

Maryland State Wetland Program Summary



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Section A. Quick View

Description of State's Wetlands

Palustrine wetlands comprise most of the wetlands in Maryland, followed by estuarine wetlands. There are an estimated 757,000 acres of mapped vegetated palustrine wetlands. Palustrine wetlands are diverse in type, including forested, shrub, and emergent in both tidal and nontidal wetlands, as well as nontidal bogs, fens, and vernal pools. Estuarine vegetated comprise an estimated 240,000 acres. (MDE, 2010).

Detailed information about the types and distribution of Maryland's wetlands may be found in the *Maryland Wetland Conservation Plan* at:

http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/MDWetlandConservationPlan/Pages/Programs/WaterPrograms/Wetlands_Waterways/wetland_conservation/index.aspx

State Definition of Wetlands

The State of Maryland defines wetlands for regulatory purposes, recognizing three main types of wetlands: Nontidal wetlands, private tidal wetlands, and state tidal wetlands. Each wetland type is defined by their spatial distribution, hydrology, vegetation, and soils.

The Federal Section 404 definition of wetland is the adopted reference in the Nontidal Wetland Act and regulations: "Nontidal wetland": (a) Means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation; (b) Is determined according to the Federal Manual; (c) Does not include tidal wetlands regulated under Environment Article, Title 16, Annotated Code of Maryland.

"State tidal wetlands" means any land under the navigable waters of the State below the mean high tide, affected by the regular rise and fall of the tide. Tidal wetlands of this category which have been

transferred by the State by a valid lease, patent, or grant confirmed by Article 5 of the Maryland Declaration of Rights are considered private tidal wetlands to the extent of the interest transferred.

"Private tidal wetlands" means: (a) Land not considered State wetland bordering on or lying beneath tidal waters, which is subject to regular or periodic tidal action and supports aquatic growth; (b) Tidal wetlands transferred by the State by a valid lease, patent, or grant confirmed by Article 5 of the Maryland Declaration of Rights, to the extent of the interest transferred; and (c) Tidal waters created by the excavation of upland unless conveyed to the State.

Historic Wetland Loss/Gain

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
1.4 million	750,000	650,000	46%

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

Primary State Wetlands Webpage

Maryland Department of the Environment - Wetlands and Waterways Webpage
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/Programs/WaterPrograms/Wetlands_Waterways/about_wetlands/index.aspx

State Wetland Program Plan

Maryland does not have an EPA-approved state wetland program plan at this time. However, the state is currently in the process of developing its State Wetland Program Plan. This plan is expected to be completed in 2016.

No Net Loss/Net Gain Goal

An overall no net loss goal is named in statute and/or regulation for tidal and nontidal wetlands. There is also a statutory goal to strive for a net gain in nontidal wetland acreage and function and preserve tidal wetlands.

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
Entity Maryland Department of the Environment (MDE)	Implements regulatory programs for activities in tidal and nontidal wetlands; nontidal wetland buffers and expanded buffers; and	Primarily monitors for mitigation and permit review; some participation and grant administration for National Wetland Condition Assessment; Mid-Atlantic Wetland	N/A MDE has conceptual draft.	Maintains records for voluntary gains; participation on advisory groups through Chesapeake Bay Program; regulatory review

	waterways and floodplains	Work Group		
Sources	State permit review and administrative fees; general funds	For mitigation M&A - -- state fees and compensation funds; EPA WPD and 106 funds for other non-regulatory monitoring and assessment	None	Federal and state funding
FTE	~35 FTE	4+ FTE	.5	~2 FTE
Entity Maryland Department of Natural Resources	Provides comments to regulatory agencies	For vernal pool work; restoration projects; Mid-Atlantic Wetland Work Group	No information available	Manages and advises on voluntary restoration projects; wetland protection through land conservation
Sources	106 funding from MDE; CZM grants; 2010 Chesapeake Bay Trust Fund			
FTE	No information available	No information available		5 FTE for restoration; 2 FTE for wetland protection
Entity Maryland State Highway Administration	Receives authorizations for regulated activities in wetlands and waters for highway transportation projects; manages mitigation projects	Monitoring and assessment for compensatory mitigation projects; assessments of wetlands proposed for impact from highway projects	N/A	
Sources	Federal and state highway funds	Federal and state highway funds		
FTE	19	Personnel involved with monitoring and assessment included with regulatory staff		
Entity MD Department of Agriculture	Local SCD offices advise agricultural producers on avoidance and mitigation when	monitoring of funded restoration projects	N/A	Reviews and funds wetland restoration and enhancement projects

