

Virginia State Wetland Program Summary



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Section A. Quick View

Description of State's Wetlands

Palustrine wetlands comprise about 72 percent of the wetland area of Virginia. Estuarine wetlands comprise about 23 percent of the State's wetlands. Lacustrine wetlands in freshwater ponds comprise most of the remaining 5 percent. Only a few hundred acres of marine and riverine wetlands exist in Virginia. Palustrine forested wetlands (swamps) are the most abundant type of wetland in Virginia, accounting for about 60 percent of the total wetland area in the State. Estuarine emergent wetlands (tidal marshes) are the second-most abundant type of wetland, comprising about 8 percent of the wetlands in the State.

State Definition of Wetlands

By statute and by regulation, Virginia uses the same definition of wetlands as the federal definition.

Historic Wetland Loss/Gain

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
1,849,000	1,074,613	774,387	42%

Note: VA hopes to update this data soon.

Source: US Fish and Wildlife Service - Dahl (1989)

Primary State Wetlands Webpages

Virginia Department of Environmental Quality – Non-tidal Wetlands

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams.aspx>

Virginia Marine Resources Commission – Tidal Wetlands

<http://mrc.virginia.gov/hmac/hmoverview.shtm>

State Wetland Program Plan

Comprehensive Wetland Program Plan for the Commonwealth of Virginia

http://water.epa.gov/type/wetlands/upload/virginia_wpp.pdf

The state is in the process of updating its wetland plan (expected Fall 2015)

No Net Loss/Net Gain Goal

Section 62.1-44.15:5 of the Code of Virginia, relating to wetlands, mandates by statute that the Commonwealth implement a nontidal wetlands regulatory program to achieve no net loss of existing wetland acreage and function, (not linear footage) and to develop voluntary and incentive based programs to achieve a net resource gain in wetlands. This mandate is reflected in the VWPP Regulation (9 VAC 25-210) and for tidal wetlands and VMRC regulation in Section 28.2-1300 Code of VA and 4 VAC 20 et seq. In addition, Virginia is a signatory to the 2000 (the latest agreement was 2014) Chesapeake Bay Agreement, which states that the signatories’ regulatory programs must achieve a no net loss of existing wetland acreage and function.

State Resources for Wetland Work

State Name	Core element #1: Regulation	Core Element #2: Monitoring and Assessment	Core Element #3: Wetland Water Quality Standards	Core Element #4: Voluntary Wetland Restoration
Agency	Virginia Department of Environmental Quality	Virginia Department of Environmental Quality	Virginia Department of Environmental Quality	
Source(s)	Unknown	Federal grants	Unknown	
Amount	Unknown	Unknown	Unknown	
Staffing	32 FTE Across Core Elements 1-3	(32 FTE Across Core Elements 1-3)	(32 FTE Across Core Elements 1-3)	
Agency	Virginia Marine Resources Commission	Virginia Marine Resources Commission		
Source(s)	Unknown	Unknown		
Amount	Unknown	Unknown		
Staffing	Unknown	Unknown		
Agency	Virginia Institute of Marine Science (scientific support as needed)			
Source(s)	Unknown			
Amount	Unknown			
Staffing	Ad hoc			

Please note that VDEQ does not have separate budget and staffing information by element

State Permitting Fees

State Permitting Fee	Non-Tidal	Tidal
Yes/No	YES	YES
Amount (range)	\$0-\$60,000	Application fee ~\$100
Agency	VDEQ	VMRC

Innovative Features

- The Nontidal Wetlands Act, passed by the Virginia General Assembly in 2000, has allowed Virginia to regulate impacts to all wetlands within the state, including those that may not currently be under federal jurisdiction.
- Forthcoming WETCAT wetland condition assessment tool (in final testing phase). This tool allows comparisons with different wetland polygons. Supports efforts to avoid and minimize, site development, cumulative/secondary impact analysis, and allows tie-in with impaired waters work. The state has been working on developing WETCAT for the last 8 years.
- Virginia DEQ and the Corps Norfolk District Office also have a model stream evaluation tool. The *Unified Stream Methodology (USM)* can be downloaded from the following site:
http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/USMFinal_01-18-07.pdf

Models and Templates

- In 2002 the General Assembly passed a voluntary certification program for professional wetland delineators, effective July 2004, and expanded the Board of Certified Soil Scientists to include wetland professionals, thus forming the Board of Certified Soil Scientists and Wetland Professionals.

