

Building Strong Collaborative Relationships for a Sustainable Water Resources Future:

STATE OF MAINE

SUMMARY OF STATE WATER PLANNING

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December 2009

The findings contained in this report are based on the information collected from the literature search and interviews for this initiative and should not be construed as an official Department of the Army position, policy or decision unless so designated by other official documentation.

STATE OF MAINE¹

1. STATE/REGIONAL WATER PLANNING STATUS

Maine does not currently have a comprehensive statewide water resources plan. Planning and management of Maine’s water resources is coordinated primarily by the Land and Water Resources Council (LWRC), established in 1993 by the Maine Legislature “to facilitate more effective interagency coordination of the State's activities regarding natural resource and land use management” (5 M.R.S.A §3331). In 2007, the Water Resources Planning Committee (WRPC) was created to facilitate planning of water withdrawals and to develop water use management plans in “watersheds-at-risk” where withdrawals are a significant fraction of the total discharge from the watershed. Statewide planning activities depend on a number of state regulatory programs including Water Withdrawal Reporting Program, a Sustainable Water Use Program, Source Water Assessment and Protection Programs, Point and Nonpoint Source Control Programs, and a Coastal Management Plan. Each of these activities is described in detail below.

2. RESPONSIBLE STATE AGENCIES/REGIONAL ENTITIES

As part of the Maine State Planning Office, the Land and Water Resources Council (LWRC) was “established to consider natural resources issues of statewide significance and to counsel the Governor and Legislature on policy options for management and protection of natural resources” (Source [1]). Its membership includes the commissioners from the following state agencies:

- Department of Agriculture, Food & Rural Resources
- Department of Conservation
- Department of Environmental Protection
- Department of Human Services
- Department of Inland Fisheries & Wildlife
- Department of Marine Resources
- Department of Economic & Community Development

The chairperson of the LWRC is the director of the State Planning Office:

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¹ Representatives from the State of Maine did not participate in an interview.

The Maine Department of Environmental Protection (DEP) Bureau of Land & Water Quality (BLWQ) is the main regulatory agency responsible for permitting, funding, enforcement, and education of the state’s water resource issues.

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3. WATER MANAGEMENT VISION AND GOALS

Since Maine does not have a statewide water management plan, the opening of the 1987 Natural Resources Protection Act (38 M.R.S.A. §480) may best represent the state’s vision regarding water resources management:

The Legislature finds and declares that the State's rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands and coastal sand dunes systems are resources of state significance. These resources have great scenic beauty and unique characteristics, unsurpassed recreational, cultural, historical and environmental value of present and future benefit to the citizens of the State and that uses are causing the rapid degradation and, in some cases, the destruction of these critical resources, producing significant adverse economic and environmental impacts and threatening the health, safety and general welfare of the citizens of the State.

The heading to the Water Classification Program regulation (38 M.R.S.A. §464) includes a list of state goals to protect its water resources:

The Legislature finds that the proper management of the State's water resources is of great public interest and concern to the State in promoting the general welfare; in preventing disease; in promoting health; in providing habitat for fish, shellfish and wildlife; as a source of recreational opportunity; and as a resource for commerce and industry.

The Legislature declares that it is the State's objective to restore and maintain the chemical, physical and biological integrity of the State's waters and to preserve certain pristine state waters. The Legislature further declares that in order to achieve this objective the State's goals are:

- A. That the discharge of pollutants into the waters of the State be eliminated where appropriate; [1985, c. 698, §15 (NEW).]*
- B. That no pollutants be discharged into any waters of the State without first being given the degree of treatment necessary to allow those waters to attain their classification; and [1985, c. 698, §15 (NEW).]*

C. That water quality be sufficient to provide for the protection and propagation of fish, shellfish and wildlife and provide for recreation in and on the water. [1985, c. 698, §15 (NEW).]

In addition, the state recognizes the importance of maintaining safe, reliable drinking water sources including both groundwater and surface water. The heading of the Groundwater Protection Program statute (38 M.R.S.A. §401) states that “an adequate supply of safe drinking water is a matter of the highest priority and that it is the policy of the State to protect, conserve and maintain ground water supplies in the State”.

