



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

To: Bangor Comprehensive Plan Committee

From: Division of Environmental Assessment, Bureau of Water Quality,
Department of Environmental Protection

Date: October 7, 2022

The Department of Environmental Protection Division of Environmental Assessment is providing this packet of information for your Comprehensive Planning Committee to use for the **surface water resources** section of your comprehensive plan. Included is a map that was generated by the DEP. Additional water resource data and information is available through the DEP, Google Earth, and Lakes of Maine websites (see links below).

As a first step, the committee should obtain and review a map such as a topographic map or Google Earth map that has the town's water resources on it. This map should be used in conjunction with the enclosed map to generate an inventory of the lakes, ponds, rivers, streams, marine waters, and wetlands with watersheds in the town.

Conditions and Trends:

1. The provided **municipal map** includes:

- Lakes, ponds, rivers, and streams in and around your town, most of which are labeled. If a stream or other waterbody is shown on the map but not labeled, it is up to you to determine what the local name for the waterbody is, if any.
- Watershed boundaries of the lakes, ponds, rivers and most streams in your town. This information should be included in the comprehensive plan as it is critical for assessing where development has or may be occurring in the future as it relates to these resources.
- State water quality classification of rivers, streams, and estuarine/marine waters for your town/city. The DEP Water Quality Classification system is used to manage the state's surface waters. The system establishes water quality goals, assigns all waters a water quality classification, and sets uses and water quality criteria for each class. If classification standards are not met, the program directs the state to improve the quality to meet standards. The classification system includes four classes for freshwater rivers and streams, three classes for marine waters, and one class for lakes and ponds. All lakes and ponds are classified as GPA. For more information about classification standards, see www.maine.gov/dep/water/monitoring/classification/.

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(207) 287-7688 FAX: (207) 287-7826

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312 CANCO ROAD
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(207) 822-6300 FAX: (207) 822-6303

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1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
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- Water quality impaired streams, rivers, and lakes that do not meet the water quality criteria for their classification. The red lines are only representations and the Integrated Water Quality Report (see Conditions and Trends bullet 3 of this memo for link and more information) is the official list and should be checked to confirm any water quality impairments. Please note the impairments of estuarine and marine waters are not included on the map.
 - Wastewater outfalls and overboard discharges in and around your town. These “point sources” of pollution are based on DEP point source discharge permits. While the information is the most up-to-date available, if you are aware of discrepancies, or have questions regarding the wastewater outfalls, please contact Cindy Dionne DEP Division of Water Quality Management, at Cindy.L.Dionne@maine.gov or 446-3820. Questions regarding overboard discharges should go to Irene Saumer, DEP Division of Water Quality Management, at Irene.Saumer@maine.gov or 485-2404.
 - Significant aquifers that have been mapped in and around your town, including those identified as being at high or moderate risk due to potential threats from local land uses (e.g. oil tanks, spills, landfills, etc.). For questions regarding the high yield gravel and sand aquifer risk assessment, contact John Hopeck DEP Division of Environmental Assessment, at John.T.Hopeck@maine.gov or 215-4463.
2. **Map of Turnpike Streams** at risk for impairment. Due to their location near I-95 exits and the likelihood of exit-related development in their watersheds, the small streams within the circles may be at risk of current or future impairment. When intense development occurs near small streams, they are often greatly impacted and their water quality and habitat can become impaired. In particular Shaw Brook, Birch Stream, Kenduskeag Stream, Arctic Brook, Penjajawoc Stream, Meadow Brook and two unnamed brooks (labeled 88 and 89 on the map) are at risk if there is intense development off of the exit and in their watershed and therefore they may be good candidates to proactively protect. To discuss, contact Jeff Dennis, DEP Division of Environmental Assessment, at Jeff.Dennis@maine.gov or 215-6376.
 3. The **Lakes of Maine Website** (www.lakesofmaine.org) can be searched by municipality or lake. This site provides the following information for each lake, if available:
 - a. Lake overview (size, depth, volume, watershed size, etc.).
 - b. Water quality data
 - c. Fish species
 - d. Local and regional stewardship organizations
 4. The **Integrated Water Quality Monitoring and Assessment Report** (available at www.maine.gov/dep/water/monitoring/305b/index.html) is produced by the DEP every two years. This report summarizes available water quality information and assesses Maine’s water resources’ attainment of designated uses and standards. While impaired lakes and streams should be indicated in red on the provided municipal map, marine waters are not, and if there are any waterbodies in question, the report is the source to check. As the Integrated Report is a lengthy report, one way to determine if any waterbodies are listed as impaired is to go to the Appendices

and search electronically by waterbody name. Waterbodies listed as Category 4 or 5 are considered impaired. For specific questions about waterbody classification, contact Susanne Meidel, DEP Division of Environmental Assessment, at Susanne.K.Meidel@maine.gov or 441-3612.

