

Chapter 4

State and Federal

Permitting Programs

This chapter describes state and federal permitting programs related to stormwater that aim to balance development with water quality protection. These permitting programs specify water quality requirements that must be met in order for development activities to occur. Although these are federal and state requirements, the majority of land-use planning decisions are made at the local level.

Municipalities may find this chapter useful to better understand federal and state programs and to determine if decisions being made at the local level agree with federal and state regulations. Permit applicants under state and federal stormwater programs may find this chapter useful to better understand the conditions and requirements of permits related to water quality. Figure 4-2 (at the end of Section 4-1) summarizes the applicability of various permit programs in New Hampshire.



State House, Concord, New Hampshire

4-1. Regulatory Authority

The Federal Clean Water Act, RSA 485-A, Water Pollution and Waste Disposal, and the New Hampshire Surface Water Quality Regulations (Env-Wq 1700) that implement RSA 485-A, are the primary regulatory authorities for the protection of water quality. They are the basis for the various New Hampshire permitting and certification programs related to stormwater.

Federal Clean Water Act

The Federal Water Pollution Control Act of 1948 was the first major federal legislation regarding the control of pollutants in surface waters in the United States. It was significantly amended in 1972, when it became commonly known as the Clean Water Act (CWA), and again under the Water Quality Act of 1987 (NEIWPCC, 2004). There are four sections of the CWA that involve stormwater:

Section 303 – Water Quality Standards and Implementation Plans

Section 303 of the CWA requires states to adopt surface water quality standards (e.g., the New Hampshire Surface Water Quality Regulations) and identify waters that do not meet these standards. Waters that do not meet

the water quality standards are considered “impaired” and are listed on the 303(d) list of impaired waters. All impaired waters must undergo a Total Maximum Daily Load (TMDL) study for the pollutants that do not meet the water quality standards. The TMDL specifies the maximum amount of the pollutants that the waterbody can receive and allocates the amount (or load) that various point and nonpoint sources can discharge to that waterbody.

Section 319 – Nonpoint Source Management Program

Section 319 of the CWA, established in 1987, provides federal guidance and funding to support activities that address nonpoint source pollution. These activities include technical assistance, education and training, technology transfer, demonstration projects, and monitoring projects. Section 319 provides funding to the NHDES Watershed Assistance Program, which provides direct financial assistance, through a competitive grant program, to municipalities and other local groups to address nonpoint source pollution.

Section 401 – Water Quality Certification

Section 401 of the CWA requires applicants for a federal license or permit, including wetlands permits from the U.S. Army Corps of Engineers, to obtain a certificate from the state for any activity that may result in a discharge to navigable waters. This includes wetlands, rivers, and natural and man-made ponds. More information on the New Hampshire 401 Surface Water Quality Certification is provided in Section 4-2.

Section 402 – National Pollutant Discharge Elimination System

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) Program. The NPDES Program regulates only point sources (i.e., direct discharges from pipes, ditches, etc.) to surface water by municipalities, industries, and other facilities and includes stormwater from certain urbanized areas, industrial activities, and construction sites. More information on the NPDES program in New Hampshire is provided in Section 4-2.

New Hampshire Surface Water Quality Regulations

New Hampshire Surface Water Quality Regulations (Env-Wq 1700) implement RSA 485-A and federal Clean Water Act (CWA) requirements and are intended to protect the state’s surface waters. The New Hampshire Surface Water Quality Regulations are implemented through various state permitting and certification programs detailed in this chapter, including the 401 Water Quality Certificate and the Alteration of Terrain Permit.

The Water Quality Regulations 1) establish **designated uses**, 2) specify appropriate **water quality criteria** to protect those designated uses, and 3) establish an **antidegradation policy** to protect surface water from pollutants.