Section B. Regulation

How are Wetlands Regulated in Virginia?

The State of Virginia implement state-wide policy for wetlands and streams and have jurisdiction over all surface waters (including wetlands) in the Commonwealth of Virginia. Authority to enact Virginia Water Protection (VWP) permit regulations is given by § 62.1-44.15:20 of the Code of Virginia. The over-arching regulation for the permit program is the Virginia Water Protection (VWP) Permit Program Regulation (9 VAC 25-210). Through the VWP permit program, OWSP regulates water withdrawal, excavation, filling, or activities that affect the biological, chemical or physical properties of surface waters (including streams, lakes and wetlands). The VWPP can serve as the Section 401 certification of a federal permit or as a state permit when no federal permit is required.

Non-Tidal Wetlands: The Department of Environmental Quality (DEQ) implements the Virginia Water Protection Permit Program, which is responsible for Section 401 Certification process for both tidal and nontidal impacts permitted under Section 404 of the Clean Water Act. DEQ can provide Section 401 Certification by either issuing a Virginia Water Protection individual or general permit or by certifying U.S. Army Corps of Engineers nationwide or regional permits. In 2000, the General Assembly removed the dependence of the State nontidal wetlands program on the issuance of a Federal permit, thus enabling DEQ to use the Virginia Water Protection Permit Program to regulate activities in wetlands. Such activities as certain types of excavation in wetlands and fill in isolated wetlands (which may not be

under Federal jurisdiction) were added to the activities already regulated through the Section 401 Certification process. The state does a large amount of upfront work with permit applicants to ensure environmental protection and does not deny many permits as a result.

State Programmatic General Permit: The U.S. Army Corps of Engineers Norfolk District issued a modified state program general permit on June 1, 2007. The modified 07-SPGP-01 became effective on June 1, 2007 which was reissued in 2012 (<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Permits/SPGP.aspx>), and may be used for certain residential, commercial, and institutional development activities and linear transportation projects. The projects must be below applicable wetland and stream impact thresholds and meet all other limitations and conditions of the SPGP.

Tidal Wetlands: Impacts to tidal wetlands, including vegetated tidal wetlands and non-vegetated shoreline between mean low and mean high water, are regulated under the Virginia Tidal Wetlands Act (Title 28.2, Chapter 13 of the Code of Virginia) enacted in 1972 and revised in 1982. The Virginia Marine Resources Commission has responsibility for issuing tidal wetlands permits under Chapters 12 and 13 of Title 28.2 of the Code of Virginia. While Chapter 12 activities permitted by Virginia Marine Resources Commission may require a separate Virginia Water Protection permit, Chapter 13 activities only require a separate Virginia Water Protection permit if § 401 Certification is required. DEQ provides the 401 Certification through issuing a Virginia Water Protection permit. In some instances when a Corps nationwide or regional permit is also issued on the same Chapter 12 or 13 activities permitted by Virginia Marine Resources Commission, DEQ may provide the § 401 Certification through a letter agreement, concurring that the U.S. Army Corps of Engineers permit conditions meet State regulatory goals, or waive the requirement for a Virginia Water Protection permit altogether.

The State provides citizens with access to *A Public Guide to the Wetland Permitting Process in Virginia*: <http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/PublicGuideRevised2012.pdf>

Wetland Delineation

Delineation Guidance	Yes	No	Detail
Use State’s Own Method		X	However, the state does have the statutory authority to create its own delineation method
Use Corps’ 1987 Manual and Regional Supplement	X		
Other (Please describe)		X	

Evaluation Methodology

- Virginia generally accepts any peer-reviewed water quality assessment that looks at function, water quality and habitat.
- The most commonly used tool is the state’s new WETCAT - Wetland Condition Assessment Tool (forthcoming; in final testing phase). This tool allows comparisons with different wetland polygons. Supports efforts to avoid and minimize, site development, cumulative/secondary impact analysis, and allows tie-in with impaired waters work. The state has been working on developing WETCAT for the last 8 years.

