



# **Wetland and Stream Replacement Fund In-Lieu Fee Mitigation Program**

## **Prospectus**

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Submitted to:  
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The Virginia Department of Environmental Quality (“Department”) is pleased to submit this Prospectus for the Wetland and Stream Replacement Fund In-Lieu Fee Mitigation Program (WSRF) to the U.S. Army Corps of Engineers, Norfolk District (“Corps”). This Prospectus has been prepared in accordance with the Corps and U.S. Environmental Protection Agency’s Compensatory Mitigation for Losses of Aquatic Resources Rule (“Federal Mitigation Rule”),<sup>1</sup> including the required elements of an in-lieu fee program prospectus outlined in 33 C.F.R. § 332.8.

The Commonwealth has a mature stream and wetland mitigation banking industry. These mitigation banks are backstopped by two competent in-lieu fee programs: the Virginia Aquatic Resources Trust Fund (VARTF) operating on a statewide basis and the Coastal Virginia Conservancy (formerly Living River Trust) serving the Elizabeth River watershed. Nevertheless, the Commonwealth has continued to experience periodic mitigation credit shortages in high-demand areas and more persistent shortages in areas with low demand.<sup>2</sup> The WSRF was conceived by the Virginia General Assembly as a public service to complement, not compete with, the Commonwealth’s mitigation banking industry and existing in-lieu fee programs. If a permittee or other eligible party needs mitigation credits, and no mitigation bank or in-lieu fee program can meet that need, the WSRF will be available to fill the gap.

## **I. OBJECTIVES OF THE WSRF**

The WSRF is intended to serve two principal objectives:

- **Ecological Objective.** The WSRF will support the Commonwealth and the Federal Mitigation Rule’s shared goal of “no net loss” of wetland area and stream and wetland function in any Virginia river watershed.
- **Public Service Objective.** The WSRF will provide a public service to the people of the Commonwealth by ensuring that a high-quality compensatory mitigation option is available for important economic development, public infrastructure projects, and other authorized activities in watersheds with shortages of mitigation bank and in-lieu fee program credits.

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<sup>1</sup> 73 Fed. Reg. 19594 (Apr. 10, 2008) (codified at 33 C.F.R. Parts 325 and 332 and 40 C.F.R. Part 230). Please refer to Appendix B for a regulatory compliance checklist documenting compliance with the above-referenced requirements.

<sup>2</sup> Department of Environmental Quality, *Review of Supply and Demand for Stream and Wetland Mitigation Credits and Incentivizing Dam Removal Projects in Virginia. A Report to the Chair of the House Committee on Agriculture, Chesapeake and Natural Resources* (Dec. 2022), available at <https://www.deq.virginia.gov/home/showpublisheddocument/23616/638508625377600000>.

These objectives are detailed in the remainder of this section, as well as the Compensation Planning Framework in Appendix A.

### **A. Ecological Objectives**

Twenty-five years ago, the Virginia General Assembly resolved to fill gaps in the Clean Water Act (CWA) Section 404 permitting program.<sup>3</sup> The legislature greatly expanded the Virginia Water Protection (VWP) Program to provide greater protection to the Commonwealth’s stream and wetland resources.<sup>4</sup> The expanded VWP program was modeled on the federal CWA 404 program—but with a broader scope. Since October 1, 2001, it has been unlawful to conduct any of the following activities in Virginia except in compliance with a VWP Permit:

- Excavate in a wetland;
- Cause a wetland to be drained;
- Place fill in a wetland;
- Permanently flood or impound a wetland;
- Cause significant alteration or degradation of wetland acreage or functions; or
- Alter the physical, chemical, or biological properties of a stream or wetland.<sup>5</sup>

These prohibitions extend beyond federally regulated Waters of the United States. The VWP program extends protection to isolated wetlands, wetland-type conversion, and streams regardless of flow regime.

This legislation set a high standard for VWP permits: for unavoidable impacts to aquatic resources,<sup>6</sup> VWP permits must require compensatory mitigation “sufficient to achieve *no net loss* of existing wetland acreage and functions.”<sup>7</sup> This standard has since been extended to streams.

The General Assembly set a similarly lofty standard for the type of compensatory mitigation that would be acceptable to meet its “no net loss” goal. Before issuing a VWP Permit that requires compensatory mitigation, the Department must evaluate the proposed method of mitigation to ensure that mitigation required by the permit (i) “is

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<sup>3</sup> 33 U.S.C. § 1344.

<sup>4</sup> 2000 Acts of Assembly Ch. 1032 (Apr. 19, 2000). The VWP program was expanded to provide additional protections for streams in 2007. 2007 Acts of Assembly Ch. 659 (Mar. 20, 2007).

<sup>5</sup> Va. Code § 62.1-44.15:20(A).

<sup>6</sup> This Prospectus uses the term “aquatic”—as in “aquatic resources” and “aquatic impacts”—to broadly refer to federally regulated “Waters of the United States,” 33 C.F.R. § 328.3(a), and Virginia-regulated “surface waters,” 9VAC25-210-10.

<sup>7</sup> Va. Code § 62.1-44.15:21(B) (emphasis added).

practicable and ecologically and environmentally preferable” and (ii) “offers the greatest likelihood of success and avoidance of temporal loss of acreage and function.”<sup>8</sup> To ensure consistency with the Corps’ CWA 404 program, the Department must also confirm that the compensatory mitigation requirements in VWP Permits are fully consistent with the Federal Mitigation Rule.<sup>9</sup>

Paralleling the Federal Mitigation Rule, the VWP Program allows compensatory mitigation to be provided in the form of (i) purchases of mitigation bank credits; (ii) purchases of in-lieu fee program credits; or (iii) permittee-responsible creation, restoration, or enhancement of aquatic resources. However, mitigation bank credits and in-lieu fee fund programs are not always available for use in certain watersheds. Because few parties are capable of successfully implementing aquatic resource creation, restoration, or enhancement projects that provide a high likelihood of success, the unavailability of mitigation bank or in-lieu fee program credits in a watershed can lead permit applicants to submit proposed compensatory mitigation plans that would not be considered ecologically and environmentally preferable under normal circumstances—such as proposals that include out-of-area or out-of-kind mitigation. The Department also believes that the lack of mitigation credits in some areas may contribute to unauthorized impacts. These situations jeopardize the Commonwealth’s goal of attaining no net loss of aquatic resource area and function.

The ecological objective of the WSRF is to advance the Commonwealth’s goal of ensuring that compensatory mitigation for aquatic resource impacts is sufficient to achieve “no net loss of existing wetland acreage and no net loss of functions in all surface waters [wetlands and streams]” in watersheds where mitigation bank and in-lieu fee fund program credits are not available.<sup>10</sup> In those situations, the WSRF will serve as a compensatory mitigation option to fund high-quality mitigation projects in the same area of aquatic resource impacts that is consistent with a watershed approach to conservation, improvement of water quality, and protection of aquatic species habitat. Through the WSRF, the Department and Corps can approve permits for activities in watersheds with no available mitigation bank or in-lieu fee fund credits while maintaining a high degree of confidence that the compensatory mitigation is adequate to achieve the no net loss goal.

The WSRF will also be available to provide compensatory mitigation for unauthorized activities that impact streams and wetlands. Many, if not most, violators lack competency to independently restore impacted resources and monitor them until appropriate success criteria are achieved. Even if a violator is generally competent to restore unauthorized

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<sup>8</sup> Va. Code § 62.1-44.15:21(B).

<sup>9</sup> *Id.*

<sup>10</sup> 9VAC25-210-116(A).

stream and wetland impacts, some impacts cannot be fully restored. In those cases, the violator may still be ordered to provide ecologically appropriate restitution by purchasing mitigation bank or in-lieu fee program credits. However, if unauthorized impacts occur in a watershed without available credits, there may be no practicable opportunities to replace lost wetland area or stream and wetland functions. The WSRF will provide violators compensatory mitigation opportunities where none other exist, thereby ensuring that compensatory mitigation may be provided for unauthorized impacts anywhere in Virginia. This anticipated use of the WSRF will further serve the ecological objective of avoiding the net loss of aquatic resource area and functions.

## **B. Public Service Objectives**

The second objective of the WSRF is to ensure that high-quality, ecologically responsible compensatory mitigation for aquatic resources is available wherever it is needed throughout the Commonwealth. The WSRF is not intended to replace or compete with private mitigation banks or existing in-lieu fee programs. Rather, the WSRF will serve as a compensatory mitigation provider of last resort that is available for use only when offsite mitigation is ecologically preferable to onsite alternatives, mitigation credits are not available from existing banks or in-lieu fee programs, and the applicant is not prepared to complete a permittee-responsible mitigation project.

The Commonwealth has a robust mitigation banking industry and two competent in-lieu fee programs.<sup>11</sup> Nevertheless, mitigation bank and in-lieu fee program credits are frequently unavailable in watersheds across the Commonwealth. While the mitigation banking industry and in-lieu fee programs are generally capable of meeting compensatory mitigation requirements if given sufficient time, some river watersheds have experienced unpredictable and rapid increases in demand for compensatory mitigation. Due to the lengthy development and approval process for new mitigation banks and projects, the supply of compensatory mitigation credits periodically lags behind increases in demand. Such credit shortages also may arise due to economic conditions, adverse weather, or various other causes.

The lack of effective compensatory mitigation options adversely affects the environmental and economic well-being of the Commonwealth. In the absence of high-quality mitigation credits, many project proponents have resorted to mitigation options that are lower on the Federal Mitigation Rule's hierarchy, such as permittee-responsible mitigation projects or out-of-kind mitigation. The Department also is aware of vitally important public utility and infrastructure projects, energy projects necessary to meet growing

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<sup>11</sup> VARTF operates a statewide in-lieu fee program, and the Coastal Virginia Conservancy does the same for the Elizabeth River watershed.

demands, and economically transformational developments that have been significantly delayed or canceled due to compensatory mitigation credit shortages.

The WSRF was created by the Virginia General Assembly and entrusted to the Department's oversight to remedy a well-known and longstanding problem of public concern. As described further below, the WSRF will allow eligible members of the public to purchase high-quality compensatory mitigation credits when no credits are available from approved mitigation banks or in-lieu fee programs. This service is provided as an insurance policy against transient mitigation credit shortages and potential pricing anomalies that can hinder public projects, economic development, and the replacement of lost aquatic resources. WSRF also will benefit the Commonwealth's mitigation banking industry by creating a source of funding that will be used to procure credits and mitigation projects from the industry in underserved watersheds. Lastly, because the fund will be administered by the state agency charged with protecting the Commonwealth's aquatic resources, the Corps and Department project managers can approve compensatory mitigation plans utilizing the WSRF with confidence that the goals of the Federal Mitigation Rule and its Virginia Water Protection Permit Program counterpart will be fulfilled.

## **II. REVIEW AND APPROVAL OF WSRF**

The WSRF requires approval by the Corps in consultation with participating members of the Interagency Review Team (IRT). The Department currently serves as a co-chair of the IRT, along with the Corps. To avoid any perceived conflicts of interest, the Department will recuse its designated representative to the IRT from participating in recommendations or decisions of the IRT related to the approval of the Prospectus, Program Instrument, or any subsequent modifications thereto—except to the extent that such participation would be normal and appropriate for any Sponsor with business before the IRT.

State law and regulations outline additional requirements and criteria for the review and approval of proposed in-lieu fee programs by the Department and State Water Control Board ("Board").<sup>12</sup> However, those requirements are inapplicable to the WSRF because it has been expressly created and authorized by the General Assembly without a Departmental or Board-approval mandate.<sup>13</sup> Nevertheless, this Prospectus has been developed to comply with the approval criteria that apply to other in-lieu fee programs.<sup>14</sup>

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<sup>12</sup> Va. Code § 62.1-44.015:21(B); 9VAC25-210-116(D).

<sup>13</sup> Va. Code § 62.1-44.15:23.1.

<sup>14</sup> 9VAC25-210-116(D).

### **III. ESTABLISHMENT AND OPERATION**

The Virginia General Assembly authorized the establishment of the WSRF in 2013. The WSRF's enabling legislation was amended in 2021 and 2023, and the current authorization for the project is codified in Section 62.1-44.15:23.1 of the Code of Virginia.<sup>15</sup>

Through the proposed Program Instrument, the Department will manage the WSRF to provide a compensatory mitigation backstop throughout the Commonwealth. To do so, the Department will screen applicants for WSRF credits and use the funds received for WSRF credits to: (1) buy credits from mitigation banks as they become available; (2) purchase released credits from other in-lieu fee programs if available; or (3) solicit requests for proposals for one or more WSRF-funded mitigation projects if no mitigation bank credits are available within two years of the Department receiving WSRF credit funds. The Department will avoid competition with existing mitigation credit providers by pricing WSRF credits at levels above existing mitigation bank and in-lieu fee program prices and by applying a credit purchase eligibility policy. This framework will advance the Commonwealth's no net loss policy and still provide mitigation credits in watersheds with limited mitigation options while avoiding ILF competition for mitigation credits in those watersheds with sufficient supply.

To ensure the WSRF can serve its intended purpose of providing a backup provider of mitigation credits wherever needed in the Commonwealth, the program will operate in eleven service areas covering the entire state. The service areas generally correspond with the Commonwealth's major river watersheds, as defined in Section 62.1-44.15:23 of the Code of Virginia.<sup>16</sup>

#### **A. Management and Oversight**

The Department's Office of Permitting Assistance will administer the WSRF in coordination with the Virginia Water Protection Permit Program.<sup>17</sup> The Department will conform to the Federal Mitigation Rule, approved In-Lieu Fee Program Instrument, and applicable provisions of the Code of Virginia while administering the WSRF.

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<sup>15</sup> 2013 Acts of Assembly Ch. 742 (Apr. 3, 2013), as amended and reenacted by 2022 Acts of Assembly Ch. 206 (Mar. 22, 2023). Copies of relevant statutory authorities are included in Appendix D.

<sup>16</sup> Refer to Section IV. Although two service areas—(1) Chesapeake Bay and its Small Coastal Basins and (2) Atlantic Ocean—are not based on rivers, the term “river watershed” is used in this Prospectus for simplicity and consistency with the WSRF's enabling legislation.

<sup>17</sup> The Department periodically reorganizes its internal office designation and naming conventions. Administration of the WSRF may be nominally reassigned to a different office within the Department in the future, but such change would have no effect on the administration of the program.

The Department may seek to engage a qualified contract manager to implement specified tasks, such as the day-to-day management of WSRF activities and the preparation of reports. Any third-party management contractor will be engaged in accordance with established state procurement laws, regulations, and policies, with concurrent notice to the IRT. The Department will provide ongoing oversight and responsibility for the contract manager's activities. The IRT will be provided with notice of the engagement of a third-party management contractor, including the manager's qualifications and scope of services, and any subsequent changes thereto.

### **B. Handling and Use of Mitigation Funds**

Payments made to the WSRF will be received by the Department and held in accounts maintained by the State Treasurer in accordance with state law and the approved Program Instrument. Payments and disbursements of mitigation funds will be made by the State Treasurer in response to written requests from the Department Director. Refer to Section VIII for further details on the operation and release of funds from the WSRF program accounts.

Operational control of mitigation funds held by the WSRF will rest with the Department's Office of Permitting Assistance staff, subject to approval by the Corps in consultation with the IRT, to use the funds in accordance with the approved Program Instrument. Moneys in the WSRF may be used for any of the following purposes:

- Purchase mitigation bank credits as outlined in Section III.C.1;
- Purchase released credits from in-lieu fee programs as provided in Section III.C.2;
- Make payments to entities that have been awarded contracts to develop and construct wetland and stream mitigation projects as stated in Section III.C.3;
- Defray the Department's reasonable costs to administer the WSRF; and
- Any other purpose approved by the Corps in consultation with the IRT.

### **C. Compensatory Mitigation Procurement by the WSRF**

The WSRF's primary function is to consolidate funds from permitted projects and unpermitted actions in surface waters regulated by the Commonwealth and/or the United States where mitigation bank or in-lieu fee program credits are not otherwise available and to use those pooled resources to accomplish more effective compensation projects involving the restoration, enhancement, and preservation of wetlands and streams than most individual actors are capable of. Pooling mitigation resources in this manner leads to a greater chance of ecological success at the watershed level than smaller, distributed mitigation projects or out-of-area or out-of-kind mitigation. The WSRF will use its pooled

funds to take one of the following actions in the relevant watersheds: (1) purchase mitigation bank credits if available; (2) purchase released credits from an approved in-lieu fee program; or (3) procure the development of projects to restore, enhance, and preserve wetlands and streams consistent with the Federal Mitigation Rule.<sup>18</sup>

In accordance with the Federal Mitigation Rule's hierarchy for the type and location of compensatory mitigation, the Department generally will pursue the three options listed above in a stepwise manner—subject to the overriding consideration of environmental preferability.<sup>19</sup> The WSRF will give priority to the purchase of mitigation bank credits in the relevant watershed. If no such credits are available, the WSRF will look for released credits from another in-lieu fee fund program. If applicable and environmentally preferable credits are not available from either source, the Department will follow its public procurement process to engage a third party to undertake stream and wetland restoration, enhancement, and/or preservation projects. The WSRF's enabling legislation guides the processes the WSRF will follow to procure compensatory mitigation.<sup>20</sup> These processes are described below.

### **1. Mitigation Bank Credit Purchases**

For each approved payment to the WSRF to compensate for an aquatic impact, the Department will purchase mitigation bank credits as soon as practicable if qualifying credits become available in the relevant Service Areas.<sup>21</sup> Credit purchases will be made in accordance with the Compensation Planning Framework. The Department anticipates that mitigation bank credit purchases may become available under various circumstances, including the following: (1) new or existing mitigation banks secure approval for new credit releases; (2) previously released credits become available due to the expiration or cancelation of credit reservations, option contracts, or other similar mechanisms; or (3) mitigation bank sponsors accept the return of previously purchased but unused credits.

If a sufficient number of mitigation bank credits have not become available within the two years after the WSRF has collected payment for a specific aquatic impact, the Department will determine if there is a significant likelihood that such credits will become available within the next year (i.e., three years after the payment to the WSRF). Circumstances that

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<sup>18</sup> It is foreseeable the WSRF could be expanded in the future to provide other forms of mitigation, such as nutrient credits. Before undertaking such an expansion, the Department would consult with the IRT and, if necessary, seek an appropriate modification of the Program Instrument.

<sup>19</sup> 40 C.F.R. § 230.93(b).

<sup>20</sup> Va. Code § 62.1-44.15:23.1.

<sup>21</sup> As used in this Prospectus, “qualifying” credits means credits from a mitigation bank or other in lieu fee fund program where the aquatic resource impact is in the approved primary or secondary service area of the bank or program credit. This term will be defined in the proposed Program Instrument.

may allow the Department to determine that credits will become available within one year could include, for example, a pending credit release request under review by the IRT. If the Department makes such determination, it will take reasonable and prudent steps to secure its right to obtain those credits, such as by pursuing a binding credit reservation agreement with the bank sponsor.

If the Department determines that qualifying mitigation bank credits are *not* likely to become available within three years of accepting payment for an aquatic impact, the Department will proceed to the next step in the hierarchy: purchase of released credits from another in-lieu fee program.

## **2. Released Credit Purchases from Other In-Lieu Fee Programs**

If mitigation bank credits have not become available within two years of the date the WSRF accepts payment for an aquatic impact, and the Department determines that such credits are not likely to become available within the next year, then the WSRF will purchase qualifying released credits (not advance credits) from another in-lieu fee fund program if available.<sup>22</sup> The purchase will be made as soon as practicable after the Department deems it unlikely that mitigation bank credits will become available.