Designated Uses

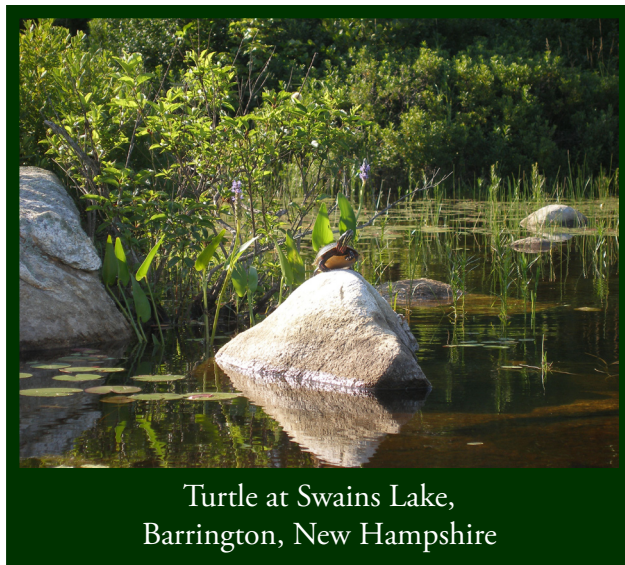
Designated uses define the goals of a waterbody and can be thought of as a waterbody's role. The designated uses for an individual waterbody are determined by how the waterbody is actually used. For example, if a waterbody is used as a public water supply, its designated use includes drinking water after adequate treatment. If a waterbody is used for recreational swimming and boating, its designated uses include primary and secondary contact recreation, and so on. A single waterbody can have multiple designated uses (USEPA, Module 3, 2005).

Federal statute (40 CFR 131.10) requires that all states take into consideration the designated uses described in Sections 101(a) and 303(c) of the federal CWA. These include the protection and propagation of fish, shellfish, and wildlife, as well as public water supplies, recreational, agricultural, industrial, and other purposes. Designated uses in New Hampshire include:

- Primary Contact Recreation
- Secondary Contact Recreation
- Aquatic Life
- Fish Consumption
- Shellfish Consumption
- Wildlife
- Drinking Water After Adequate Treatment

Water Quality Criteria

Water quality criteria are designed to protect a specific designated use. The criteria are assigned water quality standards for each water quality parameter (e.g., dissolved oxygen, pH, and bacteria) that must be met. Section 101(a) of the CWA requires, where possible, that water quality of all surface waters provide for the protection and propagation of fish, shellfish and wildlife, and recreation in and on the water. This means it is presumed that every surface water of the state, under federal law [40 CFR 131.3, 131.10] and state law [RSA 485-A:8], attains the designated uses of “fishable” and “swimmable” unless there is documentation that proves a waterbody does not meet one or more of the water quality criteria designed to support that use (USEPA, Module 7, 2005).



