# Guidelines for Establishment, Use and Operation of Tidal Wetland Mitigation Banks in Virginia

#### I. INTRODUCTION

These guidelines were originally promulgated in 1998. This update is necessary to comply with Chapter 334 of the 2023 Acts of the Virginia General Assembly, which requires the Virginia Marine Resources Commission (the "Commission") to review and update these guidelines and to "consider provisions relating to the generation of vegetated and unvegetated wetland credits from wetland creation, restoration, conversion, and enhancement activities, invasive species control, and the establishment of open water channels." The law also requires the Commission to make these guidelines consistent with its Tidal Wetlands Guidelines (May 2021 Update), including updating wetlands types and properties. This update is also necessary to bring these guidelines into alignment with current banking guidelines and practices in place with the Interagency Review Team ("IRT"). The IRT is composed federal, state, tribal, and/or local regulatory entities and serves to review documentation for the establishment and management of mitigation banks and in-lieu fee programs. The IRT operates in accordance with the Final Compensatory Mitigation for Losses of Aquatic Resources Rule, codified at 33 C.F.R. part 332 and 40 C.F.R. part 230, subpart J, and other applicable laws and guidelines.

#### II. PURPOSE AND SCOPE

This document provides guidance to the Commission, local wetlands boards, and the public for the development and operation of tidal wetland mitigation banks in the Commonwealth of Virginia.

These guidelines will supplement the existing Wetlands Mitigation-Compensation Policy currently codified at 4 Va. Admin. Code §§ 20-390-10 through 20-390-50. The effective date of these guidelines will be August 1, 2024.

#### III. DEFINITIONS

For the purposes of these guidelines, the terms defined in the Wetlands Zoning Ordinance, codified at Va. Code § 28.2-1302, as amended, and in the Compensatory Mitigation for Losses of Aquatic Resources Rule, codified at 33 C.F.R. part 332, as amended, shall have the same meanings when used herein except for those terms set forth below:

**Cataloging Unit**: Specific geographic area as defined by the U.S. Geological Survey in the Hydrologic Unit Map of the United States.

**Mitigation Bank**: A site, or suite of sites, where tidal wetlands are restored, established, enhanced, or, in exceptional circumstances, preserved for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

**Restoration**: The manipulation of the physical, chemical, or biological characteristics of a wetland where it previously existed with the goal of returning natural/historic functions.

Watershed: The drainage area for each major river system within the Commonwealth.

#### IV. TIDAL WETLAND MITIGATION BANKING GUIDANCE

Any project which involves the use of credits from an approved mitigation bank to provide compensatory mitigation for the project's adverse impacts to tidal wetlands must comply fully with existing State and Federal statutes and regulations, as well as be consistent with applicable agency policies, including, but not limited to:

- 1. Title 28.2 of the Code of Virginia
- 2. VMRC Wetlands Mitigation-Compensation Policy
- 3. Clean Water Act, Section 404 (33 U.S.C. § 1344)
- 4. Rivers and Harbors Act of 1899, Section 10 (33 U.S.C. § 403)
- 5. Section 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material (40 C.F.R. part 230)
- 6. Section 404 Permit Regulations (33 C.F.R. parts 320 through 330)

- 7. Compensatory Mitigation for Losses of Aquatic Resources (33 C.F.R. part 332; 40 C.F.R. part 230, subpart J).
- 8. National Environmental Policy Act (42 U.S.C. §§ 4321 et seq.) and the Council on Environmental Quality's implementing regulations (40 C,F,R, parts 1500 through 1508).
- 9. Fish and Wildlife Coordination Act (16 USC §§ 661 et seq.).
- 10. U.S. Fish and Wildlife Service Mitigation Policy available at https://www.fws.gov/policy/a1501fw2.pdf.
- 11. Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §§ 1801 et seq.).
- 12. National Marine Fisheries Service Habitat Conservation Policy
- 13. Coastal Zone Management Act (16 U.S.C. §§ 1451 et. seq.)