	activities may impact NTW, Implement BMPs in accordance with MDE GP for waterway and floodplain locations			
Sources	No information available State and federal funding	State and federal funding		State and federal funding
FTE	N/A	1		1
Entity Maryland Chesapeake and Coastal Bays Critical Areas Commission	Reviews development activities in wetlands and buffers within 1000 feet of tidal waters or tidal wetlands	N/A	N/A	Regulatory review when project is located within 1000 feet of tidal waters or tidal wetlands
Sources	State funds	N/A	N/A	State Funds
FTE	8	N/A	N/A	1

State Permitting Fees

State Permitting Fee	State Name
Yes/No	YES
Amount (range)	\$300 for certain minor projects; Most new applications \$750 plus amount based on extent of impact, up to \$7500/acre ; some exemptions for minor activities and restoration
Agency	MD Department of the Environment

Innovative Features

- See description of tracking of voluntary restoration projects.
- Partner in Watershed Resources Registry -<http://watershedresourcesregistry.com/>
- Pre-application meeting process and tracking:
<http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/PreApplicationIntroduction.aspx>

Models and Templates

- Restoration prioritization and protection tools
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/Programs/WaterPrograms/Wetlands_Waterways/about_wetlands/prioritizingareas.aspx
- Tidal wetland guides
Review and waiver process for Living Shorelines:
<http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/LivingShorelines.aspx>
- Maryland's Overall Wetland Gains and Losses Tracking Database

Section B. Regulation

How are Wetlands Regulated in Maryland?

All wetlands in Maryland are regulated under various State statutes. The MDE Wetlands and Waterways Program, located within the agency's Water Management Administration, is primarily responsible for state wetlands protection and comprehensive wetland management under the Nontidal Wetlands Protection Act and Tidal Wetlands Act.

Although MDE is primarily responsible for wetland protection in the state, the Maryland Board of Public Works is responsible for issuing licenses required for filling or dredging state-owned tidal wetlands.

- Tidal Wetlands Act. Environment Article, Ann. Code of Maryland, sec. 16-101-16-503: Permits are required for filling or dredging in private tidal wetlands from the Maryland Department of the Environment (MDE); licenses are required for filling or dredging state-owned wetlands from the Board of Public Works.
- Nontidal Wetlands Act. Environment Article Ann. Code of Maryland, sec. 5-901-5—911: Permits required for activities, which alter nontidal wetlands and a 25-foot buffer area. Regulations effective January 1, 1991 (COMAR 26.23.01-06.).
- Chesapeake Bay Critical Area Act. Natural Resources Article, Ann. Code of Maryland, sec. 8-1808: Local jurisdictions must adopt zoning regulations for lands within 1000 feet of the Chesapeake. Tidal and freshwater wetland areas, among other natural resource features, are managed as "habitat protection areas."

- Water Pollution, Environmental Article, sec. 9-313—9-316, 9-319, 9-320, and 9-325, Ann. Code of Maryland: Contains water quality standards and 401 certification provisions. The state has adopted Section 401 Water Quality Certification Program. Certifications are integrated in reviews of activities under tidal and nontidal wetland permit applications.
- “Water Quality Performance Standards” are required to be met through wetland regulations.

Wetland Delineation

Delineation Guidance	Yes	No	Detail
Use State’s Own Method	X		For tidal wetlands, regulatory maps are used (developed 40 years ago and based on 1:200 aerial photography) More recent aerial photographs, from the 1980’s and 1990’s, are used for guidance purposes . All non-mapped tidal wetlands are treated as non-tidal wetlands unless maps are formally amended.)
Use Corps’ 87 Manual and Regional Supplement	X		For non-tidal wetlands use the Corps ’87 manual and supplements.
Other (Please describe)			

Evaluation Methodology

MDE has an assessment tool that includes some HGM methods in it. MD-SHA uses an assessment tool based upon the New Hampshire method. However, no standard method is required by MDE at present.