Turtle at Swains Lake,
Barrington, New Hampshire

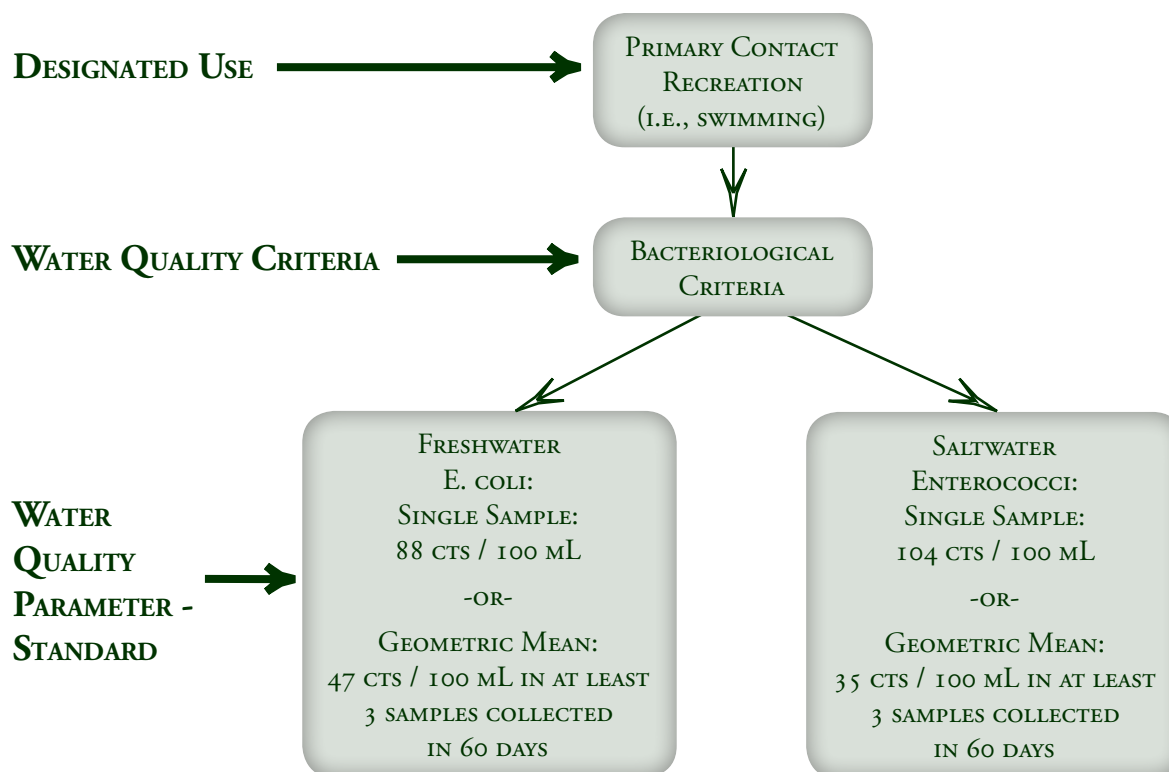


Figure 4-1. Illustration of the relationship between designated uses, water quality criteria, and water quality parameters in the New Hampshire Surface Water Quality Regulations (Env-Wq1700).

If a waterbody meets or is better than the water quality criteria, the designated use is supported; however, if a waterbody does not meet the water quality criteria, the waterbody is considered impaired for that designated use. Types of water quality criteria include: human health, bacteriological, aquatic life, biological, and nutrient criteria. An example flow chart of how designated uses, water quality criteria, and water quality parameters are related is shown in Figure 4-1.

Antidegradation

The purpose of antidegradation is to maintain or improve the quality of surface waters in the state (USEPA, Module14, 2005). The New Hampshire Antidegradation Provision (Env-Wq 1708) describes how water quality is to be protected from pollutants. It outlines limitations (or reductions) for future pollutant loading based on how a water body meets the water quality criteria for its designated uses. These limitations are on a parameter by parameter basis. The requirements of the Antidegradation Provision are explained further in Chapter 5.

New Hampshire Wetland Rules

The New Hampshire Wetland Rules (Env-Wt 100-800) implement RSA 482-A:1 and are intended to protect and preserve the submerged lands under tidal and fresh waters and their wetlands, (both salt water and fresh-water),

from unregulated alteration. Alteration of these areas, including vital habitats and reproduction areas, if not properly managed, could adversely affect the shellfish and wildlife that depend on them. In addition, the recreational, economic, and esthetic values they provide to the public could be put at risk. Proper management of these waters and wetlands are important to maintaining adequate groundwater levels and stream channel flows, and handling runoff by maintaining the natural ability of wetlands to absorb flood waters and silt. This results in less flood damage and silting of open water channels that would otherwise adversely affect the interests of the general public.

Under the Wetland Rules, NHDES implements a Fill and Dredge Permit to protect the natural environment while allowing individual landowners the freedom to use and enjoy their own land. The NHDES Fill and Dredge Permit is described in greater detail in Section 4-2.

New Hampshire Comprehensive Shoreland Protection Act

The New Hampshire Shoreland Rules (Env-Wq 1400) implement the Comprehensive Shoreland Protection Act (RSA 483-B) and are intended to protect the shorelands of the state to maintain the integrity of the public waters they surround. The shoreland provides a natural woodland buffer, consisting of trees and other vegetation located in areas adjoining public waters. These buffers are important to intercept surface runoff, wastewater, subsurface flow, and deeper groundwater flows from upland sources of pollution and to reduce the effects of nutrients, sediment, pesticides, and other pollutants as well as to moderate temperature and protect nearby surface waters from thermal impacts of development.

There is a great concern throughout the state relating to the use, protection, restoration, and preservation of shorelands because of their effect on state waters. The Comprehensive Shoreland Protection Act and the Shoreland Rules were substantially updated and became effective July 1, 2008. One of the major changes was the creation of a Shoreland Permit, described in greater detail in Section 4-2.

4-2. Water Quality Certification and Permitting Programs

The Section 401 Water Quality Certification, New Hampshire Alteration of Terrain Permit, New Hampshire Wetland Permit, New Hampshire Shoreland Permit, and the National Pollutant Discharge Elimination System (NPDES) Program Permits are the primary programs that permit land disturbance activities for the protection of water quality and stormwater management.

