonwoody plants the aerial portion dies each winter and is replaced each spring.
- PHYSIOGRAPHIC** - A description of nature or natural phenomena in general.
- POPULATION** - All of the members of one species within a community.
- PRIMARY PRODUCTION** - Biomass produced directly from sunlight by plants.
- PRODUCTIVITY** - The rate of energy storage of an ecosystem or community in the form of organic substances which can be used as food materials.
- RHIZOMES** - Underground stems capable of producing new aerial shoots.
- RIPRAP** - Refers to a bulkhead or groin constructed of selected rock or concrete forms carefully placed so as to dissipate wave energy (bulkhead) or collect sand (groin) along a shoreline.
- SECONDARY PRODUCTION** - Biomass produced by animals grazing on plants or other organic matter.
- SHORE DEFENSE STRUCTURES** - A bulkhead or groin intended to deter erosion of the shoreline.
- SPECIES DIVERSITY** - Pertaining to the numbers of different species inhabiting a given area, i.e. high species diversity would mean many different species in one area.
- SPOIL** - The material removed from a channel bottom or other body of water during a dredging operation.
- SPRING TIDES** - Higher high tides which occur twice monthly due to astronomical conditions.
- WRACK LINE** - A line of debris, above the mean high tide line, which has been deposited by previous higher than normal tides.