If qualifying released credits are not available from another in-lieu fee program (or such credits are determined to not present the environmentally preferable option), the Department will proceed to the next step in the hierarchy: a WSRF-funded mitigation project.

## **3. WSRF-Funded Mitigation Projects**

If neither mitigation bank credits nor released in-lieu fee program credits are available within two years of the date the WSRF accepts payment for an aquatic impact, and the Department determines that mitigation bank credits are not likely to become available within the subsequent year, the Department will promptly commence the process of procuring one or more WSRF-funded mitigation projects. Such projects may include the planning, construction, monitoring, and preservation of wetland and stream mitigation projects, and/or the preservation, enhancement, or restoration of upland buffers adjacent to wetlands or other state waters when used in conjunction with the creation or restoration of wetlands and streams.

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<sup>22</sup> The enabling legislation does not allow the WSRF to purchase advance credits from another in-lieu fee provider. Va. Code § 62.1-44.15:23.1.

The Department will not directly plan, build, or implement any mitigation projects. Instead, the Department will develop and issue Requests for Proposals (RFP) in accordance with state procurement laws, regulations, and policies.<sup>23</sup> RFPs will seek third-party proposals for mitigation projects within the appropriate operational Service Area. RFPs will specify, among other things, that each proposed mitigation project must meet the criteria as detailed in the Federal Mitigation Rule and VWP program regulations, including provisions for long-term stewardship and maintenance. Additionally, the Department may consider proposals from third-party mitigation bank sponsors offering to contract for the sale of expected mitigation bank credits prior to their release. In the latter case, the Department will consider mitigation bank sponsors who can demonstrate to the Department's satisfaction that the timing and likelihood of credit release approval similar to the timing and likelihood of project success for a comparable project.<sup>24</sup> The Department will review and grade RFPs based on their ability to achieve identified restoration priorities and objectives.<sup>25</sup>

Each RFP will state that the contract award is contingent upon the Corps' review and preapproval of the proposed projects and use of WSRF funds in consultation with the IRT. The Department will recuse its designated representative to the IRT from participating in the IRT's recommendation on any proposed WSRF-funded projects. Upon the award of a contract for a mitigation project and approval by the Corps, the awardee will commence (or continue) the project subject to oversight by Department staff or the Fund manager in coordination with the Department.

#### **4. Mitigation Bank Credits from Elsewhere in the River Watershed**

In some circumstances, the purchase of mitigation bank credits from elsewhere in the river watershed (i.e., outside the primary and secondary service areas) may present the most ecologically and environmentally preferable mitigation option. This scenario is most likely when the impacts to be mitigated are less than one acre in a single and complete project within a subbasin and the available funds would not support the development of a mitigation project in that area with a high likelihood of success. Other factors, such as the availability of suitable mitigation sites and the overall needs of the watershed, also

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<sup>23</sup> An RFP template will be included with the proposed Program Instrument.

<sup>24</sup> For example, assume RFP Respondent 1 proposes a project and demonstrates that there is a high likelihood that the project will be completed successfully in 18 months. RFP Respondent 2, a mitigation bank sponsor, proposes a contract for the sale of credits from an expected future credit release. If the second response demonstrates that there is the same high likelihood of success that it will secure approval of the expected credit release at the same time (18 months), the Department would consider the two proposals to be comparable (all other things being equal).

<sup>25</sup> As a final alternative, and subject to consideration of ecological and environmental preferability, the Department may contract for the purchase of released or pending mitigation bank credits elsewhere in the same operational Service Area (river watershed).

may lead the Department to determine that mitigation bank credits from elsewhere in the river watershed present the most ecologically and environmentally preferable mitigation option.

## **5. Flexibility to Implement the Most Ecologically and Environmentally Preferable Mitigation Option Available**

It is foreseeable that circumstances may arise in which a deviation from the hierarchy described above presents the most ecologically and environmentally preferable mitigation option for the use of WSRF funds. If specific circumstances cause the Department to conclude that following the hierarchy outlined above would not result in the most ecologically and environmentally preferable mitigation option, the Department will submit a request to the IRT. The Department will not deviate from the hierarchy without prior approval from the Corps. The forthcoming proposed Program Instrument will outline the process for such requests.

### **D. Eligibility Criteria to Purchase and Use WSRF Credits**

The WSRF will sell mitigation credits to any prospective purchaser,<sup>26</sup> provided the purchaser's intended use of the credits meets the eligibility requirements summarized in this section.

Upon approval by an appropriate permitting agency, enforcement agency, or court requiring compensatory mitigation, credits generated by the WSRF may be used as mitigation for any of the following purposes:

- Aquatic impacts authorized by a general or individual permit issued by the Corps and/or Department;
- After-the-fact permits issued by the Corps or Department for aquatic impacts;
- Orders issued through administrative or judicial enforcement actions requiring the purchase of mitigation credits for aquatic impacts;
- Supplemental environmental projects approved by order of a court or enforcement agency; and
- Any other purpose deemed acceptable by an appropriate federal or state agency.<sup>27</sup>

In addition to restricting the use of credits to the purposes listed above, the WSRF will be operated to fulfill its intended purposes and objectives. As outlined in Section I, the WSRF

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<sup>26</sup> For clarity, the Department's use of the term "prospective purchaser" includes agents and employees of the permit applicant or other party in interest.

<sup>27</sup> 40 C.F.R. § 230.93(g); Va. Code § 62.1-44.15:23.1; 9VAC25-210-116(D).

is meant to serve as compensatory mitigation option of last resort, when compensatory mitigation credits are not available from a mitigation bank or other in-lieu fee program and the purchase of credits from the WSRF is deemed ecologically and environmentally preferable by the appropriate agency.

The proposed Program Instrument will include a policy generally restricting the sale of WSRF credits to a prospective purchaser if the aquatic impact site is within the approved service area of a mitigation bank or in-lieu fee program that has credits available for purchase. Nevertheless, the policy will permit the sale of credits in appropriate circumstances where the Department determines that released or advance credits are unavailable as a practical matter, including the following situations:

- All other mitigation bank or in-lieu fee credits that could be acquired by the prospective purchaser are subject to reservations, option contracts, or other encumbrances;
- The mitigation bank or in-lieu fee program owner refuses to sell credits to the prospective purchaser for mission-driven beliefs or conflicts of interest;
- The prospective purchaser's aquatic impact site is in the secondary service area of a mitigation provider with available credits, and such credits will not be accepted by another relevant agency, such as the Corps, to satisfy a mitigation condition in a permit or order issued by that agency;
- Mitigation bank credits cannot be obtained under commercially reasonable terms. Reasonableness decisions will be made on a case-by-case basis based on the relevant facts. However, the Department will apply a presumption that any mitigation bank credits that are priced higher than comparable WSRF credits are not being offered under commercially reasonable terms.<sup>28</sup>

Recognizing it is not possible to predict all future circumstances, the policy will reserve the Department's authority to sell WSRF credits in other unusual situations if the Department determines that doing so is consistent with the objectives of the WSRF and the policies documented in the Program Instrument.

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<sup>28</sup> To ensure WSRF credit prices remain a viable alternative, the Department expects that the fair market price of mitigation bank credits will generally not exceed WSRF prices. WSRF credit prices are established as a multiplier of comparable Virginia Aquatic Resources Trust Fund (VARTF) credit prices (Section III.F), a methodology consistent with the General Assembly's view that mitigation bank credit prices at or above 200% of the VARTF price may be considered commercially unreasonable (Va. Code § 62.1-44.15:23(C)).

Furthermore, the Department must operate in accordance with various nondiscrimination laws, regulations, and policies. Accordingly, the policy will state that the Department will not deny credit sales to any prospective purchaser who is eligible to obtain credits from the WSRF in accordance with the provisions of the Program Instrument.

#### **E. Method for Determining the WSRF's Mitigation Procurement Needs**

The WSRF will not operate as a traditional in-lieu fee program in all respects. Instead, the WSRF will be operated to fulfill the two objectives described in Section I. Those two objectives will dictate the Department's approach to determining how it will procure mitigation to satisfy the responsibilities it assumes when it sells credits from the WSRF.

To reiterate, the public policy objective of the WSRF is to ensure the public always has a reliable source of compensatory mitigation that can bridge the gaps in available compensatory mitigation during periods when other forms of compensatory mitigation are not available. In most cases, it is assumed that the unmet demand for credits in a watershed is temporary, and the need will be filled by the private mitigation banking market or other approved in-lieu fee fund programs (e.g., VARTF) in time. When the supply of credits in a watershed rebounds, the WSRF's purpose has been served, and its role is done. The WSRF is not intended to remain available in that watershed to compete with mitigation banks or other in-lieu fee programs. Accordingly, the objective of the WSRF generally is not served by procuring or holding excess credits in watersheds with other available credit sources.<sup>29</sup> Fulfilling this objective is also why mitigation credit prices for the WSRF must be set at a level that is intended to be non-competitive with mitigation banks and other in-lieu fee programs.

Conversely, the ecological objective of the WSRF is to ensure that the Commonwealth's goal of "no net loss" of stream and wetland function and wetland area is achieved. In furtherance of this objective, the proposed WSRF Credit Price Schedule includes a reasonable contingency for unexpected events, including extraordinary increases in the cost of compensatory mitigation credits or mitigation projects and to preserve the program's ability to procure mitigation at higher ratios anywhere within an operational Service Area such that "no net loss" is achieved.<sup>30</sup> When not needed for other contingent events, the WSRF compensatory mitigation procurement policy will seek to provide full compensation for permanent losses of aquatic resources *and*—provided the necessary funds are available—the temporal loss of aquatic functions and values that can result from

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<sup>29</sup> As discussed below, there is one scenario in which the WSRF may hold excess credits.

<sup>30</sup> Va. Code § 62.1-44.15:23.C (authorizing compensatory mitigation in "secondary service areas" but requiring three times the credits or mitigation for wetland impacts and two times for stream impacts).

the lag between when a resource is impacted in reliance on a credit sold by WSRF and when compensatory mitigation can be procured by the WSRF.

The WSRF mitigation procurement policy has been crafted to balance these two objectives. The proposed credit price calculation formula detailed in the next section will generate credit prices that are significantly higher than what the private market is likely to provide (when such credits are available). In most reasonable circumstances, the Department assumes that the mitigation credit payments made to the WSRF for a specific impact will exceed the cost that will be incurred by the WSRF to procure sufficient mitigation for that impact (as detailed later in this section). Given that WSRF generally is not intended to procure and hold excess mitigation credits for future sales, the question is how to employ the funds in a manner that best serves the WSRF's objectives.

Accordingly, the Department intends to calculate its compensatory mitigation needs and use any excess monies in accordance with the methods outlined in the following two subsections.<sup>31</sup> Note that the methods discussed below are not necessarily presented in the order of preference; decisions about which mitigation option to pursue will be made by the Department in accordance with the hierarchy outlined in Section III.C as informed by the Mitigation Planning Framework.

### **1. Calculation of WSRF's Credit Procurement Needs when Purchasing Credits from Mitigation Banks or Other In-Lieu Fee Programs**

Applying the hierarchy outlined in Section III.C, the WSRF generally will be obligated to purchase credits from mitigation banks or other in-lieu fund programs if qualifying credits have become available. In those situations, the Department will follow the two-step process outlined in this section to determine the number of credits to acquire.<sup>32</sup> First, the Department will determine the minimum number of credits it must procure to fulfill the compensatory mitigation obligations it has assumed for each credit sold by the WSRF—i.e., the “baseline” credit need. Second, if there are remaining proceeds from the WSRF credit sales, the Department will acquire additional credits to compensate for temporal loss of wetland and stream functions and values. These two steps are described further below.

#### **a. Step 1: Determine Baseline Credit Acquisition**

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<sup>31</sup> For clarification, actions referenced in this section as being taken by the “Department” or “WSRF” may include, as appropriate, actions by a third-party manager engaged by the Department to administer the program on a day-to-day basis.

<sup>32</sup> The WSRF will not pay more than commercially reasonable prices for mitigation bank credits or the published prices for released in-lieu fee program credits.

The WSRF will maintain a ledger of the location and date of each WSRF credit sale within a river watershed Service Area. The WSRF also will monitor the status of actual and pending mitigation bank credit releases in each Service Area. If qualifying mitigation bank credits (1) become available within two years of the date a WSRF credit sale or (2) are likely to become available within the subsequent year, the Department will seek to procure those credits as soon as practicable at a 1:1 ratio for each WSRF credit sold within the primary service area of the bank.<sup>33</sup> For any WSRF credit sales within the secondary service area of the bank, the Department will seek to acquire wetland mitigation credits at a 3:1 ratio and stream mitigation credits at a 2:1 ratio.<sup>34</sup>

If the Department determines within two years of a WSRF credit sale that no qualifying mitigation bank credits will become available within three years, the Department will select the most ecologically and environmentally preferable mitigation opportunity in accordance with the hierarchy described in Section III.C. In some cases, the hierarchy will result in a decision to procure qualifying released credits from another in lieu fee fund program or mitigation bank credits from elsewhere in the river watershed.<sup>35</sup> If the Department acquires released mitigation credits from another in lieu fee program, it will obtain credits at a 1:1 ratio if the impact to be mitigated is within the approved geographic service area of the program. If the impact to be mitigated is within the secondary service area of released in lieu fee fund program credits (provided a secondary service area is defined for such credits), then the Department will seek to acquire wetland mitigation credits at a 3:1 ratio and stream mitigation credits at a 2:1 ratio.

If the acquisition of mitigation credits from a mitigation bank elsewhere in the river watershed (outside the bank's secondary service area) is determined to be the most ecologically and environmentally preferable option, the Department will calculate its baseline credit need using the ratios that apply to secondary service areas (i.e., 3:1 ratio for wetlands and 2:1 ratio for streams).

**b. Step 2: Determine Supplemental Credit Acquisition to Account for Temporal Loss (If Funds Available)**

After determining the minimum number of mitigation credits needed to satisfy the WSRF's "baseline" mitigation obligations, the Department will calculate the cost to purchase those credits (i.e., number of credits times the credit price). Next, the Department will subtract its reasonable program administrative costs from the remaining net proceeds of the sale of WSRF credits. Provided there are remaining credit sale

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<sup>33</sup> Va. Code § 62.1-44.15:23.B.

<sup>34</sup> Va. Code § 62.1-44.15:23.C.

<sup>35</sup> The Department also may issue an RFP soliciting mitigation projects and/or future bank credits. This third option is discussed in Section III.E.2, below.

proceeds, the WSRF will increase its mitigation credit purchase by 10% per year (pro-rated for partial years) between (1) the date the WSRF credits were sold, and (2) the date the WSRF procures mitigation credits from a mitigation bank or in-lieu fee program to satisfy its obligations.<sup>36</sup> The additional credit purchase is intended to meet the WSRF's objective of no net loss of aquatic functions and values by providing compensatory mitigation for the temporal loss resulting from the lag as well as an additional margin of safety.

If the remaining proceeds from the WSRF credit sale (after satisfying the WSRF's baseline mitigation obligation and administrative expenses) are insufficient to cover the entirety of the *supplemental* 10% per year mitigation credit purchase, then the Department will purchase as many additional credits as the remaining funds allow. Conversely, if there are remaining proceeds from the WSRF credit sale after deducting the Department's administrative costs and the cost of the mitigation credits (including the supplemental credits), the leftover funds will remain in the WSRF program account.

The following example illustrates the credit purchase policy outlined above. For the sake of simplicity, assume the WSRF sells 1 non-tidal wetland mitigation credit to a permittee at a price of \$300,000 per credit. On the two-year anniversary of the sale, non-tidal wetland mitigation credits become available from a qualifying mitigation bank for \$100,000 per credit. After adding the supplemental credit purchase for temporal loss and risk (10%/year x 2 years), WSRF would purchase 1.2 non-tidal wetland mitigation credits from the bank. In this hypothetical, WSRF would use the credit sale proceeds as follows:

	\$300,000	<i>Credit sale proceeds in WSRF Program Account</i>
<i>Less</i>	<u>\$30,000</u>	<i>Deduction for WSRF administrative expenses (10%)</i>
	\$270,000	<i>Available in WSRF Program Account for procuring mitigation</i>

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<sup>36</sup> Various methodologies have been developed for calculating temporal loss. For example, the Huntington and Pittsburgh Districts (West Virginia Stream and Wetland Valuation Metric) and Nashville and Memphis Districts (Tennessee Stream Quantification Tool) apply a multiplier of 3% per year for the duration of temporal loss in West Virginia and Tennessee, respectively. Other states and districts factor temporal loss into more complex calculations that incorporate temporal loss multipliers ranging from 2% to 15% per year. See, e.g., Jacksonville District Wetland Rapid Assessment Procedure; Environmental Law Institute, *Assessing Stream Mitigation Guidelines at the Corps District and State Levels (2016)* (summarizing methodologies). For the purposes of the WSRF, the Department has not attempted to develop a new temporal loss calculation methodology. Instead, the Department has selected a reasonable multiplier (10% per year) that is within the range multipliers developed by other Corps districts and states. Furthermore, the Department selected a number that is toward the higher end of that range with the purpose of incorporating a qualitative margin of safety to account for the inherent risks of operating an in-lieu fee program. The Department emphasizes that the 10% multiplier is a *policy choice* for administering the WSRF. It would not be appropriate for third parties to cite the multiplier as authority or precedent for calculating temporal loss mitigation values in other contexts, such as permit applications or enforcement actions.

Less \$100,000 WSRF's cost to purchase one mitigation bank credit  
Less \$20,000 Cost of 0.2 credit for temporal loss/risk (10%/year x 2 years)  
\$150,000 Remaining in WSRF Program Account for other uses allowed by  
the Program Instrument

This approach strikes an appropriate balance between the two program objectives. The WSRF has procured enough credits to ensure that the goal of no net loss has been achieved without causing undue manipulation of the private credit market.

## **2. Calculation of WSRF's Credit Procurement Needs when Soliciting Bids to Implement a Mitigation Project**

If the Department determines that a mitigation project is the most ecologically and environmentally preferable mitigation option in accordance with Section III.C, the WSRF will issue an RFP to solicit proposals from qualified bidders to undertake a compensatory mitigation project for the WSRF. The Department will prepare an RFP for a mitigation project that is designed to generate sufficient compensation to offset the sale of WSRF credits plus an additional 10% of the credits per year for each year between the date the WSRF credits were sold and the expected mitigation project construction date.

The Department will apply the mitigation ratios discussed above to any mitigation projects proposed in response to an RFP.<sup>37</sup> For proposed mitigation projects in the same or adjacent 8-digit Hydrologic Unit Code (HUC) subbasins (within the same river watershed) as credits sold by WSRF, mitigation projects will be subject to a 1:1 mitigation ratio. Proposed mitigation projects in the same watershed but *not* within the same or adjacent 8-digit HUC subbasin would be subject to a 3:1 ratio for wetland credits and 2:1 ratio for stream credits. For example, if an RFP is issued to procure a mitigation project to offset 10 stream credits sold by the WSRF for impacts at a single location, a proposed mitigation project within the same or adjacent 8-digit HUC subbasins would have to provide a baseline of 10 stream credits (1:1 ratio). However, the RFP would specify that any proposed mitigation projects located *outside* of the same or adjacent 8-digit HUC subbasins as the impact being mitigated must generate a baseline of 20 stream credits (2:1 ratio). Accordingly, RFPs will list the eligible 8-digit HUC subbasin within the target Service Area (river watershed) and identify the number of stream or wetland credits that must be supplied depending on the location of a proposed mitigation project.<sup>38</sup>

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<sup>37</sup> Section III.E.1.

<sup>38</sup> Consistent with the Compensation Planning Framework, RFPs may restrict or state preferences for proposed mitigation projects within identified 8-digit HUC subbasins.

