

New Hampshire State Wetland Program Summary



Photo Credit: New Hampshire Cooperative Extension

Click Here to Skip to

New Hampshire's Information about Wetland:

[Regulation](#)

[Monitoring & Assessment](#)

[Water Quality Standards](#)

[Voluntary Restoration](#)

[Education and Outreach](#)

[Integration with Other Programs](#)

Section A. Quick View

Description of State's Wetlands

The predominant wetland types in New Hampshire are palustrine forested and scrub-shrub. Forested and scrub-shrub wetlands that have organic-rich mineral soils are commonly referred to as swamps, whereas wetlands that have organic soils over mineral soils are called peatlands. Most of New Hampshire's lakes and rivers have areas of shallow water where aquatic vegetation has become established. Estuarine and marine wetlands along New Hampshire's 18-mile coastline are estimated at about 7,500 acres.

State Definition of Wetlands

Administrative rule Env-Wt 301.01 requires that wetlands be delineated using the 1987 Corps of Engineers Wetlands Delineation Manual, and the 1998 New England Interstate Field Indicators for Identifying Hydric Soils in New England (<http://www.neiwpcc.org/field%20indicators%20guide.pdf>). Administrative rule Env -Wt 101.88 defines "wetland" using the language of 33CFR 328.3 (Army Corps definition).

Historic Wetland Loss/Gain

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
220,000	200,000	20,000	9%

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

Primary State Wetlands Webpage

<http://des.nh.gov/organization/divisions/water/wetlands/>

State Wetland Program Plan

New Hampshire Wetland Program Plan 2011-2017

<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt800.pdf>

No Net Loss/Net Gain Goal

The goal in New Hampshire, by policy, is no net loss of environmental value. Protection of upland buffers around natural wetlands, and of uplands within a natural mosaic of wetlands and uplands is the preferred mode of mitigation where such systems exist in a healthy state. Such preservation provides a value gained, since there is considerable loss of wetland value whenever those unregulated upland areas are developed.

State Budget for Wetland Work (2014 Estimate)

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	DES Wetlands Bureau	DES Watershed	DES Watershed	DES
Source(s)	Fees & General Funds	EPA Wetland Program Development Grants to DES	EPA Wetland Program Development Grants to DES	EPA grant funding to work with TNC
Amount	\$900,000	Funding for ~0.80 FTE position	Funding for ~0.20 FTE position	Information unavailable
Staffing	~33 FTE	0.7 FTE	0.2 FTE	
Agency	Forest Rangers		Natural Heritage	New Hampshire Corporate Wetland Restoration Partnership
Source(s)	Information unavailable		Information unavailable	Information unavailable
Amount	Information unavailable		Information unavailable	Information unavailable
Staffing	<1 FTE (Enforcement by small % of 1 staff position)		Information unavailable	Information unavailable

State Permitting Fees

State Permitting Fee	State Name
Yes/No	Yes
Amount (range)	\$200 (plus impact fee per square foot)
Agency	Department of Environmental Services

Innovative Features

- New Hampshire was one of the first states to regulate the protection of wetlands. Jurisdiction began for tidal wetlands in 1967 and for nontidal wetlands in 1969. Since then, the Legislature has consistently recognized the importance of this resource.

- The U.S. Army Corps of Engineers (Corps) revoked all Nationwide Permits in New Hampshire in June 1992, and replaced them with the New Hampshire State Programmatic General Permit (NHSPGP). The Corps comes to the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau once a week to review those projects that have received a New Hampshire wetland permit. Corps reviewers decide whether the project is federally jurisdictional and whether it qualifies, potentially qualifies (subject to a federal agency review), or does not qualify under the NHSPGP. Those projects that meet federal jurisdiction and do not qualify (less than 1% of those approved by the State) require an individual 404 permit in addition to the State permit.