Exempted Activities

For Nontidal Wetlands

Approved mitigation projects required under nontidal wetlands act and regulations; .Activities within farmed nontidal wetlands and their buffers, excluding farmed nontidal wetlands with 15 or more consecutive days of inundation during the growing season, and their buffers. The duration of inundation is determined by the Department consistent with federal agency procedures adopted pursuant to the Food Security Act of 1985, 16 U.S.C. §3801 et seq. The following activities, if they do not result in cumulative direct or indirect adverse impacts:

- (1) Construction of additions, outbuildings, and accessories to existing structures within a landscape management area which impacts less than 1,000 square feet of nontidal wetlands;
- (2) Construction placed on existing impervious surfaces or on structures within the buffer or expanded buffer;
- (3) Removal of 30 percent of the trees in the buffer, provided that:
 - (a) The density but not the areal extent of the trees is reduced, and
 - (b) Not more than 30 percent of the understory is removed;
- (4) Mowing or other forms of vegetation control on existing rights-of-way;
- (5) The control of State-designated noxious weeds;

- (6) Landscape management in the nontidal wetland, buffer, or expanded buffer;
 - (7) Soil investigations;
 - (8) Percolation tests for sewage disposal fields;
 - (9) Survey markers or survey monuments;
 - (10) Other similar activities with minimal adverse impacts as approved by the Department;
 - (11) The maintenance of specific serviceable structures or fills (see 16 U.S.C. §3801 et seq)
- See next section for agriculture and forestry exemptions for nontidal wetlands.

For Tidal Wetlands

- (1) Dredging of seafood products by any licensed operator including normal leased bottom activities permitted under Natural Resources Article, Title 4, Subtitle 11, Annotated Code of Maryland, and COMAR 08.02.08.12, or the harvesting of submerged aquatic vegetation provided the root system is not affected;
 - (2) Trapping, hunting, fishing, and catching shellfish, if legally permitted;
 - (3) Mosquito control and abatement projects as approved by the Department of Agriculture;
 - (4) Improvement of agricultural drainage ditches as approved by the Department of Agriculture;
 - (5) Routine maintenance, repair, or replacement of a highway structure, pier, boathouse, a structure on a pier, bulkhead, revetment, tidal impoundment dike, water control structure, aboveground transmission facility, agricultural drainage ditch, or highway drainage ditch when the existing structure is functional and there is no increase in the original length, width, height, or channelward encroachment;
 - (6) Channel and harbor navigation aids, if approval has been granted by the United States Coast Guard;
 - (7) Private piers that meet the criteria in COMAR 26.24.04.02;
 - (8) Control of exotic plant species such as *Phragmites australis*, if a toxic materials permit under COMAR 26.08.03.02 is obtained;
 - (9) Temporary installation of bass spawning boxes from March 1 through June 15 annually outside of marked navigation channels.
- See next section for agriculture and forestry exemptions for tidal wetlands.

Special Provisions for Agriculture and Forestry

Tidal Wetlands Act

Most agricultural activities are exempt from requirements of the Act. Grazing is allowed without notification or approval provided that tidal wetland vegetation is not destroyed. Unlike the Nontidal Wetlands Act, aquaculture is not considered an agricultural activity. Aquaculture does not occur in vegetated tidal wetlands. Dredging of seafood products is exempt from this Act if the work is done by an operator licensed by the Department of Natural Resources (DNR). Harvesting of submerged aquatic vegetation is also exempt if no dredging is involved. The cutting of submerged aquatic vegetation requires a permit from DNR. Installation and operation of tide gaits, used by some farmers to prevent salt water from entering agricultural fields, is reviewed under standard permit requirements. Construction of mosquito ditches is not considered an agricultural activity, though it is reviewed by the Department of Agriculture (MDA). They are also exempt if approved by MDA. Projects such as farm roads are reviewed under standard review criteria. Note: Agricultural activities or their best management practices as defined under this Act do not always match those identified in federal programs.