401 Water Quality Certification

There are several federal permits that may be required in order to conduct an activity that could result in a discharge to navigable waters. Common examples include dredge or fill of wetlands under the New Hampshire

Programmatic General Permit (PGP) issued by the Army Corps of Engineers, and construction activity under the EPA National Pollutant Discharge Elimination System (NPDES). Section 401 of the federal Clean Water Act requires that an applicant for such federal permits must provide the permitting agency with a 401 Certificate from the state before the federal



Brody, age 1, enjoys the New Hampshire seacoast.

permit is issued. The 401 Certificate verifies that the discharge from the permitted activity will meet the New Hampshire Surface Water Quality Regulations (USEPA, Module 19a, 2005). It may include specific conditions for construction, operation, water quality monitoring, and reporting. In New Hampshire, the 401 Certificate is issued by the NHDES Watershed Management Bureau with the exception of NPDES permits, where the 401 Certificate is issued by the NHDES Wastewater Engineering Bureau.

The 401 Certification review process considers all discharges associated with the construction and operation of an activity. It considers the potential impacts of the discharge to the designated uses of the surface water. Potential impacts can include discharges during construction, such as erosion and sedimentation, as well as long-term impacts from the operation of the activity, such as post-construction runoff. The review process often involves consultation with other state and federal programs and agencies, including the NHDES Rivers Management and Protection Program, the New Hampshire Fish and Game Department, and the U.S. Fish and Wildlife Service.

The U.S. Army Corps of Engineers (ACOE), the Federal Energy Regulatory Commission (FERC), and the U.S. Environmental Protection Agency (EPA) are federal agencies with permitting authority over wetland and water development projects, including permits for wetland alteration and the NPDES program. These agencies will not issue a permit until NHDES issues a 401 Certificate. Projects that are likely to require a 401 Certificate include, but are not limited to: road construction or subsurface pipeline installation over or near surface waters, such as rivers and lakes; construction projects that require dredge or fill of a wetland; and hydroelectric power developments that require licensing. All projects requiring a federal NPDES Construction General Permit (CGP) need a 401 Certificate.

In order to streamline the permitting process for wetland permits, the ACOE issued a general permit, the *New Hampshire State Programmatic General Permit* (NH PGP), for projects that are expected to have a minimal impact on the aquatic environment. The NH PGP includes criteria for eligible projects. Because it is still a federal permit, it requires 401 Certification. NHDES issues “general 401 Certificates” for the NH PGP that includes general provisions for protecting water quality. Most projects under NH PGP do not

require an individual 401 Certification review since water quality is addressed through the general 401 Certification. However, NHDES can modify the general 401 Certification, or revoke and issue a new 401 Certificate for any project included under the general permit. In New Hampshire, the NHDES Wetlands Bureau contacts the ACOE to determine if a project falls under the NH PGP and the general 401 Certification, or if a separate 401 Certification is required.

Further information about the 401 Water Quality Certification Program may be found at NHDES's website at: <http://des.nh.gov/organization/divisions/water/wmb/section401/index.htm>

New Hampshire Alteration of Terrain Permit

The New Hampshire Alteration of Terrain permit is issued by the Alteration of Terrain (AoT) Program within NHDES. This permit protects New Hampshire surface waters, drinking water supplies, and groundwater by controlling soil erosion and managing stormwater runoff from developed areas. An AoT permit is required whenever a project proposes to disturb more than 100,000 square feet of contiguous terrain (50,000 square feet, if a portion of the project is within the protected shoreland). In addition to these larger disturbances, the AoT Permit by Rule applies to smaller sites.

This permitting program applies to earth moving operations, such as industrial, commercial, and residential developments as well as sand pits, gravel pits, and rock quarries. Permits are issued by NHDES after a technical review of the application, which includes the project plans and supporting documents. Information on this program, including current rules, AoT forms, and worksheets may be found at the following website: <http://des.nh.gov/organization/divisions/water/aot/index.htm>

Traditionally, the Alteration of Terrain permitting program addressed water quantity and quality, with a primary focus on prevention of downstream flooding and increased peak flows to receiving waters and treatment of stormwater. In 2005, the NHDES began substantial revisions of the Alteration of Terrain Program Rules (Env-Wq 1500, formerly Env-Ws 415).