Models and Templates

- New Hampshire has a state-run certification program for wetland scientists. It is managed by the Joint Board of the Licensure. For more information, go to: <http://www.nh.gov/jtboard/ns.htm>. In New Hampshire's rules, for certain projects, only a Certified Wetland Scientist (CWDS) is allowed to conduct delineations.
- The State of New Hampshire's Administrative Rules for Compensatory Mitigation can be downloaded from: <http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt800.pdf>
- The New Hampshire Department of Environmental Services ("DES") Aquatic Resource Mitigation ("ARM") Fund has been a highly successful in lieu fee program in the state. For more information about ASWM, go to:
<http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/InLieuFeePrograms/NH.aspx>

Section B. Regulation

How are Wetlands Regulated in New Hampshire?

New Hampshire regulates impacts to wetlands primarily under the ***Fill and Dredge in Wetlands Act*** (The Wetlands Act) RSA 482-A, which authorizes the state's permitting program to protect wetlands and surface waters. The state's wetland permitting program is the primary means of wetlands regulation in New Hampshire. The New Hampshire Department of Environmental Services, Water Division, Wetlands Bureau administers the state's wetland regulatory program. New Hampshire has a Section 401 certification program (under RSA 485-A:8), but the NHSPGP has a blanket 401 Water Quality Certification, so most water quality issues are handled as conditions to the State Wetlands Permit. Federal 404 permitting is mostly through the NHSPGP. The law also protects sand dunes and upland tidal buffer zones (100 feet above the highest observable tideline). Although the law was adopted in 1967 to protect tidal wetlands and waters, it was extended in 1969 to regulate activities in freshwater bodies. There is no minimum threshold of size for wetlands or wetland impacts under the Act; NHDES has jurisdiction over tidal wetlands, nontidal wetlands, and tidal buffer zones. New Hampshire Wetlands Statute, rules, and proposed rules are available at
<http://des.nh.gov/organization/commissioner/legal/rules/index.htm#wetlands>

In addition, the Surface Water Quality Protection Act (SWQPA), RSA 483-B, formerly known as the Comprehensive Shoreland Protection Act, regulates impacts to uplands adjacent to fourth-order streams and higher and public waters. Under the SWQPA, also administered by NHDES, projects and activities located within the regulated shoreland are subject to Minimum Shoreland Protection Standards. Protected shorelands include all land within 250-feet of waters listed in the state's *Official*

List of Public Waters, fourth order and higher streams, rivers designated under RSA 483, the Rivers Management and Protection Program, and tidal waters subject to the ebb and flow of the tide. In 2007, the state legislature authorized the development of a permitting program for construction, excavation, and filling within the protected shoreland.

Alteration of Terrain – This law, RSA 485-A:17, requires a permit for any project that disturbs 100,000 or more square feet of land or 50,000 square feet of land within the protected shoreland. The permit is intended to limit the negative impacts associated with increased stormwater runoff at developed sites. To the extent that projects requiring these permits are adjacent to wetlands, this law protects wetlands from indirect impacts caused by stormwater.

For rivers that have been designated by the Legislature for protection under the state's **Rivers Management and Protection Program**, local advisory committees routinely comment on permit applications for development projects. Because of co-occurrence of rivers and wetlands, this also serves to protect wetlands, although not through any specific regulatory or permitting authority.

Large Groundwater Withdrawal Permitting Program – This program is administered by DES and serves to prevent impacts to wetlands and other water resources from large withdrawals of groundwater from wells sited after July 1998.

Additionally, **municipalities may designate wetlands as “prime wetlands,”** which receive higher level protection under the Act. NHDES also has jurisdiction over areas within 100 feet of prime wetlands, although only seven wetlands still retain this designation at this time. In Wetlands are evaluated for designation using the “New Hampshire Method” as detailed in two manuals, one for nontidal wetlands and the other for tidal wetlands. The designation process included a formal study which results in a ranking and identification of outstanding values. The proposed designation of these wetlands must then be adopted by the municipality by vote of the residents after undertaking a process comparable to the adoption of zoning ordinances. The mapping and a report of the evaluation of the wetland(s) is submitted to DES for acceptance. Once DES formally accepts the designation, the designated prime wetland and a 100 foot buffer around it are afforded special protection by DES under the wetlands law. Projects involving impacts to prime wetlands or the prime wetland buffer are classified as major impact projects, requiring a more stringent burden of proof that the project is the least impacting alternative and that the proposed activity, either alone or in conjunction with other human activity, will not result in the significant net loss of any of the values identified by law. The prime wetlands buffer provisions have returned to the prime wetlands limits only for older designations. A forest management waiver provision has been added allowing management within protected areas where the applicant can demonstrate mitigating design features.

