STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

To: Scarborough Comprehensive Plan Committee

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

Date: May 12, 2017

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 Sources of Information Section 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.

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.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

- 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 page 3 of this memo for link and more information) is the official list and should be checked to confirm any water quality impairments. Marine/estuary waters that are impaired 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 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.
- 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 Mark Holden, DEP Division of Environmental Assessment, at Mark.K.Holden@maine.gov or 215-1691.

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/water/monitoring/classification/

4. **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, Willowdale Brook and Beaver Brook could be harmed by further development in their watersheds. To discuss, contact Jeff Dennis, DEP Division of Environmental Assessment, at Jeff.Dennis@maine.gov or 215-6376.

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/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, contact Kristin Feindel, DEP Division of Environmental Assessment, at Kristin.B.Feindel@maine.gov or 215-3461. 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 Wendy Garland, DEP Division of Environmental Assessment, at Wendy.Garland@maine.gov or 615-2451 for more information.

Sources of Information:

1. **Lakes of Maine Website** – www.lakesofmaine.org
    - Environmental information on lakes, including water quality data, is available on the Lakes of Maine website. Included on this site is the following information for lakes:
        - Lake overview (size, depth, volume, 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)

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.

- 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/water/monitoring/305b/index.htm. This is a lengthy report that will require scanning the report to find any information for waters in your town. 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.
- 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/water/monitoring/tmdl/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 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

4. **Additional Resource Information -** 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 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 Stormwater Best Management Practices Manual**, including chapters on low impact development and phosphorus control methods. www.maine.gov/dep/land/stormwater/stormwaterbmps/index.html#manual

- **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
- **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
- Information on **invasive aquatic plants** and list of infested lakes and streams. www.maine.gov/dep/water/invasives/index.html
- **Maine Environmental Monitoring and Assessment Program Index** (MEMAP) includes projects and programs monitoring environmental factors and links to watershed organizations. http://library.umaine.edu/memap/
- **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