Nontidal Wetlands Act

The Act specifically exempts persons conducting agricultural activities from the requirement to obtain a permit. A person is required to obtain a soil conservation and water quality plan from the soil conservation district (SCD) when new impacts to nontidal wetlands are proposed. SCD personnel are responsible for verifying the extent of wetlands affected by the new activity and assist in preparing the plans. Soil conservation and water quality plans include best management practices (BMP's) for protecting other wetlands, water quality, and preventing soil erosion. Plans also require mitigation for new wetland losses. Mitigation may be delayed if a farmer demonstrates to the Maryland Department of Agriculture that an economic hardship exists. Soil Conservation District personnel submit concurrence sheets and maps or farm plans to MDE to document certain conditions and resources have been evaluated. On the sheets, the SCD personnel indicate whether or not the wetland proposed for impact is isolated, has significant plant or wildlife value, and the size of the disturbance. These conditions in turn will determine if mitigation is required.

Size thresholds for requiring mitigation are similar to those used for other types of regulated activities. MDE reviews the proposal and returns it with concurrence with the findings of the SCD or if other requirements will apply to the proposed activity. Exemptions allow for activities with minor wetland impact to proceed without a soil conservation and water quality plan. Ongoing agricultural activities in nontidal wetlands, including new drainage and maintenance of drainage structures, is allowed under the Maryland Nontidal Wetlands Act without new requirements. Mosquito ditching in nontidal wetlands is not considered an agricultural activity and requires a permit. Agricultural activities that resume in areas that were part of an easement or set aside program are also exempt from any requirement under this Act provided that the activities resume within five years after the set aside has expired. Note: Agricultural activities or their best management practices as defined under this Act do not always match those identified in federal programs.

Forestry activities are exempt from State nontidal wetland permit and mitigation requirements. In order to qualify for this exemption, the land harvested or managed for forestry activities must remain in a forested land use. A person conducting forestry activities must comply with certain best management practices through an erosion and sediment control plan. Among other best management practices, the area must remain as a wetland. Soil conservation districts are responsible for verifying the extent of wetlands and approving the sediment and erosion control plan. A registered professional forester must prepare the plan. Note: Forestry activities or their best management practices as defined under this Act do not always match those identified in federal programs.

Penalties and Enforcement

Civil and criminal penalties are provided for in various laws. Most compliance enforcement is the responsibility of the Maryland Department of the Environment (MDE) and/or the Corps. However, parties must go to court prior to the state levying fines.

Permit Tracking

The state tracks all permitting activity using an enterprise database and *links with all other MDE permits based on property location and identifier; reports on processing time and impacts.*

State General Permit (statewide vs. regional coverage)

Permit Coverage	Yes	No	Detail (Type of Permit)
Regional General Permit	X		Regional general permit for certain restoration activities in support of Chesapeake Bay TMDL
Statewide General Permit	X		A state programmatic general permit for Maryland generally covers activities with up to one acre of impact.

Details: Programmatic General Permit from U.S. Army Corps of Engineers applies to the discharge of dredged or fill material and/or the placement of structures, that are components of a single and complete project, including all attendant features both temporary and/or permanent, which individually and/or cumulatively result in direct or indirect impacts not to exceed 1.0 acre (43,560 square feet) of waters of the United States, including jurisdictional wetlands and/or 2,000 linear feet of streams, for specific categories of activities.

Assumption of 404 Powers

Assumption Status	Yes	No	Detail
Assumed		X	
Working Toward Assumption		X	
Explored Assumption	X		Legislation was proposed twice and failed to pass. Would also have to amend State statutes and regulations. Resources were not the issue, as a fee bill allows resources for staffing. Exploration resumed in 2015.

Joint permitting

A joint State/Federal application is used. A Section 404 general permit is authorized for certain activities that receive State approval.

Special Area Management Plans and Advanced Identification Plans

None.