Finally, the New Hampshire Fish and Game Department (NHFGD) participates in the regulatory review process and implements the **state wildlife action plan**, which includes measures to conserve and protect wetland habitat.

Wetland Delineation

Delineation Guidance	Yes	No	Detail
Use State's Own Method		X	
Use Corps' 87 Manual and Regional Supplement	X		
Other (Please describe)		X	

Detail: Administrative rule Env-Wt 301.01 requires that wetlands be delineated using the 1987 Corps of Engineers Wetlands Delineation Manual, and the 2004 New England Interstate Field Indicators for Identifying Hydric Soils in New England (version 3) (see <http://www.neiwpcc.org/hydricsoils.asp>)
Administrative rule Env-Wt 101.88 defines "wetland" using the language of 33CFR 328.3 (Army Corps definition); however, all wetlands are jurisdictional in New Hampshire. Additionally, DES has issued guidance concerning the use of the National Hydric Soils manual to be consistent with the Corps, until rule changes can be proposed and adopted.

Evaluation Methodology

There is no standard method for permitting purposes, with most evaluations being conducted using best professional judgment. . The mitigation rules require use of the Highway Methodology Workbook Supplement. DES does accept use of the updated NH Method. <http://nhmethod.org/index.htm>. DES has received an EPA grant, working with DRED NHB to study various evaluation methods, See DRED report at http://www.nhdfl.org/library/pdf/Natural%20Heritage/Final%20EPA%20Grant2%20Report_3-16-2013.pdf.

Exempted Activities

The following activities have been exempted: a) Repair or replacement of an existing structure with no change in location or configuration is exempted if it does not involve excavation, removal, filling or dredging, or work in the water; b) maintenance of nontidal ditches, culverts, catch basins, and manmade detention ponds that have been legally constructed, and that have been maintained with sufficient frequency that they are not dominated by hydrophytic vegetation; and c) maintenance dredge of legally constructed fire ponds and dry hydrants.

Special Provisions for Agriculture and Forestry

There are no special exemptions for agriculture or forest management, but special rules and best management practices have been developed to address the unique needs of each. A streamlined notification process is in place for timber harvesting that meets certain criteria.

Penalties and Enforcement

NHDES is responsible for enforcement, and can impose administrative orders I and administrative fines of up to \$ 5,000 per violation (multiple violations at a single site are possible). Acting through the Attorney General's Office, NHDES can seek civil penalties of up to \$10,000 per violation per day and/or criminal penalties up to a misdemeanor for private individuals and felony for corporations. In cases where the impact is exceptionally large or environmentally damaging, the violator has a prior enforcement history, or the violator is unwilling to work with the program to correct deficiencies, more formal action may be taken, such as Administrative Orders, Administrative Fines, or referral to the

Department of Justice and, for the imposition of civil penalties. Remedial actions, including restoration, frequently require that the violator hire a state-certified wetland scientist or an erosion control specialist to develop and submit a plan to bring the site into compliance.

Permit Tracking

Permits, enforcement and mitigation actions are all tracked using a database which also produces weekly reports of permitting activity which are posted on the Wetlands Bureau's web site (<http://des.nh.gov/organization/divisions/water/wetlands/decisions/index.htm>). The Wetlands Bureau also has GIS data layers with locations of permits and enforcement actions, municipally designated prime wetlands, rivers designated under the state program, and buffered layers of threatened and endangered species and exemplary plant communities. Every incoming permit application is checked against the GIS layers so potential impacts to these resources may be evaluated during the permit review process.