To determine the number of additional credits to be procured to compensate for temporal loss, the Department will include an expected construction start date in the RFP. The Department may eliminate all or part of the desired *supplemental* mitigation for temporal loss from the RFP if the lowest qualifying bid price exceeds the funds available in the Program Account for the project (including proceeds from the underlying WSRF credit sale and reserve proceeds). This process is illustrated in the scenarios below.

Scenario 1: WSRF Credit Proceeds Sufficient to Cover Entire Credit Need

Assume the Department is developing an RFP for a mitigation project that is intended to offset 10 non-tidal wetland mitigation credits sold by the WSRF. Those credits were sold for \$300,000 each, with total credit sale proceeds of \$3,000,000. After deducting administrative expenses (10%), \$2,700,000 is left in the Program Account to procure mitigation. The expected construction start date stated in the RFP is three years after the date the WSRF credits were sold. Applying the temporal loss/risk multiplier discussed above, the Department expects to procure 13 mitigation credits to compensate for the 10 WSRF credits sold plus three years of temporal loss/risk adjustment (at 10%/year). The lowest qualifying bid for 13 credits is \$2,000,000. In this scenario, the WSRF credit sale proceeds *exceed* the estimated costs to procure 13 mitigation credits. The Department will proceed to execute a contract for 13 credits.

\$3,000,000 *Credit sale proceeds in WSRF Program Account*  
Less \$300,000 *Deduction for WSRF administrative expenses (10%)*  
\$2,700,000 *Net proceeds in WSRF Program Account for procuring mitigation*

\$2,000,000 *Lowest qualifying bid for 13 credits*

Result: *Department executes a contract for 13 credits at a cost of \$2,000,000.*

Scenario 2: WSRF Credit Proceeds and Reserves Sufficient to Cover Entire Credit Need

The assumptions are the same as above, except the lowest qualifying bid for 13 credits is \$3,100,000. Assume the WSRF has at least \$500,000 available reserve funds in the Program Account from prior credit sales within the same Service Area.

\$3,000,000 *Credit sale proceeds in WSRF Program Account*  
Less \$300,000 *Deduction for WSRF administrative expenses (10%)*  
\$2,700,000 *Net proceeds in WSRF Program Account for procuring mitigation*

Plus \$500,000 *Unallocated reserve funds in the Program Account*

\$3,200,000 *Total funds in Program Account available to procure mitigation*

\$3,100,000 *Lowest qualifying bid for 13 credits*

Result: *The Program Account has sufficient funds to cover the lowest qualifying bid, so the Department executes a contract for 13 credits at a cost of \$3,100,000.*

### Scenario 3: WSRF Credit Proceeds and Reserves Insufficient to Cover Entire Credit Need

The assumptions are the same as Scenario 2, except the total of unallocated funds in the Program Account from prior credit sales within the relevant Service Area is \$200,000.

\$3,000,000 *Credit sale proceeds in WSRF Program Account*

Less \$300,000 *Deduction for WSRF administrative expenses (10%)*

\$2,700,000 *Net proceeds in WSRF Program Account for procuring mitigation*

Plus \$200,000 *Unallocated reserve funds in the Program Account*

\$2,900,000 *Total funds in Program Account available to procure mitigation*

\$3,100,000 *Lowest qualifying bid for 13 credits*

Result: *The lowest qualifying bid exceeds the available funds. The Department would negotiate with the lowest qualifying bidder and/or issue a new RFP seeking fewer credits. In no event will the RFP request fewer credits than the baseline compensation requirement (10 credits).*

Lastly, consistent with the objectives of the WSRF and the Compensation Planning Framework—and provided funds are available—the Department may issue RFPs that solicit *more* credits than the minimum number needed to fulfill the WSRF’s mitigation commitments. The Department may do so for any of several reasons, including to ensure that credits are available in chronically underserved watersheds or in anticipation of expected shortages in other portions of a river watershed. Generating excess credits is ecologically beneficial because it provides enhanced aquatic functions and values in advance of impacts. This approach also advances the policy objectives of the WSRF by stimulating mitigation projects and assuring the availability of credits in underserved areas. Any excess credits generated through mitigation projects will be held by the WSRF and offered for sale subject to the same terms, conditions, and prices as other WSRF credits. Alternatively, the WSRF may elect to apply the excess credits to other mitigation obligations it may assume. If a new mitigation bank or in lieu fee fund program begins offering credits on commercially reasonable terms in a watershed where WSRF is holding

credits, the WSRF's credits will become unavailable to prospective purchasers within that area. In that event, the Department will hold the credits in reserve until such time as (1) the supply of mitigation bank and other in lieu fee program credits in the watershed is once again exhausted or (2) the reserve credits can be allocated to satisfy other mitigation obligations assumed by the WSRF.<sup>39</sup>

The above-described approach to calculating the scope of compensatory mitigation projects solicited through WSRF-related RFPs ensures the goal of no net loss is achieved without unnecessarily encumbering potentially scarce land by building larger-than-necessary mitigation sites.

## **F. WSRF Credit Pricing**

Consistent with the goal of the WSRF to serve as a safety net for periodic credit shortages, prices for mitigation credits purchased from the WSRF will be determined by reference to Fee Schedules published by the Virginia Aquatic Resources Trust Fund (VARTF) as shown below in Table 1. WSRF credits will be priced at a premium above VARTF credits.

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<sup>39</sup> Consider the following example: WSRF sells credits to Permittee A in Year 1. In Year 2, WSRF sells credits in the same subbasin to Permittee B. The Department also determines that no bank or program credits will become available in the subbasin by Year 3, so WSRF elects to issue an RFP for a mitigation project in the same subbasin. Because WSRF would apply credit from the project to Permittee A's impact at a 1:1 ratio (plus a supplement for temporal loss), the available funds from the credit sale to Permittee A may be sufficient to procure a project that generates sufficient credit to also mitigate Permittee B's impacts. In that scenario, the Department likely would proceed with a mitigation project that could satisfy its mitigation obligations for the credit sales to *both* permittees. However, the WSRF's enabling statute would not allow the Department to allocate the mitigation project to Permittee B's impact until a future date when the Department determines that no mitigation bank credits are likely to become available within three years of the WSRF's credit sale to Permittee B. Upon making that determination, the Department would apply the mitigation project to satisfy the WSRF's obligations for Permittee B's impact. Conversely, if qualifying mitigation bank credits become available in the subbasin within the three-year period after credits are sold to Permittee B, the WSRF would procure those credits to offset Permittee B's impacts as required by statute. In that case, the WSRF would hold the excess credits generated by the mitigation project in reserve until such time as the subbasin experiences another credit shortage or the credits can be applied to satisfy another WSRF mitigation obligation.

Table 1. WSRF Credit Price Calculation Formula

<b>Credit Type</b>	<b>Credit Price Greater of Column A or B</b>	
	<b>A</b>	<b>B</b>
Nontidal Wetland	3 times lowest VARTF nontidal wetland credit price in the river watershed	1.3 times VARTF nontidal credit price in the 8-digit HUC
Tidal Wetland	3 times lowest VARTF tidal wetland credit price in the river watershed	1.3 times VARTF tidal credit price in the 8-digit HUC
Stream	2 times lowest VARTF stream credit price in the river watershed	1.3 times VARTF stream credit price in the 8-digit HUC

Notes

1. VARTF credit price refers to the Fee Schedule in effect on the immediately preceding June 1.
2. River watersheds are defined in Va. Code § 62.1-44.15:23 and shown in Appendix A.

In determining how and when to adjust the WSRF Credit Price Schedule, the Department must strike a balance between the objectives of maintaining steady and predictable credit prices and protecting the program funds from unexpected volatility.

The Department will attach an initial credit price schedule with the Program Instrument and will maintain a current Credit Price Schedule on its website and RIBITS. The schedule will be updated and republished on an annual basis to coincide with the Department’s fiscal year.<sup>40</sup> Credit prices will be adjusted each year by applying the applicable multiplier in Table 1 to the price for the corresponding credit type on the VARTF Fee Schedule in effect on June 1. Prices will be listed for 8-digit HUCs in the Commonwealth. Annual updates to the Credit Price Schedule will take effect on July 1 and generally will remain in effect until the following June 30.

Notwithstanding the annual credit price update process, the Department may, in its discretion, publish an Updated Credit Price Schedule on a more frequent basis in response to changes in the VARTF fee schedule. If the Department elects to update the WSRF credit price schedule outside of the annual process, it will do so no later than 30 days after VARTF publishes an updated credit price schedule.

The Federal Mitigation Rule permits the Department to charge fees to cover reasonable overhead and administrative costs of implementing and managing the WSRF accounts, subject to approval by the Corps.<sup>41</sup> In its evaluation of other in-lieu fee programs, the

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<sup>40</sup> July 1 to June 30.

<sup>41</sup> 33 C.F.R. § 230.98(i)(1).

Department has found that administrative fees of up to 20% are common. For the WSRF, the Department estimates that a fee calculated as 10% of the credit price would be adequate to defray its administrative expenses. The 10% administrative fee will be deducted from the gross proceeds of each credit sale. The Department will maintain the 10% administrative fee for the first 3 years of program operation.

Starting with the third annual Credit Price Schedule update and periodically thereafter, the Department may evaluate the sufficiency of the administrative fee compared to the program's actual expenses. Based on the results of this evaluation, the fee may be adjusted higher or lower as appropriate. The proposed Program Instrument will include a range of acceptable administrative fees from 5% to 15%. Provided the revised administrative fee is within this range, it will become effective with the next Credit Price Schedule update. Should the Department determine that the administrative fee should be higher than 15% or lower than 5%, it will submit the proposed fee adjustments to the IRT in the form of a Program Instrument modification request.

#### **G. Review and Approval of the Use of Credits Purchased from the WSRF**

Approval authority for the use of WSRF credits lies primarily with the agency or court responsible for the permit or order giving rise to the applicable mitigation obligation. Notwithstanding any third-party agency or court's decision to accept WSRF credits, the Department will only sell WSRF credits to prospective purchasers that satisfy the eligibility requirements that will be incorporated into the Program Instrument. Those requirements are summarized above in Section III.D.

#### **H. Reservation and Sale of WSRF Credits**

Through its VWP program staff, the Department has seen an increase in recent years of permit applicants that fail to properly reserve available credits that are referenced in their applications. This situation has caused significant challenges and delays if those credits are no longer available at the time the permit is approved. The WSRF reservation and sale process has been designed to bring additional predictability to this process.

Instructions, forms, and contact information necessary for the public to request and purchase credits from the WSRF will be published to RIBITS; the Department's website; and the Department's forthcoming mitigation credit trading platform, the Stream, Wetland, and Nutrient Credit Trading Platform ("SWaN"). To provide further stability to mitigation credit markets and certainty for parties in search of mitigation credits, the Department will enter agreements with prospective purchasers for WSRF credits with a non-refundable deposit of 20%, and due fully by the earlier of: (i) 30 days of permit issuance, or (ii) 10 days prior to construction commencement of any portion of the project.

Prospective purchasers will submit a credit request form to the Department that includes all information necessary for the Department to review and process the request.

It will be the responsibility of the prospective purchaser to demonstrate to the Department's satisfaction that the purchaser satisfies the eligibility requirements specified in the Program Instrument and summarized in Section III.D of this Prospectus. However, the prospective purchaser will remain solely responsible for confirming that the agency or court imposing the mitigation obligation will accept WSRF credits in satisfaction of that obligation.<sup>42</sup> Prospective purchasers also will be responsible for ensuring that their purchase of credits from the WSRF complies with any other requirements of the relevant agency or court, including any conditions relating to the quantity, timing, or type of credit purchase.

Upon determining that a prospective purchaser is eligible to purchase credits from the WSRF, the Department will require payment of the deposit or full purchase price within 30 days to finalize the agreement. If the prospective purchaser has been issued a permit or order conditioned on purchase of mitigation credits, full payment will be due within 30 days of the Department's approval of WSRF credits. Upon receipt of full payment for WSRF credits, the Department will issue a bill of sale and other documentation as provided in the final Program Instrument.

However, if the prospective purchaser is preparing or has filed a pending permit application, the prospective purchaser may, at its election, pay a non-refundable deposit in an amount equal to 20% of the total purchase price of the requested WSRF credits (based on the fee schedule in effect on the date a complete request was received by the Department). The deposit is intended to cover the Department's administrative expenses for processing the application and credit reservation. Upon receipt of the deposit, the Department will issue a credit reservation letter in a form to be identified in the approved Program Instrument.

A prospective purchaser who has paid the deposit and received a credit reservation letter may then purchase credits from the WSRF by providing written notice to the Department in a form the Department will specify. The written notice must identify the number of credits the prospective purchaser wishes to purchase. The Department will issue an invoice for the credits calculated as follows:

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<sup>42</sup> Such confirmation need not be obtained by prospective purchasers seeking to satisfy compensatory mitigation requirements imposed by permits (e.g., VWP permits) or other actions (e.g., enforcement) under the authority of the Department. In accordance with Virginia Code §§ 62.1-44.15:31.1 and 62.1-44.15:21(B), WSRF credits may be used for such purposes. Nevertheless, if the Corps or other agency has imposed a *concurrent* mitigation obligation—such as independent mitigation conditions in an individual VWP permit and individual CWA 404 permit issued for a project—the prospective purchaser remains responsible for confirming that WSRF credits will be accepted by such agency.

- For all requested credits in an amount equal to or less than the number of credits identified in the credit reservation letter, the invoice will be calculated based on the number of credits purchased times the *lower* of the credit price in effect on the (1) date the final notice was submitted to the Department or (2) date the deposit was paid. For credit purchases associated with permit applications, this pricing will remain available for 45 days after the Corps and/or Department issue permit approvals (whichever is later). If payment is not made by that date, the price will reflect the *higher* of the credit prices referenced in (1) or (2), above, or the credit price in effect on the date payment is made.
- For any requested credits in excess of the number of reserved credits, the additional credits will be invoiced at the *higher* of the credit price in effect on (1) the date the final notice was submitted to the Department or (2) the date the deposit was paid. If payment is not made within 45 days of the date the relevant permit is issued, the credit price will be subject to further increase if the WSRF Credit Price Schedule is changed before payment is made.

In both situations, the previously paid deposit will be credited in full toward the total mitigation credit sale price shown on the final invoice.

This credit pricing approach has several intended purposes. First, it will benefit prospective purchasers by providing reasonable certainty that the price of any reserved WSRF credits will not increase while their permit application is being processed. Second, this approach will support the management of the WSRF by providing an incentive for prospective purchasers to provide accurate estimates of how many credits they need to reserve. This pricing structure will therefore provide the Department with more accurate estimates of future compensatory mitigation requirements for the management of the WSRF, and disincentivize applicants from reserving fewer credits than necessary to reduce their deposit. Lastly, the deposit structure will promote the Department's VWP Program policy of encouraging applicants to carefully evaluate and adopt all practicable measures to avoid aquatic impacts prior to submitting a permit application. By crediting the deposit in full on the final WSRF credit sale invoice, there is no "penalty" (i.e., lost deposit) if an applicant purchases fewer WSRF credits than they initially reserved in their WSRF application as a result of adopting additional avoidance measures during the permit application process.

Payment will be due within 30 days of issuance of the final credit sale invoice. Upon receipt of payment, the Department will issue a bill of sale, affidavit of credit sale, and any

other necessary documentation that may be specified in the approved Program Instrument.

### **I. Publication of Information Related to the WSRF**

Consistent with its public service objectives, the WSRF will be operated in an open and transparent manner to the extent practicable. All relevant program information will be conspicuously posted concurrently to the Department's website and provided for posting to RIBITS. This information will include, at a minimum, the following:

- Approved Program Instrument;
- Final Prospectus;
- Current and historical Credit Price Schedules;
- Public notices for the issuance and award of RFPs;
- List of mitigation bank credit and released in-lieu fee program credits purchased by the WSRF;
- List of mitigation projects undertaken with WSRF funds and related information; and
- Ledger of WSRF transactions, including credit reservations and sales.

In the future, the Department intends to integrate the WSRF with the Virginia Permit Transparency (VPT) system<sup>43</sup> and the SWaN mitigation credit exchange marketplace tool, which remains under development at this time. It is the Department's belief that the WSRF program, as proposed in this Prospectus, can be integrated seamlessly into the VPT system and forthcoming SWaN marketplace tool without the need for a subsequent modification to the final Program Instrument.

### **J. Use of Excess Funds in the WSRF Program Account**

As discussed above, the WSRF credit price calculation methodology is intended to generate sufficient proceeds to achieve the WSRF's goal of no net loss of aquatic resource functions and values while maintaining funds as a robust contingency for unexpected expenses or mitigation market volatility. The Department assumes that the WSRF will tend to operate with a surplus of funds. In accordance with the Federal Mitigation Rule, any surplus funds will remain in the WSRF program account until the Corps approves a use in consultation with the IRT.

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<sup>43</sup> <https://permits.virginia.gov/>.

The Department proposes that any surplus funds be used for the following two purposes. First, although the Department intends to price WSRF credits with a healthy implicit contingency, the program is vulnerable to unexpected increases in the price of mitigation bank credits, released in-lieu fee program credits, and mitigation project services without funds dedicated to address such possibilities. Accordingly, the Department will propose that it be authorized to maintain a reserve in an appropriate amount, subject to periodic review and adjustment. Second, the Department's use of funds contributed to the WSRF is limited to statutory purposes set forth in the enabling legislation. One of the authorized uses of WSRF funds is "other water quality improvement projects as deemed acceptable by the Department."<sup>44</sup> Consistent with this authority, the Department proposes that excess funds in the WSRF program account be used to issue RFPs and award contracts for water quality improvement projects to further the objectives of the WSRF program and Federal Mitigation Rule.

#### **K. Mitigation for Impacts to Streams and Wetlands that Are Not Waters of the United States**

State "surface waters" subject to the regulatory jurisdiction of the Department's VWP program include all Waters of the United States, as well as other streams and wetlands (and activities) that fall outside the regulatory jurisdiction of the Corps.<sup>45</sup> It is common for a party to submit a Joint Permit Application requesting a CWA 404 permit from the Corps and a VWP permit from the Department for an activity that impacts (1) streams and wetlands subject to the concurrent jurisdiction of the Corps and Department *and* (2) other streams and wetlands subject exclusively to the Department's regulatory jurisdiction. Due to the significant overlap in the agencies' respective jurisdiction and the widespread use of Preliminary Jurisdictional Determinations, most activities that impact streams or wetlands have historically been subject to the concurrent permitting jurisdiction of the Corps and Department. In those situations, the compensatory mitigation requirements in the respective permits typically are identical.

For activities that are subject in whole or in part to federal regulation under the Clean Water Act, the WSRF will operate in accordance with the Program Instrument. For example, assume an applicant seeks credits from the WSRF for an activity that requires (1) a CWA 404 permit for an impact to one acre of jurisdictional non-tidal wetlands and (2) a VWP permit for the same one-acre impact *plus* a second acre of impacts to wetlands that are not regulated by the Corps. If the applicant in this scenario purchases two credits from the WSRF, the Department would not apportion the credits between the federal-

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<sup>44</sup> Va. Code § 62.1-44.15:23.1.

<sup>45</sup> Va. Code § 62.1-44.3.

and state-regulated impacts.<sup>46</sup> 100% of the proceeds from the credit sale would be deposited in the program account and two undifferentiated wetland mitigation credits would be added to the WSRF's ledger. However, the situation would be handled somewhat differently in the case of an applicant for a VWP permit if the proposed activity does *not* impact Waters of the United States.

Due to recent and potential future changes to the scope of Waters of the United States, the Department foresees the potential for an increase in VWP permit applications for activities that do *not* require permit authorization from the Corps. In those cases, the Department bears the sole responsibility for ensuring that impacts to the streams and wetlands are mitigated appropriately in accordance with the Commonwealth's "no net loss" policy and the VWP regulations. State law mandates that the WSRF be available to provide compensatory mitigation credits for impacts to streams and wetlands regardless of whether those impacts are subject to the regulatory jurisdiction of the Corps.