Regarding surface water supplies, the heading to the Protection of Maine’s Lakes statute (38 M.R.S.A. §1841) reads:

Maine's great ponds are an important element of the State's economy and traditional way of life. Their abundance and relatively high water quality are precious resources in light of the growing inadequacy of water supplies and the deterioration of natural settings and habitat in many other states. The use of great ponds as a source for drinking water, recreation and power production is vital to the State. [1991, c. 838, §26 (NEW).]

To protect the public trust, the State's great ponds must be protected from degradation. They must be managed according to watershed boundaries, while a diversity of lake setting types within each region of the State is maintained. Potable water from the State's great ponds should require minimal treatment. [1991, c. 838, §26 (NEW).]

A primary goal of the protection of the State's great ponds is to ensure that consistent land use management policies and regulations are applied throughout the direct watershed of each great pond. [1991, c. 838, §26 (NEW).]

The State's goals in managing the surface uses of great ponds are to avoid or minimize conflicts among recreational users, energy producers, shoreland owners and other users; maintain traditional water-dependent businesses; and ensure that the intensity of use allowed on a great pond is in keeping with its capacity to accommodate that use. [1991, c. 838, §26 (NEW).]

4. SCOPE OF WATER RESOURCES PLANNING AND MANAGEMENT

Although Maine does not currently have a comprehensive statewide water plan, there are a number of agencies, programs and regulations that are involved in planning and management of the state’s water resources.

In 2000, the Maine Department of Human Services’ Drinking Water Program (DWP) initiated its Source Water Assessment Program (SWAP) as mandated by the federal Safe Drinking Water Act (SDWA) (Source [2]). The purpose of SWAP was “to ensure that when a water supply is at risk of contamination, the citizens of Maine are made aware so

that appropriate steps can be taken at the local level to minimize or eliminate the risk” (Source [2]). The goal of SWAP was to “evaluate each of the 2600 public water supply sources, assess for each the likelihood of contamination by existing or future activities, and make the results of these studies widely available to the public” (Source [2]). Once the results of SWAP were made available to local officials and public water suppliers, they were handed the responsibility “for providing safe drinking water to the population they serve” (Source [3]). However, the state provides support through guidance documents such as *Best Management Practices for Groundwater Protection* (Source [4]).

After completion of the source water assessment, the DWP was asked to lead an interagency review of the state’s drinking water supply laws and regulations. They reported to the Legislature’s Joint Standing Committee on Natural Resources in 2007 that “the primary risk to public water systems lies in unmanaged development in areas contributing water to their wells and intakes” (Source [5]). To address this risk, the DWP provided three recommendations (Source [5]):

- *Recommendation 1: Establish consistent policies among all State agencies to enhance source protection in all state decision making, development, and practices.*
- *Recommendation 2: Create an effective program to maintain agricultural and forestry land uses in source protection areas.*
- *Recommendation 3: Mitigate the effects of existing and new development on drinking water quality through the use of education, incentives and enforcement*

For each recommendation, the DWP provided implementation strategies, which focused on expanded enforcement of existing regulations, especially the Natural Resource Protection Act. An important result of this review was a recommended shift from local to statewide enforcement. “The group did not reach consensus on requiring additional regulation on the part of local government. The group believes that utilizing statewide programs..., while still offering encouragement to localities, is a more effective strategy” (Source [5]).

In addition to source water protection, the state has begun to evaluate the impact of water withdrawals on its fresh water resources through the Department of Environmental Protection’s (DEP’s) Sustainable Water Use Program (SWUP). The SWUP has resulted in a Water Withdrawal Reporting Program and a set of regulations governing In-stream Flows and Lake and Pond Water Levels.

In 2002, the Maine Legislature passed “An Act to Require Major Water Users to Provide Public Information About Their Annual Water Withdrawals from Public Water Resources” (38 M.R.S.A. §470). This law established the Water Withdrawal Reporting Program (WWRP) designed to create a reporting system for all water withdrawals in the state (excluding small withdrawals for local use that are below specific minimum thresholds). The most recent annual report from this program was delivered to the Maine Legislature’s Joint Standing Committee on Natural Resources in March 2007 by the Maine Department of Environmental Protection (DEP). Figure 1 shows the statewide distribution of public water system sources based on the most recent data from the WWRP.