State General Permit (statewide vs. regional coverage)

Permit Coverage	Yes	No	Detail (Type of Permit)
Regional General Permit		X	Federal 404 permitting is mostly through the NHSPGP.
Statewide General Permit	X		

Detail: New Hampshire operates under a statewide programmatic general permit (SPGP) (thus, nationwide permits do not apply in the state). NHDES works with the Corps when the SGP is due for re-issue to address any changes that should be made. The Corps determines whether a proposed project qualifies for certification under the statewide programmatic general permit (SPGP) or if it requires individual certification from NHDES. If a project qualifies under the SGP, the Watershed Management Bureau determines whether additional conditions are required (e.g., hydrological modifications, large subdivisions, or impacts to impaired water bodies).

Assumption of 404 Powers

Assumption Status	Yes	No	Detail
Assumed		X	
Working Toward Assumption		X	
Explored Assumption		X	The state has determined there would be no additional benefit to assumption given the success of the NHSPGP.

Joint permitting

The State works jointly with the Corps on those few large transportation projects that do not qualify for the NHSPGP.

Special Area Management Plans and Advanced Identification Plans

Municipalities can designate prime wetlands that receive additional protections under NH RSA 482 A:15 and Chapter Env-Wt 700 of the rules (<http://des.nh.gov/organization/commissioner/legal/rules/index.htm#wetlands>).

Buffer Protections

In 1979 New Hampshire's wetlands law was amended to provide an option for municipalities to designate high value wetlands for greater protection. The designation of these wetlands must then be adopted by the municipality by vote of the residents and approved by DES. Once DES formally accepts the designation, the designated prime wetland are afforded special protection by DES under the wetlands law. While there have been greater protections, a 100-foot buffer now applies to wetlands in only seven communities. Additionally, RSA 482-A (Wetlands law) provides for 100 foot tidal buffer zone for work proposed within 100 feet of the highest observable tideline. DES rules require that an upland preservation parcel to be protected for mitigation contain a 100 foot upland buffer. Permit conditions requiring protections for wildlife and water quality may require buffers. The legislature is currently reviewing a proposed bill to examine state buffers to wetlands and streams.

Mitigation Policy

For unavoidable impacts, regulations require compensatory mitigation. Compensatory mitigation requirements are based on the size of the impact and project classification. All major impact projects and permanent impacts greater than 10,000 square feet require mitigation. Mitigation proposals must include a functional assessment using the Corps' methodology or NH Method and data on the surrounding area (e.g., land use, soils, plant communities, habitat, and endangered species). Mitigation is required on a function-by-function basis. The total package must provide equal or greater environmental value. Mitigation options include restoration, preservation, creation, and, if no other option is feasible, payment to the state's in-lieu fee (ILF) program. Preservation is the most commonly selected option. Up front mitigation has been required on some sites. The State of New Hampshire's Administrative Rules for Compensatory Mitigation can be downloaded from:

<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt800.pdf>

The New Hampshire Department of Environmental Services ("DES") Aquatic Resource Mitigation ("ARM") Fund has been created as one of several compensatory mitigation options available to applicants for impacts to wetlands and other aquatic resources. This mitigation option is available for use after avoidance and minimization of impacts to these aquatic resources has been achieved. The ARM Fund seeks "no net loss" of aquatic resource acreage and functions using a watershed approach. See Figure 1 for the Hydrologic Unit Code 8 (HUC 8) display of the watersheds that is used for collection of funds. ARM has been highly successful. The ARM Fund has funded permanent protection of over 10,000 square feet of high value habitat parcels in the last 7 years since its inception. For more information on ARM, please go to:

<http://www.nae.usace.army.mil/Missions/Regulatory/InLieuFeePrograms/NH.aspx>

Mitigation Database

NHDES maintains a database of permitting, enforcement, and mitigation information. Much of the permit data is accessible to the public online, in the form of a one-stop data query that allows users to look up submitted permit applications and status of reviews by town, file number, assigned staff member, or application type. Additional data is managed and used, but not available online, such as: acreage of mitigation (including creation, restoration, and protection), enforcement information (including identities of violators and complainants), characteristics of a site (including its status in the Natural Heritage Program or designation as a prime wetland, if applicable), and overlapping

statutes applicable. Through an existing EPA grant, DES is developing a mitigation tracking system to update information to the Corps RIBITS database.