From the perspective of the regulated public (and the aquatic environment), the WSRF will function identically irrespective of whether it is being used to mitigate impacts to Waters of the United States or state waters that are not subject to federal jurisdiction. However, credit transactions that do not fall under the Federal Mitigation Rule will be accounted and managed separately. Such credit transactions would not be subject to the Program Instrument, except to the extent it outlines procedures for ensuring that these transactions are managed and tracked independently of credit transactions that are subject to the Federal Mitigation Rule.

If the WSRF sells mitigation credits to a VWP permittee for an activity that is not regulated by the Corps (or other federal entity acting under the Clean Water Act), proceeds from the credit sale will be deposited in a separate account as described in Section VIII.B. The WSRF's internal ledger and accounting procedures will track these credits and funds separately from other credits sold by the WSRF.

The Department will follow the same general procedures and hierarchy to procure mitigation to satisfy credits sold by WSRF for state-only impacts as it does for all other WSRF credits. If the WSRF sells credits in a Service Area to permittees with CWA 404 permits *and* to permittees that only require a VWP permit, the Department will consolidate those credits sales for the purpose of procuring mitigation whenever appropriate. When the Department requests approval from the Corps for a mitigation project that covers both federal and non-federal impacts, the request will identify which proportion of the funds will be paid from the program accounts for impacts subject to

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<sup>46</sup> The Federal Mitigation Rule authorizes the use of in-lieu fee program projects to "holistically address requirements under multiple programs and authorities for the same activity." 40 C.F.R § 230.93(j)(2).

federal jurisdiction and funds to be paid from the program account for impacts not subject to federal jurisdiction. Other than documenting the source of funds, the mitigation project will otherwise be presented to the Corps as a single, undivided project for review and approval.

The Department acknowledges that the procedures outlined in this section for mitigating stream and wetland impacts that are not subject to federal regulation marginally increase the accounting and management complexity of the WSRF. However, the Department recognizes that expanding the WSRF to cover stream and wetland impacts that are not otherwise subject to the Federal Mitigation Rule serves the overall purpose of that rule: ensure “no net loss” of stream and wetland resources. Furthermore, expanding the scope of the program to state-only impacts will generate additional funds that can be used to procure larger and more sophisticated mitigation projects with a higher likelihood of success.

#### **L. Annual Reporting**

The Department will provide an annual report of WSRF activities, deposits, disbursements, and balances for the relevant state fiscal year (July 1 through June 30) to the IRT on or before November 30th each year. The reports will include summaries by Service Area of all income received, disbursements made, and interest earned by the WSRF account(s); all permits for which in-lieu fee program funds were accepted (with applicable state and/or Corps permit numbers); the amount of impacts authorized through the WSRF; the amount of required compensatory mitigation; the amount paid to the WSRF; the date the funds were received; and the balance of advance and released credits. HUC-8 identification will be included for permitting and compensation activities. The Department will post finalized annual reports to its website and RIBITS.

#### **M. Term of WSRF**

The WSRF shall be effective on the date the final Program Instrument is approved by the Corps in consultation with the IRT.

The enabling statute creating the WSRF contains no sunset date. Nor does the Virginia Code grant the Department discretionary authority to terminate the program. Accordingly, the WSRF shall continue to operate indefinitely unless (1) the Commonwealth enacts new legislation terminating the program or (2) the Corps elects to terminate the program in accordance with the Federal Mitigation Rule.

#### **IV. PROPOSED SERVICE AREAS**

The WSRF will serve the following Service Areas based on Virginia’s major river watersheds:

- Potomac River Basin
- Shenandoah River Basin
- James River Basin
- Rappahannock River Basin
- Roanoke and Yadkin Rivers Basin
- Chowan River Basin, including the Dismal Swamp and Albemarle Sound
- Tennessee River Basin/Big Sandy River Basin Complex
- Chesapeake Bay and its Small Coastal Basins
- Atlantic Ocean
- York River Basin
- New River Basin

The proposed Service Areas are discussed in more detail in the Compensation Planning Framework (Appendix A).

#### **V. NEED AND TECHNICAL FEASIBILITY**

The Commonwealth has a well-known and longstanding need to increase the supply of stream and wetland mitigation credits. This need was publicly acknowledged by the Virginia General Assembly when it approved the creation of the WSRF in 2013. The legislation was a response to several high-profile missed opportunities for economic development in areas that lacked the compensatory mitigation alternatives normally required by state and federal permitting agencies. The problem has persisted.

In 2022, then-Chairman of the House of Delegates Committee on Agriculture, Chesapeake and Natural Resources, R. Lee Ware, asked the Department to convene a stakeholder advisory group to review the status of Virginia’s supply of wetland and stream mitigation credits and provide recommendations for increasing the available supply. In the subsequent report to Chairman Ware, the Department noted the persistence of “periodic mitigation credit shortages and resulting price jumps in various geographic areas within the Commonwealth.”<sup>47</sup> The problem was attributed primarily to a combination of two compounding circumstances:

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<sup>47</sup> Va. Dep’t of Env’tl. Quality, *Report to the Chair of the House Committee on Agriculture, Chesapeake, and Natural Resources; Review of Supply and Demand for Stream and Wetland Mitigation Credits and Incentivizing Dam Removal Projects in Virginia* 5 (Dec. 2022) (“Ware Report”). The Department notes

1. Mitigation bank approval, construction, and credit release times that are slower than market demand time frames.
2. A lack of accurate and timely data on credit supply, demand and pricing—the hallmarks of a true “free market.”<sup>48</sup>

The first problem—delays in bringing new credits to the market—is well-supported by data. For example, one study found that, between 2014 and 2021, it took an average of 3 years and 8 months for mitigation bank sponsors in Virginia to obtain approval for mitigation banking instruments.<sup>49</sup> Considering the other steps necessary to develop a new bank and obtain approval for credit releases, the Department observed that bringing new credits to market was a 6- to 7-year process.

To mitigate this first problem, the report to Chairman Ware noted that the Department was developing a memorandum of agreement jointly with the Corps to take coordinated actions to reduce bank approval and credit release timeframes.<sup>50</sup> The Department is pleased to report that the Corps and Department finalized the agreement in March 2023.<sup>51</sup>

To address the second problem noted in the report to Chairman Ware—lack of transparent information on the credit market—the Department noted that it had two initiatives in progress. The first was the development of the Permitting Enhancement and Evaluation Platform (PEEP). PEEP was launched in late 2022 to bring transparency to the Department’s permitting processes. The platform provides current information to the public about the critical steps and permitting schedules needed for permit approval. On March 13, 2023, the Department incorporated proposed mitigation banking instruments, banking instrument modification requests, and credit releases to the PEEP platform. The inclusion of mitigation bank permitting into PEEP allows the public to better track the status of mitigation bank and credit approval processes. Going forward, this same information will be incorporated into PEEP’s successor—the state agency-wide VPT system.<sup>52</sup>

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that the diverse stakeholder advisory group did not reach full consensus on the nature of the problem or which recommendations should be reported as representing the views of the group.

<sup>48</sup> *Id.*

<sup>49</sup> Steve Martin & Becca Madsen, *The Time It Takes for Restoration: An Analysis of Mitigation Bank Instrument Timelines* 36 (2023).

<sup>50</sup> *Ware Report* at 5.

<sup>51</sup> Memorandum of Agreement Between the U.S. Army Corps of Engineers, Norfolk District, and the Virginia Department Environmental Quality Regarding Implementation of the Third-Party Compensatory Mitigation Program (Mar. 2023).

<sup>52</sup> <https://permits.virginia.gov/>.

The Department outlined its plans to develop a public mitigation trading platform in the report to Chairman Ware. The “SWaN” trading platform is presently under development. When it becomes active (projected to occur in the fall of 2025), the trading platform is expected to provide the public with “real-time data on existing supply and expected future supply” with the objective of introducing “free market characteristics” that may foster greater alignment between credit supply and credit demand.

Lastly, the report to Chairman Ware documented recommendations from members of the stakeholder group to further address the recognized problems. One recommendation that generated a healthy discussion among the stakeholder group was to make a renewed effort to stand up the WSRF program. However, the group acknowledged that the enabling legislation for the program likely would have to be amended to resolve an issue identified by the Corps in its comments on a prior WSRF prospectus submitted by the Department in 2014. The General Assembly acted on that recommendation, and the legislation was amended in 2023.<sup>53</sup>

Thanks to the diligent work and collaboration between the Corps and Department, significant strides have been made in reducing mitigation banking instrument and credit release approval timelines by approximately two-thirds. The “bellwether approval” of a Mitigation Banking Instrument has averaged 243 days since the MOA was signed, which is approaching the schedule goal of 225 days.

Despite the substantial progress that has been made since 2022, the Commonwealth continues to experience frequent shortages in credit availability and volatile prices.

The General Assembly’s amendment of the WSRF statute is a clear signal that the Commonwealth continues to believe that this state-operated mitigation credit “safety net” is needed. Accordingly, this Prospectus has been prepared to make further progress toward addressing the Commonwealth’s need for a stable, reliable, and predictable mitigation credit supply.

The technical feasibility of the WSRF should be evident. The General Assembly has granted the Department sufficient authority and resources to operate the program to fulfill the objectives described in this Prospectus. That statement is evidenced by the statutory amendments to the WSRF legislation in 2023 to address the Corps’ comments on the prior draft prospectus, and a budget amendment in FY 2025 to pay for development of this Prospectus and Instrument.<sup>54</sup> The WSRF will be managed by

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<sup>53</sup> The amendment can be found in Appendix D. The Department also wishes to emphasize that this Prospectus has been prepared to address each of the Corps’ comments on the previous draft.

<sup>54</sup> HB 6001, Item 363 n.L (2024).

Department staff. The Department has a long and productive history of working with the Corps to implement their complementary stream and wetland mitigation programs—both in the Department’s role as co-chair of the IRT and in its role as co-permittee pursuant to each agency’s respective authority under CWA 404 and 401.<sup>55</sup>

## **VI. OWNERSHIP AND LONG-TERM MANAGEMENT STRATEGY**

The WSRF will rely on existing, time-tested methods to ensure that the long-term management objectives of the Federal Mitigation Rule are satisfied by the WSRF’s mitigation activities. As discussed in Section III.C, the WSRF will rely on three options to procure mitigation to satisfy the obligations the WSRF has incurred by selling credits: (1) purchase mitigation bank credits; (2) purchase released credits from another in-lieu fee program; and (3) funding mitigation projects to be completed by third party contractors which often will be new or expanded mitigation banks. In each case, the WSRF will assign responsibility for ownership and long-term management to the bank sponsor, program sponsor, or contractor as permitted by the Federal Mitigation Rule.

The IRT requires that sponsors of proposed mitigation banking instruments and in-lieu fee program instruments and sites document that provisions will be made for the long-term ownership and management of mitigation projects. Those provisions include an appropriate protective instrument on the property that runs with the chain of title, a legally binding agreement with a party assuming responsibility for long-term maintenance of the project (including appropriate alternatives to conservation easements where federally recognized tribes are involved), and a source of funds to conduct any necessary maintenance activities. When the WSRF purchases mitigation bank credits or released in-lieu fee program credits, it will have assurance that the IRT has already verified that all necessary ownership and long-term management provisions have been satisfied.

If no mitigation bank credits or released in-lieu fee program credits are available, the WSRF will commission appropriate mitigation projects. The WSRF will issue RFPs soliciting proposals from competent third-party contractors. If the purchase will not be from a newly proposed mitigation bank, the RFP will specify that the selected contractor is responsible for preparing a long-term management plan that identifies management needs, costs, funding sources, financing, and contingencies sufficient to guarantee the success of each project undertaken in accordance with the Federal Mitigation Rule and VWP program regulations, including remediation of catastrophic events.<sup>56</sup> The contractor

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<sup>55</sup> 33 U.S.C. §§ 1343 & 1341.

<sup>56</sup> The third-party contractor also will be responsible for obtaining all necessary permit approvals for the project from the Corps, Department, and any other relevant agencies.

must identify the party who will assume responsibility for long-term management and provide a proposed form of protective instrument to be executed for the project site (including appropriate alternatives to conservation easements where federally recognized tribes are involved). The RFP will further state that the long-term management plan and related materials must be submitted to the Department and IRT for review and approval prior to the commencement of the project. Lastly, the contract will require demonstration that the contractor has completed all necessary actions to ensure the protection and long-term management of the project site before the Department approves final payment to the contractor.

## **VII. DEPARTMENT OF ENVIRONMENTAL QUALITY'S QUALIFICATIONS**

The Department is the principal state agency charged with responsibility to protect the stream and wetland resources of the Commonwealth. The Department (in conjunction with the State Water Control Board) was delegated authority to issue CWA 401 water quality certifications in 1970. Since 1989, the Department has exercised this function through the VWP permit program. The VWP program is staffed by a talented team of environmental scientists, stream and wetland ecologists, mitigation specialists, and regulatory experts. The Department has regulated all ground water and surface water, including wetlands, in Virginia since July 1, 2000. And unlike the Corps, its regulatory coverage includes wetlands no longer regulated federally due to the U.S. Supreme Court's decision in *Sackett v. EPA*, as well as activities in wetlands such as "Tulloch ditching" which the Corps does not regulate.<sup>57</sup>

Through the VWP permit program, which is described in Section I.A, the Department works in coordination with the Corps to regulate activities that impact streams and wetlands. That program includes ensuring that compensatory mitigation is provided for unavoidable impacts to aquatic resources. The WSRF is central to the core mission of the VWP program, and the Department is uniquely qualified to administer the program proposed in this Prospectus.

## **VIII. WSRF PROGRAM ACCOUNT**

In accordance with the WSRF's enabling legislation, the program account will be maintained by the Commonwealth of Virginia in accordance with the WSRF's enabling legislation and the approved Program Instrument.

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<sup>57</sup> 598 U.S. 651 (2023).

## **A. Account Management and Oversight**

The WSRF program account will be maintained by the Commonwealth of Virginia Comptroller as a special non-reverting fund within the State Treasury in accordance with generally accepted accounting principles and state law.<sup>58</sup> The enabling legislation provides the Department with broad authority to “administer and utilize” payments to the WSRF for the purposes of the program.<sup>59</sup> The Department will exercise that authority in compliance with the conditions and requirements of the approved Program Instrument. The program account will be administered by the Department’s Office of Permitting Assistance staff, although the Department may contract a third-party manager for certain accounting and oversight functions.

The WSRF program account and its related records are public records that are generally open to public inspection and audit through the Virginia Freedom of Information Act.<sup>60</sup> All records related to the program account will be made available to the Corps for audit upon request. The Department may periodically solicit audits by an independent auditor, the cost of which shall be an administrative expense. A typical audit would consist of a fiscal audit, a program audit, and review other programmatic aspects of WSRF as appropriate.

## **B. Program Accounts**

Funds received by the WSRF will be credited to one of three accounts:

- Program Account 1: Compensation for Permitted Impacts to Aquatic Resources Subject to the Clean Water Act. The first account will be reserved for payments made for the purpose of compensating for aquatic resource impacts authorized by permits issued under CWA Section 404 and Rivers and Harbors Act Section 10. This account will also include payments made to compensate for aquatic resource impacts authorized by a VWP permit if any of the impacts are subject to the Corps’ concurrent jurisdiction and permitting authority.
- Program Account 2: Compensation for Other Impacts to Aquatic Resources Subject to the Clean Water Act. As described in Section I.A, of this Prospectus, the WSRF also may be used to provide compensatory mitigation for other purposes relating to impacts to aquatic resources subject to the Clean Water Act,

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<sup>58</sup> Funds held in the State Treasury are deposited in Federal Deposit Insurance Corporation-insured banks and savings institutions designated by the State Treasurer or in other collateralized accounts. Va. Code §§ 2.2-1813 & -1814.

<sup>59</sup> Va. Code § 62.1-44.15:23.1.

<sup>60</sup> Va. Code § 2.2-3700 et seq.

such as to satisfy mitigation requirements imposed by an administrative or judicial order for unauthorized aquatic impacts.<sup>61</sup>

- Program Account 3: Compensation for Impacts to State Waters Not Subject to the Clean Water Act. Payments to the WSRF for any purpose other than as stated for Accounts 1 and 2 will be maintained in a third account. The primary purpose of this account is to facilitate the Department's use of the WSRF to provide compensatory mitigation for impacts to aquatic resources that are under the exclusive jurisdiction of the Commonwealth. This third account advances the "no net loss" objective common to the VWP and CWA 404 programs by ensuring that high-quality compensatory mitigation is available for impacts that would otherwise fall outside the reach of the Federal Mitigation Rule.

The following examples are provided for clarity:

Example 1: Impacts to Aquatic Resources under Federal and State Jurisdiction. An applicant proposes a project that will cause the loss of (1) one acre of non-tidal wetlands under the concurrent jurisdiction of the Corps and Department and (2) an additional one acre of non-tidal wetlands that fall exclusively under the Department's regulatory jurisdiction. The applicant is issued (1) a CWA 404 permit authorizing one acre of impact a wetland subject to federal jurisdiction and (2) a VWP permit authorizing impacts to two acres of wetlands (i.e., one acre under concurrent federal and state jurisdiction and one acre subject only to state jurisdiction). The applicant purchases two non-tidal wetland mitigation credits from the WSRF. Because the transaction is associated with a CWA 404 permit, the WSRF would deposit 100% of the credit sale proceeds in Account 1.

Example 2: Impacts to Aquatic Resources Solely under State Jurisdiction. An applicant proposes a project that will cause the loss of one acre of non-tidal wetlands. The applicant obtains an Approved Jurisdictional Determination from the Corps confirming that the subject wetland is not a Water of the United States. The applicant subsequently purchases one credit from the WSRF to satisfy a mitigation requirement in a VWP permit issued by the Department. Because the applicant does not propose impacts to any wetlands subject to the Corps' jurisdiction, 100% of the credit sale proceeds would be deposited in Program Account 3.

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<sup>61</sup> See 33 C.F.R. 332.8(i)(1) (requiring that funds provided by persons other than qualifying permittees be held in a separate account).

### **C. Receipt and Processing of Payments to the WSRF**

The Department will calculate payments due and issue invoices to prospective purchasers from the WSRF in accordance with the process described in Section III.H. The invoices will be payable to the State Treasury and credited to the appropriate WSRF account. The preferred method of payment will be wire transfer, credit card with additional fee required for transaction costs, or, for Commonwealth of Virginia agencies, Inter-agency Transfer. Payment by check also will be accepted.

When a payment is received by the Department, Accounts Receivable will record the payment and notify a designated member of the Department's Office of Permitting Assistance staff, who will then coordinate the recordation of the payment, the Service Area and HUC-8 subbasin to be credited with the payment, and the number and type of credits purchased on the applicable account's and/or Service Area's ledger.<sup>62</sup> This information will be recorded separately for (1) deposits to reserve credits and (2) final mitigation credit sales.

The Department will issue a Credit Reservation Letter or Affidavit of Credit Sale after the deposit or credit sale payment, respectively, has cleared and been credited to the appropriate account.

### **D. Earnings, Interest, and Excess Moneys**

Any interest accruing in the program account will remain in and be credited to the account. Likewise, any moneys in the accounts that exceed the amount needed for compensatory mitigation, or unused moneys received for any purpose related to providing the compensatory mitigation, shall remain in the account until approved for use by the Corps.