The policies set forth in this document are intended solely as guidance. This guidance does not establish or affect legal rights or obligations, establish a binding norm on any party, or constitute the final determination of the issues addressed.

#### V. IMPLEMENTATION PROCEDURES

The following criteria should be followed for bank planning, siting, construction and operation:

1. Any party or parties interested in creating a tidal wetland mitigation bank should first contact the Commission and the U. S. Army Corps of Engineers ("Corps") regarding the proposal. The Corps and Commission will gather pertinent information about the proposal and will, as co-chairs, establish the IRT. The IRT will consider the proposal and review all submitted documentation, including the prospectus, proposed mitigation banking instrument, and other appropriate documents, in accordance with applicable Federal and State law.

- 2. The sponsor will be required to provide a bond, letter of credit, or other financial assurance to ensure alternative compensatory mitigation is provided in the event the mitigation bank fails.
- 3. The mitigation bank's service area must be specified in the mitigation banking instrument. Unless otherwise provided by law, a mitigation bank's service area may only include the cataloging unit in which it is located or an adjacent cataloging unit in the same watershed.
- 4. The IRT will determine the number of credits available at the mitigation bank. Credits will be available for the establishment, restoration, enhancement, or, in certain circumstances, preservation of wetlands.
- 5. Upon receipt of a complete banking instrument, the Commission or Corps shall provide notification to the public, through standard procedures, and provide a reasonable comment period.

# CHAPTER 4VAC20-390-10 ET SEQ.

#### **PREAMBLE**

This chapter sets forth the policy of the Commonwealth to avoid, minimize, and then compensate for impacts to tidal wetlands. The chapter further sets forth the methods by which compensatory mitigation for unavoidable impacts to tidal wetlands may be achieved and the restrictions on each method.

This chapter is promulgated pursuant to the authority contained in §28.2-103 and §28.2-1301 of the Code of Virginia. This chapter amends and re-adopts, as amended, Chapter 4VAC 20-390-10 et seq., which was promulgated May 24, 2005, and made effective July 1, 2005. The effective date of this chapter, as amended, is February 1, 2025.

#### 4VAC20-390-10 Definitions.

The following words, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise:

"Ad hoc in-lieu fees" means the payment of funds to a participating locality for the restoration, establishment, enhancement or, in certain circumstances, preservation of wetlands resources to satisfy compensatory mitigation requirements. Ad hoc in-lieu fee programs are not governed by an in-lieu fee program instrument.

"Approved in-lieu fee program" means a program involving the restoration, establishment, enhancement, or, in certain circumstances, preservation of wetlands resources through funds paid to a governmental or non-profit natural resources management entity for the purchase of credits to

# CHAPTER 4VAC20-390-10 ET SEQ.

satisfy compensatory mitigation requirements. The operation and use of an approved in-lieu fee program are governed by an in-lieu fee program instrument approved as provided in federal law.

"Compensation" means actions taken which have the effect of substituting some form of wetland resource for those lost or significantly disturbed due to a permitted development activity; generally habitat creation or restoration. Compensation is a form of mitigation.

"Compensatory mitigation" means the restoration, establishment, enhancement, or, in certain circumstances, preservation of wetlands resources for the purpose of offsetting unavoidable adverse impacts of a permitted development activity which remain after all appropriate and practicable avoidance and minimization has been achieved.

"Mitigation" means all actions, both taken and not taken, which eliminate or materially reduce the adverse effects of a proposed activity on the living and nonliving components of a wetland system or their ability to interact. <u>Mitigation includes compensatory mitigation.</u>

# 4VAC20-390-20 Policy.

In spite of the passage of the Virginia Wetlands Act and the Federal Water Pollution Control Act in 1972, the Virginia, as a Chesapeake Bay Program partner, has committed to achieving "a no-net loss of existing wetlands acreage and function in [its] regulatory programs." In addition, Virginia's Coastal Resilience Master Plan recognizes the importance of tidal wetlands as natural flood buffers. Despite this, pressures to use or develop tidal wetlands along Virginia's shoreline, have continued to accelerate as evidenced by the increasing number of permit applications being