Links to Additional Regulatory Documents:

- Fill and Dredge in Wetlands, N.H. Rev. Stat. Ann., 482-A:1 to :27 (was known as RSA 483-A prior to recodification in January, 1990). Permits are required for dredge, fill, or construction of structures in wetlands, surface waters, tidal buffer zones, sand dunes, and areas adjacent to municipally designated prime wetlands. Initial passage was in 1967.
<http://www.gencourt.state.nh.us/rsa/html/nhtoc/nhtoc-l-482-a.htm>
- N.H. Administrative Code, Chapters Env-Wt 100-900 contain the wetlands administrative rule.
<http://des.nh.gov/organization/commissioner/legal/rules/index.htm#wetlands>
- The NHDES's water quality program is authorized under RSA 485-A:8 & 13 (N.H. Water Pollution and Waste Disposal Act) and Env-wq 1700. See
<http://des.nh.gov/organization/divisions/water/wmb/section401/index.htm>

Section C. Monitoring and Assessment

Agency Responsible for Wetland Monitoring and Assessment

The New Hampshire Department of Environmental Services ("DES")- Watershed Management Bureau is responsible for monitoring and assessment of the state's wetlands.

Mapping/Inventory

Wetland mapping for New Hampshire was completed in the 1990s and the data have been available online for several years. LANDSAT telemetry data was converted to a state-wide GIS-based resource map in the early 1990s and was extensively ground-truthed. Since that time new USDA Natural Resources Conservation Service (NRCS) soils mapping has been digitized, as have existing National Wetland Inventory maps. No single source is considered particularly reliable, but in combination they give good landscape scale estimates. Updated NWI mapping is needed for a variety of purposes.

Wetland Classification and Assessment

NH Administrative rule Env-Wt 301.02 requires use of U.S. Fish and Wildlife Service (Cowardin et al., 1979) classification. The State is still struggling with assessment issues; however, permitting regulations place highest value on tidal wetlands, bogs, marshes, and swamps (in that order).

- *The New Hampshire Method* was developed to help municipalities evaluate the functions and values of their wetland resources for planning, education, and wetland inventory purposes. The method provides a way for municipalities to compare the relative values of multiple wetlands. It was not designed for an impact analysis on individual wetlands. The methodology was originally developed by NHDES, Audubon Society of New Hampshire, and U.S. Department of Agriculture (USDA). New Hampshire Cooperative Extension is worked with the state to update *The New Hampshire Method*. It was revised in 2011 and has had additional minor revisions in

2012 and 2013 (<http://nhmethod.org/>). While its short title remains the same, the revised version is known by The Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire. It is no longer a comparative method and can be used to evaluate a single wetland complex.

- New Hampshire's *Coastal Method* is a site-specific method that coastal communities can use to inventory and evaluate their vegetated tidal marshes. The method, which was developed by the Audubon Society, is not designed to provide definitive site evaluations, but instead to provide a tool for planning, educating, and inventorying.
- The Coastal Program monitors the success of its restored salt marshes using the *Gulf of Maine Protocol*.

Statewide Wetland Monitoring Plan

The state developed and published a wetlands monitoring strategy in 2013. In addition, Monitoring and assessment goals are noted in the *New Hampshire's Wetland Program Plan 2011-2017*:
<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt800.pdf>

Overall Wetland Gain and Loss Tracking System

The state does look at wetland gain and loss from the regulatory program, does not include restoration work by other parties such as NRCS, or FWS. Gain/loss data and permitted impacts are based on the permitting database. Gain and data are reported in the Integrated report (305(b) 303(d) on a biennial basis.

Wetland Monitoring and Assessment Characteristics

Level	None	Level 1	Level 2	Level 3
<i>New Hampshire</i>		X	X	

Detail: The state is in the process of reviewing USA RAM, existing state specific RAM's and NH's method to develop protocols for Level II wetlands monitoring for wetland condition.