The WSRF was created by the General Assembly as a "special nonreverting fund." Accordingly, state law dictates that any money, including accrued interest, remaining in the program account "at the end of each fiscal year shall not revert to the general fund but shall remain in the [WSRF]."<sup>63</sup>

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<sup>62</sup> As appropriate, the Department may identify additional parties to be notified, including relevant VWP permit staff and the administrator of the VPT system.

<sup>63</sup> Va. Code § 62.1-44.15:23.1.

## **E. Project-Specific Tracking and Accounting**

The Department will maintain a ledger of all requests to reserve or purchase credits from the WSRF. This internal ledger will be a more detailed version of the public-facing ledger referenced in Part III.I. The ledger will include the following information:

- Unique Identification Number for each proposed credit reservation or purchase transaction;<sup>64</sup>
- Respective project or permit numbers from the Corps, Department, VMRC, and/or other relevant agency or court;
- Identifying and contact information for the prospective purchaser, including, as applicable, the permit applicant and authorized agent;
- Proposed or completed aquatic impact(s) information, including the location (lat/long); Service Area; watershed (HUC 8); impact type (permanent or temporary); Cowardin classification for the impact(s); and area of each impact (area for wetlands and area and lineal distance for streams);
- Number and type of credits reserved and/or purchased (including credits purchased for activities that exclusively impact streams and wetland that are not subject to federal jurisdiction);
- Applicable credit prices;
- Log of payments made or due, including the relevant dates;
- Identification of the compensatory mitigation procured by the WSRF in satisfaction of credits sold by the WSRF; and
- Any other pertinent information deemed relevant by the Department.

The Department will maintain a separate (but linked) accounting system for payments made to and by the WSRF. Payments will be tracked by the Unique Identification Number assigned to each proposed or completed credit transaction. Deposits will be allocated for general administrative expenses and will not be used to purchase mitigation bank or in-lieu fee credits or to fund third-party mitigation projects.

Payments made to the WSRF for credit purchases (net of administrative expense deductions)<sup>65</sup> will be aggregated and allocated to each Service Area for tracking and

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<sup>64</sup> For clarification, a Unique Identification Number will be assigned when a prospective purchaser reserves credits from the WSRF for a specific permit or activity. This identification number will continue to be used through the final purchase of the reserved credits. If the same prospective purchaser submits another request related to a different permit application, a new Unique Identification Number will be assigned to the second transaction.

<sup>65</sup> The Department has estimated that 10% of WSRF proceeds are sufficient to cover the administrative expenses of the program. The administrative fee will be subject to periodic review and adjustment. For

accounting purposes. The system will track the respective “maturity dates” for each credit purchase transaction in a given Service Area—meaning the two- and three-year dates by which the funds must be used to purchase credits or fund a mitigation project. In other words, the accounting system will allow a reviewer to quickly ascertain the aggregate funds available for mitigation credit purchases or WSRF-funding projects in a Service Area, as well as a list of dates by which funds must be spent to procure mitigation on the WSRF’s behalf. Upon request, the Program Instrument will contain a mechanism for the district engineer to direct funds from program Accounts 1 and 2 toward alternative mitigation projects if mitigation under a Department of the Army permit or enforcement action is not sufficiently progressed within three years of the WSRF receiving funds.

As payments are made by the WSRF to purchase mitigation credits or fund mitigation projects, the tracking system referenced above will be updated to reflect the current aggregate funds and maturity dates for each Service Area.

#### **F. Expenditures and Disbursements from the Program Accounts**

As mandated by the Federal Mitigation Rule, expenditures and disbursements of moneys from the program account may be made upon receipt of written authorization from the Corps after consultation with the IRT. Upon receiving approval for a disbursement, the Department Director will make a written request to the Comptroller. The Comptroller will, in turn, issue a warrant to the State Treasurer to make the authorized expenditure or disbursement.

The Department’s Office of Permitting Assistance staff or the Department’s contract manager will maintain detailed records of all disbursements and expenditures from the program account. The recordkeeping and retention policies of the WSRF will be detailed in the proposed Program Instrument.

Expenditures and disbursements from Program Account 3 (credit sales for impacts exclusively to state waters) will follow the procedures stated in this section with one exception: because Program Account 3 is not subject to the Federal Mitigation Rule, the Department will not request Corps approval for use of these funds.

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accounting purposes, the Department will segregate the relevant percentage of the credit sale proceeds for administrative expenses. Any previously paid deposits will be credited against the administrative cost set-aside in the first instance.

# **Appendix A**

## **Wetland and Stream Restoration Fund Compensation Planning Framework**

## **Introduction**

The scope of the Compensation Planning Framework is set to meet the Program Instrument’s ecological objective of meeting the Commonwealth and the Federal Mitigation Rule’s shared goal of “no net loss” of wetland area and stream and wetland function in any Virginia river watershed and the Program Instrument’s public service objective of ensuring that a high-quality compensatory mitigation option is available for authorized activities in watersheds with shortages of mitigation bank and in-lieu fee program credits. The Department will use this Compensation Planning Framework to provide mitigation through the purchase of mitigation bank credits, released ILF credits, or the selection of appropriate stream and wetland restoration, establishment, enhancement, and/or preservation activities for credits sold by the WSRF.

The following sections address the ten elements of a Compensation Planning Framework as identified in *Compensatory Mitigation for Losses of Aquatic Resources*, 33 C.F.R. Part 332, specifically subsection 332.8(c). This framework was developed from a body of existing research and literature; no independent effort was made to validate the information referenced and quoted.

### **Element 1: Geographic Service Areas**

The compensation planning framework must support a watershed-based approach to compensatory mitigation. To fulfill its intended purpose of providing the public with a safety net for periodic credit shortages, the Virginia General Assembly’s legislation enacting the WSRF supports the establishment of WSRF service areas (hereafter ‘Service Areas’) across the entire Commonwealth.

The Department proposes to use the statutory definition of “River watershed[s]” in Virginia’s wetland and stream mitigation banks provision, as the proposed geographic Service Areas to account for mitigation credits and debits:<sup>66</sup>

- Potomac River Basin
- Shenandoah River Basin
- James River Basin
- Rappahannock River Basin
- Roanoke and Yadkin Rivers Basin
- Chowan River Basin, including the Dismal Swamp and Albemarle Sound
- Tennessee River Basin/Big Sandy River Basin Complex
- Chesapeake Bay and its Small Coastal Basins
- Atlantic Ocean

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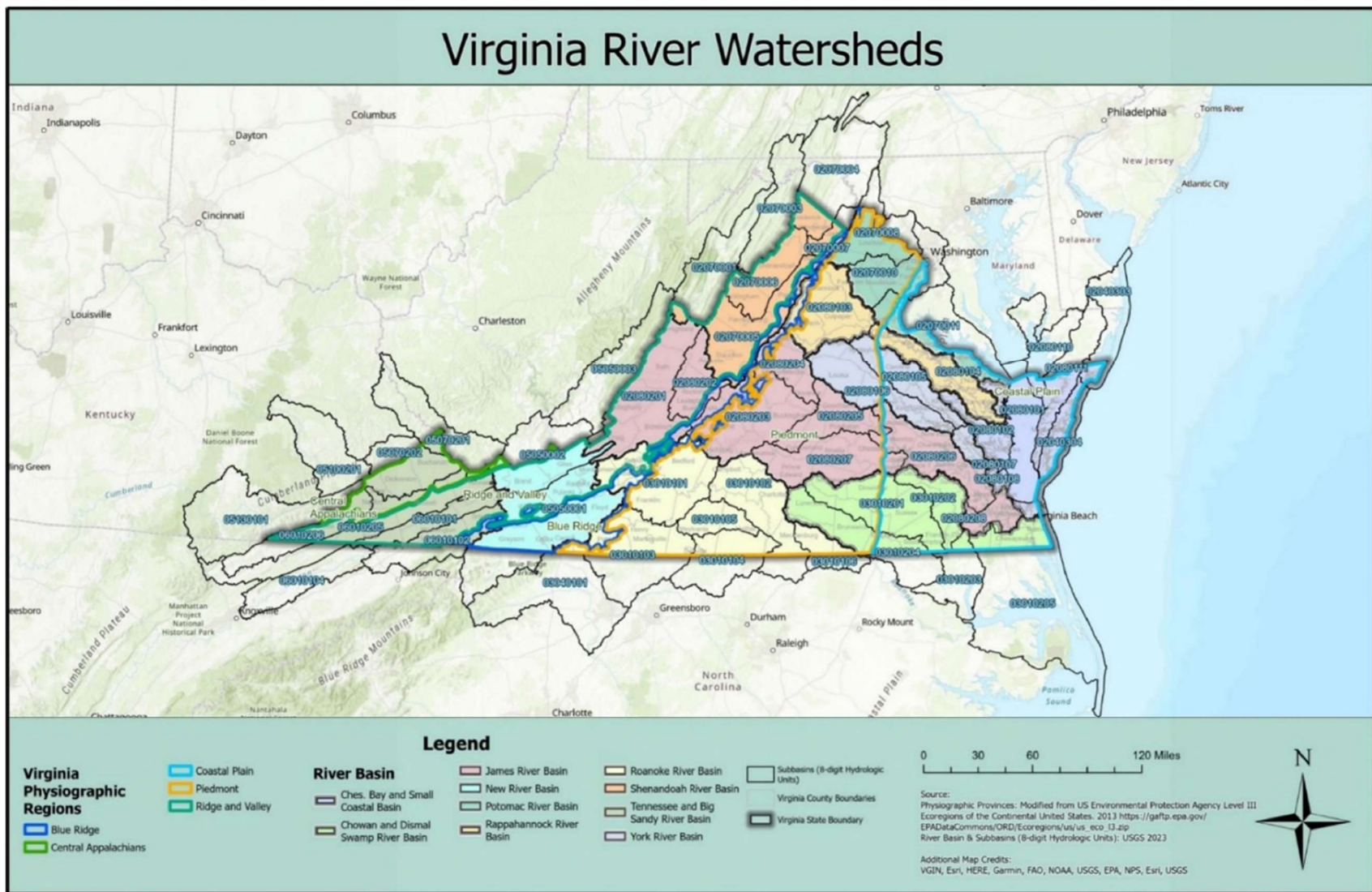
<sup>66</sup> Va. Code § 62.1-44.15:23.A.

- York River Basin
- New River Basin

These Service Areas align with the major river basins of the Commonwealth. Selection of these Service Areas supports the WSRF objectives. While the Service Areas are based on larger river basins, DEQ will use the 8-digit hydrologic unit code (HUC-8), as delineated by the United State Geological Survey National Watershed Boundary Dataset (WBD), as the geographic scale to assess credit needs and for disbursing WSRF money in each river basin.

The WSRF is intended to serve as a “safety net” for compensatory mitigation in areas where neither mitigation bank credits nor released in-lieu fee program credits are immediately available. The Department will use the WSRF funds to purchase mitigation bank credits as soon as practicable when qualifying credits are available. If mitigation bank credits are not available within two years of the collection of moneys for a specific impact and the Department determines no credits are likely to become available within the next year, then the Department will use WSRF moneys to purchase qualifying released credits from another in-lieu fee program, commence the process of procuring one or more WSRF-funded mitigation project(s), or purchase mitigation bank credits from elsewhere in the river watershed (i.e., outside the primary and secondary service areas). The Department will select and fund mitigation projects in accordance with the approved Program Instrument.

A map of the Service Areas and HUC-8 boundaries is presented below.



**Figure 1: Wetland and Stream Replacement Fund General Service Area Boundaries.** The Atlantic Ocean Service Area is not pictured above but consists of the easternmost watersheds of the Chesapeake Bay and Small Coastal Basin Service Area.

## **Element 2: Threats to Aquatic Resources**

Virginia loses wetland acreage, functions, and associated ecosystem services as well as stream acreage and functions through unpermitted activities, permitted activities, and natural processes. This section will describe the threats to wetlands and streams across the Service Areas and the measures the Department has identified to address them. Exhibit 1 of the Compensation Planning Framework provides more information for each river watershed Service Area.

### **A. Threats**

The Department identified general threats and stresses for wetlands and streams across the Commonwealth in the *Wetland Program Plan for 2021-2025* and *Draft Virginia's 2024 305(b)/303(d) Water Quality Assessment Integrated Report* and other Departmental programs. General threats and stresses include:

- Degradation of water quality
- Erosion or sedimentation
- Land conversion and land use changes
- Industrial and urban development
- Agriculture and forestry
- Hydrologic alterations
- Invasive species
- Sea level rise and inundation

The 2015 *Virginia Wildlife Action Plan* also lists a variety of general threats to streams and wetlands across the Commonwealth. Specifically, the plan notes that runoff laden with nutrients and sediment may decrease local water quality and degrade wetlands.<sup>67</sup> Similarly, the plan notes that both tidal and non-tidal wetlands are susceptible to filling and conversion into residential, commercial, or agricultural development. The plan also highlights the alteration of hydrology, through the digging of channels or ditches or the construction of structures that change the flow of water, can drain or further inundate a wetland. Finally, the plan records changes to upland areas; livestock access to streams; the loss of riparian vegetation buffers; failing septic systems, pet waste, and the lack of cover crops on fields or highly erodible land are significant threats to stream water quality.

The Commonwealth has increasingly recognized water quantity as a potential threat to wetland and stream resources. The 2024 *Status of Virginia's Water Resources* report emphasized “an increasing population and a growing economy can present challenges for managing water resources despite the relative bounty Virginia enjoys. Virginia benefits from a robust economy and an increasing population drawn by the many opportunities

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<sup>67</sup> The *Virginia Wildlife Action Plan* is updated on a decennial basis. The next update is expected to be issued in Fall 2025.

available. The state’s water resources are shared across a variety of beneficial uses, including in-stream uses such as recreation, navigation, habitat for wildlife, and the aesthetic value of rivers and streams, as well as off-stream uses such as supplying drinking water, agricultural, commercial, or industrial facilities.”

The VWP Permit Program also includes springs under its jurisdiction. The 2015 *Virginia Wildlife Action Plan* notes that springs and other subterranean systems are impacted by similar threats to surface sources. Possible stresses to Virginia’s springs include pollution or debris that is allowed to infiltrate into groundwater systems and impervious surfaces that direct water away from groundwater recharge areas.

## **B. Measures to offset impacts of threats**

The Department’s Virginia Water Protection (VWP) Permit Program is tasked with issuing permits for unavoidable impacts to streams and wetlands, taking compliance and enforcement action against persons who cause unauthorized impacts, and providing public education about the importance of streams and wetlands. The Department requires applicants for permits to avoid and minimize impacts to streams and wetlands, recommends alternatives to impacts, and requests the protection of avoided wetlands and streams. The Department exercises its authority to ensure that impacts to streams and wetlands are reduced to the extent practicable during the permitting process.

For potential unavoidable losses to streams and wetlands, applicants for VWP permits must purchase mitigation bank credits, contribute to in-lieu fee funds, or engage in wetland and/or stream creation, restoration, preservation, or enhancement to compensate for impacts to streams and wetlands resulting from the permitted activity. Compensatory mitigation should replace the lost stream and/or wetland resulting from the permitted activity to ensure “no net loss” of stream and wetland functions or wetland area.<sup>68</sup> The Department requires applicants to protect all compensation sites in perpetuity.

The Department consults with other state and/or federal aquatic resource programs, such as the Virginia Department of Wildlife Resources, when it reviews VWP permit applications. When appropriate, the Department seeks to accommodate the conservation, restoration, and improvement recommendations of other resource agencies through special conditions in VWP permits.

The proposed WSRF in-lieu fee fund will serve as the final backstop for unavoidable losses to streams and wetlands for those permittees for whom mitigation bank and other in-lieu fee credits are unavailable. The use of the WSRF will offset impacts to streams and wetlands from the threats above and permittees’ activities.

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<sup>68</sup> Va. Code § 62.1-44.15:21.B.

### **Element 3: Historic Aquatic Resource Loss**

The U.S. Fish and Wildlife Service estimates that approximately 221,000 acres of wetlands were lost across the United States between 2001 and 2019. Most of this loss is attributed to the conversion of wetlands to dry upland or unvegetated wetland features like ponds.<sup>69</sup> Virginia is estimated to have lost roughly 40 percent of its wetlands since colonial times.<sup>70</sup> Before the enactment of the Tidal Wetlands Act in 1972, Virginia lost approximately 600 acres of tidal wetlands annually.<sup>71</sup>

Similarly, Virginia lost significant acres of forested land since colonial times but forest cover has increased from approximately 14 million acres in 1940 to above 16 million acres today.<sup>72</sup> Riparian buffers are of particular interest in forest restoration efforts in the state for their potential to improve local water quality.<sup>73</sup> As a result, Virginia included riparian forest buffer restoration as an important goal to restore water quality in Chesapeake Bay and more generally across the Commonwealth.<sup>74</sup>

### **Element 4: Current Aquatic Resource Conditions**

To satisfy Virginia’s obligations under the CWA, a team of approximately 65 staff members in the Department’s Water Planning Division are responsible for implementing a comprehensive water monitoring program, including the “collection and analysis of physical, chemical and biological data,” to assess the condition of all surface waters in the state every three years.<sup>75</sup> These data are assembled from various programs within the Department, including an Ambient Watershed Monitoring Network, Chesapeake Bay Monitoring Program, Probabilistic Monitoring Networks, Trend Monitoring Network, Lakes Monitoring Program, Biological Monitoring Program, Targeted Fish Tissue and Sediment Monitoring Program, and a Volunteer Monitoring Program. The Department also consults with various federal and state agencies and non-governmental organizations

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<sup>69</sup> M.W. Lang, J.C. Ingebritsen, & R.K Griffin, U.S. Fish & Wildlife Serv., *Status and Trends of Wetlands in the Conterminous United States 2009 to 2019* 16 (2024).

<sup>70</sup> Department of Environmental Quality, *Virginia State Wetlands Plan, 2015-2020* 1 (2016).

<sup>71</sup> Walter I. Priest, *Historic Wetland Loss in the Elizabeth River*, 14 Virginia Wetlands Report 1 (1999).

<sup>72</sup> Virginia Department of Forestry, *Forest Resource Information* (last viewed Mar. 3, 2025) (available at: <https://dof.virginia.gov/forest-markets-sustainability/forest-inventory/forest-resource-information/>).

<sup>73</sup> Virginia Department of Forestry, *State of the Forest* 18 (2023).

<sup>74</sup> *Id.*; U.S. Department of Agriculture, *Chesapeake Bay Riparian Forest Buffer Initiative: Virginia State Task Force Final Report and Request for Funding* (2015); Virginia Department of Forestry, *Riparian Forests For Landowners Program* (last viewed Mar. 3, 2025) (available at: <https://dof.virginia.gov/water-quality-protection/water-quality-protection-landowner-assistance/financial-assistance-programs-protecting-water-quality/riparian-forests-for-landowners-program/>).

<sup>75</sup> 40 C.F.R. § 130.4; *see also* 33 U.S.C. § 1313(d).

to further support its evaluation.<sup>76</sup> Every two years, these various lines of evidence are synthesized into an “Integrated Report” that provides a comprehensive and current assessment of aquatic resource conditions in the state.

According to the Department’s most recent Integrated Report, *Draft 2024 305(b)/303(d) Water Quality Assessment Integrated Report*, Virginia has approximately 1,000,000 acres of non-tidal vegetated wetlands and 200,000 acres of tidal vegetated wetland throughout the Commonwealth. The previous element detailed the long history of wetland loss in the Commonwealth and the developmental pressure and water quality threats that remain for wetlands across the Commonwealth.

The report also estimates 100,975 miles of streams and rivers across nine river watersheds in the Commonwealth. In addition, the Commonwealth has 117,783 acres of lakes and reservoirs that are publicly accessible. The Department designated approximately 16% of river miles (16,291 miles) and 86% of lake acres (100,715 acres) as impaired in the report. Bacteria, low dissolved oxygen, sediment, and other water quality deficiencies were the leading causes for the Department to designate rivers and lakes as impaired.