#### CHAPTER 4VAC20-390-10 ET SEQ.

submitted. While losses are controlled by existing permit programs, data compiled by the Virginia Institute of Marine Science (VIMS) over the last 11 years (1993-2004) has shown a total permitted loss of 132 acres of tidal wetlands. Of these losses, most are associated with shoreline stabilization projects where each individual project may account for only a few hundred square feet of impact. Compensation for these losses has not usually been required. In fact, during the same period only 20.3 acres of mitigation have been required some impacts to tidal wetlands from development activity are unavoidable. Research, however has demonstrated that certain wetlands can be established or reestablished in areas where wetlands are not presently found, wetlands that were previously lost or degraded can be reestablished, and wetland functions in existing wetlands can be improved. As such, compensation compensatory mitigation for permitted wetland losses is viewed as a means of offsetting impacts of necessary projects.

The Marine Resources Commission (commission), through this policy, intends to encourage, encourages where appropriate, the compensation of compensatory mitigation for all permitted tidal wetland losses, especially vegetated losses, impacts, provided all other mitigative measures have been considered to avoid and minimize any impact. This should include compensation on site, compensation within the watershed, compensation through the use of a mitigation bank as authorized by § 28.2-1308 of the Code of Virginia or through acceptance of an applicant's offer of payment to an in-lieu fee account established at the local, regional or state level and dedicated to wetland creation and restoration.

#### CHAPTER 4VAC20-390-10 ET SEQ.

The need to compensate for all permitted wetland losses is further emphasized by the Commonwealth's commitment to the restoration of the Chesapeake Bay. In 2000, Virginia, as a Chesapeake Bay Program partner committed to "achieve a no-net loss of existing wetlands acreage and function in the signatories' regulatory programs." If Virginia is to meet this goal, wetland losses permitted through the tidal wetland regulatory program, no matter how small, must be replaced.

# 4VAC20-390-30 General Criteria.

It shall remain the policy of the Commonwealth to mitigate or avoid, minimize the loss of, and then compensate for impacts to wetlands and the adverse ecological effects of all permitted activities through the implementation of the principles set forth in the existing Wetlands Guidelines promulgated by the commission. To determine whether compensation is warranted and permissible a two-tiered mechanism will be implemented. This dual approach will consist first of an evaluation of necessity for the proposed wetlands loss (see specific criteria below). If the proposal passes this evaluation, compensation will be required and implemented as set forth in the second phase, the Supplemental Guidelines of this policy, 4VAC20-390-50.

The primary thrust of combining the existing Wetlands Guidelines with the two-tiered compensation guidelines aim is to preserve the wetlands as much as possible in their natural state and to consider appropriate requirements for compensation compensatory mitigation only after it has been proven that the loss of impact to the natural resource is unavoidable and that the project will have the highest public and private benefit.

# CHAPTER 4VAC20-390-10 ET SEQ.

A reading of the original Wetlands Act clearly indicates that the General Assembly intended for the Commonwealth's wetland resources to be preserved in their "natural state," and emphasized through its declaration of policy, the importance of an overall ecological approach to wetlands management.

"The Commonwealth of Virginia hereby recognizes the unique character of the wetlands, an irreplaceable natural resource which, in its natural state, is essential to the ecological systems of the tidal rivers, bays and estuaries of the Commonwealth." (Emphasis added)

The General Assembly has also originally stated that where economic development in the wetlands is clearly necessary and justified it will be accommodated while preserving the wetlands resource.

".... 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." (Originally adopted under § 62.1-13.1 of the Code of Virginia, now under Powers and Duties of the Commission pursuant to § 28.2-1301 of the Code of Virginia) (Emphasis added)

In § 28.2-1308 of the Code of Virginia the General Assembly mandated the preservation of the ecological systems within wetlands of primary ecological significance and then stated:

"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

# CHAPTER 4VAC20-390-10 ET SEQ.

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."