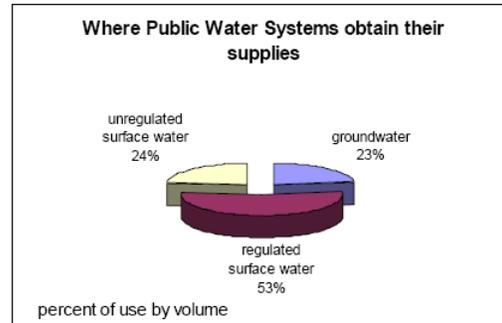


Figure 1. Source of Public Water Systems, (Source [6])

The SWUP also resulted in Chapter 587 of the DEP Rules entitled “In-stream Flows and Lake and Pond Water Levels”. This set of rules was enacted by the Legislature in 2007 and “establishes river and stream flows and lake and pond water levels to protect natural aquatic life and other designated uses in Maine’s waters” (Source [7]). This rule was the result of significant collaboration between state agencies, non-profit organizations, and other stakeholder groups.

In 2006, the Maine Geological Survey (MGS) used the data from the WWRP and SWUP to conduct a preliminary watersheds-at-risk analysis (Source [8]). A “watershed-at-risk” was defined as “a watershed where the sum of the required in-stream flows plus the consumptive water withdrawals exceeds some percentage of the total runoff generated within the watershed” (Source [8]). At the time of this analysis, the in-stream flow requirements were still provisional, but were later adopted as a final rule in August 2007 by DEP (see below) (Source [7]). The watershed-at-risk analysis identified 69 watersheds where the sum of in-stream flow and the estimated surface and ground water withdrawals exceeded 80 percent of the average annual runoff, and 11 watersheds at 90 percent threshold (Figure 2) (Source [8]).

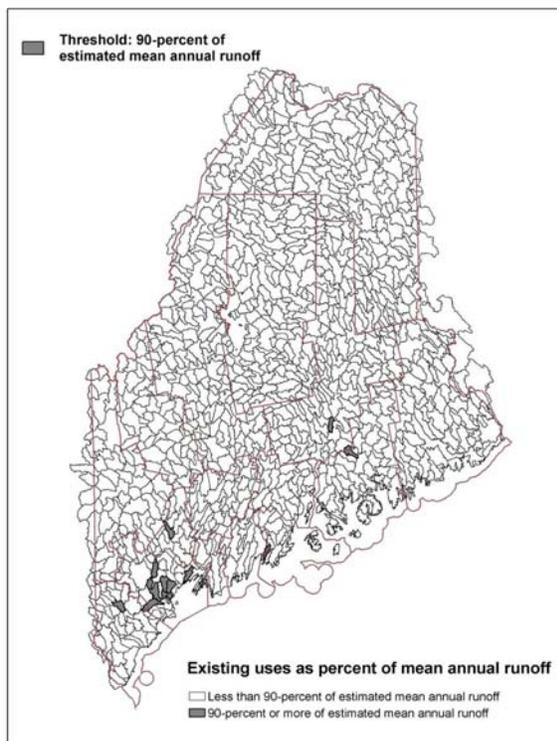


Figure 2. Results of MGS Watersheds-At-Risk Analysis (Source [8])

In May 2007, the Water Resources Planning Committee (WRPC) was created “to plan for the sustainable use of water resources focusing on the following three phases” [Public Law Chapter 399]. The three phases include (Source [9]):

Phase 1: *Collecting and reviewing information regarding water withdrawal activities
Coordinating state water resources information
Identifying watersheds at risk by refining the watersheds-at-risk analysis
previously performed by the Maine Geological Survey*

Phase 2: *Convening planning groups in watersheds at risk or regions encompassing multiple watersheds at risk to develop water use management plans for water withdrawals.*

Phase 3: *If oversubscription of water use remains after the analysis conducted in the 2nd phase, the committee shall recommend a process to resolve issues.*

In September 2008, the WRPC submitted its first annual report to the Land and Water Resources Council (LWRC) describing the activities completed by the WRPC in its first year 2007 to 2008 (Source [10]). These activities include a review of the watershed-at-risk analysis conducted by MGS in 2006, and selection of watersheds in Freeport, ME as the focus for future assessment efforts. In addition, the WRPC met to coordinate an agreement between the Kennebunkport-Wells Water District (KKWWD) and a commercial water bottling company, Poland Spring, over water withdrawals in the Branch Brook watershed. During this meeting, the WRPC supported efforts by KKWWD to comply with the new in-stream flow rules described above.