The information in the Integrated Report is complemented by the 2020 *Status of Virginia’s Water Resources* report, which details the following summarized water withdrawals during the 2020 water year:

- Withdrawals from surface waters totaled approximately 5,950 million gallons per day (mgd), while withdrawals from groundwater totaled an additional 280 mgd.
- Community water systems generate the largest demands for surface water in the Commonwealth, with approximately 884 mgd.
- Other large users who supply their own water, for example for manufacturing, demand approximately 418 mgd, 82% of which is supplied by surface water.
- Total surface water withdrawals are typically greater than total ground water withdrawals for large commercial operations. Self-supplying small businesses and individual residents are more likely to rely on groundwater.

These total withdrawals are projected to rise approximately 17% over the next 20 years as the population and associated development and industrial activity of the state increase. Increasing demands for water will impact streams and wetlands across the Commonwealth if they alter water tables or stream flow.

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<sup>76</sup> The Department consults with the U.S. Environmental Protection Agency, U.S. Geological Survey, National Park Service, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Chesapeake Bay Program, Virginia Department of Health, and various academic and civic organizations.

In short, the condition of streams and wetlands varies considerably across the Commonwealth. Water quality at times and in places has improved or degraded in cycles related to the emergence and remediation of threats but has improved overall across the Commonwealth since tracking began.

### **Element 5: Aquatic Resource Goals and Objectives**

The objective of this Compensation Planning Framework is to advance the ecological and public service objectives of the Program Instrument.

The overall goals for all Service Areas include:

1. Replacement of lost acreage of wetlands;
2. Replacement of lost functions of all surface waters;
3. Retention of existing stream and wetland acreage and functions;
4. Improvements to water quality and other stream and wetland functions;
5. Improvements to terrestrial ecosystem functions as they relate to stream and wetland resources;
6. Improvements to overall river watershed health.

The Department requires compensation for stream and wetland impacts that is sufficient to ensure no-net-loss of wetland acreage and function, and to ensure no-net-loss of stream function. Any mitigation approved must be ecologically preferable among proposed mitigation options; provide continuing accountability to the Department and the public; and demonstrate successful replacement of resource functions provided by surface waters.<sup>77</sup> Where possible, the Department will also promote public access opportunities to advance the Commonwealth's goal of increasing access to nature for the public.<sup>78</sup>

The Commonwealth included the goals of establishing 21,965 acres of forest buffer and an additional 26,390 acres of forest buffers with exclusion fencing in its Chesapeake Bay Watershed Implementation Plan III.<sup>79</sup> The Commonwealth included this goal in large part due to the potential improvements in water quality associated with increased riparian vegetation.<sup>80</sup>

The Commonwealth's overall water resources goals are addressed in part through the issuance of permits. The Virginia Water Protection (VWP) permit program expects the current level of permitting activities to continue into the future, barring any major economic downturns. Demand for permits often reflects proximity to Virginia's

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<sup>77</sup> Va. Code § 62.1-44.15:21; 9 VAC 25-210-116(D)-(F).

<sup>78</sup> Commonwealth of Virginia, *2024 Virginia Outdoors Plan*, (available at: <https://vop-vdcr.hub.arcgis.com/>)

<sup>79</sup> Commonwealth of Virginia, *Chesapeake Bay TMDL Phase III Watershed Implementation Plan* (2019).

<sup>80</sup> Commonwealth of Virginia, *Virginia Riparian Forest Buffer Action Plan* (2024).

population centers and/or surface waters. VWP permitting activity in specific locations is also affected by factors such as overall development pressure, the amount of suitable uplands available for build out, and local demand for water-related recreation access.

Under this planning framework, one acre of wetlands or one linear foot of stream bed can be equated to one mitigation bank or in-lieu fee fund credit. However, bank credits are typically a blend of multiple types of compensation depending upon the specific banking instrument. When recording the compensatory mitigation accounted for through use of the WSRF, Department staff will record the dollar amount received and the required compensation in units of area and/or linear extent.

### **Specific goals and objectives**

The amounts, types, and locations of aquatic resource mitigation the WSRF will seek to provide on a Service Area basis will be dependent upon the compensatory mitigation requirements of the purchaser of WSRF credits, the requirements imposed on the WSRF by statute,<sup>81</sup> and the public service and ecological goals of described in the Program Instrument. Compensatory mitigation ratios will typically apply according to the Program Instrument but are subject to change over the life of the WSRF, particularly where condition assessment data may support application of alternative ratios. The Department will set WSRF credit prices according to Table 1.

### **Element 6: Prioritizing Mitigation projects**

The Department expects demand for WSRF credits are likely to stem from permit actions with an occasional need for credits stemming from mitigation for unpermitted activities. The same laws, regulations, and policies that are currently used for permit processing will continue until such time that revisions are mandated or implemented. Staff in the VWP program will play a key role in informing program managers of upcoming compensatory mitigation needs. The Department will use agency tracking tools for permit actions, including the PEEP program, related to use of the WSRF.

The Department will prioritize spending WSRF funds on mitigation bank credits in accordance with Va. Code § 62.1-44.15:23.B. If no mitigation bank credits are available within two years of the date the Department sells credits for an aquatic impact and the Department determines that such mitigation bank credits are not likely to become available within the next year, then the Department will purchase qualifying released credits from another in-lieu fee fund program if available, commence the process of procuring one or more WSRF-funded mitigation project(s), or purchase mitigation bank credits from elsewhere in the river watershed (i.e., outside the primary and secondary

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<sup>81</sup> Va. Code §§ 62.1-44.15:23; 62.1-44.15:23.1.

service areas). The Department will select and fund mitigation projects in accordance with the priorities and hierarchy described in the approved Program Instrument.

If no bank credits are available after two years in the permitted impacts' primary or secondary service areas, the purchase of mitigation bank credits from outside those areas may present the most ecologically and environmentally preferable mitigation option under certain circumstances. This scenario is most likely when a single and complete project's impacts to be mitigated are less than one acre in size within one subbasin and the available funds would not support the development of a mitigation project in that area with a high likelihood of success. The Department may determine the availability of suitable mitigation sites, the overall needs of the watershed, or other factors make mitigation bank credits from elsewhere in the river watershed the most ecologically and environmentally preferable mitigation option.

### **Element 7: Preservation**

The Department will consider preservation as an acceptable form of compensatory mitigation in WSRF-funded projects only if no other ecologically preferable options exist and preservation is proposed in conjunction with other compensation in the response to the Department's RFP.

In general, proposed preservation mitigation projects must permanently protect high quality or exceptional streams and/or wetlands or streams and/or wetlands that may contribute significantly to the conservation needs within a Service Area that benefits or protects the aquatic system. Preservation requirements cannot already be in place over the compensatory mitigation project area, and the sponsor must demonstrate a documented threat or degradation to the compensatory mitigation project area. The Department would only accept preservation as part of a response to a WSRF-funded project RFP if the project adhered to the Department's regulations for including preservation as part of a compensatory mitigation plan.<sup>82</sup>

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<sup>82</sup> Virginia Department of Environmental Quality, *VWP Permit & Compliance Manual* Ch. 3 at 35 (November 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/wetlands-streams>).

## **Element 8: Stakeholders**

As noted previously, a stakeholders group representing the mitigation banking industry played a key role in driving the legislation that mandated creation of the WSRF. Some of these same stakeholders were contacted to provide input on the WSRF structure and operations during the Department's initial development of this program.

The WSRF Program Instrument, Prospectus, Compensation Planning Framework, and all project proposals will also be coordinated for review and comment with the IRT, consisting of federal and state resource agency personnel. The Department will recuse its staff from reviewing and commenting upon the submittals necessary for the WSRF's approval, as well as project proposals that are brought before the IRT. Future revisions to the WSRF Instrument, when necessary, will be submitted to the IRT, and the Department will recuse its staff from review and comment.

Outside of normal public comment periods established as part of WSRF approval, the Department intends to investigate new or existing websites on which to add WSRF information, such as the Regulatory In lieu fee and Bank Information Tracking System (RIBITS), VPT system, PEEP, and SWaN program website. All proposed projects being considered under the WSRF will be posted on RIBITS and the Department's website, including a brief description of the project goals and objectives, and will be publicly noticed during review by the district engineer when applicable.

The Department may also hold periodic meetings with stakeholders once the WSRF is operational to gain feedback about all aspects of the WSRF.

## **Element 9: Long-term Management/Protection**

Mitigation providers (the mitigation bank or other ILF program sponsor, a project sponsor, or a party contracting with a bank, ILF program sponsor, or a project sponsor) will be responsible for the long-term management of sites approved for compensatory mitigation and for estimating the cost of and securing financing for long-term management. The long-term management of compensatory mitigation is and will be a necessary element of all mitigation projects. As permitted by the Federal Mitigation Rule, the Department will assign responsibility for long-term management and protection to appropriate parties as approved by the Corps and IRT.

The IRT requires that sponsors of proposed mitigation banking instruments and in-lieu fee program instruments and sites document that provisions will be made for the long-term ownership and management of mitigation projects. Those provisions include an appropriate protective instrument on the property that runs with the chain of title (including appropriate alternatives to conservation easements where federally recognized tribes are involved), a legally binding agreement with a party assuming responsibility for

long-term maintenance of the project, and a source of funds to conduct any necessary maintenance activities. When the WSRF purchases mitigation bank credits or released in-lieu fee program credits, it will have assurance that the IRT has already verified that all necessary ownership and long-term management provisions have been satisfied.

If no qualifying mitigation bank credits or released in-lieu fee program credits are available, the Department will commission appropriate mitigation projects. The Department will issue RFPs soliciting proposals from competent third-party contractors. Each RFP will specify that the selected contractor is responsible for preparing a long-term management plan that identifies management needs, costs, funding sources, financing, and contingencies sufficient to guarantee the success of each project undertaken in accordance with the Federal Mitigation Rule and VWP program regulations, including remediation of catastrophic events.<sup>83</sup> The contractor must identify the party who will assume responsibility for long-term management and provide a proposed form of protective instrument to be executed for the project site (including appropriate alternatives to conservation easements where federally recognized tribes are involved). The RFP will further state that the long-term management plan and related materials must be submitted to the Department and Corps for approval prior to the commencement of the project. Lastly, the contract will require demonstration that the contractor has completed all necessary actions to ensure the protection and long-term management of the project site before the Department approves final payment to the contractor.

The Department will also incentivize and request that proposed project sponsors responding to WSRF RFPs plan and design projects to be self-sustaining through time. Some active management and maintenance maybe necessary to ensure the long-term viability and sustainability of some compensatory mitigation projects. For example, the long-term management plan for a compensatory mitigation project may require prescribed burns to sustain fire-dependent species or to control invasive species or repair/ replace fences to continue to exclude livestock from riparian vegetation and streams.

### **Element 10: Evaluation and Reporting**

This Compensation Planning Framework also will be evaluated any time (1) significant revisions are made to the Program Instrument or (2) material amendments to the Federal Mitigation Rule or Virginia Code that affect the priorities or operation of the WSRF. These event-driven reviews will be supplemented with periodic reviews. Due to the unknown

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<sup>83</sup> The third-party contractor also will be responsible for obtain all necessary permit approvals for the project from the Corps, Department, and any other relevant agencies.

frequency and timing of Program Instrument revisions, no fixed evaluation frequency is specified (after an initial five-year review).

Periodic reviews will consist of both internal and external evaluations of the Program Instrument and this planning framework. The external review will include stakeholder participation that the Department will solicit in advance of any requested revisions. Unless the Department deems an earlier review is necessary, the Department anticipates the first review to occur within five years of the first approved project to use WSRF moneys. Finally, the Department will conduct periodic reviews and revisions to WSRF credit costs as needed and with an opportunity for public comment. The Department will submit all comments and agency responses to the IRT as part of any WSRF Instrument revision process.

The Department will issue reports on the progress, success and compliance of the program. These reports include annual reporting on program activities, mitigation site activity and overall success of the projects and how they contribute to the success of the program. However, the Department does not intend to develop project-specific reports. Mitigation Banks or project sponsors are responsible for all reporting for mitigation bank establishment activities and sponsored project activities required under the provisions of any applicable permits, mitigation banking instruments, protective instruments, or sponsor-required protocols. Such reporting may include, but is not limited to, pre- and post-construction conditions, unexpected events, and success monitoring data.

## Exhibit 1

### Information Specific to Service Areas

The following is additional information specific to Service Areas regarding aquatic resource threats, historic and current aquatic resource conditions, and potential mitigation projects that may be considered in each river watershed.

The conditions described herein were gathered from multiple sources. The following basin-specific conditions were reported in the Department's Draft *Virginia's 2024 305(b)/303(d) Water Quality Assessment Integrated Report* (April 2024) and are directly related to the identified aquatic threats:

- Potomac: Approximately 40% forested, 33% cropland and pasture, 27% urban
- Shenandoah: Approximately 45% forested, 39% cropland and pasture, 16% urban
- James: Over 65% forested, 19% cropland and pasture, 12% urban
- Rappahannock: Approximately 51% forested, 36% cropland and pasture, 6% urban
- Roanoke: Over 62% forested, 25% cropland and pasture, 10% urban
- Chowan River-Dismal Swamp: Approximately 64% forested, 28% cropland and pasture, 6% urban
- Tennessee: Approximately 48% forested, 39.7% cropland and pasture, a small percent urban
- Big Sandy: Approximately 86% forested, 5% cropland and pasture, a small percent urban
- Chesapeake Bay/Atlantic Ocean: Approximately 30% forested, 22% cropland and pasture, 24% urban
- York: Approximately 65% forested, 20% cropland and pasture, 10% urban
- New: Approximately 59% forested, 35% cropland and pasture, 3% considered urban

## **Potomac River Basin:**

### **Threats**

The following threats were identified in the Potomac River basin: sediment load alterations; toxins; nutrient input, organic matter input, turbidity, pH, hydrologic, and dissolved oxygen regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; metals; unintentional capture or killing of wildlife; and complications due to small wildlife populations. Invasive plant and animal species have been identified in the Northern Virginia region.<sup>84</sup> Some suspected sources of designated use impairment in the rivers of this basin include wildlife other than waterfowl, non-point sources, agriculture, and grazing in riparian zones. In lakes, suspected sources of designated use impairment are largely attributed to unknown sources with a smaller percentage of possible sources of impairment stemming from atmospheric deposition of toxins, combined sewer overflows, contaminated sediments, grazing in riparian zones, and upstream sources. For estuaries in the basin, agriculture, sediments, industrial point source discharges, the loss of riparian habitats, and the atmospheric deposition of nitrogen are suspected sources of impairment.<sup>85</sup>

### **Potential WSRF-Funded Projects**

In places where agriculture is prevalent, such as the Potomac-Shenandoah, Roanoke, Tennessee, and Rappahannock River Basins, as well as on the Eastern Shore of Virginia, and where the required criteria can be met, measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals.

In Service Areas such as the Potomac River Basin where a high level of land development occurs, potential projects may also include sediment reduction and habitat restoration as part of the mitigation project activities that focus on water quality improvements.

Finally, dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins. Dams and the associated impounded water have been found to contribute to the destruction of stream habitat, to limit the migrations of fish species, and to

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<sup>84</sup> Department of Conservation and Recreation, *Virginia Invasive Species*, (Mar. 13, 2023) (available at: <https://www.invasivespeciesva.org/>). Examples include the water chestnut (<https://dwr.virginia.gov/wildlife/invasive-species/water-chestnut/>) and invasive zebra mussels (<http://dwr.virginia.gov/wildlife/zebra-mussels/>).

<sup>85</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters.

## **Shenandoah River Basin:**

### **Threats**

Invasive plant and animal species have been identified in the Northern Virginia region (<https://www.invasivespeciesva.org/>; <https://dwr.virginia.gov/wildlife/invasive-species/water-chestnut/>); <http://dwr.virginia.gov/wildlife/zebra-mussels/>). Some suspected sources of designated use impairment in the rivers of these basins include wildlife other than waterfowl, non-point sources, agriculture, and grazing in riparian zone, but in lakes the suspected sources are largely attributed to unknown sources with a smaller percentage of possible sources of impairment stemming from atmospheric deposition of toxins, combined sewer overflows, contaminated sediments, grazing in riparian zones, and upstream sources.<sup>86</sup> Benthic algae and nutrients have also been identified as a potential concern in the Shenandoah River watershed.<sup>87</sup>

### **Potential WSRF-Funded Projects**

In places where agriculture is prevalent, such as the Potomac, Shenandoah, Roanoke, and Rappahannock River Basins, as well as on the Eastern Shore of Virginia, and where the required criteria can be met, measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals. The restoration or preservation of small ridge and valley streams and rivers to improve water quality, channel structure, and riparian buffers within the Shanandoah Valley are also potential projects.

## **James River Basin:**

### **Threats**

The following threats were identified in the James River watershed: sediment load alteration; herbicides/fungicides/insecticides; competition; predation; toxins;

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<sup>86</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

<sup>87</sup> Department of Environmental Quality, *Final 305(b)/303(d) Water Quality Integrated Report* (Oct. 2022) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

nutrient input, organic matter input, turbidity, pH, hydrologic, dissolved oxygen regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; and metals. Some suspected sources of designated use impairment in the rivers of this basin include agriculture, on-site septic treatment systems, non-point sources, wildlife other than waterfowl, and urban runoff or storm sewers. For lakes in this river watershed, the suspected sources of impairment are largely unknown, but dams, atmospheric deposition of toxins, non-point sources, and agriculture are known sources. For estuaries in the basin, agriculture, industrial and municipal point source discharges, and non-point sources are suspected sources of impairment.<sup>88</sup>

### **Potential WSRF-Funded Projects**

In Service Areas such as the James River Basin where a high level of land development occurs, potential projects may also include sediment reduction and habitat restoration as part of the mitigation project activities that focus on water quality improvements. In areas with high forest coverage, goals may include the increase in the amount of conserved, protected, and established forestland in Virginia's watersheds for water quality benefits; the establishment and maintenance of riparian buffer zones; and the planting trees in wetlands or wetland buffers.

Dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins. Dams and the associated impounded water have been found to contribute to the destruction of stream habitat, to limit the migrations of fish species, and to alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters.

## **Rappahannock River Basin:**

### **Threats**

The following threats were identified in the Rappahannock River basin: sediment load alteration; herbicides/fungicides/insecticides; competition; predation; toxins; nutrient input, organic matter input, turbidity, pH, hydrologic, dissolved oxygen regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; and metals. Some suspected sources of designated use impairment in the rivers of the Rappahannock river watershed include on-site

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<sup>88</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

septic treatment systems, livestock, waterfowl, wildlife other than waterfowl [unspecified activities], pet wastes, and some urban runoff. For lakes in the watershed, the known suspected sources of impairment are primarily non-point sources and the atmospheric deposition of toxins. Suspected sources of impairment for estuaries in the basin are agriculture, municipal point source discharges, loss of riparian habitat, industrial point source discharges, and atmospheric deposition of nitrogen.<sup>89</sup>

### **Potential WSRF-Funded Projects**

In places where agriculture is prevalent, such as the Potomac-Shenandoah, Roanoke, and Rappahannock River Basins, as well as on the Eastern Shore of Virginia, and where the required criteria can be met, measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals.

Dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins, and even somewhat in Tidewater Virginia. Dams and their associated impounded water have been found to contribute to the destruction of stream habitat, to alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters.