The General Assembly has clearly spelled out that "necessary economic development" is to be accommodated in Tidewater, Virginia, but that the emphasis is on wetlands preservation in their natural state.

Since use and development of tidal wetlands are regulated through the Wetlands Zoning

Ordinance, commitments to preserve other existing tidal wetlands are not ordinarily an acceptable form of compensation.

A permittee's commitment to preserve existing tidal wetlands can, under certain circumstances, be a form of compensatory mitigation.

Mitigation, including compensatory mitigation, shall be required for both vegetated and nonvegetated wetlands unless site-specific information indicates such mitigation is not necessary.

Where compensatory mitigation is required, the ratio of the area of required compensatory mitigation to the area of approved impact should, in most cases, be at least one to one.

# 4VAC20-390-40. Specific Criteria Repealed.

In order for a proposal to be authorized to destroy wetlands and compensate for same in some prescribed manner, the three criteria listed below must be met. If the proposal cannot meet one or more of these criteria, the activity shall be denied, or must occur in areas apart from the

#### CHAPTER 4VAC20-390-10 ET SEQ.

wetlands. Should it satisfy all three criteria, however, compensation for the wetlands lost is required. Since the proposed activity should stand on its own merits in the permit approval process, compensation should not be used to justify permit issuance.

- 1. All reasonable mitigative actions, including alternate siting, which would eliminate or minimize wetlands loss or disturbance shall be incorporated in the proposal.
- 2. The proposal shall clearly be water-dependent in nature.
- 3. The proposal shall demonstrate clearly its need to be in the wetlands and its overwhelming public and private benefits.

#### 4VAC20-390-50 Supplemental guidelines. Compensatory mitigation requirements.

A. When a permit is issued for the use or development of, or activities in, wetlands, the permit shall require, where appropriate, the provision of compensatory mitigation.

A. B. If compensation compensatory mitigation is required, then the following guidelines should be given due consideration and, if appropriate, may be included as conditions of the permit. In any case, on site compensation at the project site is the preferred location alternative with off-site, in the same watershed, as a consideration when on-site is not feasible. Locating a compensation site outside the river basin of the project is not acceptable unless it is done as part of a state-coordinated program of ecological enhancement. The sequence of acceptable the permit must specify the appropriate mitigation option and amount of mitigation required as a condition

#### CHAPTER 4VAC20-390-10 ET SEQ.

of the permit. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. Unless otherwise permitted by law, the compensatory mitigation should occur in, or have an approved service area that includes, the same USGS cataloging unit or adjacent USGS cataloging unit in the same watershed as the permitted project. The wetlands board or commission shall select the compensatory mitigation options should be as follows On-site, option in the following order of preference: (i) use of an approved mitigation bank (ii) use of an approved in-lieu fee program, (iii) permittee-responsible on-site and in-kind mitigation, or (iv) permittee-responsible mitigation through off-site or out-of-kind mitigation within the same watershed or mitigation bank in the watershed, or through a proffered payment of an in-lieu fee if on-site and off-site compensation are shown by the applicant to be impractical considering the project location.

C. Use of mitigation banks. Pursuant to § 28.2-1308 of the Code of Virginia, when any activity involving the loss of tidal wetlands authorized by the commission or a wetlands board is conditioned upon compensatory mitigation, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from any approved wetlands mitigation bank. Guidelines for the Establishment, Use and Operation of Tidal Wetland Mitigation Banks in Virginia have been promulgated by the commission. Unless the applicant can demonstrate compliance with specific criteria contained in § 28.2-1308 for use of a compensatory mitigation bank outside the watershed where a permitted project is located, the use of a mitigation bank for permitted activities requiring compensation must be in the same USGS cataloging unit or

CHAPTER 4VAC20-390-10 ET SEQ.

adjacent USGS cataloging unit in the same watershed. When approving the use of a compensatory mitigation bank the ratio of required compensation to approved loss number and type of credits the permittee is required to secure must be specified by the commission or wetlands board—and should incorporate the use of Function Specific Credit Calculation Method established by the Virginia Institute of Marine Science (VIMS) and contained in the Guidelines for the Establishment, Use and Operation of Tidal Wetland Mitigation Banks in Virginia. The credits secured should be of a type to replicate, as nearly as practicable, the functions of the wetlands impacted.