Type	None	IBI	Condition	Functional
<i>New Hampshire</i>		X	X	

Detail: The state has begun to use Floristic Quality Assessment (FQA) as a Level 2.5 assessment tool and use various indices to develop numeric criteria for FQA. The state is also working to develop a strategy to establish and adopt criteria (water quality standards) for wetlands.

Frequency	None	Project Specific	Ongoing
<i>New Hampshire</i>		X	X

Participation in National Wetland Condition Assessment

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

Detail: DES sampled 11 wetlands plus 2 additional sampling events at two revisit sites, conducting 13 wetland sampling events as part of the 2011 NWCA. In 2012, DES with the Natural Heritage Bureau applied several wetland assessment methods at 32 sites. Among those methods was the Rapid Assessment method also applied during the NWCA work. The results of that work are available online at: <http://www.nhdfi.org/about-forests-and-lands/bureaus/natural-heritage-bureau/publications/report.aspx>

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	X		
<i>Narrative criteria in the standards to protect designated wetland uses</i>		X	X		
<i>Numeric criteria in the standards based on wetland type and location to protect the designated uses</i>		X	X		
<i>Anti-degradation policy includes wetlands</i>		X	X		

Detail:

- New Hampshire has not yet adopted water quality standards specific to wetlands.
- By Env-Wq 1703.02, water quality standards apply to wetlands except “wherever the naturally occurring conditions are different from the criteria listed in these rules, the naturally occurring conditions shall be the applicable water quality criteria.”
- The state is currently in the process of developing a strategy to establish and adopt wetland-specific water quality standards.

Section E. Voluntary Wetland Restoration

Types of Wetland Restoration Work Funded by the State:

Type of Work	YES	NO	Description
Fund Wetland Restoration (may include easement agreements)	X		319 funds
Private Land Restoration		X	Although there may be some wetland restoration associated with dam removal (incl. limited state funds for dam removal projects)
Public Land Restoration		X	
Technical Assistance		X	
Tax Incentives		X	
Other		X	

Description: The state does not have a formal voluntary wetland restoration program. However, there are several cooperative State/federal programs in the coastal section of the State, and at least one river restoration associated with improvement of cold-water fisheries. Most restoration is done as mitigation for permitting or to resolve an enforcement case.

- Under the Great Bay Resource Protection Partnership, NHFGD often partners with federal agencies (e.g., EPA, U.S. Fish and Wildlife Service, NRCS), non-profit organizations (e.g., Ducks Unlimited, TNC, Audubon, Society for the Protection of New Hampshire Forests), and the Great Bay Estuarine Reserve, a quasi-state-federal program, to conduct restoration as part of its open water marsh management of salt marshes.
- NHDES has worked with NHFGD on habitat inventories for the state wildlife action plan, which provides information about restoration opportunities. NHFGD does not prioritize areas for restoration. However, salt marsh habitat is minimal in New Hampshire, all salt marshes are considered to be priority habitat.
- The NHDES Coastal Program runs a Coastal Restoration Program that focuses on salt marsh and river restoration.
- The New Hampshire Corporate Wetland Restoration Partnership also provides funding for state restoration projects.

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

None.

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

The state has several proactive education and outreach initiatives, which include:

- Efforts to develop and deliver wetlands messages and outreach tools (fact sheets, presentations, etc.) focused on important functions and values (i.e wildlife, flood protection, and water quality) and specific resource types (such as vernal pools, <http://des.nh.gov/organization/divisions/water/wetlands/vernal-pools.htm>)
- Training existing volunteer groups to integrate wetland steward message (VLAP, VRAP)
- Strategizing on creating on-line training in wetland outreach and assessment tools
- Coordinate with DOT Storm Water Outreach Team

Section G. Climate Change and Wetlands

The State of New Hampshire actively studies and plans around the concept of climate change. The state has a State Climate Office that addresses and promotes actions to work on climate change issues.