## **Roanoke and Yadkin Rivers Basin:**

### **Threats**

The following threats were identified in the Roanoke and Yadkin Rivers basin: sediment load alteration; herbicides/fungicides/insecticides; competition; predation; toxins; nutrient input, organic matter input, turbidity, pH, hydrologic, water temperature, dissolved oxygen regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; metals; and complication due to small populations. Some suspected sources of designated use impairment in the rivers of this basin include wildlife and other waterfowl [unspecified activities], grazing in riparian zones, unspecified domestic waste, pet wastes, and on-site septic systems. The suspected known sources of impairment for lakes in the basin are industrial point sources discharges, atmospheric deposition,

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<sup>89</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

contaminated sediments, on-site septic treatment systems, and wildlife other than waterfowl.<sup>90</sup>

### **Potential WSRF-Funded Projects**

In places where agriculture is prevalent, such as the Potomac-Shenandoah, Roanoke, and Rappahannock River Basins, as well as on the Eastern Shore of Virginia, and where the required criteria can be met, measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals.

Due to the forested area in the river watershed, additional goals may include the increase in the amount of conserved, protected, and established forestland in the river watershed for water quality benefits; the establishment and maintenance of riparian buffer zones; and planting trees in wetlands or wetland buffers.

Finally, dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins. Dams and the associated impounded water have been found to contribute to the destruction of stream habitat, to alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters.

## **Chowan River Basin:**

### **Threats**

The following threats were identified in the Chowan River basin: sediment load alteration; herbicides/fungicides/insecticides; competition; toxins; nutrient input, turbidity, hydrologic, dissolved oxygen regime alterations; and organic pollutants. Some suspected sources impairing the designated use in the rivers of this basin include atmospheric deposition, agriculture, on-site septic treatment systems, and non-point sources. For lakes, the suspected sources are natural conditions and sources, atmospheric deposition of toxics, and agriculture. Suspected sources to estuaries within the basin are on-site septic treatment systems, municipal point source discharges, urban runoff, agriculture, and livestock.<sup>91</sup>

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<sup>90</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

<sup>91</sup> *Id.*

## **Potential WSRF-Funded Projects**

In areas with high forest coverage, for example in the New and Chowan River Basins, goals may include the increase in the amount of conserved, protected, and established forestland in Virginia's watersheds for water quality benefits; the establishment and maintenance of riparian buffer zones; and the planting trees in wetlands or wetland buffers. DOF notes that all of these activities are closely related to meeting water quality goals associated with the Chesapeake Bay restoration and watersheds for Virginia's southern rivers. Implementation of agricultural Best Management Practices and stream channel restoration are also appropriate in light of the cropland area in the basin.

### **Tennessee River Basin/Big Sandy River Basin Complex:**

#### **Threats**

The following threats were identified in the Tennessee/Big Sandy River basin complex: sediment load alteration; herbicides/fungicides/insecticides; toxins; nutrient input, organic matter input, turbidity, pH, and hydrologic regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; metals; and complications due to small populations. Suspected sources of designated use impairment in the rivers of this complex include unrestricted cattle access, rural residential areas, sewerage discharges in unsewered areas [i.e., straight pipes], coal mining, and surface mining. For lakes in the complex, the suspected sources are atmospheric deposition of toxins and natural sources.<sup>92</sup>

The condition of streams and wetlands in the western Virginia watersheds has historically been affected by coal mining, the region's primary industry, which continues to affect streams and wetlands today. As alternative energy sources have gained more widespread acceptance, the region has also been, and may continue to be, targeted for energy infrastructure growth. Growth of this particular economic sector will continue to impact surface waters in the region.

#### **Potential WSRF-Funded Projects**

DEQ has previously identified the practice of direct discharge (or 'straight-piping') of waste waters to surface waters in the far western reaches of the Commonwealth, such as the Tennessee River Basin/Big Sandy River Basin Complex, that are

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<sup>92</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

affecting both water quality and human health. Additionally, DEQ has Total Maximum Daily Load (TMDL) plans in Southwest Virginia that include the removal of straight pipes to meet the water quality standards. As such, DEQ's intention is to consider project proposals of this nature after having determined that the project proponent has made a practicable effort in locating suitable, traditional compensation projects in this basin, and/or has made a reasonable effort to consider other compensation practices as part of the project scope.

The Department will consider measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals in light of the agriculture in the area.

## **York River Basin:**

### **Threats**

The following threats were identified in the York River basin: sediment load alteration; herbicides/fungicides/insecticides; competition; predation; toxins; nutrient input, organic matter input, turbidity, hydrologic, dissolved oxygen regime alterations; organic pollutants; channel or shoreline alteration; habitat fragmentation; metals; and complications due to small populations. Some suspected sources of designated use impairment in the rivers of this basin include on-site septic treatment systems, agriculture, non-point sources, urban runoff and storm sewers, and the atmospheric deposition of toxics. Suspected sources of impairment for lakes in the basin are unknown. For estuaries, suspected sources of impairment are agriculture, sources outside the state, sediment resuspension, and internal nutrient recycling.<sup>93</sup>

### **Potential WSRF-Funded Projects**

Dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins. Dams and the associated impounded water have been found to contribute to the destruction of stream habitat, to alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters. In areas with high forest coverage, goals may include the increase in the amount of conserved, protected, and established forestland in Virginia's watersheds for water

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<sup>93</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

quality benefits; the establishment and maintenance of riparian buffer zones; and the planting trees in wetlands or wetland buffers.

### **New River Basin:**

#### **Threats**

The following threats were identified in the New River basin: sediment load alteration; herbicides/fungicides/insecticides; toxins; nutrient input, turbidity, and hydrologic regime alterations; and channel or shoreline alteration. Some suspected sources of designated use impairment in the rivers of this basin include livestock, unrestricted cattle access to rivers, on-site septic treatment systems, other domestic waste, wildlife other than waterfowl, and grazing in riparian zones. For lakes in the basin the suspected sources are atmospheric deposition, contaminated sediments, industrial point source discharges, and on-site septic treatment systems.<sup>94</sup>

#### **Potential WSRF-Funded Projects**

In areas with high forest coverage, for example in the New and Chowan River Basins, goals may include the increase in the amount of conserved, protected, and established forestland in Virginia's watersheds for water quality benefits; the establishment and maintenance of riparian buffer zones; and the planting trees in wetlands or wetland buffers. DOF notes that all of these activities are closely related to meeting water quality goals associated with the Chesapeake Bay restoration and watersheds for Virginia's southern rivers. Implementation of agricultural Best Management Practices and stream channel restoration are also appropriate in light of the cropland area in the basin.

### **Chesapeake Bay and its Small Coastal Basins:**

#### **Threats**

The following threats were identified in the Coastal Plain and Coastal Marsh: sediment load alteration; herbicides/fungicides/insecticides; competition; predation; toxins; nutrient input, hydrologic, and salinity regime alterations; organic pollutants; habitat fragmentation and destruction; metals; genetic alteration (e.g., hybridization); unintentional capture or killing; intentional take;

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<sup>94</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

sea level rise; and food supply or trophic structure changes. Some suspected sources of designated use impairment in the rivers of this basin include on-site septic treatment systems, agriculture, non-point sources, urban runoff and storm sewers, and the atmospheric deposition of toxics. For estuaries in the basin, agriculture, sources outside the state, and sediments and sediment resuspension are suspected sources of designated use impairment.<sup>95</sup>

### **Potential WSRF-Funded Projects**

In places where agriculture is prevalent, such as the Potomac-Shenandoah, Roanoke, and Rappahannock River Basins, as well as on the Eastern Shore of Virginia, and where the required criteria can be met, measures such as enhancing, increasing, and/or preserving riparian buffer functions and values and excluding of livestock from those wetland or riparian areas may be used to meet or partially meet the WSRF's goals.

In Service Areas such as the Chesapeake Bay region where a high level of land development occurs, potential projects may also include sediment reduction and habitat restoration as part of the mitigation project activities that focus on water quality improvements.

Dam removal and/or fish passage measures may be an option in Service Areas such as the Potomac, James, Rappahannock, York, and Roanoke River Basins, and even somewhat in Tidewater Virginia. Dams and the associated impounded water have been found to contribute to the destruction of stream habitat, to alter the temperature and chemical nature of downstream waters, as well as the flow velocities of up- and downstream waters.

## **Atlantic Ocean:**

### **Threats**

The following threats were identified for barrier islands and other beaches: sea level rise; human disturbance; and aquaculture.

### **Potential WSRF-Funded Projects**

The marine environment (Atlantic Ocean) presents unique and specific challenges, most recently recognized in discussions regarding sea-level rise. Permits issued through the Virginia Water Protection Permit Program are frequently waived upon

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<sup>95</sup> Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).

issuance of permits from other state and/or federal permitting programs whose jurisdiction overlaps with that of DEQ. While DEQ would expect to have few permitting and compensatory mitigation activities in this Service Area, energy infrastructure and waterfront projects may present the need for a compensation approach.

In Service Areas such as the Atlantic Ocean where a high level of land development occurs, potential projects may also include sediment reduction and habitat restoration as part of the mitigation project activities that focus on water quality improvements.

# **Appendix B**

## **Regulatory Compliance Checklist**

<b>Prospectus Requirements in 33 CFR § 332.8(d)</b>	<b>Section/Page Number(s)</b>
The objectives of the proposed mitigation bank or in-lieu fee program.	I / 1-5
How the mitigation bank or in-lieu fee program will be established and operated.	III / 6-28
The proposed service area	IV / 29
The general need for and technical feasibility of the proposed in-lieu fee program	V / 29-32
The proposed ownership arrangements and long-term management strategy for the in-lieu fee project sites.	VI / 32-33
The qualifications of the sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the sponsor.	VII / 33
A compensation planning framework	Appendix A
<ul style="list-style-type: none"> <li>Geographic service areas, including a watershed-based rationale for the delineation of each service area</li> </ul>	Element 1 / A2-A3
<ul style="list-style-type: none"> <li>A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats</li> </ul>	Element 2 / A5-A6
<ul style="list-style-type: none"> <li>An analysis of historic aquatic resource loss in the service area(s)</li> </ul>	Element 3 / A7
<ul style="list-style-type: none"> <li>An analysis of current aquatic resource conditions in the service area(s), supported by an appropriate level of field documentation</li> </ul>	Element 4 / A7-A8
<ul style="list-style-type: none"> <li>A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide</li> </ul>	Element 5 / A9-A10
<ul style="list-style-type: none"> <li>A prioritization strategy for selecting and implementing compensatory mitigation activities</li> </ul>	Element 6 / A10-A11
<ul style="list-style-type: none"> <li>An explanation of how any preservation objectives identified in paragraph (c)(2)(v) of this section and addressed in the prioritization strategy in paragraph (c)(2)(vi) satisfy the criteria for use of preservation in § 332.3(h);</li> </ul>	Element 7 / A11
<ul style="list-style-type: none"> <li>A description of any public and private stakeholder involvement in plan development and implementation, including, where</li> </ul>	Element 8 / A11-A12

appropriate, coordination with federal, state, tribal and local aquatic resource management and regulatory authorities	
<ul style="list-style-type: none"> <li>• A description of the long-term protection and management strategies for activities conducted by the in-lieu fee program sponsor</li> </ul>	Element 9 / A12-A13
<ul style="list-style-type: none"> <li>• A strategy for periodic evaluation and reporting on the progress of the program in achieving goals and objectives, including a process for revising the planning framework as necessary</li> </ul>	Element 10 / A13-A14
A description of the in-lieu fee program account	VIII / 34-38

# **Appendix C**

## **References**

1. 2000 Acts of Assembly, Ch. 1032 (Apr. 19, 2000).
2. 2007 Acts of Assembly, Ch. 659 (Mar. 20, 2007).
3. 2013 Acts of Assembly, Ch. 742 (Apr. 3, 2013).
4. 2023 Acts of Assembly, Ch. 206 (Mar. 22, 2023).
5. 40 CFR § 230.93.
6. 33 CFR §§ 230.98, 332.1 *et seq.*
7. 33 U.S.C. § 1251 *et seq.*
8. 9 VAC 25-210 *et seq.*
9. Commonwealth of Virginia, *Chesapeake Bay TMDL Phase III Watershed Implementation Plan* (2019).
10. Commonwealth of Virginia, Department of Conservation and Recreation, *Virginia Invasive Species*, (Mar. 13, 2023) (available at: <https://www.invasivespeciesva.org/>).
11. Commonwealth of Virginia, Department of Environmental Quality, *Draft 305(b)/303(d) Water Quality Integrated Report* (April 2024) (available at: <https://www.deq.virginia.gov/our-programs/water/water-quality/assessments/integrated-report>).
12. Commonwealth of Virginia, Department of Environmental Quality, *Report to the Chair of the House Committee on Agriculture, Chesapeake, and Natural Resources; Review of Supply and Demand for Stream and Wetland Mitigation Credits and Incentivizing Dam Removal Projects in Virginia* (Dec. 2022).
13. Commonwealth of Virginia, Department of Environmental Quality, *Virginia Annual Water Resources Report* (Oct. 2024).
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15. Commonwealth of Virginia, Department of Forestry, *Forest Resource Information* (last viewed Mar. 3, 2025) (available at: <https://dof.virginia.gov/forest-markets-sustainability/forest-inventory/forest-resource-information/>).
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17. Commonwealth of Virginia, Department of Wildlife Resources, *Virginia's 2015 Wildlife Action Plan* (Sept. 1, 2015) (available at: <https://dwr.virginia.gov/wildlife/wildlife-action-plan/>).
18. Compensatory Mitigation for Losses of Aquatic Resources, 73 Fed. Reg. 19594 (Apr. 10, 2008) (codified at 33 CFR Parts 325 and 332).
19. M.W. Lang, J.C. Ingebritsen, & R.K Griffin, *Status and Trends of Wetlands in the Conterminous United States 2009 to 2019*, U.S. Fish & Wildlife Serv. (2024).
20. Steve Martin & Becca Madsen, *The Time It Takes for Restoration: An Analysis of Mitigation Bank Instrument Timelines*, Environmental Policy Innovation Center (EPIC) and Ecological Restoration Business Association (2023).

21. United States Department of Agriculture, *Chesapeake Bay Riparian Forest Buffer Initiative: Virginia State Task Force Final Report and Request for Funding* (2015).
22. Va Code §§ 62.1-44.15:20; 62.1-44.15:21; 62.1-44.15:23; 62.1-44.15:23.1.
23. Walter I. Priest, *Historic Wetland Loss in the Elizabeth River*, 14 Virginia Wetlands Report (1999).

# **Appendix D**

## **Excerpts of Selected Authorities**

The following excerpts are for reference only, as copied from the Code of Virginia Legislative Information Service (LIS) website (March 4, 2025).

Va Code § 62.1-44.3. Definitions.

Unless a different meaning is required by the context, the following terms as used in this chapter shall have the meanings hereinafter respectively ascribed to them:

“Beneficial use” means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. 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 an instream beneficial use of Virginia's waters. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural uses, electric power generation, commercial, and industrial uses.

“Board” means the State Water Control Board. However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.

“Certificate” means any certificate or permit issued by the Department.

“Department” means the Department of Environmental Quality.

“Director” means the Director of the Department of Environmental Quality.

“Establishment” means any industrial establishment, mill, factory, tannery, paper or pulp mill, mine, coal mine, colliery, breaker or coal-processing operations, quarry, oil refinery, boat, vessel, and every other industry or plant or works the operation of which produces industrial wastes or other wastes or which may otherwise alter the physical, chemical or biological properties of any state waters.

“Excavate” or “excavation” means ditching, dredging, or mechanized removal of earth, soil or rock.

“Industrial wastes” means liquid or other wastes resulting from any process of industry, manufacture, trade, or business or from the development of any natural resources.

“Land-disturbance approval” means an approval allowing a land-disturbing activity to commence issued by (i) a Virginia Erosion and Stormwater Management Program authority after the requirements of § 62.1-44.15:34 have been met or (ii) a Virginia

Erosion and Sediment Control Program authority after the requirements of § 62.1-44.15:55 have been met.

“The law” or “this law” means the law contained in this chapter as now existing or hereafter amended.

“Member” means a member of the Board.

“Municipal separate storm sewer” means a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system or "MS4," including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains, that is:

1. Owned or operated by a federal entity, state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including a special district under state law such as a sewer district, flood control district, drainage district or similar entity, or a designated and approved management agency under § 208 of the federal Clean Water Act (33 U.S.C. § 1251 et seq.) that discharges to surface waters;
2. Designed or used for collecting or conveying stormwater;
3. Not a combined sewer; and
4. Not part of a publicly owned treatment works.

“Normal agricultural activities” means those activities defined as an agricultural operation in § 3.2-300 and any activity that is conducted as part of or in furtherance of such agricultural operation but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

“Normal silvicultural activities” means any silvicultural activity as defined in § 10.1-1181.1 and any activity that is conducted as part of or in furtherance of such silvicultural activity but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

“Other wastes” means decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals, and all other substances except industrial wastes and sewage which may cause pollution in any state waters.

“Owner” means the Commonwealth or any of its political subdivisions, including but not limited to sanitation district commissions and authorities and any public or private institution, corporation, association, firm, or company organized or existing under the laws of this or any other state or country, or any officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for any actual or potential discharge of sewage, industrial wastes, or other wastes to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5.

“Person” means an individual, corporation, partnership, association, governmental body, municipal corporation, or any other legal entity.

“Policies” means policies established under subdivisions (3a) and (3b) of § 62.1-44.15.

“Pollution” means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution" for the terms and purposes of this chapter.

“Pretreatment requirements” means any requirements arising under the Board's pretreatment regulations including the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the owner of a publicly owned treatment works; or any reporting requirements imposed by the owner of a publicly owned treatment works or by the regulations of the Board.

“Pretreatment standards” means any standards of performance or other requirements imposed by regulation of the Board upon an industrial user of a publicly owned treatment works.

“Reclaimed water” means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a direct beneficial or controlled use that would not otherwise occur. Specifically excluded from this definition is "gray water."

“Reclamation” means the treatment of domestic, municipal, or industrial wastewater or sewage to produce reclaimed water for a direct beneficial or controlled use that would not otherwise occur.

“Regulation” means a regulation issued under subdivision (10) of § 62.1-44.15.

“Reuse” means the use of reclaimed water for a direct beneficial use or a controlled use that is in accordance with the requirements of the Board.

“Rule” means a rule adopted by the Board to regulate the procedure of the Board pursuant to subdivision (7) of § 62.1-44.15.

“Ruling” means a ruling issued under subdivision (9) of § 62.1-44.15.

“Sewage” means the water-carried human wastes from residences, buildings, industrial establishments or other places together with such industrial wastes and underground, surface, storm, or other water as may be present.

“Sewage treatment works” or “treatment works” means any device or system used in the storage, treatment, disposal, or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power, and other equipment, and appurtenances, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for the ultimate disposal of residues or effluent resulting from such treatment. These terms shall not include onsite sewage systems or alternative discharging sewage systems.

“Sewerage system” means pipelines or conduits, pumping stations, and force mains, and all other construction, devices, and appliances appurtenant thereto, used for conducting sewage or industrial wastes or other wastes to a point of ultimate disposal.

“Special order” means a special order issued under subdivisions (8a), (8b), and (8c) of § 62.1-44.15.

“Standards” means standards established under subdivisions (3a) and (3b) of § 62.1-44.15.

“State waters” means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

“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.

**Va Code § 62.1-44.15:21. Impacts to wetlands.**

A. Permits shall address avoidance and minimization of wetland impacts to the maximum extent practicable. A permit shall be issued only if the Board finds that the effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to a significant impairment of state waters or fish and wildlife resources.