- DEQ worked with botanical experts and wetland scientists from various regions of Virginia to develop a ***Floristic Quality Assessment Index*** (FQAI) to be used as a qualitative indicator of a wetland's relative condition.
- Virginia also has a carefully crafted model stream evaluation tool. The ***Unified Stream Methodology (USM)*** (http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/USMFinal_01-18-07.pdf) provides a method to rapidly assess what the stream compensation requirements would be for permitted stream impacts and the amount of "credits" obtainable through implementation of various stream compensation practices.

Exempted Activities

Virginia's exemptions are comparable to the federal exemptions. For a list of activities exempt from the requirement for a VWPP, but may require other permits under state and federal law, go to:

<http://register.dls.virginia.gov/details.aspx?id=2379>

Special Provisions for Agriculture and Forestry

State exemptions for agriculture and silviculture follow the federal exemptions.

Penalties and Enforcement

The Commonwealth of Virginia is responsible, through its agencies, for enforcement of permits for tidal and nontidal wetland activities, and can assess both civil and criminal penalties. Enforcement is handled in a different division of VDEQ than the division that houses the Wetland Program. The state offers guidance through its *Civil Enforcement Manual*:

<http://www.deq.virginia.gov/Programs/Enforcement/Laws,Regulations,Guidance.aspx>

The vast majority of enforcement actions are resolved voluntarily. Most minor wetlands infractions are resolved informally by means of a Request for Corrective Action or Warning Letter issued by DEQ to the alleged violator, or by a Letter of Agreement signed by DEQ and the alleged violator.

For more serious wetlands violations, DEQ issues a Notice of Violation (NOV) to the alleged violator. In most cases, NOVs are resolved by a Consent Order entered into between DEQ, on behalf of the State Water Control Board, and the alleged violator, subject to the approval of the Board. Wetland violators can be subject to a civil penalty of up to \$25,000 per day per violation under State Water Control Law (§ 62.1-44.32).

Permit Tracking

DEQ maintains a regulatory permitting database (CEDs) from which data is retrieved to develop all or part of approximately nine internal and external, periodic reports. Information developed for the reports may include permitting actions, the time it takes to complete those actions, waters impacts, and the compensatory mitigation that may be required for impacts. Data here is related to the activities in surface waters that are regulated by DEQ's Virginia Water Protection (VWP) Permit Program. VDEQ is currently modernizing the database to include all DEQ regulatory programs.

State General Permit (statewide vs. regional coverage)

Permit Coverage	Yes	No	Detail (Type of Permit)
Regional General Permit	X		Corps has 5-7 regional general permits
Statewide General Permit	X		SPGP administered by DEQ

Description: In November 2002, the Corps’ Norfolk District put into effect a State Programmatic General Permit (SPGP-01) for wetlands and stream impacts from development and transportation projects, and suspended NWP 39 and the nontidal portion of NWP 14. The permit has been reviewed and reissued periodically since that time. Under the SPGP-01, the Commonwealth has the primary responsibility for issuance of development permits for impacts less than one-half acre; the Corps has a 15-day review for permits for impacts between one-half to one acre; and transportation permits for impacts less than one-third acre. (<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/PermitsFeesRegulations.aspx>)

Assumption of 404 Powers

Assumption Status	Yes	No	Detail
Assumed		X	
Working Toward Assumption		X	
Explored Assumption	X		The state has informally reviewed the possibility of assuming the program (2004 and 2012). A joint study by DEQ and VGA determined that the cost was too high)

Joint Permitting

The permit process for both tidal and nontidal wetlands relies on a Joint Permit Application (JPA) which receives independent and concurrent review by local wetlands boards, VMRC, DEQ and the U.S. Army Corps of Engineers (Corps), as appropriate.

