

# Memo

To: Hancock County Planning Commission municipalities

From: Thomas E. Martin, AICP, Executive Director

Date: June 21, 2012

Re: Information on Water Quality Technical Assistance  
Resources

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This mailing summarizes Hancock County Planning Commission (HCPC) water quality technical assistance resources. These include ways to identify threats to water quality and both regulatory and non-regulatory techniques to promote clean drinking water. These techniques also can help assure that water remains safe for swimming and shellfish harvesting. This document contains numerous on-line references. If you do not have Internet capability, feel free to contact Tom Martin (667-7131 or [tmartin@hcpcme.org](mailto:tmartin@hcpcme.org)) for hard copies or if you have any questions. *Please circulate this mailing to interested parties in town.*

## **PART 1: ASSESSMENT OF THREATS**

There are two basic sources of water pollution: point and non-point. Point sources refer to discharges from a pipe into a water body. Non-point refers to diffuse sources such as stormwater runoff from a parking lot that carries contaminants into a water body. There are many potential sources of non-point pollution. These may include soil erosion, runoff from lawns, improper storage of hazardous chemicals, failing septic systems, and land clearance practices.

According to the Maine DEP impervious land cover (such as pavement and roofs) produces 16 times as much stormwater runoff as a forested area. This means that as an area is developed, the risk of non-point source pollution increases. There are, however, established techniques for assessing threats as well as mitigation measures. Assessing non-point sources of pollution is best

done on watershed basis. This means reviewing land use activities in the entire area from which runoff drains into a given water body.

One useful resource in assessing non-point sources is the EPA's Non-Point Source Outreach Tool Box: <http://cfpub.epa.gov/npstbx/index.html>. Another is the Maine DEP'S Watershed Division Non-Point Resource page: <http://www.maine.gov/dep/land/watershed/nps/index.html>. The Maine Non-Point Education for Municipal Officials (NEMO) Program has a variety of training sessions and other information on its website: <http://www.mainenemo.org/>.

If you suspect that there are failing septic systems in your town or watershed, you may want to conduct a survey of the systems to determine if they are operating according to state standards. The HCPC web site: <http://www.hpcme.org/environment.html> has information on sanitary surveys. A sanitary survey identifies sources of water pollution such as failing septic systems and agricultural, industrial, and commercial operations. The focus is usually on threats to water quality that may affect aquatic life or recreational use of a water body. Ideally, the survey should cover the entire watershed. Since this is not always practical, surveys often focus on areas close to the water body in question. This is particularly the case when the concern is septic systems.

## **PART 2: SAMPLE LAND USE ORDINANCES THAT PROTECT WATER QUALITY**

The following links can be used by planning boards in drafting amendments to land use ordinances. If making major amendments to a land use ordinance, be sure that they are consistent with the comprehensive plan. HCPC also recommends that you have your proposed ordinance changes reviewed by an attorney skilled in Maine land use law.

### **LOW IMPACT DEVELOPMENT (LID)**

LID practices are a set of site development strategies that are designed to mimic natural hydrologic function by reducing stormwater runoff and increasing groundwater recharge and pollutant treatment. LID practices are almost always small in scale and diffuse across a project site. They are generally surface vegetative systems, such as rain gardens and buffers, that are integrated with the site development infrastructure. There are sample standards that can be incorporated in local land use ordinances. For details, see:

<http://www.hpcme.org/environment/LID/LIDguidancemanual2007.pdf>

### **SUBDIVISION ORDINANCES THAT ADDRESS WATER QUALITY**

There are links to two ordinances: the town of Philips (see <http://www.hpcme.org/comdev.html#CDBGWell>) and a model ordinance prepared by the Southern Maine Regional Planning Commission (see <http://smrpc.org/landuse/subord/subord.htm>). These ordinances have good examples of stormwater runoff and erosion and sedimentation control. They also have phosphorus loading standards for lake watersheds

## **SUPPLEMENTAL PLUMBING CODE**

A supplemental plumbing code is one that exceeds state minimum standards. It is generally aimed at large subsurface disposal systems (those serving three or more dwelling units or non-residential systems generating 1,500 or gallons per day). However, it may also require local plumbing inspector review of any expansion of an existing structure served by a septic system. Some towns restrict their supplemental code to the shoreland zone of vulnerable lakes. Examples from two towns may be found at <http://www.hpcme.org/comdev.html#CDBGWell>.

## **SMART GROWTH & WATER QUALITY**

Water quality protection can be viewed in a context of smart growth strategies. There are numerous resources on smart growth. One is Smart Growth for Coastal and Waterfront Communities. For a broader view, see Putting Smart Growth to Work for Rural Communities. Both these documents can be found at: <http://www.hpcme.org/environment/LID/index.html>.

## **PART III: NON-REGULATORY TECHNIQUES**

On a broad level public education is an important tool. For example, there is extensive information on protecting lake water quality on the DEP Division of Watershed Management web site (<http://www.maine.gov/dep/land/watershed/index.html>) Information on groundwater can be found at: <http://www.maine.gov/dep/water/groundwater/index.html> For advice on homeowners maintaining their own wells and septic systems, see: [http://www.hpcme.org/environment/wellseptic/HCPC\\_WellBrochure2012.pdf](http://www.hpcme.org/environment/wellseptic/HCPC_WellBrochure2012.pdf) and [http://www.hpcme.org/environment/wellseptic/HCPC\\_SepticBrochure2012.pdf](http://www.hpcme.org/environment/wellseptic/HCPC_SepticBrochure2012.pdf).

There are also funding sources for septic system and well replacements for income qualifying households. One source is the Community Development Block Grant program. See: <http://www.hpcme.org/comdev.html#CDBGWell>. Another is the USDA Rural Development: [http://www.rurdev.usda.gov/me/RHP\\_CF.htm](http://www.rurdev.usda.gov/me/RHP_CF.htm)

## **WHERE DO WE GO FOR MORE INFORMATION?**

Contact Tom Martin at the HCPC (207-667-7131) or [tmartin@hpcme.org](mailto:tmartin@hpcme.org). He can refer you to other resources, help you adapt material for use in your town, and discuss the experiences of other towns. He can also refer you to funding sources.

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