D. Approved in-lieu fee programs. An applicant may be permitted to satisfy all or part of any compensatory mitigation requirements by the purchase or use of credits from an approved in-lieu fee program. When approving the use of an approved in-lieu fee program, the number and type of credits the permittee is required to secure must be specified by the commission or wetlands board. The credits secured should be of a type to replicate, as nearly as practicable, the functions of the wetlands impacted.

B. E. Use of on-site and off-site compensation. When on-site or off-site compensation is required as a condition of permit approval, the following items should be considered. The commission or wetlands board may wish to condition any approval on the receipt of an acceptable compensation plan before issuance of the final permit for an approved project apply.

CHAPTER 4VAC20-390-10 ET SEQ.

- 1. A The applicant must provide a detailed plan, including a scaled plan view drawing, should be submitted describing the objectives of the wetland compensation, the type of wetland to be created, the mean tide range at the site, the proposed elevations relative to a tidal datum, the exact location, the areal extent, the method of marsh wetland establishment and, the vegetation to be planted, the exact time frame from initial work to completion, and an abatement plan for any plants listed on the Virginia Invasive Species Plant List promulgated by the Virginia Department of Conservation and Recreation. The plan should also include plans for address replanting areas where vegetation fails to grow. The permittee must secure approval of the plan by the commission or wetlands board prior to commencing impacts to tidal wetlands.
- 2. Once the grading is completed at the planting site, it should be inspected by a competent authority to <u>insure ensure</u> that the elevations are appropriate for the vegetation to be planted and that the surface drainage is effective.
- 3. The compensation plan and its implementation should be accomplished by experienced professionals knowledgeable of the general and site-specific requirements for wetland establishment and long-term survival.
- 4. A performance bond or letter of credit should be required and remain in force until the new wetland is successfully established; a minimum of two growing seasons <u>have passed</u> and a required planting success rate established by the commission or wetlands board has been achieved.

CHAPTER 4VAC20-390-10 ET SEQ.

- 5. The eompensation marsh replacement wetland should be designed to replace, as nearly as possible, the functional values functions of the lost resource on an equal or greater basis. In general this means creating a marsh of similar plant structure to that being lost. This may not be the case where a lesser value marsh is involved (i.e. Group 4 or 5 wetlands). A minimum 1:1 areal exchange is required in all cases. The ratio of required compensation to approved loss should be specified by the commission or wetlands board and may be based on the use of the Function Specific Credit Calculation Method established by the Virginia Institute of Marine Science (VIMS) and contained in the Guidelines for the Establishment, Use and Operation of Tidal Wetland Mitigation Banks in Virginia.
- 6. The compensation compensatory mitigation should be accomplished prior to, or concurrently with, the construction of the proposed project. Before any activity under the permit may begin, the permittee must own hold all interests in the compensatory mitigation site that are needed to carry out the compensatory mitigation.
- 7. All reasonable steps must be taken to avoid or minimize any adverse environmental effects associated with the eompensation compensatory mitigation activities themselves.
- 8. In selecting a compensation site, one aquatic community should not be sacrificed to "create" another. In cases where dredged material must be placed overboard, the area may be used to create marsh, oyster rock or improve the resource value of the bottom.

CHAPTER 4VAC20-390-10 ET SEQ.

9. The type of plant community proposed as compensation must have a demonstrated history of successful establishment in order to be acceptable.

10. Manipulating the plant species composition of an existing marsh community, as a form of compensation, is unacceptable.

11. Nonvegetated wetlands should be treated on an equal basis with vegetated wetlands with regard to compensation and mitigation, unless site-specific information indicates one is more valuable than the other.

12. 8. Both short-term and long-term monitoring of compensation compensatory mitigation sites should be considered on a case-by-case basis. For unproven types of compensation the applicant The permittee will be responsible for funding such monitoring as is deemed necessary.