Special Area Management Plans and Advanced Identification Plans

Virginia Department of Environmental Quality (VDEQ) works with localities within Tidewater Virginia to set up protection ordinances within the Chesapeake Bay area. Resource Protection Areas (RPAs) are established in each locality and consist of tidal water and wetlands, non-tidal perennial tributaries and their adjacent non-tidal wetlands, and a 100-foot landward buffer. In general only water dependent development and redevelopment can take place in RPAs, as specified by each locality's ordinances. Wetlands not identified above, as well as other environmentally sensitive areas, are included in Resource Management Areas which can be developed under certain restrictions.

Special Area Management Plans have been developed for certain areas within Virginia's Coastal Zone. These are managed by VDEQ’s Coastal Program.

Buffer Protections

The 2000 Virginia General Assembly enacted the *Riparian Buffer Tax Credit* to provide a nonrefundable tax credit for voluntary actions to:

- Individuals, S-Corporations or Partnerships; Estates and Trusts are not eligible for this tax credit, but Family Partnerships and Limited Liability Corporations are eligible.
- owning land on which timber is harvested,
- which abuts a waterway,
- and who forbears timber harvesting on certain portions of the land for 15 consecutive years.

The Virginia Department of Forestry managed the tax credit program. The amount of the credit is equal to 25% of the value of the timber retained as a buffer up to \$17,500. The buffer must be at least 35 feet wide and no more than 300 feet and be intact for 15 years. The applicant must have a Stewardship Plan for the tract to qualify. A separate application must be completed for each tract. For more information: <http://www.dof.virginia.gov/tax/credit/riparianbuffer/index.htm>

Mitigation Policy

Virginia's Nontidal Wetland Act states that "[p]ermits shall address avoidance and minimization of wetland impacts to the maximum extent practicable." Further, "permits [issued for impacting nontidal wetlands] 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 wetland creation or restoration, purchase or use of mitigation bank credits...or contributing to a fund that is approved by the [State Water Control] Board and is dedicated to achieving no net loss of wetland acreage and functions. When utilized in conjunction with creation, restoration or mitigation bank credits, compensation may incorporate (i) preservation or restoration of upland buffers adjacent to wetlands or other state waters or (ii) preservation of wetlands."

In Virginia, compensatory mitigation may include:

- Purchase or use of wetland mitigation bank credits at a DEQ-approved mitigation bank
- Contributing to a DEQ-approved in-lieu fee fund
- Wetland creation or restoration
- Stream restoration (see the Unified Stream Methodology below)
- Preservation of existing wetland and streams, when utilized in conjunction with creation, restoration, or mitigation bank credits
- Preservation or restoration of upland buffers adjacent to surface waters, when utilized in conjunction with creation, restoration, or mitigation bank credits

Virginia uses the following general compensation ratios (alternative ratios may be required by DEQ for activities permitted under a VWP individual permit):

- 2 acres compensation for each 1 acre of impact (2:1) for forested wetland impacts
- 1.5:1 for scrub-shrub wetland impacts
- 1:1 for emergent wetland impacts
- project-specific ratios for other surface water impacts

The Virginia Aquatic Resources Trust Fund (currently managed by The Nature Conservancy) is a mitigation program which acquires stream and wetland conservation projects throughout Virginia in order to compensate for impacts to streams and wetlands permitted by state and federal regulatory agencies. The Trust Fund is dedicated to replacing the greatest value in terms of acreage and function, while providing a specific emphasis on protecting Virginia's rare plants, animals, and natural communities. Click the link for more information:

<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/virginia/explore/the-virginia-aquatic-resources-trust-fund-home.xml>

Mitigation Database

Permitted wetland losses and wetland compensation for those losses are tracked through DEQ's permit database by latitude/longitude and HUC. The state has a searchable database that will report on tidal and nontidal wetland gains/losses by watershed in WETCAT. The state also relies on the RIBITS database for management of data on the state's mitigation banks.

Section C. Monitoring and Assessment

Agency Responsible for Wetland Monitoring and Assessment

Virginia's wetland monitoring and assessment program is being implemented through a cooperative agreement between DEQ and the Center for Coastal Resources Management at the Virginia Institute of Marine Science (CCRM) using funds awarded through EPA's Wetland Program Development Grants to continue these efforts. For more information about these monitoring and assessment activities, visit the DEQ Wetland Monitoring and Assessment webpage at:

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/MonitoringAssessmentStrategy.aspx>

Mapping/Inventory

The National Wetlands Inventory (NWI) maps have been updated using the new classification system for most of Virginia. GIS mapping has been prepared for coastal wetlands by the VIMS.