5. If the municipality has any lakes or streams listed as impaired, check to see if a **Total Maximum Daily Load (TMDL)** report has been completed since the report is a good source of information about the water quality concerns in the watershed. TMDL reports define pollutant reductions needed to restore healthy waterbody conditions. Draft and approved TMDL reports are available at:
www.maine.gov/dep/water/monitoring/tmdl/index.htm.
6. Information on **invasive aquatic plants** and lists of infested lakes and streams are available at www.maine.gov/dep/water/invasives/index.html.
7. **List of Watersheds of Lakes Most at Risk from New Development and Urban Impaired Streams** is available at
<https://webcache.googleusercontent.com/search?q=cache:Uu5qqR2y1l0J:https://www.maine.gov/sos/cec/rules/06/096/096c502.docx+&cd=1&hl=en&ct=clnk&gl=us>.
This list is part of Chapter 502 and is used by the DEP for developments requiring either a Stormwater permit or Site Location of Development permit. Development projects located in these watersheds are required to meet additional standards.
8. The **Nonpoint Source Priority Watersheds List** is available at www.maine.gov/dep/land/watershed/nps_priority_list/index.html. This list was developed to encourage local communities to take action to restore or protect waters impaired or threatened primarily by polluted runoff. The list also helps prioritize DEP nonpoint source water pollution control efforts and grant funds. The priority lists are organized by lake, stream, and marine waters.

Strategies:

1. To protect lake water quality, towns must control phosphorus inputs to lakes. The DEP developed the **Phosphorus Control Method** as a tool for the state and towns to use for regulating development and phosphorus export to lakes. The method calculates how much phosphorus may be allowed to be exported and is based in part on an assessment of how much of the watershed has been and is likely to be developed. For many towns, the calculated watershed phosphorus allocations for lakes and ponds are available in Appendix C of *Volume II. Phosphorus Control in Lake Watersheds: A Technical Guide to Evaluating New Development* (www.maine.gov/dep/land/stormwater/stormwaterbmps/index.html). If your town is not listed in this document and you would like to have the phosphorus allocation numbers calculated for your town's watersheds or to discuss the Phosphorus Control method in general, contact Jeff Dennis, DEP Division of Environmental Assessment, at Jeff.Dennis@maine.gov or 215-6376.

2. Consider amending your local land use ordinances, if they haven't been already, to incorporate stormwater runoff performance standards consistent with the Maine **Stormwater Management Law** and Stormwater Rules (Title 38 MRSA Section 420-D and 06-096 CMR 500 and 502) and reference the current stormwater manual (available at <http://www.maine.gov/dep/land/stormwater/stormwaterbmps/index.html>).
3. Ensure your town ordinances are consistent with **Shoreland Zoning laws**, or go above and beyond them. Contact your DEP Regional Office Shoreland Zoning specialist for more information.
4. Explore whether your **town may want to repair a private road** for the purpose of protecting or restoring lake water quality. In 2009 legislation was enacted to allow municipalities to authorize the use of public funds to repair a private road, way or bridge to prevent stormwater runoff pollution from reaching a great pond. To qualify, the road must be in the watershed of a lake that is listed as "most at risk" in DEP rules, listed as having impaired water quality by DEP, or identified as having threats to water quality through a watershed survey. The road must be found to be contributing to degradation of lake water quality based on an evaluation of the road using DEP accepted protocol. Repair work must comply with best management practices required by DEP and there must be a road association in place to maintain the road. The statute is MRS Title 23 §3106. Contact Alaina Chormann, DEP Division of Environmental Assessment, at Alaina.g.chormann@maine.gov or 699-9279 for more information.
5. If the town has a lake, stream, or marine water that is on the **Nonpoint Source Pollution Impaired or Threatened Priority Watersheds List**, consider developing or supporting an effort to develop a Watershed Based Plan to restore or protect water quality. If there is already a plan in place, consider supporting implementation of the plan. A list of DEP-accepted plans is available at <http://www.maine.gov/dep/water/grants/319.html>.

Other Sources of Information:

1. DEP Regional Offices Contacts

- When preparing the comprehensive plan, if the committee has questions or would like further information about surface water resources, they may wish to contact the DEP Division of Environmental Assessment, Watershed Management Unit. DEP's main office is located in Augusta and there are three regional offices located in Portland, Bangor, and Presque Isle.
- Phone numbers for the regional offices are:

- Central Maine Office (Augusta): 287-7688
- Southern Maine Regional Office (Portland): 822-6300
- Eastern Maine Regional Office (Bangor): 941-4570
- Northern Maine Regional Office (Presque Isle): 764-0477

2. The **Maine DEP website** (www.maine.gov/dep) has extensive information on it including data, educational information, and links to other resources. Below is a list of resources on the DEP website that may be useful or of interest to municipalities.

- **DEP Google Earth Maps.** Interactive maps and linked information on Google Earth Maps, including monitoring locations, hazardous waste spill and remediation sites, NRPA bird habitat, air quality information, and other DEP database information. www.maine.gov/dep/gis/datamaps/
- **DEP Lakes Page** covering a wide range of subjects including programs, monitoring and assessment, laws and general information. www.maine.gov/dep/water/lakes/index.html
- **Land and Water Quality programs and related requirements.** Included here are the Erosion and Sedimentation Control Law, Natural Resources Protection Act, Shoreland Zoning, Site Law, and Stormwater Law. www.maine.gov/dep/land/programs/index.html

As you compile information and update your Comprehensive Plan, please feel free to contact Addie Halligan directly with questions regarding any of the above information and it's integration into your plan by calling (207) 441-9057 or emailing Addie.Halligan@maine.gov .