

OVERVIEW OF STORMWATER POLLUTION

and Existing Laws, Rules and Permits

Stormwater is the largest unmanaged source of pollution to Maine's waters and a serious threat to our resource-dependent economy. Stormwater flows across landscapes altered by human uses and picks up a toxic slurry of pollution. In urban and some suburban areas, this water flows from built surfaces into piped storm sewer systems that discharge through outlets to Maine's rivers and coastal waters. This is called "**point source pollution.**" Stormwater that flows across landscapes, picks up pollutants, and sheets directly to Maine's waters is called "**nonpoint source pollution.**"

Both point source and nonpoint source stormwater pollution can carry a range of contaminants, including:

- **Bacteria** that close beaches to recreation and clam flats to harvesting.
- **Nutrients** such as phosphorus and nitrogen that fuel harmful algal blooms, which are toxic to humans and aquatic life, as well as nuisance algal blooms, which smother clam flats and acidify waters.
- **Pesticides and other toxic chemicals, including PFAS and car exhaust,** have a broad range of negative effects on human and aquatic life.
- **Sediment** that clouds water, reducing sunlight for aquatic plants and hindering the survival of fish and other species.
- **Debris** that threatens navigation and pollutes water with plastics. Plastics can kill birds and other wildlife, degrade habitats, and foul recreational areas.
- **Chlorides** from road salt that can kill freshwater life and make water unsafe for drinking.



Nuisance algal blooms harm clam flats.



Stormwater pollution is increasing as Maine experiences:

- **Urban Sprawl:** Development that replaces natural landscapes with pavement and buildings, altering the natural flow of waterways, and eliminating the land's ability to filter stormwater.
- **More intense storms,** like those experienced over the winter of 2023-2024, which caused \$90 million in damage to public infrastructure and millions of dollars in damage to private property.

Existing Regulations Leave Significant Gaps

Most stormwater pollution in Maine is unmanaged and does not fall under existing regulatory or management programs. The following categories are managed under:

Federal Stormwater Law: The U.S. Environmental Protection Agency (EPA) has delegated its authority to regulate four categories of stormwater under the Clean Water Act to Maine's Department of Environmental Protection (DEP). The four categories are regulated under the:

- **Maine Construction General Permit (MCGP):** The Land Bureau issues this permit to control erosion and sediment pollution from construction sites that disturb more than one acre.
- **Multi-Sector General Permit (MSGP):** The Water Bureau issues this permit, which mandates best management practices to reduce pollution from [29 industrial activities](#).
- **Municipal Separate Storm Sewer System Permit (MS4 permit):** The Water Bureau issues this permit to reduce pollution from MS4s in Maine's most urbanized areas ([30 of 482 municipalities](#)), state and federally owned MS4s, and transportation MS4s.

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Federal Stormwater Law (cont.):

- **Residual Designation Authority (RDA):** The Water Bureau regulates the [Long Creek watershed](#) under RDA. RDA gives EPA and delegated states like Maine the authority to issue a general permit to regulate additional stormwater discharges to reduce stormwater pollutants. *Maine could expand its use of RDA to other watersheds impaired by stormwater pollution.*

State Stormwater Law: Maine has statutes that augment federal law. **The Land Bureau implements these laws.**

- **Erosion and Sediment Control (ESC):** This law requires people who engage in activities that involve filling, displacing, or exposing soil or other earthen materials to adopt measures that prevent unreasonable erosion of soil or sediment beyond the project site or into a [protected natural resource](#). Erosion control measures must be in place before construction begins and remain functional until the site is permanently stabilized. Until recently, DEP implemented this law through permits issued under state stormwater law. Now, DEP's Land Bureau has consolidated state and federal erosion and sediment control requirements into the MCGP. *The MCGP only applies to development that disturbs one acre or more, although state law does not set this threshold.*
- **Stormwater Management Law:** This law requires people who construct, or cause to be constructed, a project that includes **one acre or more of disturbed area** to first obtain a permit from DEP. This law applies to projects or any portion of projects located within organized areas of Maine. This section of law requires DEP to adopt rules specifying quantity and quality standards for stormwater. *Stormwater quality standards for projects with three acres or less of impervious surface may address phosphorus, nitrates, and suspended solids, but may not directly address other dissolved or hazardous materials unless infiltration is proposed. This language hinders DEP from addressing pollutants such as chlorides, where infiltration would harm groundwater, making it unsafe for drinking, and causing it to seep into nearby streams where it degrades water quality year-round.*
- **Site Location of Development Law (SLODA):** This law also has stormwater requirements for large-scale development.
- **Rule Chapters 500–502:** Maine's stormwater management law and SLODA apply standards [codified in Rule Chapters 500–502, which are being updated](#). The revisions include proposed amendments to these major substantive rules.



This leaves a lot of stormwater pollution unmanaged, including pollution from historic development, lots under one acre, stormwater not covered by Clean Water Act permits, and more

Questions Related to Existing Regulatory Programs

- Is there a need to better coordinate stormwater management between DEP's Land Bureau and its Water Bureau?
- What other municipalities might be covered by the MS4 permit?
- Should DEP use RDA to issue general permits to restore other impaired waters?
- Should the state law portion of the MCGP apply to some lots that disturb less than an acre, for example in sensitive and threatened watersheds or areas with rapid development?
- Should Maine's stormwater law be amended to remove the one-acre threshold to make it commensurate with the language in the ESC statute and allow for stricter regulation where needed, such as in impaired, sensitive, and threatened watersheds?
- Should Maine's stormwater law be amended to allow DEP to regulate chlorides and other pollutants that cannot be treated by infiltration?
- Should the Commission recommend expedited approval of the revisions to Ch 500-502?