B. Permits shall contain requirements for compensating impacts on wetlands. Such compensation requirements shall be sufficient to achieve no net loss of existing wetland acreage and functions and may be met through (i) wetland creation or restoration, (ii) purchase or use of mitigation bank credits pursuant to § [62.1-44.15:23](#), (iii) contribution to the Wetland and Stream Replacement Fund established pursuant to § [62.1-44.15:23.1](#) to provide compensation for impacts to wetlands, streams, or other state waters that occur in areas where neither mitigation bank credits nor credits from a Board-approved fund that have met the success criteria are available at the time of permit application, or (iv) contribution to a Board-approved fund dedicated to achieving no net loss of wetland acreage and functions. The Board shall evaluate the appropriate compensatory mitigation option on a case-by-case basis with consideration for which option is practicable and ecologically and environmentally preferable, including, in terms of replacement of acreage and functions, which option offers the greatest likelihood of success and avoidance of temporal loss of acreage and function. This evaluation shall be consistent with the U.S. Army Corps of Engineers Compensatory Mitigation for Losses of Aquatic Resources (33 C.F.R. Part 332). When utilized in conjunction with creation, restoration, or mitigation bank credits, compensation may incorporate (a) preservation or restoration of upland buffers adjacent to wetlands or other state waters or (b) preservation of wetlands.

C. The Board shall utilize the U.S. Army Corps of Engineers' "Wetlands Delineation Manual, Technical Report Y-87-1, January 1987, Final Report" as the approved method for delineating wetlands. The Board shall adopt appropriate guidance and regulations to ensure consistency with the U.S. Army Corps of Engineers' implementation of delineation practices. The Board shall also adopt guidance and regulations for review and approval of the geographic area of a delineated wetland. Any such approval of a delineation shall remain effective for a period of five years; however, if the Board issues a permit pursuant to this article for an activity in the delineated wetland within the five-year period, the approval shall remain effective for the term of the permit. Any delineation accepted by the U.S. Army Corps of Engineers as sufficient for its exercise of jurisdiction pursuant to § 404 of the Clean Water Act shall be determinative of the geographic area of that delineated wetland.

D. The Board shall develop general permits for such activities in wetlands as it deems appropriate. General permits shall include such terms and conditions as the Board deems

necessary to protect state waters and fish and wildlife resources from significant impairment. The Board is authorized to waive the requirement for a general permit or deem an activity in compliance with a general permit when it determines that an isolated wetland is of minimal ecological value. The Board shall develop general permits for:

1. Activities causing wetland impacts of less than one-half of an acre;
2. Facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or State Corporation Commission, except for construction of any natural gas transmission pipeline that is greater than 36 inches inside diameter pursuant to a certificate of public convenience and necessity under § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)). No Board action on an individual or general permit for such facilities shall alter the siting determination made through Federal Energy Regulatory Commission or State Corporation Commission approval. The Board and the State Corporation Commission shall develop a memorandum of agreement pursuant to §§ [56-46.1](#), [56-265.2](#), [56-265.2:1](#), and [56-580](#) to ensure that consultation on wetland impacts occurs prior to siting determinations;
3. Coal, natural gas, and coalbed methane gas mining activities authorized by the Department of Energy, and sand mining;
4. Virginia Department of Transportation or other linear transportation projects; and
5. Activities governed by nationwide or regional permits approved by the Board and issued by the U.S. Army Corps of Engineers. Conditions contained in the general permits shall include, but not be limited to, filing with the Board any copies of preconstruction notification, postconstruction report, and certificate of compliance required by the U.S. Army Corps of Engineers.

E. Within 15 days of receipt of an individual permit application, the Board shall review the application for completeness and either accept the application or request additional specific information from the applicant. Provided the application is not administratively withdrawn, the Board shall, within 120 days of receipt of a complete application, issue the permit, issue the permit with conditions, deny the permit, or decide to conduct a public meeting or hearing. If a public meeting or hearing is held, it shall be held within 60 days of the decision to conduct such a proceeding, and a final decision as to the permit shall be made within 90 days of completion of the public meeting or hearing. A permit application may be administratively withdrawn from processing by the Board if the application is incomplete or for failure by the applicant to provide the required information after 60 days from the date of the latest written information request made by the Board. Such administrative withdrawal shall occur after the Board has provided (i) notice to the applicant and (ii) an opportunity for an informal fact-finding proceeding pursuant to § [2.2-4019](#). An applicant may request a suspension of application review by the Board. A submission by the applicant making such a request shall not preclude the Board from

administratively withdrawing an application. Resubmittal of a permit application for the same or similar project, after such time that the original permit application was administratively withdrawn, shall require submittal of an additional permit deposit and may be subject to additional notice requirements. In addition, for an individual permit application related to an application to the Federal Energy Regulatory Commission for a certificate of public convenience and necessity pursuant to § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)) for construction of any natural gas transmission pipeline greater than 36 inches inside diameter, the Board shall complete its consideration within the one-year period established under 33 U.S.C. § 1341(a).

F. Within 15 days of receipt of a general permit coverage application, the Board shall review the application for completeness and either accept the application or request additional specific information from the applicant. Provided the application is not administratively withdrawn, the Board shall, within 45 days of receipt of a complete application, deny, approve, or approve with conditions any application for coverage under a general permit within 45 days of receipt of a complete preconstruction application. The application shall be deemed approved if the Board fails to act within 45 days. A permit coverage application may be administratively withdrawn from processing by the Board if the application is incomplete or for failure by the applicant to provide the required information after 60 days from the date of the latest written application request made by the Board. Such administrative withdrawal shall occur after the Board has provided (i) notice to the applicant and (ii) an opportunity for an informal fact-finding proceeding pursuant to § [2.2-4019](#). An applicant may request suspension of an application review by the Board. A submission by the applicant making such a request shall not preclude the Board from administratively withdrawing an application. Resubmittal of a permit coverage application for the same or similar project, after such time that the original permit application was administratively withdrawn, shall require submittal of an additional deposit and may be subject to additional notice requirements.

G. No Virginia Water Protection Permit shall be required for impacts to wetlands caused by activities governed under Chapter 13 (§ [28.2-1300](#) et seq.) of Title 28.2 or normal agricultural activities or normal silvicultural activities. This section shall also not apply to normal residential gardening, lawn and landscape maintenance, or other similar activities that are incidental to an occupant's ongoing residential use of property and of minimal ecological impact. The Board shall develop criteria governing this exemption and shall specifically identify the activities meeting these criteria in its regulations.

H. No Virginia Water Protection Permit shall be required for impacts caused by the construction or maintenance of farm or stock ponds, but other permits may be required pursuant to state and federal law. For purposes of this exclusion, farm or stock ponds shall include all ponds and impoundments that do not fall under the authority of the Virginia Soil and Water Conservation Board pursuant to Article 2 (§ [10.1-604](#) et seq.) of Chapter 6 pursuant to normal agricultural or silvicultural activities.

I. No Virginia Water Protection Permit shall be required for wetland and open water impacts to a stormwater management facility that was created on dry land for the purpose of conveying, treating, or storing stormwater, but other permits may be required pursuant to local, state, or federal law. The Department shall adopt guidance to ensure that projects claiming this exemption create no more than minimal ecological impact.

J. An individual Virginia Water Protection Permit shall be required for impacts to state waters for the construction of any natural gas transmission pipeline greater than 36 inches inside diameter pursuant to a certificate of public convenience and necessity under § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)). For purposes of this subsection:

1. Each wetland and stream crossing shall be considered as a single and complete project; however, only one individual Virginia Water Protection Permit addressing all such crossings shall be required for any such pipeline. Notwithstanding the requirement for only one such individual permit addressing all such crossings, individual review of each proposed water body crossing with an upstream drainage area of five square miles or greater shall be performed.

2. All pipelines shall be constructed in a manner that minimizes temporary and permanent impacts to state waters and protects water quality to the maximum extent practicable, including by the use of applicable best management practices that the Board determines to be necessary to protect water quality.

3. The Department shall assess an administrative charge to any applicant for such project to cover the direct costs of services rendered associated with its responsibilities pursuant to this subsection. This administrative charge shall be in addition to any fee assessed pursuant to § [62.1-44.15:6](#).

**Va Code § 62.1-44.15:23. Wetland and stream mitigation banks.**

A. For purposes of this section:

“Physiographic province” means one of the five physiographic provinces of Virginia designated as the Appalachian Plateaus, Blue Ridge, Coastal Plain, Piedmont, and Ridge and Valley physiographic provinces as identified on Figure 2 in the Overview of the Physiography and Vegetation of Virginia prepared by the Department of Conservation and Recreation, Division of Natural Heritage and dated February 2016. The Department of Environmental Quality may adjust the boundaries of a physiographic province to reflect site-specific boundaries based on relative elevation, relief, geomorphology, and lithology provided by the bank sponsor.

“Primary service area” means the fourth order subbasin in which the bank is located, as defined by the hydrologic unit boundaries of the National Watershed Boundary Dataset or the hydrologic unit system or dataset utilized and depicted or described in the bank’s approved mitigation banking instrument, and any adjacent fourth order subbasin within the same river watershed.

“River watershed” means the Potomac River Basin; Shenandoah River Basin; James River Basin; Rappahannock River Basin; Roanoke and Yadkin Rivers Basin; Chowan River Basin, including the Dismal Swamp and Albemarle Sound; Tennessee River Basin/Big Sandy River Basin Complex; Chesapeake Bay and its Small Coastal Basins; Atlantic Ocean; York River Basin; and New River Basin.

“Secondary service area” means the area outside the primary service area but within the same physiographic province in which the bank is located and any adjacent physiographic province within the same river watershed.

“Tree canopy” includes all of the area of canopy coverage by self-supporting and healthy woody plant material exceeding five feet in height.

B. When a Virginia Water Protection Permit is conditioned upon compensatory mitigation for adverse impacts to wetlands or streams, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from any wetland or stream mitigation bank in the Commonwealth, or in Maryland on property wholly surrounded by and located in the Potomac River if the mitigation banking instrument provides that the Board shall have the right to enter and inspect the property and that the mitigation bank instrument and the contract for the purchase or use of such credits may be enforced in the courts of the Commonwealth, 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 (i) the impacted site is located in the bank’s primary or secondary service area as provided in subsection C or it meets all the conditions found in clauses (a) through (d) and either clause (e) or (f); (ii) the bank is

ecologically preferable to practicable onsite and offsite individual mitigation options as defined by federal wetland regulations; and (iii) the banking instrument, if approved after July 1, 1996, has been approved by a process that included public review and comment. When the impacted site is not located in the bank's primary or secondary service area, the purchase or use of credits shall not be allowed unless the applicant demonstrates to the satisfaction of the Department of Environmental Quality that (a) 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 encompasses multiple river watersheds; (b) there is no practical same river watershed mitigation alternative; (c) the impacts are less than one acre in a single and complete project within a subbasin; (d) there is no significant harm to water quality or fish and wildlife resources within the river watershed of the impacted site; and either (e) impacts within the Chesapeake Bay watershed are mitigated within the Chesapeake Bay watershed as close as possible to the impacted site or (f) impacts within subbasins 02080108, 02080208, and 03010205, as defined by the National Watershed Boundary Dataset, are mitigated in-kind within those subbasins, as close as possible to the impacted site. For the purposes of this subsection, the hydrologic unit boundaries of the National Watershed Boundary Dataset or other hydrologic unit system may be adjusted by the Department of Environmental Quality to reflect site-specific geographic or hydrologic information provided by the bank sponsor.

C. For impacts to a site for which no credits are available to purchase (i) in the primary service area of any mitigation provider or (ii) at a price below 200 percent of the current price of credits applicable to that site from a Board-approved fund dedicated to achieving no net loss of wetland acreage and functions, a permit applicant may be permitted to purchase or use credits from the secondary service area of a mitigation provider to satisfy all or any part of such applicant's mitigation requirements. For purposes of this subsection, the permit applicant shall provide a determination of credit availability and credit price no later than the time such applicant submits to the Department (a) its proof of credit acquisition or (b) a later change to such proof.

If a permit applicant purchases or uses credits from a secondary service area, the permit applicant shall:

1. Acquire three times the credits it would have had to acquire from a bank in the primary service area for wetland impacts and two times the number of credits it would have had to acquire in the primary service area for stream impacts;
2. When submitting proof of acquisition of credits for a subdivision or development, provide to the Department a plan that the permit applicant will implement that is certified by a licensed professional engineer, surveyor, or landscape architect for the planting, preservation, or replacement of trees on the development site such that the minimum tree canopy percentage 20 years after development is projected to be as follows:
  - a. Ten percent tree canopy for a site zoned for business, commercial, or industrial use;

- b. Ten percent tree canopy for a residential site zoned for 20 or more units per acre;
- c. Fifteen percent tree canopy for a residential site zoned for more than eight but fewer than 20 units per acre;
- d. Twenty percent tree canopy for a residential site zoned for more than four but not more than eight units per acre;
- e. Twenty-five percent tree canopy for a residential site zoned for more than two but not more than four units per acre; and
- f. Thirty percent tree canopy for a residential site zoned for two or fewer units per acre.

For a mixed-use development, the tree canopy percentage required pursuant to this subdivision shall be that which is applicable to the predominant use.

The tree canopy requirements established under this subsection shall not supersede any additional requirements imposed by a locality pursuant to § [15.2-961](#) or [15.2-961.1](#).

D. The Department is authorized to serve as a signatory to agreements governing the operation of mitigation banks. The Commonwealth and its officials, agencies, and employees shall not be liable for any action taken under any agreement developed pursuant to such authority.

E. State agencies and localities are authorized to purchase credits from mitigation banks.

F. A locality may establish, operate and sponsor wetland or stream single-user mitigation banks within the Commonwealth that have been approved and are operated in accordance with the requirements of subsection B, provided that such single-user banks may only be considered for compensatory mitigation for the sponsoring locality's municipal, joint municipal or governmental projects. For the purposes of this subsection, the term "sponsoring locality's municipal, joint municipal or governmental projects" means projects for which the locality is the named permittee, and for which there shall be no third-party leasing, sale, granting, transfer, or use of the projects or credits. Localities may enter into agreements with private third parties to facilitate the creation of privately sponsored wetland and stream mitigation banks having service areas developed through the procedures of subsection B.

G. Notwithstanding any provision of this section restricting the location of the source of credits, the Department may, for tidal wetland impacts, authorize the use of, including without the application of subsection C, a tidal wetland mitigation bank located in an adjacent river watershed when such bank contains the same plant community type and salinity regime as the impacted wetlands, which shall be the preferred form of compensation. This subsection shall apply only (i) to tidal wetland mitigation banks with a polyhaline salinity regime located in subbasins 02080102, 02080107, 02080108, and 02080208 and (ii) when a tidal wetland mitigation bank with the same plant community

type and salinity regime as the impacted wetlands is not available in the same river watershed as the impacted wetland.

**Va Code § 62.1-44.15:23.1. Wetland and Stream Replacement Fund established.**

There is hereby created in the state treasury a special nonreverting fund to be known as the Wetland and Stream Replacement Fund, hereafter referred to as “the Fund.” The Fund shall be established on the books of the Comptroller. All contributions to the Board pursuant to clause (iii) of subsection B of § [62.1-44.15:21](#) shall be paid into the state treasury and credited to the Fund. Interest earned on moneys in the Fund shall remain in the Fund and be credited to it. Any moneys remaining in the Fund, including interest thereon, at the end of each fiscal year shall not revert to the general fund but shall remain in the Fund. The Fund shall be administered and utilized by the Department. The Fund may be used as an additional mechanism for compensatory mitigation for impacts to aquatic resources (i) that result from activities authorized under (a) § 404 and 401 of the Clean Water Act (33 U.S.C. § 1251 et seq.), (b) the Virginia Water Protection Permit Regulation (9 VAC 25-210 et seq.), or (c) § 10 of the Rivers and Harbors Act (33 U.S.C. § 403); (ii) that result from unauthorized activities in waters of the United States or state waters; and (iii) in other cases, as the appropriate regulatory agencies deem acceptable. Moneys in the Fund shall be used for the purpose of purchasing mitigation bank credits in compliance with the provisions of subsection B of § [62.1-44.15:23](#) as soon as practicable after moneys are collected. If the Department determines within two years after the collection of moneys for a specific impact that credits will not be available within three years of the collection of moneys for such specific impact, then funds may be utilized either (1) to purchase credits from a Board-approved fund that have met the success criteria, if qualifying credits are available, (2) for the planning, construction, monitoring, and preservation of wetland and stream mitigation projects and preservation, enhancement, or restoration of upland buffers adjacent to wetlands or other state waters when used in conjunction with creation or restoration of wetlands and streams, or (3) for other water quality improvement projects as deemed acceptable by the Department. Such projects developed under clause (2) shall be developed in accordance with guidelines, responsibilities, and standards established by the Department for use, operation, and maintenance consistent with 33 CFR Part 332, governing compensatory mitigation for activities authorized by U.S. Army Corps of Engineer permits. Expenditures and disbursements from the Fund shall be made by the State Treasurer on warrants issued by the Comptroller upon written request signed by the Director of the Department. The Department may charge a reasonable fee to administer the Fund.

**VIRGINIA ACTS OF ASSEMBLY -- 2023 SESSION**

**CHAPTER 206**

*An Act to amend and reenact § 62.1-44.15:23.1 of the Code of Virginia, relating to Wetland and Stream Replacement Fund; availability of credits; use of funds.*

[H 1628]

Approved March 22, 2023

**Be it enacted by the General Assembly of Virginia:**

**1. That § 62.1-44.15:23.1 of the Code of Virginia is amended and reenacted as follows:**

**§ 62.1-44.15:23.1. Wetland and Stream Replacement Fund established.**

There is hereby created in the state treasury a special nonreverting fund to be known as the Wetland and Stream Replacement Fund, hereafter referred to as "the Fund." The Fund shall be established on the books of the Comptroller. All contributions to the Board pursuant to clause (iii) of subsection B of § 62.1-44.15:21 shall be paid into the state treasury and credited to the Fund. Interest earned on moneys in the Fund shall remain in the Fund and be credited to it. Any moneys remaining in the Fund, including interest thereon, at the end of each fiscal year shall not revert to the general fund but shall remain in the Fund. The Fund shall be administered and utilized by the Department of Environmental Quality. The Fund may be used as an additional mechanism for compensatory mitigation for impacts to aquatic resources (i) that result from activities authorized under (a) Section 404 and 401 of the Clean Water Act (33 U.S.C. § 1251 et seq.), (b) the Virginia Water Protection Permit Regulation (9 VAC 25-210 et seq.), or (c) Section 10 of the Rivers and Harbors Act (33 U.S.C. § 403); (ii) that result from unauthorized activities in waters of the United States or state waters; and (iii) in other cases, as the appropriate regulatory agencies deem acceptable. Moneys in the Fund shall be used for the purpose of purchasing mitigation bank credits in compliance with the provisions of subsection B of § 62.1-44.15:23 as soon as practicable if qualifying credits are available after moneys are collected. If such the Department determines within two years after the collection of moneys for a specific impact that credits are will not be available within three years of the collection of moneys for a such specific impact, then funds shall may be utilized either (1) to purchase credits from a Board-approved fund that have met the success criteria, if qualifying credits are available, (2) for the planning, construction, monitoring, and preservation of wetland and stream mitigation projects and preservation, enhancement, or restoration of upland buffers adjacent to wetlands or other state waters when used in conjunction with creation or restoration of wetlands and streams, or (3) for other water quality improvement projects as deemed acceptable by the Department of Environmental Quality. Such projects developed under clause (2) shall be developed in accordance with guidelines, responsibilities, and standards established by the Department of Environmental Quality for use, operation, and maintenance consistent with 33 CFR Part 332, governing compensatory mitigation for activities authorized by U.S. Army Corps of Engineer permits. Expenditures and disbursements from the Fund shall be made by the State Treasurer on warrants issued by the Comptroller upon written request signed by the Director of the Department of Environmental Quality. The Department may charge a reasonable fee to administer the Fund.