

**Water Resources Planning Committee**  
**November 13, 2020**  
**9:00 AM – 11:00 AM**  
**Via Microsoft Teams**

**Meeting notes**

Attending: Andrew Beahm, Dave Bell, Bruce Berger, Kaitlyn Bernard, David Braley, Susan Breau, Mark Dubois, Don Flannery, Susan Gallo, Ryan Gordon, Bertrand Kendall, Naomi Kirk-Lawlor, Dan Kusnierz, Dan Locke, Mark Margerum, Bob Marvinney, Nancy McBrady, Stephani Morancie, Mike Plaziak, Julie Ann Smith, Stacie Thompson, Eric Venturini. Dave Burns (Maine DEP)

1. State Geologist Bob Marvinney welcomed everyone to the meeting and requested that participants self-identify themselves in the Teams meeting chat.
2. PFAS in groundwater – Dave Burns (Maine DEP)
  - a. Overview of PFAS Task Force recommendations
    - i. Providing safe drinking water. The Maine Drinking Water Program (DWP) has tested a number of Public Water Systems. DEP has been testing around PFAS sources
    - ii. Protecting our food supply. The Department of Agriculture, Conservation and Forestry (DACF) has been testing milk supplies.
    - iii. Identifying and investigating PFAS in the environment. DEP has been investigating many sites, including landfill sites, biosolid application sites, and others with potential PFAS contamination.
    - iv. Identifying and reducing use of PFAS. 2019 prohibition on PFAS in food packaging. Upcoming legislation regarding PFAS reporting.
    - v. Manage waste responsibly. Licenses are subject to routine testing for PFAS compounds; for biosolids composting, routine ongoing testing of incoming materials and finished product.
    - vi. Improve public education about PFAS. Information on [DEP website](#). Website also includes complete PFAS dataset from DEP's Environmental and Geographic Analysis Database ([EGAD](#)).
    - vii. Promote federal action. Participation in regional calls involving EPA and other federal agencies.
    - viii. Funding for state agencies to investigate, respond to, and reduce exposure of Maine citizens to PFAS. State agencies currently absorbing all costs within current budgets.
  - b. Legislation:
    - i. 129<sup>th</sup> Legislature. LD 1923, LD 2147, LD 2160. Due to COVID response and shortened session, no action was taken on these bills.
    - ii. 130<sup>th</sup> Legislature. DEP will introduce bills for PFAS reporting requirements, uncontrolled sites program, add PFAS to list of emerging contamination. Hopeful for bond for uncontrolled sites program.
  - c. Current work:
    - i. Closed, unlined landfills. Testing continues at the sites and nearby monitoring wells.
    - ii. Biosolids – ongoing testing of materials.

- iii. Biosolids land application sites – ongoing testing in collaboration with DACF Milk program.
  - iv. DoD, Superfund, & uncontrolled sites. Testing where PFAS may be present due to past uses.
  - v. Model calibration and plant uptake. Working to determine screening levels. Testing predictability of modeling.
  - vi. Coordination with DACF, DWP, MECDC. Retail milk testing, screening values for soils, identifying public water systems that may be at risk.
3. PFAS and Agriculture. Nancy McBrady (Director, Bureau of Agriculture, Food and Rural Resources)
- a. First found on a farm in Arundel in 2016. MCDC created action level for PFAS in milk. This is the only action level for PFAS in milk nationally, as far as we are aware.
  - b. Conducted two statewide surveys of milk. A third expected in late 2020.
    - i. Tested milk bottled in state and sold in state, or bottled outside state and brought in. Tested 26 samples from multiple dairies. All samples came in below reporting limit, either non-detect or below 50 ppt.
    - ii. Tested milk on site on three dairy farms, two of which had documented biosolid application. All came in below 50 ppt.
    - iii. Second round of retail milk testing at lower detection limit of 25 ppt, and broader suite of PFAS chemicals.
    - iv. Most samples tested very low. One tested at 65.7 ppt – high enough to be of concern given the multiple sources contributing to that sample.
    - v. Traced sources of milk and located one contributor with very high PFAS levels (12,700-32,200 ppt). Farm had documented biosolids applications.
  - c. Work at the farm source:
    - i. The farm is no longer producing milk or selling beef cattle.
    - ii. Testing fields to determine extent of PFAS contamination and whether some operations can continue in uncontaminated areas.
  - d. Continuing work
    - i. Collaborating with FDA on other areas of food testing.
    - ii. DEP has a robust database of 30-40 years of biosolid application, but it takes time to work through this information.
    - iii. Working with MECDC on pathways of uptake to beef or milk.
    - iv. Coordinating with other states on these issues.
    - v. Seeking federal standardization of PFAS limits.
    - vi. Financial resources are needed to address PFAS in the environment.
  - e. Questions:
    - i. Testing of wild foods? State has not done any testing of game or other wild foods. Some information will be available on fish. Other states have looked at some wild foods.

- ii. How good are the records for determining the sources of biosolids? DEP has licensed applications for the last 40 years. Wastewater facilities, paper mills, etc. License does not necessarily mean application happened. Sleuthing needed to determine specific fields where biosolids were applied, how much was applied, what crops were grown, etc.
- iii. Has there been research on the impacts to wildlife or humans of PFAS spreading sites proximal to lakes and ponds? Resources are limited. Prioritizing on sites with known problems, immediate needs.