State Wetland Mapping Public Portal

The WETCAT tool will provide public access to state wetland maps in the near future.

Wetland Classification and Assessment

Virginia relies on the Cowardin wetland classification system. DEQ's Office of Wetland and Stream Protection (OWSP), in collaboration with the Virginia Institute of Marine Science (VIMS), has developed a wetland monitoring and assessment protocol to provide an ongoing assessment of the status of the Commonwealth's wetland resources and the success of both wetland regulatory and voluntary programs. This tool is called WETCAT.

WETCAT’s assessment protocol consists of a three-tiered approach using comprehensive coverage of all mapped non-tidal wetlands to achieve a GIS based analysis of remotely sensed information (Level I). Level I scores wetland types based on the habitat and water quality stressors associated with surrounding land use types. Levels II and III are intended to calibrate and validate the model that is used for Level I analysis. For more information on WETCAT, go to:

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/MonitoringAssessmentStrategy.aspx>
[X](#)

Statewide Wetland Monitoring Plan

Virginia Wetland and Stream Monitoring Strategy

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/MonitoringAssessmentStrategy.aspx>

Virginia is currently in the process of updating its monitoring and assessment strategy (expected Summer 2015).

Overall Wetland Gain and Loss Tracking System

No. While Virginia DEQ is required to report on wetlands gains and losses for regulated non-tidal wetlands, other losses (and gains) are not tracked by this system. The Virginia Commission on Marine Resources also has a separate database that tracks tidal wetland losses.

Wetland Monitoring and Assessment Characteristics

Level	None	Level 1	Level 2	Level 3
<i>Virginia</i>		X	X	X

Type	None	IBI	Condition*	Functional
<i>Virginia</i>		X	X (The state uses an IBI in Level 3)	NO

* The state focuses on measurement of condition (analogy provided: if the roof has a hole in it, it won't function well)

Frequency	None	Project Specific	Ongoing
<i>Virginia</i>		X	X

Participation in National Wetland Condition Assessment

NWCA Study Type	Yes	No
National Study	X	
State Intensification Study	X	

Detail: Work on the 2011 NWCA study was contracted out to Virginia Institute of Marine Sciences. Participation in the NWCA also allowed the state to run a test of their new WETCAT wetland assessment tool. For more information on Virginia’s involvement with the NWCA contact Kirk Havens at VIMS.

Section D. Water Quality Standards

Wetland and Water Quality Standards

Type	None	Use Existing WQ Standards	In Process	Adopted	Future Direction
Wetland-specific Designated Uses		X			
Narrative criteria in the standards to protect designated wetland uses		X			May develop narrative criteria in the future; dependent on use of WETCAT
Numeric criteria in the standards based on wetland type and location to protect the designated uses		X			
Anti-degradation policy includes wetlands		X			

Description: Virginia does not have narrative and numeric criteria specific to wetlands. Virginia does have Class VII Waters called swamp waters, which have a special D.O. standard. The state does have narrative water quality standards for all state waters, including wetlands have been adopted. The “free forms” are found in the general criteria and include substances attributable to industrial, sewerage or other waste that would interfere with the designated use of the waterbody. Numerical criteria for oxygen, pH and temperature assigned by waters class, toxicants, and for specific uses and certain water bodies are found in 9 VAC 25-260 *et seq.* The state is currently evaluating the correspondence with trends in water quality monitoring by gathering and analyzing monitoring data and other information that could become the basis of wetland quality standards. Water quality standards in Virginia include a special category (Class T) for swamp waters as low pH waters, with pH of 4/3 to 9 to avoid classification as impaired waters (wetland have naturally low pH levels).

Section E. Voluntary Wetland Restoration

Virginia does not have a state-run voluntary wetland restoration program. However, a lot of voluntary restoration is occurring in the state and the state is involved in a number of these collaborative efforts.

