

Drinking Water Protection in Maine A Summary of Regulatory Authority to Protect Drinking Water in Maine

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History

Public water systems have worked to protect drinking water for over 100 years in Maine. The earliest efforts involved locating sources of drinking water that were better protected than the large rivers, which often contained cholera from upstream sewage discharges. Most early public water systems located aquifers, lakes, and ponds with good water quality and worked to protect them from human influence, particularly sewage. Systems worked with both local government and the state legislature to enact private and special laws (charters) and ordinances that reduced their risk of contamination.

Protecting Public Water Systems

Most public water systems possess limited resources to reduce their risks. The most effective tool is to purchase the land that provides the water. For most systems, acquiring the entire aquifer or watershed proves well beyond their means. The next, most common, option is to work with entities holding regulatory authority, to manage specific activities and development patterns in helping keep water clean. The table on the reverse side of this document shows the cumulative effect of efforts over the last 30 years, which provides a state framework of protection for drinking water. Most land use decisions are made at the town level; therefore, municipalities have the best opportunity to keep drinking water safe.

Regulatory Authority

With the passage of the Federal Safe Drinking Water Act, Maine adopted new laws to implement drinking water protection at the state level. One of the provisions explicitly authorized municipalities to adopt ordinances that protect public water sources. There are about 380 community water systems. Of those, 80 larger ground water systems and most of the 45 surface water systems have worked with one or more towns to adopt some municipal protection. For surface water systems, shore land zoning in resource protection is the most common measure. Many smaller community systems, and nearly all non-community systems, rely on state-level protections to reduce risks to their drinking water. As noted in the table on the reverse, most of these barriers are aimed at specific activities that pose a threat to water quality. These protections have evolved over time, mostly in response to specific contamination issues. Many focus on fuel storage and use, which has required significant investments in clean-up efforts, as well as developing new water systems that serve areas contaminated by gasoline and oil products. The regulations, coupled with technical assistance, have started to reduce spill response costs and help keep drinking water clean.

Impact from Farming & Forestry

On a broader scale, farm and forest owners' management choices significantly impact drinking water quality. Wellmanaged agriculture and silviculture provide better drinking water, as well as better results for the landowner. State level standards for farming and forestry set a baseline. Voluntary, incentive-based programs encourage landowners to implement practices that benefit both their lands and drinking water. When these land uses are supported by the community and prove economically viable, unplanned development is also less likely.

The table on the reverse side summarizes the legislative authority for drinking water protection, organized by type of threat to drinking water source. It is a distributed system, with responsibilities and authority at many levels. Ongoing communication and coordination between water systems and state and local agencies facilitates safer and more secure drinking water.