New Hampshire Wetland Permit

The New Hampshire Wetland permit is issued by the Wetlands Bureau within NHDES under RSA 482-A, which authorizes NHDES to protect the State's wetlands and surface waters by requiring a permit for dredge or fill or construction of structure in wetlands or other waters of the state.

A Wetland Permit is required for any alteration of tidal or non-tidal wetlands. Permits are issued by NHDES after a technical review of the application, which includes a statement of the impact from the proposed activity. The statement of impact must include evidence to demonstrate that potential impacts have been avoided to the maximum extent practicable

and that any unavoidable impacts have been minimized. Any proposed permanent impacts to wetlands must be mitigated. The permit application should include a plan for mitigation to compensate for the wetland areas lost due to the proposed activity. There are certain exemptions from the required mitigation such as if the impact is considered minor. Information on this program, including current rules, permit forms, and worksheets may be found at the following website: <http://des.nh.gov/organization/divisions/water/wetlands/index.htm>.

New Hampshire Shoreland Permit

The New Hampshire Shoreland Permit is issued by the NHDES Wetland Bureau. This permit protects the shorelands surrounding state surface waters by managing disturbance within the protected shoreland area. The protected shoreland is defined as the land within 250 feet of a surface water. A Shoreland Permit is required whenever a project proposes construction, excavation, or filling within the protected shoreland.

Permits are issued by NHDES after a technical review of the application, which includes a narrative description of the project, the project plans, a detailed worksheet, and supporting documents. Information on this program, including current rules, application, and worksheets may be found at the following website: <http://des.nh.gov/organization/divisions/water/wetlands/cspa/index.htm>.

National Pollutant Discharge Elimination System Program

The Clean Water Act authorized the U.S. EPA to regulate point sources that discharge pollutants into waters of the United States through the National Pollutant Discharge Elimination System (NPDES) permit program. In some states, this regulatory authority is delegated to state government for administration. In New Hampshire, the NPDES program is administered by the U.S. EPA. The program regulates “point sources” generated from a variety of municipal and industrial operations, including treated wastewater, process water, cooling water, and includes stormwater from certain urbanized areas, industrial activities, and construction sites.

In 1990, EPA implemented the NPDES Phase I Storm Water Program, which regulates cities and counties with populations of 100,000 that operate a municipal separate storm sewer system (MS4), specific industrial operations (as defined at 40 CFR 122.26(b)(14)), and construction activities that disturb 5 or more acres of land. Industrial activities are covered under a Multi-Sector General Permit (MSGP) issued by the EPA.

Since March of 2003, municipalities and developers have been subject to stormwater management requirements under Phase II of EPA’s Storm Water Program. Phase II regulates municipally owned industrial activities (e.g., runoff from municipal wastewater treatment facilities and transfer stations), small municipal separate storm systems (MS4s) located within

“urbanized areas” as defined by the latest census from the U.S. Census Bureau, and construction activities that disturb between 1 and 5 acres. The Phase II regulations related to land disturbance are implemented through the following general permits:

- General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). The MS4 General Permit involves the implementation of a stormwater management program encompassing six minimum control measures for addressing stormwater impacts. Two of the minimum control measures relate to construction and development (including redevelopment).
- The NPDES Construction General Permit (CGP), which is the primary federal permit involved in land disturbance activities, is required for construction activity that disturbs one or more acres of land. If the construction activity creates less than one acre of disturbance, but is part of a larger common plan or sale of development totaling over one acre of disturbance (e.g., a single lot within a planned subdivision), a permit is needed. It is important to note that the one acre threshold is for the total disturbance and does not need to be a contiguous (or connected) disturbed area to be included in the total disturbance.