- Restoration projects have been undertaken by groups such as The Nature Conservancy, the Chesapeake Bay Foundation, the Department of Defense, the Living River Restoration Trust (formerly, the Elizabeth River Project), and others.
- The Virginia Department of Game and Inland Fisheries (DGIF) has worked to facilitate and affect the voluntary creation and protection of significant acreage of non-tidal wetlands. This work focuses on wet soil management for migratory waterfowl (recreational hunting). This is a

waterfowl program that happens to restore wetlands to reach their goals, rather than being a wetland-focused effort. Contact David North at DGIF for more information.

- Most of the state’s efforts have been on trying to track voluntary restoration, but the task has proved challenging. The following documents provides an overview of voluntary restoration activities in the state:

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/LandownerResourcesVoluntaryRestoration.aspx>

Types of Voluntary Wetland Restoration Work Funded by the State:

Type of Work	YES	NO	Description
Fund Wetland Restoration (may include easement agreements)		X	
Private Land Restoration		X	(Some is federally-funded, but not by the state)
Public Land Restoration		X	
Technical Assistance		X	
Tax Incentives		X	
Other		X	

Voluntary Wetland Restoration Program Components

Wetland Restoration Efforts	Nothing in the Works	Planning	In Progress	Mature/ Complete
Program has a set of restoration goals	N/A			
Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes	N/A			
Developed multi-agency body to coordinate restoration/ protection efforts	N/A			
Set restoration goals based on agency objectives and available information	N/A			

Goals for Restoration Projects*

Goal	Yes	No	Description
No Net Loss	N/A		
Reverse Loss/Net Gain	N/A		
Nonpoint Source Pollution (NPS)/WQ	N/A		
Total Maximum Daily Load (TMDLs)	N/A		
Habitat	N/A		
Coastal Protection	N/A		
Floodwater Protection	N/A		
Groundwater	N/A		
Other (please describe)	N/A		

Landowner Guides and Handbooks to Assist with Voluntary Wetland Restoration Efforts

- *Restoring Virginia’s Wetlands: A Citizen’s Toolkit (2005)*
<http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/restoringvawetlandstoolkit.pdf>
- *Tools for Targeting Sites for Voluntary Wetland Activities*
<http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/toolsvoluntaryrestoration.pdf>
- *Virginia Wetlands and Streams: A Guide for Residential Property Owners*
http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/VWP_Residential_Pamphlet.pdf
- *How to Hire a Wetland Consultant*
[http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/consultant0607\[1\].pdf](http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/consultant0607[1].pdf)

Section F. Innovative and/or Highly Effective Education and Outreach

The state wetland program staff (Dave Davis) guest lectures in both undergraduate and graduate classes at the university on wetland policy 5-6 times per year. However, there are currently no other state-funded wetland education and outreach efforts. Once the WETCAT tool is finalized, the state plans to offer trainings on how to use and integrate the tool into wetland management.

Section G. Climate Change and Wetlands

The state wetland program is not actively leading climate change work. Virginia Institute of Marine Sciences takes the lead on sea level rise work, rather than the state. The College of William and Mary’s School of Law is currently coordinating a workgroup to look at overall public policy re sea level rise (not specific to wetlands; but does include wetlands). The project takes into consideration flood hazards related to sea level rise. Another concern is wetland migration – as sea level rises, non-tidal areas may convert to tidal areas.

Section H. Integration

Entity/Program Area	Yes/No	Description of the Connection
NPDES/Stormwater	YES	Both programs are in the same division; lots of integration; overlap, but not same people; no joint permit
303(d)	YES	Both programs are in the same division; lots of integration; overlap, but not same people
305(b) reporting on wetlands	YES	Both programs are in the same division; lots of integration; overlap, but not same people
Total Maximum Daily Load (TMDLs)	YES	Both programs are in the same division; lots of integration; overlap, but not same people
Climate Change/ Resiliency	Limited	Some sea level rise work, not led by state
Land Use /Watershed planning	In the future	WETCAT may provide linkages in the future
Flood/Hazard Mitigation	NO	Run out of a very separate agency, minimal soft connections
Coastal Work	YES	Serve jointly on the Virginia Coastal Policy Team
Wildlife Action Plan	NO	No hard linkages
Statewide Comprehensive Outdoor Recreation Plan (SCORP)	NO	No hard linkages
Other - Transportation	YES	WETCAT has the capability to look at cumulative impacts as a linear feature to assist highway projects to conduct better NEPA analysis and develop location and design studies; how crossing multiple polygons, how fragmenting

