

# 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, terms defined in the Wetlands Zoning Ordinance currently codified at Va. Code § 28.2-1302, as amended, shall have the same meaning when used herein. In addition, the following terms are defined:

**Banking Instrument:** The legally binding document drafted by the bank sponsor and approved by the Interagency Review Team which describes in detail the physical and legal characteristics of the bank and how the bank will be established and operated.

**Bank Sponsor:** Any public or private entity responsible for establishing or operating a mitigation bank.

**Cataloging Unit:** A geographic area representing part or all of a surface drainage basin, a combination of drainage basins, or a distinct hydrological feature. Cataloging units are depicted on the Hydrologic Unit Map of the United States (United States Geological Survey).

**Compensatory mitigation:** The restoration, establishment, or enhancement of wetlands resources for the purpose of offsetting unavoidable adverse impacts of a permitted activity which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Credit:** A unit of measure representing the accrual or attainment of wetland functions at a mitigation bank.

**Debit:** A unit of measure representing the loss of wetland functions due to a permitted activity at a project site.

**Enhancement:** Activities conducted in existing wetlands which heighten, intensify, or improve one or more wetland functions.

**Establishment:** The creation of a functional tidal wetland where one did not previously exist at an upland site.

**Interagency Review Team (IRT):** The interagency group of Federal, state, tribal and/or local regulatory and resource agency representatives, including but not limited to the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, U.S. Department of Agriculture – Natural Resource Conservation Service, National Oceanic and Atmospheric Administration, Virginia Marine Resources Commission, Department of Environmental Quality, the Virginia Institute of Marine Science, the Department of Wildlife Resources, Department of Conservation and Recreation – Natural Heritage Division, Department of Historic Resources, Department of Forestry, and local wetlands board(s) for the locality or localities in which the bank is

located, which approve a banking instrument and oversee the establishment, use and operation of a mitigation bank.

**Mitigation:** 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. Mitigation includes compensatory mitigation.

**Mitigation Bank:** A site where tidal wetlands are restored, established, or enhanced expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. **Preservation:** The protection of ecologically important wetlands or other resources in perpetuity through the implementation of appropriate legal and physical mechanisms.

**Restoration:** Re-establishment of wetland characteristics and functions where they have ceased to exist or exist in a substantially degraded state.

**Service Area:** The geographic area within which impacts can be mitigated at a specific mitigation bank.

**Success Criteria:** The minimum standards required to meet the objectives for which the bank was established.

**Tidal Wetlands Guidelines:** The latest version of the guidelines that scientifically evaluate vegetated and nonvegetated wetlands by type, describe the consequences of use of these wetlands types, and provide minimum standards for protection and conservation of wetlands promulgated by the Commission pursuant to § 28.2-1301(C) of the Code of Virginia.

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

#### IV. TIDAL WETLAND MITIGATION BANKING GUIDANCE

Any project in which the proponent proposes to use credits from an approved mitigation bank to compensate 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)
4. Section 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material (40 C.F.R. part 230)
5. Section 404 Permit Regulations (33 C.F.R. parts 320 through 330)
6. Compensatory Mitigation for Losses of Aquatic Resources (33 C.F.R. part 332; 40 C.F.R. part 230, subpart J).
7. 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).
8. Fish and Wildlife Coordination Act (16 USC §§ 661 et seq.).
9. U.S. Fish and Wildlife Service Mitigation Policy available [at https://www.fws.gov/policy/a1501fw2.pdf](https://www.fws.gov/policy/a1501fw2.pdf).
10. Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §§ 1801 et seq.).
11. National Marine Fisheries Service Habitat Conservation Policy
12. 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:

**A. Establishment of Tidal Wetland Mitigation Banks**

1. Any party or parties interested in creating a tidal wetland mitigation bank should first formally contact the Commission and the U. S. Army Corps of Engineers (Corps) through the submittal of a bank prospectus to provide notice of intent to establish a bank. This is critical for early review of site selection, development design, and technical feasibility of the proposed bank. The prospectus should include information on the objectives for the bank, how it will be established and operated, the bank's proposed service area, general need for, and technical feasibility of the proposed bank, proposed ownership arrangements and long-term management strategy for the bank, qualifications of the sponsor, and ecological suitability of the site to achieve the proposed bank's objectives.

2. Upon receipt of a complete prospectus, the Commission and Corps, as co-chairs, will establish the IRT to facilitate the development of the banking instrument. The banking instrument will serve as documentation of agency concurrence on the objectives and administration of the bank. While the majority of the information in the banking instrument is to be provided by the bank sponsor, the IRT will provide guidance where necessary to assure a complete and acceptable document. The banking instrument may be amended as necessary in accordance with the procedures used to establish the banking instrument and subject to agreement by the signatories. At a minimum, the banking instrument shall include the following information:

a. Bank goals and objectives, including a description of the resource types and approximate amounts that will be provided, the methods to be used for compensation, and the ecological resource needs within the watershed in which the bank site is located;

b. The identity of the party or parties responsible for the implementation, performance, and long-term management of the mitigation bank;

c. Bank size, baseline conditions, site plan, and specifications;

d. Mitigation work plan;

- e. Site protection instrument (e.g., conservation easement, enforceable declaration of restrictions, etc.);
- f. Geographic service area;
- g. Credit determination;
- h. Credit release schedule;
- i. Accounting procedures;
- j. Reporting protocols and monitoring plan;
- k. Default and closure provisions;
- l. Contingency and remedial actions;
- m. Financial assurances;
- n. Performance standards consistent with those set forth herein;
- o. Monitoring requirements;
- p. Maintenance plan for the monitoring period;
- q. Provisions for long-term management and maintenance;
- r. The bank sponsor's agreement to assume responsibility for a permittee's compensatory mitigation requirements once the permittee has secured the appropriate number and type of credits from the bank sponsor.

