

To: Town/City Comprehensive Plan Committee

From: Division of Watershed Management, Bureau of Land & Water Quality,
Department of Environmental Protection

Date: September 10, 2009

The Department of Environmental Protection Division of Watershed Management 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 and University of Maine websites (see Sources of Information Section below).

As a first step, the committee should obtain and review a map such as a topographic map or GIS 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.

Documents Provided:

1. **Municipal map** which 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. See attached information sheets for a description of the classifications.
- 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 Bill Hinkel, DEP Division of Water Quality Management, at Bill.Hinkel@maine.gov or 287-7659. Questions regarding overboard discharges should go to Mike Demarest, DEP Division of Water Quality Management, at Michael.Demarest@maine.gov or 287-6301.

2. **Lake Watersheds Most at Risk from New Development and Urban Impaired Streams** List (Appendix A and B from DEP's Chapter 502). Chapter 502 includes the criteria used to identify these watersheds and the list of watersheds meeting the criteria. This list 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.

3. **Water Classification Program description** for Rivers/Streams, Estuarine/Ocean, and Lakes. For more information about classification standards, see www.maine.gov/dep/blwq/docmonitoring/classification/index.htm.
4. **Stormwater Regulations flyer** from Maine NEMO.

A Few Considerations:

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/blwq/docstand/stormwater/stormwaterbmmps/index.htm). 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, contact Kristin Feindel, DEP Division of Watershed Management, at Kristin.B.Feindel@maine.gov or 287-5586. To discuss the Phosphorus Control method in general, contact Jeff Dennis, DEP Division of Watershed Management, at Jeff.Dennis@maine.gov or 287-7847.
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 www.maine.gov/dep/blwq/docstand/stormwater/stormwaterbmmps/index.htm). See enclosed flyer and contact LaMarr Clannon, Maine NEMO, at lcannon@maine.rr.com or 771-9020 for more information.
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.

Sources of Information:

1. **PEARL**-University of Maine Environmental Information Website
 - Environmental information including water resources data is available on the University of Maine PEARL website. Most of the data available at this time is lake data, although some river and stream data is also available. Included on this site is the following information for lakes:
 - Lake overview (size, depth, volume, watershed size, etc).
 - Water quality data summary and water quality summary (written explanation)
 - Fish species and Inland Fisheries and Wildlife fish stocking
 - Invasive species (link to DEP's list of waters known to have invasive plant species)

- To access this website, go to www.pearl.maine.edu. Click on data search. Generally you will want to search by lake or stream name. It does allow you to search by town, but this may not however produce a complete list of lakes/ponds in the town. The database notes that “in some cases, data associated with a lake may not be returned if that lake crosses multiple town lines. This is an issue we are currently working on but for the time being, any data directly associated with a particular lake will be best accessed through a lake search and not a town search.”

2. Integrated Water Quality Monitoring and Assessment Report

- Every two years, as required by Section 305(b) of the Clean Water Act, the DEP produces this report. Often referred to as the 305(b) report, this report summarizes available water quality information and assesses Maine’s water resources’ attainment of designated uses and standards.
- The report assigns waters to five main assessment categories:
 - Category 1: Attaining all designated uses and water quality standards, and no use is threatened.
 - Category 2: Attains some of the designated uses; no use is threatened; and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).
 - Category 3: Insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired).
 - Category 4: Impaired or threatened for one or more designated uses, but does not require development of a TMDL (Total Maximum Daily Load) report.
 - Category 5: Waters impaired or threatened for one or more designated uses by a pollutant(s), and a TMDL report is required.
- Comprehensive plan committees can obtain information about surface waters that are not attaining classification from the 305(b) report, available at www.maine.gov/dep/blwq/docmonitoring/impairedwaters/index.htm. This is a lengthy report that will require scanning the report to find any information for waters in your town. If you can narrow the search down to the major basin(s) of interest, this will help. Another 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 Susan Davies, DEP Division of Environmental Assessment, at Susan.P.Davies@maine.gov or 287-7778.
- Total Maximum Daily Load (TMDL) reports are available for many impaired lakes and streams. TMDL reports define pollutant reductions needed to restore healthy waterbody conditions. The report describes the impairments, pollutants, water quality targets, and the loading that the lake or stream can receive without exceeding water quality criteria. Draft and approved TMDL reports are available at: www.maine.gov/dep/blwq/docmonitoring/impairedwaters/index.htm. If the town has any lakes or streams listed as impaired, you may want to check to see if a TMDL has been completed since a TMDL report is a good source of information about the environmental issues in the watershed.

3. 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 Watershed Management. 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): 287-3901
 - Southern Maine Regional Office (Portland): 822-6300
 - Eastern Maine Regional Office (Bangor): 941-4570
 - Northern Maine Regional Office (Presque Isle): 764-0477

4. Additional Resource Information - The Maine DEP website has extensive information on it including data, educational information, and links to other resources. Below is a list of resources on the DEP website and a few other sites that may be useful or of interest to towns.

- **DEP Google Earth Maps.** 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/
- **Maine Nonpoint Source Education for Municipal Officials.** Educational program for land use decision makers that addresses the relationship between land use and natural resource protection, with a focus on water resources. www.mainenemo.org
- **Maine Stormwater Best Management Practices Manual**, including chapters on low impact development and phosphorus control methods.
www.maine.gov/dep/blwq/docstand/stormwater/stormwaterbmps/index.htm
- **Lake publications** covering a wide range of subjects including BMPs, monitoring and assessment, laws and general information.
www.maine.gov/dep/blwq/doclake/publake.htm
- **Maine Volunteer Lake Monitoring Program (VLMP).** The website includes the list of volunteer monitors and Invasive Plant Patrollers, information on the VLMP, and invasive plants. www.mainevolunteerlakemonitors.org
- **DEP Stream Team Program.** General and educational information about streams and links to other stream resources and organizations.
www.maine.gov/dep/blwq/docstream/team/streamteam.htm
- Information on **invasive aquatic plants** and list of infested lakes and streams.
www.maine.gov/dep/blwq/topic/invasives/doc.htm
- **Maine Environmental Monitoring and Assessment Program Index (MEMAP)** includes projects and programs monitoring environmental factors and links to watershed organizations. www.memapindex.org
- General educational material about **non-point source pollution**.
www.maine.gov/dep/blwq/doceducation/nps/index.htm
- **DEP Land and Water Quality Bureau publications.** This is a general list of topics and program pages. Included here are a few publications and links to DEP program webpages. www.maine.gov/dep/blwq/lwpub.htm
- **Land and Water Quality laws and 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/blwq/stand.htm