State Wetland Program Continuum

Continuum Stage	Core Element 1: Regulation	Core Element 2: Monitoring & Assessment	Core Element 3: Wetland Water Quality Standards	Core Element 4: Voluntary Restoration
<p>Mature Stage High</p> <p style="text-align: center;">↑</p> <p>Initial Implementation Stage</p> <p>Development Stage</p> <p>Early Stage Low</p>	X	X (Moving from development to implementation)	X	X (No state funded restoration work; however, WETCAT feature will be able to tell what restoration potential exists for a specific polygon)

Special Considerations:

Virginia has over one million acres of wetlands including the Dismal Swamp, one of the few Atlantic white cedar wetlands remaining on the East Coast. Over 58 percent of these wetlands are located within the urban crescent between Washington, D.C. to Norfolk, an area experiencing unprecedented development pressure. While we have relatively large amounts of permitted impacts, we have a strong state program that protects all wetlands and requires that permits provide for no net loss of wetland acreage and function through effective compensatory mitigation.

Section I. Contact Information

Dave Davis (Non-Tidal Wetlands)

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Tony Watkinson (Tidal Wetlands)

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Section J. Useful Websites

State Government Programs

1. Department of Environmental Quality
 - a) Water Program
 - i. Clean Water Financing & Assistance
<http://www.deq.virginia.gov/Programs/Water/CleanWaterFinancingAssistance.aspx>
 - ii. Wetlands & Stream Protection
The Virginia Water Protection Permit Program serves as Virginia's Section 401 certification program for federal Section 404 permits issued under the authority of the Clean Water Act. State law requires that a VWP permit be obtained before disturbing a wetland or stream by clearing, filling, excavating, draining, or ditching. Application is made through the Joint Permit Application process for concurrent federal and state project review.
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams.aspx>
 - Land Owner Resources and Voluntary Restoration

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/LandownerResourcesVoluntaryRestoration.aspx>

- Permits, Fees, and Regulations
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/PermitsFeesRegulations.aspx>
- Surface Water Withdrawals and Impoundments
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/SurfaceWaterWithdrawalsImpoundments.aspx>
- Mitigation
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Mitigation.aspx>
- Nontidal Wetlands Data Query Program
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/DataQuery.aspx>
- Virginia Water Protection Compliance Program
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Compliance.aspx>
- Monitoring and Assessment Strategy
<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/MonitoringAssessmentStrategy.aspx>
- Comprehensive Wetland Program Plan
http://water.epa.gov/type/wetlands/upload/virginia_wpp.pdf

iii. Chesapeake Bay Program

<http://www.deq.virginia.gov/Programs/Water/ChesapeakeBay.aspx>

iv. Stormwater Management

<http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>

v. Water Quality Information & TMDLs

<http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs.aspx>

- Nonpoint Source Pollution Management
<http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/NonpointSourcePollutionManagement.aspx>

a) Coastal Zone Management Program

The Virginia Coastal Zone Management (CZM) Program is a network of Virginia state agencies and local governments, established in 1986 through an Executive Order, which administers enforceable laws, regulations and policies that protect our coastal resources and foster sustainable development.

i. Virginia Coastal & Estuarine Land Conservation Program

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/CoastalEstuarineLandConservationProgram.aspx>

