Water Resources Planning Committee November 1, 2019 9:00 AM – 12:00 PM Deering Building Room 106 90 Blossom Lane, Augusta, Maine

Meeting notes

Attending: Andrew Beahm, David Bell, Bruce Berger, Kaitlyn Bernard, Susan Breau, Tom Brennan, Don Flannery, Susan Gallo, Ryan Gordon, Bertrand Kendall, Naomi Kirk-Lawlor, Dan Locke, Mark Margerum, Bob Marvinney, Nancy McBrady, Jeff McNelly, Stephani Morancie Mike Plaziak, Julie Ann Smith, Greg Sweetser

- 1. Self-introductions by meeting participants
- 2. Review of Legislative charge to the Committee Marvinney
 - a. Review required membership of the Committee and who represents each.
 - b. Review of Section B of legislation with status:
 - i. Collecting and reviewing information regarding water withdrawals Water Use project has collected, organized much water use information.
 - ii. Coordinating state water resources information Largely accomplished through Water Use project.
 - iii. *Identifying watersheds at risk* Update of watershed supply and demand analysis planned 2019/2020.
 - iv. Conduct appropriate water resource investigations in watersheds at risk Some work in Kennebunk-Kennebunkport-Wells Water District watersheds; Popham Beach SP water supply study.
 - v. Consider projected increased water use Part of the watershed analysis.
 - vi. Consider seasonal use Part of the watershed analysis; water use data.
 - vii. Consider potential effects of climate change Part of the watershed analysis.
 - viii. Consider effects of anticipated future water quality classification changes Through work with DEP. This would be mostly improved water quality that would offer additional supply opportunities.
 - ix. *Establish priorities for further investigations* for further discussion. There are several watersheds with public supplies that we have suggested in the past.
 - x. *Develop guidelines for further investigations* Largely completed through discussions with permitting agencies.
 - xi. Review state policy on water conservation For further discussion.
 - xii. Review state policy on development of regional sources and solutions to water issues For further discussion.
 - xiii. Review state policy on incentives for stewardship of water resources For further discussion.
 - xiv. Review state policy on effects of surface water quality improvements on water withdrawal opportunities For further discussion.

- xv. Guidance to municipalities and water districts, develop and disseminate educational materials On-going.
- 3. <u>Agricultural Water Management Board</u> Nancy McBrady (Director, Bureau of Agriculture and Rural Resources) summarized the status of this Board.
 - a. The Bureau is working to re-establish the Board. Potential nominees to the Board are moving through the nomination process with the DACF Commissioner and the Governor's Office.
 - b. Once re-established, there will be a member of the Agricultural Water Management Board on this committee. Until then, Nancy will represent.
 - c. Statutory membership of the Board is the following (Title 7, §352):
 - i. A potato producer;
 - ii. A wild blueberry producer;
 - iii. A small fruit or vegetable grower;
 - iv. A producer of ornamental crops;
 - v. A livestock producer;
 - vi. A person with expertise in federal wetlands permitting;
 - vii. A person with expertise in agricultural engineering and water use efficiency;
 - viii. A member of the general public;
 - ix. The Commissioner of Environmental Protection or the commissioner's designee.
 - d. The Board will focus on development of farm ponds and other agricultural water sources. Also focus on funding for agricultural water sources.
- 4. Summary of on-going water-related activities at the Maine Geological Survey Bob Marvinney and Ryan Gordon reviewed water-related projects at the Maine Geological Survey (Note presentation will be available soon on MGS website):
 - a. National Groundwater Monitoring Network enhancements. For decades the USGS has maintained a network of 18 groundwater level monitoring wells in Maine. Over the past several years, MGS has worked with the USGS to enhance this network, using existing wells for which data have been collected in the Maine DEP's environmental database. We added 32 new wells from this database and in 2019 visited most wells to precisely geolocate and collect construction parameters.
 - b. Soil Water-Balance Recharge project (SWB). This has been a multi-year project with the USGS to develop a statewide model to estimate groundwater recharge. The climate-based model calculates snowmelt, direct runoff, evapotranspiration, snow and soil moisture storage to estimate infiltration below the root zone (potential recharge). The model has highest uncertainties at high elevations, but lowest uncertainties in the valleys where most of the usage occurs. Final datasets may be found here.
 - c. Water Census program with the U.S. Geological Survey. Every five years, the USGS summarizes water use nationwide across twelve categories and three tiers of increasingly detailed information. For agricultural water demand, we used a survey to collect information from irrigators. This information allowed us to develop improved water demand coefficients based on crop type. We are currently improving domestic and public water system data in collaboration with the PUC.

d. Agricultural water demand analysis. We are building an irrigation demand model based on the SWB model that only includes lands in agriculture. It uses local climate to estimate a deficit in water demand from precipitation which is then assumed to be made up by irrigation. The model will have the capability to analyze the impact of climate change – increased precipitation and drought.

5. Future work

a. Revised watershed supply-demand analysis. The MGS did a statewide supply and demand analysis in 2007. Due to our work on the water census and modeling agricultural water demand, much improved tools are available to revise this analysis. Ryan will be working on this effort over the next year.

6. WRPC next steps.

- a. Next meeting probably in February to begin review of state policies and regulations governing groundwater withdrawals.
- b. Probably one more (perhaps two) meetings before reporting the Legislature in August 2020.

Following the adjournment of the WRPC meeting, Tom Brennan (Poland Spring/Nestle) presented on his company's effort to implement the <u>Alliance for Water Stewardship</u> standard for sustainable water use.