13. 9. Conservation or other easements to be held in perpetuity should be required for the compensation marsh. Easements accepted by the commission will be processed in accordance with the provisions of § 28.2-1301 of the Code of Virginia An appropriate site protection instrument that will protect the site in perpetuity should be required for the compensatory mitigation site except in cases where both the impact to wetlands and the compensatory mitigation required are determined by the wetlands board or the commission to be de minimis.

CHAPTER 4VAC20-390-10 ET SEQ.

D. Use of in-lieu fees. The use of in-lieu fees should be the last form of mitigation used to offset permitted wetland losses and must be the result of an agreed upon permit condition between the applicant and the commission or wetlands board provided the applicant can demonstrate that on site or off site compensation options are not practical and no compensatory mitigation banks have been established in the project watershed. Localities are encouraged to establish a fund for such payments that is dedicated to tidal wetlands restoration and creation. At the local level this could be the same fund established for the receipt of civil charges or civil penalties. Administration of such a fund should include an ability to trace the contribution of in-lieu fees to eventual use in actual wetland restoration or creation projects. If payments are made to other dedicated wetland restoration funds, this should be recognized in the permit issued by the board. In no case should an in-lieu fee amount be accepted for less than the cost of necessary compensation acreage or the purchase of necessary credits in an approved bank. This is intended to prevent the avoidance of use of on-site or off-site compensation, or compensatory mitigation bank for a cheaper alternative that would not be able to fund the same level of wetland restoration or creation required by on-site or off site compensation or through use of a compensatory mitigation bank. Use of the fund could be for actual tidal wetland creation or restoration projects in the locality or for the purchase of credits in an approved compensatory mitigation bank that is authorized subsequent to the receipt of any in-lieu fee. Localities are encouraged to combine any in-lieu fee with other potential or available funds for wetland restoration or creation projects.

4VAC20-390-60. Ad hoc in-lieu fees.

CHAPTER 4VAC20-390-10 ET SEQ.

Compensatory mitigation requirements may be met by payment of an ad hoc in-lieu fee only in exceptional circumstances where federal regulators do not require compensatory mitigation and the applicant demonstrates that other forms of compensatory mitigation are not available. The use of ad-hoc in-lieu fees must be the result of an agreed upon permit condition between the applicant and the commission or wetlands board. Localities are encouraged to establish a fund for such payments that is dedicated to tidal wetlands restoration and creation. This could be the same fund established for the receipt of civil charges or civil penalties. Administration of such a fund should include an ability to trace the contribution of ad-hoc in-lieu fees to eventual use in actual wetland restoration or creation projects. If payments are made to other dedicated wetland restoration funds, this should be recognized in the permit issued by the commission or wetlands board. In no case should an ad-hoc in-lieu fee amount be accepted that is less than the cost, at the prevailing market rate, of establishing an area of wetlands that exceeds the area of wetlands impacted by a ratio of at least 2:1. Use of the fund could be for actual tidal wetland creation or restoration projects in the locality or for the purchase of credits in an approved compensatory mitigation bank that is authorized subsequent to the receipt of any ad-hoc in-lieu fee. Localities are encouraged to combine any ad-hoc in-lieu fee with other potential or available funds for wetland restoration or establishment projects

\* \* \* \* \* \* \* \* \* \*

This is to certify that the foregoing is a true and accurate copy of the chapter passed by the Marine Resources Commission, pursuant to authority vested in the Commission by §§28.2-103 and 28.2-1301 of the Code of Virginia, duly advertised according to statute, and recorded in the Commission's minute book, at meeting held in Hampton, Virginia on January 28, 2025.

CHAPTER 4VAC20-390-10 ET SEQ.

# COMMONWEALTH OF VIRGINIA MARINE RESOURCES COMMISSION

	BY:	
	Jamie L. Green Commissioner	
Subscribed and sworn to before me this	day of, 2025.	
	Notary Public	