Buffer Protections

As a matter of state policy, buffers must be included as an option for mitigation requirements. Regulated activities in buffers are also included in law for non-tidal wetlands. Twenty-five foot and 100-foot buffers are recognized in regulations and mapped when special state concern (unique, threatened species; steep sloped with highly-erodible soils).

Mitigation Policy

An overall no net loss goal is in statute and/or regulation and applied for tidal and nontidal wetlands. Permittees and licensees receiving authorizations are generally required to mitigate for permanent losses of wetland or alterations of wetlands resulting in functional losses. The State also allows some losses to be mitigated through payment of an in-lieu fee and is in the process of having its program approved for consistency with federal requirements. However, the state generally mitigates for nontidal

wetlands loss less than 5,000 square feet. Mitigation banking is also allowed and MDE participates on the Interagency Review Team to evaluate proposals.

For more information, for to:

http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/DocumentsandInformation/Pages/Programs/WaterPrograms/Wetlands_Waterways/documents_information/technicaldocuments.aspx

Mitigation Database

The State has an enterprise database for tidal and non-tidal wetlands. The state is working to develop a SQL database to manage this data in the future.

Section C. Monitoring and Assessment

Agency Responsible for Wetland Monitoring and Assessment

The Maryland Department of the Environment, Maryland Department of Natural Resources, Maryland Department of Agriculture and State Highway Administration all work on wetland monitoring and assessment efforts. The state has a new monitoring strategy:

http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/Programs/WaterPrograms/Wetlands_Waterways/about_wetlands/monitoring.aspx

Mapping/Inventory

There are statewide National Wetland Inventory (NWI) maps and digital orthophoto quarter quad maps. The state is drawing in mitigation sites, and plans to make digital updates on mitigation sites, changes in wetlands and changes as a result of regulatory programs. Status and trends reports exist for part of the State. There are also regulatory maps of tidal wetlands.

State Wetland Mapping Public Portal

The state maintains an overall state mapping website: <http://imap.maryland.gov/Pages/default.aspx>

Wetland Classification and Assessment

- The state generally uses the Cowardin classification system. State-designated tidal wetlands are shown on regulatory maps using a unique classification system based on the dominant vegetation type.
- Certain wetlands are designated as nontidal wetlands of special State concern have more stringent permit review and expanded 100 foot buffers.
- While Maryland is moving towards a standard for assessment to capture BMP efforts claimed for credit to meet Chesapeake Bay TMDL requirements, methods are currently determined by each individual agency conducting assessments. The state has a RAM for mitigation projects, but the RAM relies in part on best professional judgment as well as quantitative evaluations MDE uses best professional judgment for most impact assessments. Assessments are generally done by State Highway Administration (SHA) for their proposed projects. The SHA assessment approach is approach modified from the New Hampshire method. An assessment using best professional judgment is performed by staff for most sites visited in the field.

Statewide Wetland Monitoring Plan

Maryland does no comprehensive condition monitoring but did participate in 2011 National Wetland Condition Assessment. The MDE and partners developed a monitoring strategy for wetlands, which is planned to be part of the state's Wetland Program Plan (under development). For more information: http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/Programs/WaterPrograms/Wetlands_Waterways/about_wetlands/monitoring.aspx

Overall Wetland Gain and Loss Tracking System

MDE has databases for regulatory gains and losses and voluntary wetland creation, restoration, and enhancement and has been tracking gains and losses since 1998. Through the Chesapeake Bay Program Agreement, additional tracking is required related to the Bay TMDL. Importantly, Maryland has invested a lot of resources in cross-checking data submitted by practitioners, allowing high levels of quality assurance. This makes Maryland's database one of the most developed in the U.S.

Wetland Monitoring and Assessment Characteristics

Level	None	Level 1	Level 2	Level 3
<i>Maryland</i>		X (Screen wetlands)	X (Cursory in the field)	X (Rare; have funded some long-term studies)

Type	None	IBI	Conditional	Functional
<i>Maryland</i>		DNR is developing an IBI for vernal pools	X (Some for mitigation sites; simple protocol for mitigation sites; participated in NWCA)	X (Checklist for regulated activities combined with best professional judgement; more standard protocol and scoring for mitigation sites with simple quantification.)