DES developed a climate action plan which includes various actions related to wetlands and streams and mitigation of impacts of climate change. To download the document, go to:

http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/nh_climate_action_plan.htm

The state's wetland plan includes information from the state Climate Action Plan. Additionally, the state is in the process of updating the state's Wildlife Action Plan, which includes wetland work. DES also worked with Fish and Game Dept in the development of its *Ecosystems and Wildlife: Climate Change Adaptation Plan* an amendment to the Wildlife Action Plan. This document can be downloaded at: http://www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/climate.html

Section H. Integration

Entity/Program Area	Yes/No	Description of the Connection
NPDES/Stormwater	YES	<ul style="list-style-type: none"> • Stormwater permits reviewed by DES wetland staff. • The DES Wetland Program coordinates with the DOT Storm Water Outreach Team; • Alteration of Terrain program coordinates with DES wetland staff to assesses water quality and quantity for 50k shoreline; 10,000k other • DES has also developed procedures for cross-training staff
303(d)	YES	<ul style="list-style-type: none"> • Assessment methods for wetlands evaluation of 303(d) • Wetlands are recognized in the impaired streams rules • Revising GIS and guidance to include impaired streams • Planning in future to have these designations directly affected by wetland permitting guidance
305(b) reporting on wetlands	YES	<p>Reporting on Level 1 in 2012. Reporting on Level 2 wetland assessment results has not been included in 305(b)/303(d) reporting.</p>
Total Maximum Daily Load (TMDLs)	NO	
Climate Change/ Resiliency	YES	<p>(See above) Also Statewide Culvert Inventory includes climate change considerations</p>
Land Use /Watershed Planning	YES	<ul style="list-style-type: none"> • DES is developing a systematic approach on a watershed scale to address Land Resources Management and Water Quality complaints; • DES has a database of all water quality violations issued to strengthen coordination • Developing a strategy for cross training on staff and interns between Land Resource and Water Quality regulation; • The Wetlands Bureau is also working with EPA on several projects that examine impacts to streams and wetlands on the watershed level. • <i>Innovative Land Use Planning Techniques Guide</i> has a Wetlands chapter and sample zoning ordinance. http://des.nh.gov/organization/divisions/water/wmb/repp/innovative_land_use.htm • Statewide culvert inventory to prioritize for ILF Program

Flood/Hazard Mitigation		<ul style="list-style-type: none"> Post Incident River Response http://des.nh.gov/organization/commissioner/gsu/fegh/index.htm - The Post Incident River Response Team, formed in the aftermath of Tropical Storm Irene is a standing committee of state and federal partners tasked with addressing flood risks, remains actively engaged. Aquatic Organism Passage Fluvial Erosion Hazard work: http://silverjackets.nfrmp.us
Coastal Work	YES	Mostly in terms of state match to federal grants
Wildlife Action Plan		NHFGD participates in the wetland regulatory review process and implements the state wildlife action plan, which includes measures to conserve and protect wetland habitat.
Statewide Comprehensive Outdoor Recreation Plan (SCORP)	YES	This document does include wetlands, but is not a strong plan. DES is coordinating with OEP to update the plan: http://www.nhstateparks.org/who-we-are/division/reports.aspx
Other: Natural Heritage Program	YES	DES uses data that the NHP develops; coordinated work on wetland assessment methods; NHB provides consultation on Data Check tool results that involve rare plant species or exemplary natural communities.
Other: NH Department of Transportation	YES	DES works closely with NHDOT and has monthly joint meetings to scope projects.

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
Mature Stage	High	X State permitting program			
Initial Implementation Stage					
Development Stage			X	X	
Early Stage	Low				X

List of State Wetland Program Contacts

Collis Adams

Wetlands Bureau Administrator
NH Department of Environmental Services
PO Box 95
29 Hazen Drive
Concord, NH 03302-0095
(603) 271-4054
collis.adams@des.nh.gov

Sandy Crystall, PWS

Water Quality Planning Section
Watershed Management Bureau
NH Department of Environmental Services
PO Box 95
29 Hazen Drive
Concord, NH 03302-0095
(603) 271-2471

Lori Sommer

Mitigation Coordinator
Wetlands Bureau
NH Department of Environmental Services
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095
(603) 271-4059
lori.sommer@des.nh.gov

Linda Magoon

Wetland and Shoreland Compliance Supervisor
NH Department of Environmental Services
PO Box 95
29 Hazen Drive
Concord, NH 03302-0095
(603) 271-4061
linda.magoon@des.nh.gov