- ii. Laws, Regulations, and Advisory Policies
http://www.deq.virginia.gov/Programs/CoastalZoneManagement/LawsRegulationsGuidance.aspx#wetlands_management
- 2. Marine Resources Commission
 - a) Habitat Management Division
 We manage the state's submerged bottom lands, tidal wetlands, sand dunes and beaches in order to preserve and protect Virginia's natural resources and the habitat our saltwater fisheries depend on.
<http://www.mrc.state.va.us/hmac/hmoverview.shtm>
 - b) Guidelines For Tidal Wetland Mitigation Banks In Virginia
<http://www.mrc.state.va.us/regulations/fr391.shtm>
- 3. Department of Agriculture & Consumer Services
 - a) Agricultural Stewardship Program
<http://www.vdacs.virginia.gov/stewardship/index.shtml>
- 1. Department of Game & Inland Fisheries
 - a) Habitat Partners program
<http://www.dgif.virginia.gov/habitat/>
- 2. Department of Conservation & Recreation
 - a) Water Quality
 Effective July 1, 2013, regulatory programs previously managed by DCR related to erosion and sediment control, the Chesapeake Bay Act and stormwater management will be handled by the Virginia Department of Environmental Quality.
 - b) Natural Heritage Program
http://www.dcr.virginia.gov/natural_heritage/index.shtml
 - c) Floodplain Management Program
http://www.dcr.virginia.gov/dam_safety_and_floodplains/index.shtml
 - d) Tidal Wetlands
http://www.dcr.virginia.gov/natural_heritage/natural_communities/ncEI.shtml

Federal Wetland Programs

- 1. USDA Natural Resources Conservation Program
 Wetlands Reserve Program
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/va/programs/easements/wetlands/>

Other Organization Wetland Programs

- 1. County of Gloucester
 Wetlands Board
<http://www.gloucesterva.info/CodesCompliance/EnvironmentalPrograms/WetlandsBoard/tabid/891/Default.aspx>
- 2. Fairfax County
 - a) Huntley Meadows Park Wetland Restoration Project

- <http://www.fairfaxcounty.gov/parks/huntley-meadows-park/restorationproject.htm>
3. Center for Coastal Resource Management
 - a) Wetlands
<http://ccrm.vims.edu/wetlands/index.html>
 4. Chesapeake Bay Program

The Chesapeake Bay Program is a unique regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. The Chesapeake Bay Program partners include the states of Maryland, Pennsylvania and Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; the Environmental Protection Agency, representing the federal government; and participating citizen advisory groups.

 - a) Agriculture
<http://www.chesapeakebay.net/issues/issue/agriculture>
 - b) Groundwater
<http://www.chesapeakebay.net/issues/issue/groundwater>
 - c) Rivers & Streams
http://www.chesapeakebay.net/issues/issue/rivers_and_streams
 - d) Sediment
<http://www.chesapeakebay.net/issues/issue/sediment>
 - e) Stormwater Runoff
http://www.chesapeakebay.net/issues/issue/stormwater_runoff
 - f) Wetlands
<http://www.chesapeakebay.net/issues/issue/wetlands>
 5. Alliance for Chesapeake Bay

The Alliance brings together individuals, organizations, businesses and governments to find collaborative solutions, to build a strong commitment to stewardship, and to deliver innovative, broadly-supported programs that benefit the land, waters, and residents of the Chesapeake Bay.

 - a) Virginia Citizen Wetland Education, Outreach And Monitoring Program
<https://allianceforthebay.org/resources/publications-old/virginia-citizen-wetland-education-outreach-and-monitoring-program/>
 6. Virginia Association of Wetland Professionals
<http://www.vawp.org/>
 7. Piedmont Environmental Council

The Piedmont Environmental Council (PEC) have offices throughout a nine county Piedmont region that includes Albemarle, Clarke, Culpeper, Fauquier, Greene, Loudoun, Madison, Orange and Rappahannock counties.

 - a) Field Guide to Common Wetland Plants of Virginia's Piedmont
<http://www.pecva.org/maps-and-resources/publications/conservation-and-rural-programs/399-field-guide-to-common-wetland-plants-of-virginias-piedmont>
 8. Virginia Institute of Marine Science/William & Mary College
 - a) Virginia Wetlands Report
<http://www.vims.edu/bayinfo/wetlandreports/index.php>
 9. National Aquarium

a) Wetland Nursery Program

<http://www.aqua.org/care/conservation-initiatives/wetland-nursery-program>