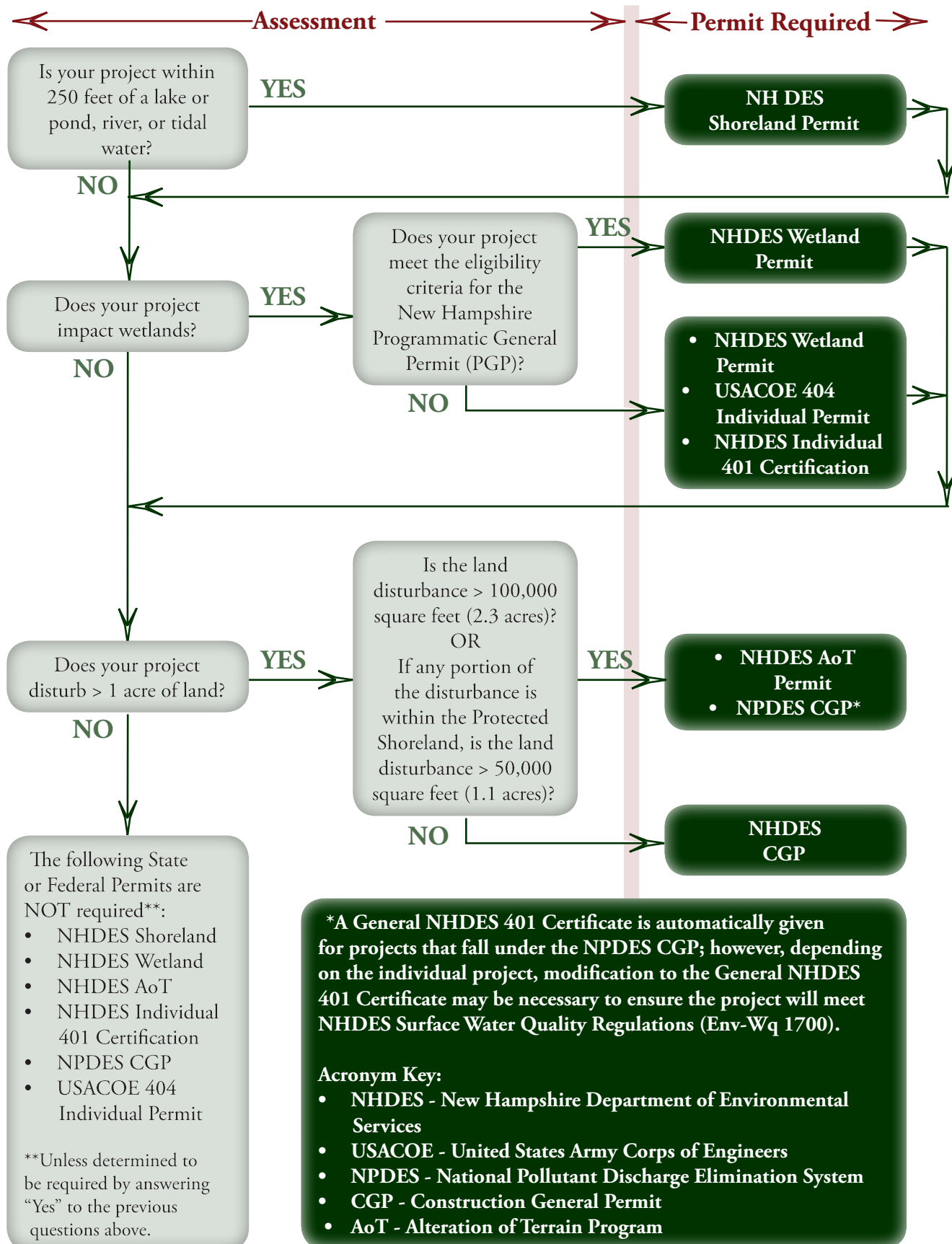
Condominium development under construction
in New Hampshire

EPA and NHDES define “construction activity” to include clearing, grading, and excavating that results in land disturbance including activities related to construction such as landscaping, demolition, and building homes, office buildings, factories, roads and other development activities. Because the NPDES CGP is a federal permit, projects are required to obtain a 401 Certificate from NHDES, as discussed earlier in this section.

Further information about the NPDES Storm Water Phase I and Phase II Programs may be found at EPA’s website at the following webpage: <http://cfpub.epa.gov/npdes/stormwater/swphases.cfm#phase1>

Information regarding the applicability of the program to certain municipally owned or operated “industrial activities” may be found at the following webpage: http://epa.gov/boston/npdes/stormwater/industrial_act.html

Figure 4-2. Applicability of Permit Programs



Chapter 4 References

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