Maryann Tilton

Assistant Wetlands Bureau Administrator
NH Department of Environmental Services
PO Box 95
29 Hazen Drive
Concord, NH 03302-0095
(603) 271-2929
MaryAnn.Tilton@des.nh.gov

Section J. Useful Websites

State Government Programs

1. Department of Environmental Services

a. Water Division

i. Wetlands Bureau

<http://des.nh.gov/organization/divisions/water/wetlands/index.htm>

- Wetland Program Plan

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

- Rules/Regulatory

<http://des.nh.gov/organization/divisions/water/wetlands/categories/rules.htm>

- Technical Assistance

<http://des.nh.gov/organization/divisions/water/wetlands/categories/technical.htm>

- Permits

<http://des.nh.gov/organization/divisions/water/wetlands/categories/permits.htm>

- Shoreland Program

<http://des.nh.gov/organization/divisions/water/wetlands/cspa/index.htm>

- Wetland Mitigation Program

<http://des.nh.gov/organization/divisions/water/wetlands/wmp/index.htm>

- Merrimack River Watershed Wetland Restoration Strategy

<http://www.restorenhwetlands.com/contacts.asp>

ii. Alteration of Terrain Bureau

<http://des.nh.gov/organization/divisions/water/aot/index.htm>

iii. Watershed Management Bureau

<http://des.nh.gov/organization/divisions/water/wmb/index.htm>

- Lakes Management & Protection Program

<http://des.nh.gov/organization/divisions/water/wmb/lakes/index.htm>

- Rivers Management and Protection Program

<http://des.nh.gov/organization/divisions/water/wmb/rivers/index.htm>

- Lakes Management & Protection Program

<http://des.nh.gov/organization/divisions/water/wmb/lakes/index.htm>

- Biomonitoring Program

<http://des.nh.gov/organization/divisions/water/wmb/biomonitoring/index.htm>

- Coastal Program

<http://des.nh.gov/organization/divisions/water/wmb/coastal/>

➤ Coastal Estuarine Land Conservation Program

- <http://des.nh.gov/organization/divisions/water/wmb/coastal/celcp/index.htm>
 - Coastal Restoration
<http://des.nh.gov/organization/divisions/water/wmb/coastal/restoration/index.htm>
 - Nonpoint Pollution Control Program
<http://des.nh.gov/organization/divisions/water/wmb/coastal/nonpoint/index.htm>
 - Surface Water Quality Assessment Program
<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>
 - Wetland Water Quality Standards Subcommittee
<http://des.nh.gov/organization/divisions/water/wmb/wqs/wetlands-subcommittee.htm>
- 2. Department of Transportation
 - a) Bureau of the Environment
 - i. Wetlands Program
<http://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/wetlands.htm>
- 3. Dept of Resources and Economic Development
 - a) Natural Heritage Bureau
 - Natural Heritage
<http://www.nhdfi.org/about-forests-and-lands/bureaus/natural-heritage-bureau/DataCheck Tool>
 - <http://www.nhdfi.org/about-forests-and-lands/bureaus/natural-heritage-bureau/services/>
 - NHB reports (wetland assessment work with NHDES)
<http://www.nhdfi.org/about-forests-and-lands/bureaus/natural-heritage-bureau/publications/report.aspx>
- 4. Department of Fish and Game
 - a) Nongame and Endangered Wildlife Program
http://www.wildlife.state.nh.us/Wildlife/nongame_and_endangered_wildlife.htm

Federal Government Programs

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

Other Organization Wetland Programs

1. Great Bay National Estuarine Research Reserve
<http://www.greatbay.org/>

2. Great Bay Stewards
<http://www.greatbaystewards.org/>
3. University of New Hampshire Cooperative Extension
 - a) Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire
<http://nhmethod.org/>
4. New Hampshire Lakes Association
<http://www.nhlakes.org/>
5. Lakes Region Conservation Trust
<http://lrct.org/>
6. [Land and Community Heritage Investment Program](#)
<http://www.lchip.org/>