Summary of Regulatory Authority for Drinking Water Protection in Maine

	Authority					
Threat	Public Water System	Municipal Government	Department of Environmental Protection	Other State Agencies		
Underground Storage Tanks	No	Possible through zoning	38 MRS §1393 prohibits new tanks in source protection areas Existing tanks	-		
Aboveground Storage Tanks	No	Possible through zoning	regulated by Chapter 691. 38 MRS §§1393 & 1395: New tanks within 1,000 feet of community PWS or within mapped source water protection area must be double-walled or have secondary containment. SPCC for larger facilities.	State Fire Marshal		
Gravel Extraction	No	May be regulated by zoning	38 MRS §490-D prescribes setbacks of 300-1,000 feet to PWS well, depending on size of PWS			
Sand Salt Piles Salting of roads	No	Possible zoning	06-096 CMR Ch. 574 prohibits new sites in source protection areas and must have a setback of at least 300 feet from any well	DOT salt use policies		
Subsurface Waste disposal (septic systems)	No	LPI review	22 MRS § 42, 10-144 CMR Ch 241: Minimum 300-feet setback between leachfield and PWS well. Industrial subsurface disposal regulated by UIC and Discharge permits.	Plumbing Code, Table 700.2 300 ft PWS setback		
Underground Injection wells	No	No	06-096 CMR Ch 543: UIC program registers injection wells: Discharge Permits 38 MRS § 413			
Landspreading of residuals (sludge application sites)	No	Local ordinance	06-096 CMR Ch. 419(3): Boundary of spreading area must have 500-feet setback from PWS. Other limiting factors, site specific review			
Septage spreading sites	No	Local ordinance	06-096 CMR Ch. 420(4); Minimum setback of 1,000 feet from septage spreading boundary to PWS. Other limiting factors based on depth to bedrock and soil types			
Landfills	No	Local ordinance	06-096 CMR Ch. 401(1)(C): 1,000 feet setback, site specific review			
Transfer stations and processing facilities	No	Local ordinance	06-096 CMR Ch. 402(7)(E) & 409(2)(A): Setback of 300 feet from waste handling area to drinking water wells, including PWS			
RCRA facilities	No	Local ordinance	06-096 CMR Ch 854(7)(A): Site specific review & a minimum of 1,000 feet setback to any source of potable water (PWS)			
Waste Oil Storage facility	No	?	06-096 CMR Ch 860(10)(B): Minimum setback of 1,500 feet from PWS			
Biomedical waste facilities	No	?	06-096 CMR Ch. 900(16)(A): Minimum setback of 1,500 feet from PWS			
Marine oil terminals	No	?	06-096 CMR Ch. 600(6): New facilities cannot be located within 600 feet of existing private well or within 1,000 feet of a significant groundwater aquifer			
Subdivision	No	Local ordinance	Site Location for larger developments			
Industrial /Commercial Development	No	Local ordinance	38 MRS §1393: prohibits installation of automobile graveyards, body shops, or other automobile maintenance and repair facilities, dry cleaning facilities that use PCE, metal finishing or plating facilities, and commercial hazardous waste facilities with 1,000 feet of a PWS or within DHHS mapped source water protection area. Site Location for larger developments			
Fertilizers	No	Local ordinance	No	Agricultural nutrient mgt plans		
Pesticides	No	Local ordinance	No	Pesticides Control Board		
Shore front development	No	Shore land Zoning	NRPA review of some activities			
Storm water disposal	No	Local Ordinance	06-096 CMR Ch 500: Stormwater Regulations limit recharge in SWPA (Appendix D)			
Surface (land and water) Activities around intakes	No	Title 22, § 2642 authorizes municipal regulation	Certain lakes 12 MRS § 13068-A limits motor size, type	I F&W 22 MRS § 2648: 400 feet intake radius		
Animal husbandry/manure stockpiling.	No	Possible local ordinance	No	7 MRS, Chapter 747: nutries management plans		
GW/SW extraction	No	Local ordinance	Site Location, Significant Groundwater wells under NRPA, 38 MRS § 404	LUPC regulations		
Boat launches/access	No	Local ordinance	Shoreland Zoning	IFW, DOC access program		
Residential Uses	No	Local land use/zoning	Large subdivisions Site location review	LUPC regulations		
	No	No	38 MRS §413 requires a license for all surface discharges			

Tools for Protection						
		Authority				
Protection Tool	Public Water System	Municipal Government	Department of Environmental Protection	Other State Agencies		
Source Protection area ownership	Authorized by 35-A MRS §6408	As part of open space plan.	No	DWP funding, LMF funding.		
Active management of existing activities	<u>.</u>	Possible through local ordinance-Code enforcement 30-A MRS §3428, septic system malfunctions	38 MRS §413 requires a license for discharge, and the facilities may be inspected/monitored	Agriculture and Forestry standards Farm and forest management plans		
Wellhead/watershed Protection Zoning restrictions	No	Authorized by 22 MRS §2642 and 30-A MRS §4312	22 MRS §2649-A State's impact on public water supply protection When undertaking actions that have a negative impact on a public water supply, a state agency shall consider the impact and evaluate alternatives to avoid and minimize the impact.			
Intake Protection	400 foot radius, subject to IF&W, DOC and town approval. 22 MRS §2648	May regulate winter use in consultation with IF&W 22 MRS §2649	No	IF&W surface use management of lakes and ponds		