3. Individual banking instruments shall specify that the bank sponsor shall be accountable for all bank-related project costs including acquisition, administration, development, management, maintenance, monitoring, and remedial measures, as

necessary. A bond, letter of credit, or other financial assurance shall be required to provide alternative compensatory mitigation in the event of bank failure.

4. The following performance standards will be used to determine credit availability and level of success of a tidal mitigation bank:

a. IRT approved banking instrument, including specific marsh design and final elevation plans.

b. Acquisition of bank site and IRT approved financial assurances in the form of a bond, letter of credit, or other similar instrument.

c. Establishment and verification of proper tidal hydrology and substrate elevations relative to on-site tidal datum and satisfactory planting of bank site with proper wetland vegetation.

d. Minimum of 80% survival of plantings after the first growing season. If plant mortalities exceed 20%, the sponsor will have to replace those plantings or implement other remedial actions specified in the banking instrument.

e. Minimum 50% plant cover after one growing season.

f. Natural increase in the accumulation of organics in the bank substrate.

g. Natural recruitment of plant species within the bank.

h. Increasing primary production during the first three years.

i. Utilization by typical primary and secondary consumers.

j. Utilization by higher consumers (birds, mammals, fish, etc.).

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 for the proposal.

## **B. Criteria for the Siting and Design of Mitigation Banks**

1. The selection of a tidal wetland mitigation bank site should generally be based on: the restoration or establishment potential of the site; the existing resource value of the site; the size of the site; the location of the site; costs associated with land acquisition and site preparation; existing landscape characteristics and potential future land uses adjacent to the site; presence of contaminants at the site; potential for human intrusion at the site; and the ability of the sponsor to protect the functions of the bank site over the long-term. Where wetland establishment is undertaken, consideration should be given to establishing banks on sites having minor existing ecological value.<sup>3</sup>

Preservation of existing tidal wetlands will not generally be accepted as a basis for credits in a mitigation bank.

2. Mitigation banks should incorporate management strategies that contribute to overall water quality improvements in the ecosystem and that protect the ecological integrity of adjacent habitats (e.g., the use of buffers, acquisition of easements, etc.). Where practicable, provision should be made for wildlife migrational corridors between mitigation banks and other high-quality aquatic and upland habitats.

3. Every effort should be made to avoid establishing banks which require regular and intensive maintenance and management. Exceptions will only be made when the IRT determines that adequate procedures exist to ensure the permanent viability of the bank site.

4. Once a potential bank site has been identified, the IRT shall review the baseline site conditions to determine if the site has potential to develop credits.

5. Mitigation banking instruments shall contain a schedule and criteria governing withdrawal of credits from the bank. It shall specify the maximum credit withdrawals allowed prior to interim or final success determinations, as appropriate. Permitting agencies shall assure that withdrawal of credits from a bank will be in accordance with the schedules and criteria contained in the banking instrument.

## **C. Criteria for the Use and Operation of Tidal Mitigation Banks**

1. The IRT will review the operation of a mitigation bank, but it will not be responsible for specific operation protocols or any liabilities associated with bank operation. The bank



sponsor will be responsible for day-to-day operations and any liabilities associated with such operation.

2. The IRT will review the banking instrument, inspect the site, and determine the projected credits to eventually be available in a particular bank.

3. Prior to the withdrawal of credits from a mitigation bank, the IRT will determine if the bank is functioning, consistent with construction thresholds and success criteria specified in the banking instrument.

4. The IRT will establish a process or formula ("debiting plan") for translating compensation requirements into debits.

5. In certain instances, limited withdrawal of credits may be allowed by the IRT prior to demonstrating functional success of the bank. A maximum of 15% of the total credits projected for the bank may be available for early withdrawal only when all of the following requirements are satisfied:

a. The banking instrument and final mitigation plans have been approved by the IRT;

b. The bank site has been acquired and appropriate financial assurances have been established (e.g., bond or letter of credit).

c. The proper hydrology has been established and satisfactory initial plantings have been installed.

6. If during the wetland permit review process compensation is required, the applicant and/or the bank sponsor will assess the impacts of the project and determine the necessary amount of compensation through an established bank to achieve no net loss of wetland function. The IRT will review the assessment.

7. To evaluate the long-term success of operational mitigation banks, annual monitoring will generally be required for the first five years of bank operation. Thereafter, reporting should be continued at a regular interval, to be determined by the IRT and included in the banking instrument. Monitoring should provide sufficient written and graphic descriptions of bank conditions for the IRT to evaluate the effectiveness of bank management and verify the availability of compensation credits. Reporting

requirements may be discontinued after all the credits have been withdrawn from the bank, provided a minimum of three (3) years has passed since the bank was determined to be functioning successfully.

**D. Dispute Resolution**

The IRT will follow the dispute resolution process outlined in 33 C.F.R. § 230.98(e) or other applicable law.