4. PFAS and Public Water Systems – Susan Breau (Maine Drinking Water Program).

- a. PFAS chemicals are not currently federally regulated in drinking water. DWP refers to them as “emerging contaminants.”
- b. EPA’s Drinking Water Health Advisory set at 70 parts per trillion (ppt) for PFOA & PFOS. Not enforceable and non-regulatory.
- c. EPA drafted national PFAS action plan with proposals for Maximum Contaminant Levels (MCLs), steps to designate hazardous materials, and recommendations for groundwater cleanup.
- d. Maine DWP partnered with DEP and others to perform three rounds of PFAS testing statewide, involving large systems and select priority areas (close to potential PFAS sources).
- e. PFAS Task Force recommendations include statewide PFAS testing for some public water systems, determination of a drinking water PFAS MCL, private well testing, additional environmental testing.
- f. Many recommendations await legislation.

Questions:

- g. Updates for Kennebunk supply well? Extensive carbon filtration, constant testing, blending the water with other wells.

5. Review of 2020 Drought:

- a. Overview – Ryan Gordon (Maine Geological Survey)
  - i. Definition of drought. Different measures: lack of precipitation, low soil moisture, river and stream low flows, low groundwater levels.
  - ii. [U.S. Drought monitor](#): a multi-factor analysis.
  - iii. Many low-flow records broken in 2020.
  - iv. “Flash drought.” Dry conditions began in May and rapidly worsened. Some relief in October, but conditions have not returned to normal.
  - v. Worst conditions in late September with extreme drought in parts of Aroostook County and southern Maine.
  - vi. Temperatures were higher than normal in northern Maine, contributing to dry conditions. Also higher than normal in southern Maine.

- vii. Surface water flows were all well below normal for most of the summer, with occasional higher flows due to thunderstorms.
  - viii. Groundwater: wells across the state were near normal to below normal through the summer.
  - ix. Review of recent droughts – 1947-50, 1995, [1999-2003](#), 2016, 2020. Longest drought was seven years (1963-69).
- b. Questions
- i. Do we know the impact of this drought on vernal pools? It most probably has had an impact but we do not have details.
  - ii. Do we think we're out of the drought now? Hard to predict. We don't have frozen ground, so at least from the standpoint of groundwater recharge, conditions might be favorable. Hoping for a good snowpack.
  - iii. Is there any monitoring of lake water levels? Mostly in regulated basins, locations with dams. Some lake associations have been monitoring other unregulated locations.
  - iv. People have been calling with dry wells, mostly dug wells. The number of calls during this drought has been less than 2001-2003, partly because marginal wells were replaced during the prior drought.
- c. Drought impact on Agriculture – Don Flannery (Maine Potato Board).
- i. Most of Aroostook County was in extreme drought. Most areas had no substantial rain between Memorial Day and the last part of September.
  - ii. All agricultural commodities in the County were affected.
  - iii. Potatoes need rain. Plants emerged and developed slowly. Very small number of tubers under the plant, no water for the tubers to bulk up.
  - iv. Production was probably down 30%. That probably comes to \$33-35 million in economic impact.
  - v. For those farms with systems, irrigation began in the second-third week in June compared to normal time of the third week of July.
  - vi. It was an unprecedented drought. It happened fast.
- d. Questions and comments for Don:
- i. Are there long-term impacts? Impacts will continue going forward, even if precipitation returns to normal. Due to the impact on seed crop this year, the impacts will extend for 3-4 years.
  - ii. Eric Venturini, Maine Wild Blueberry Commission: Washington County was also hit very hard. Blueberry crop is down 50%. Blueberries are a two-year crop, plants are storing up this year for next, so will not expect a record crop.
  - iii. Any problems with irrigation sources? Yes, instream flow rules limited water withdrawals. Ponds were quickly depleted. Growers are seeking advice on improving water sources. Working with DEP to develop sustainable, environmentally sound sources.
- e. Public Water Systems – Susan Breau (Maine Drinking Water Program).
- i. We can't predict droughts, except that they seem to be happening more often.
  - ii. Focus on drought resilience.

- iii. Due to improved resilience, we had few problems in supply. PWS managers have improved awareness, redundancy in supplies, interconnected with other systems, have developed Mutual Aid agreements with neighboring systems, prepared plans for emergency water supplies, ensuring that equipment works across multiple systems, and have developed emergency communication templates.
6. Water Resource investigations by the Maine Geological Survey – Ryan Gordon.
    - a. National Groundwater Monitoring Network. Finishing a two-year project to better characterize the physical parameters of 30 wells added to the network. Wells were GPSed and Ryan examined them with a submersible camera.
    - b. Installed pressure transducers in some wells to collect hourly level measurements. This is particularly important for Aroostook County where the USGS does not have any long-term wells in the central and eastern part of the County where agriculture is focused.
      - i. Well in Fort Fairfield instrumented.
    - c. Water Use Research. Completing a project using census data and data from Public Water Systems to understand domestic water use. Beginning a new project on industrial water use.
  7. Annual report – Bob Marvinney
    - a. Summary of meetings in November 2019 and May 2020.
    - b. The report is submitted to the Department of Agriculture, Conservation and Forestry.
  8. Next meeting early in 2021.
  9. Questions:
    - a. Terms of Committee members? They are staggered, but MGS will propose renewal for anyone who's term expires in 2020.
    - b. Related to drought, has the MGS fielded questions from the public or interest groups regarding water use? Most of the calls have been from homeowners with shallow or dug wells.

Meeting recording:

<https://web.microsoftstream.com/video/403b5d40-2381-4f0d-bf95-0a4e118d6bf1>