In addition to management of water use, the DEP also runs the Nonpoint Source Control Program, which was last upgraded with a 15-year strategy in 1999 as mandated by Section 319 of the federal Clean Water Act (CWA) (Source [11]). The 15-year strategy addresses the nine key elements required by Section 319 of the CWA, and includes statewide short- and long-term goals and implementation strategies to improve inland and coastal water quality. As part of an initial 5-year implementation strategy, the following issues were identified as being in need of improvement (Source [11]):

- *Public recognition that erosion and sedimentation is a significant pollutant that threatens water resources is limited.*
- *Maine’s Soil and Water Conservation Districts do not have adequate base funding support from the State, county and local governments to meet the demands for soil and water conservation services.*
- *The State needs to build support for the new Priority Watersheds Protection Program.*
- *Data on the water quality status of Maine’s streams is limited.*
- *Further refinement of a well-coordinated team approach to resolving NPS complaints and violations in the agriculture and forestry areas is needed.*

- *The State needs to develop and put in practice improved, practical methods to assess or quantify progress at protecting water resources.*
- *Better information on the efficacy of [Best Management Plans] is needed to support both regulatory and non-regulatory approaches.*
- *The transport and fate of nonpoint pollutants in Maine’s complex coastal environment is not well understood.*

While these issues were targeted as part of a 5-year strategy (2000 to 2004), the outcomes of such efforts have not been readily reported. As part of this effort, the DEP generated a list of Nonpoint Source Priority Watersheds, which the LWRC adopted as locations for development of specific watershed management plans. However, no information on the results of this effort was found on the DEP website.

In addition to its fresh water resources, Maine has developed plans to address management and protection of its coastal resources. In 2001, the State Planning Office released the latest “Maine Coastal Plan” in accordance with Section 309 of the federal Coastal Zone Management Act, which “offers states the opportunity to enhance their current coastal management programs by developing improvements to core law authorities, creating new programs, and designing new funding sources” (Source [12]). This document described six high priority issues including:

- Ocean Management
- Aquaculture
- Coastal Wetlands
- Coastal Hazards
- Cumulative Impacts of Development
- Public Access

For each of these issues, the Coastal Plan describes existing and anticipated threats, recent accomplishments, significant management impediments, and strategies to address the issue. It was intended to guide state efforts for a 5-year period 2001 to 2005, but has since not been updated.

5. PARTNERSHIPS, STAKEHOLDER, AND PUBLIC INVOLVEMENT

Many of the state’s regulations and planning activities involve the cooperation and participation of state agencies and planning commissions, local officials and public water suppliers, non-profit organizations, citizens and a variety of other stakeholder groups. For example, the 2007 report on *Integrating Public Water Supply Protection into the State of Maine’s Vision* was the result of a series of meetings in 2006 including “citizens representing a variety of governmental, land use, water resource, and development interests” (Source [5]). The majority of recently enacted regulations were the result of collaboration between various groups.

State planning commissions are generally composed of multiple agencies and stakeholder groups. The Land and Water Resources Council is composed of members from various

state agencies and is chaired by the Director of the State Planning Office. The Water Resources Planning Committee is composed of members from government, non-profit organizations, and private businesses.

In general, the state has repeatedly stated that cooperation with local governments is critical to the success of many of its goals and strategies. Some programs indicate a shift toward a statewide implementation strategy through regulations and general education, but the majority still relies on action by local officials.

6. PLAN IMPLEMENTATION STRATEGY

Each of the statewide planning strategies described above are based on its own implementation strategy and schedule, the majority of which are enforced by state regulations and permits or local officials.

7. OUTCOMES ASSESSMENT PROCESS

Many of the statewide planning programs and commissions including the Land and Water Resources Council, the Water Resources Planning Committee, and the Water Withdrawal Reporting Program are mandated by law to submit annual reports of their activities and progress to the state Legislature and Governor. There is no comprehensive assessment strategy to address statewide water resources issues as a whole.

8. REFERENCES

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STATE-SPECIFIC INTERVIEW QUESTIONS²

1. What attempts are made to pull water resources efforts together into a sustainable water resources plan? What is the relationship to the Sustainable Water Use Program?
2. Are there any plans for a statewide water resources plan?
3. What is the status of the NPS Priority Watersheds?
4. What is the significance of the 80% and 90% thresholds in the watersheds-at-risk analysis?
5. What will the water use management plans developed by the WRPC include? How will they be implemented? How will they be assessed and when?

² Representatives from the State of Maine did not participate in an interview.