Frequency	None	Project Specific	Ongoing
<i>Maryland</i>		X (non-regulatory)	X (for regulatory and voluntary)

Participation in National Wetland Condition Assessment

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

Detail: State contracted consultants; state staff also participated in sampling at NWCA sites. Maryland Department of the Environment will participate in the 2016 National Wetland Condition Assessment.

Section D. Water Quality Standards

Wetland and Water Quality Standards

Type	None	Use Existing WQ Standards	In Process	Adopted	Future Direction
<i>Wetland-specific Designated Uses</i>		X			
<i>Narrative criteria in the standards to protect designated wetland uses</i>	X (had preliminary draft in wetlands monitoring strategy)				
<i>Numeric criteria in the standards based on wetland type and location to protect the designated uses</i>	X				
<i>Anti-degradation policy includes wetlands</i>		X (existing statutes protect wetlands adequately)			

Description:

- Designated uses include: water contact recreation; fishing; propagation of fish, other aquatic life, and wildlife; agricultural and industrial water supply.
- No specific criteria for wetlands exists that differs for other criteria for waters. General water quality criteria exist for substances that are unsightly or odorous, produce a taste, change existing color, create a nuisance, or change other chemical or physical conditions.
- Numeric criteria are in place for toxic substances and fecal coliform, dissolved oxygen, temperature, and turbidity.

- The state has no anti-degradation policy for wetlands as distinct from other waters. However, there is enough in statute already to protect wetlands adequately. Note: Fishable, swimmable do not apply appropriately to wetlands.

Section E. Voluntary Wetland Restoration

The state does not have a designated, single formal volunteer wetland restoration program. However, numerous State, federal, and private funding programs exist to restore wetlands.

Types of 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		
Public Land Restoration	X		
Technical Assistance	X		
Tax Incentives	X		
Other	X		A reduction of property taxes may result from a re-assessment of land due to the existence of a conservation easement.

Description: The state does not have a designated, single formal volunteer wetland restoration program. However, numerous State, federal, and private funding programs exist to restore wetlands.

Voluntary Wetland Restoration Program Components

Wetland Restoration Efforts	Nothing in the Works	Planning	In Progress	Mature/ Complete
Program has a set of restoration goals				X Not calculated by Program, but complete for wetlands as BMP for WIPs required for Chesapeake Bay TMDL
Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes				X (Involves a number of key players)
Developed multi-agency body to coordinate restoration/ protection efforts			Informal coordination	
Set restoration goals based on agency objectives and available information				X See above for TMDL

Goals for Restoration Projects*

Goal	Yes	No	Description
No Net Loss	X		Applies to regulatory program
Reverse Loss/Net Gain	X		Net gain applies to voluntary restoration
Nonpoint Source Pollution (NPS)/WQ	X		
Total Maximum Daily Load (TMDLs)	X		
Habitat	X		
Coastal Protection	X		
Floodwater Retention	X		
Groundwater		U/K	
Other (please describe)		U/K	

Landowner Guides and Handbooks to Assist with Voluntary Wetland Restoration Efforts

Maryland has produced guides in the past, but they are now out-of-date. There is some guidance in the state’s Wetland Conservation Plan.

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

Pre-application meeting process and tracking:

<http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/PreApplicationIntroduction.aspx>

Section G. Climate Change and Wetlands

Maryland actively works on climate change issues and has a state climate adaptation plan. There are provisions in the state’s plan for a variety of wetland-related adaptation efforts, including consideration of tidal wetland migration mapping and plans for land acquisition. For more information:

<http://climatechange.maryland.gov/>

Section H. Integration

Entity/Program Area	Yes/No	Description of the Connection
NPDES/Stormwater	YES	Coordination with stormwater is mostly related to stream restoration; but have a shared interest in not damaging resources; physically located down the hall from each other; share review ’ draft documents and policies of mutual interest
303(d)	NO	Only if there is an associated wetland restoration effort
305(b) reporting on wetlands	YES	Include some updates on programmatic and vernal pools work
Total Maximum Daily Load (TMDLs)	YES	Restoration is listed in BMPs for TMDLs
Climate Change/ Resiliency	YES	Wetlands are included by multiple agencies in

		climate change planning efforts
Land Use /Watershed planning	YES	Sometimes
Flood/Hazard Mitigation	YES	Division is part of Wetlands and Waterways Program
Coastal Work	YES	Attempting to resolve inconsistencies
Wildlife Action Plan	YES	Wetlands are identified as important habita types in the plan.
Statewide Comprehensive Outdoor Recreation Plan (SCORP)	U/K	No efforts that are coordinated with the wetland program
Other: Comprehensive Water and Sewer Plans	YES	Proposed plans come to state and are checked for consistency with wetland work; comments provided regarding potential regulatory issues

State Wetland Program Development Continuum

Continuum Stage		Core Element 1: Regulation	Core Element 2: Monitoring & Assessment	Core Element 3: Wetland Water Quality Standards	Core Element 4: Voluntary Restoration
Mature Stage	High	X	X (mitigation M&A)		X* (State is actively engaged, but no single formal program)
Initial Implementation Stage	↑		X (Voluntary Restoration M&A)		
Development Stage				X (Have drafts but not moved to implementation)	
Early Stage		Low			

***Note:** The State of Maryland is actively engaged in voluntary restoration and it is part of the state’s TMDL Program, but not a statewide formal program nor based on statewide program plan. Maryland may develop pooled funding, monitoring and reporting for joint priority areas in the future.

State Wetland Program Contact and Other Relevant Contacts

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Section J. Useful Websites

State Government Programs

1. The Department of the Environment
 - a) Wetlands and Waterways Program
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/Programs/WaterPrograms/wetlands_waterways/index.aspx
 - i. The Maryland State Wetland Conservation Plan
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/MDWetlandConservationPlan/Pages/Programs/WaterPrograms/Wetlands_Waterways/wetland_conservation/index.aspx
 - ii. Maryland's Wetland Restoration Initiative
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/programs/waterprograms/wetlands_waterways/about_wetlands/restoration.aspx
 - iii. Mitigation
http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Regulations/Pages/Programs/WaterPrograms/Wetlands_Waterways/regulations/mitigation.aspx
 - a) Stormwater Management Program
<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/SedimentandStormwaterHome/Pages/Programs/WaterPrograms/SedimentandStormwater/home/index.aspx>
 - i. Erosion & Sediment Control
<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/SoilErosionandSedimentControl/Pages/Programs/WaterPrograms/SedimentandStormwater/erosionsedimentcontrol/index.aspx>
 - b) Bay Restoration Fund
<http://www.mde.state.md.us/programs/Water/BayRestorationFund/Pages/index.aspx>
 - c) Chesapeake Bay TMDL

http://www.mde.state.md.us/programs/Water/TMDL/ChesapeakeBayTMDL/Pages/programs/waterprograms/tmdl/cb_tmdl/index.aspx

2. Department of Natural Resources

<http://www.dnr.state.md.us/index.asp>

a) Chesapeake & Coastal Service Program

<http://www.dnr.state.md.us/ccs/index.asp>

b) The Coastal Bays Monitoring Program

http://www.dnr.state.md.us/coastalbays/water_quality/index.html

i. Maryland Rivers and Streams

<http://www.dnr.state.md.us/streams/>

ii. Chesapeake Bay Monitoring Program

<http://www.dnr.state.md.us/bay/>

3. Department of Agriculture

a) Soil Conservation & Water Quality Plan

http://mda.maryland.gov/resource_conservation/Pages/scwqpi.aspx

4. Maryland Department of Transportation

a) Office of the Environment

<http://www.mdot.maryland.gov/Office%20of%20Environmental%20Programs/index.html>

Federal Government Programs

1. USDA Natural Resources Conservation Service

Wetlands Reserve Program

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/md/programs/easements/wetlands/>

Other Organization Wetland Programs

1. Chesapeake Bay Program: Wetlands

<http://www.chesapeakebay.net/issues/issue/wetlands>

2. Watershed Resources Registry –

<http://watershedresourcesregistry.com/>