

Director: Tom O'Donovan
Assistant Director: Rene Pelletier

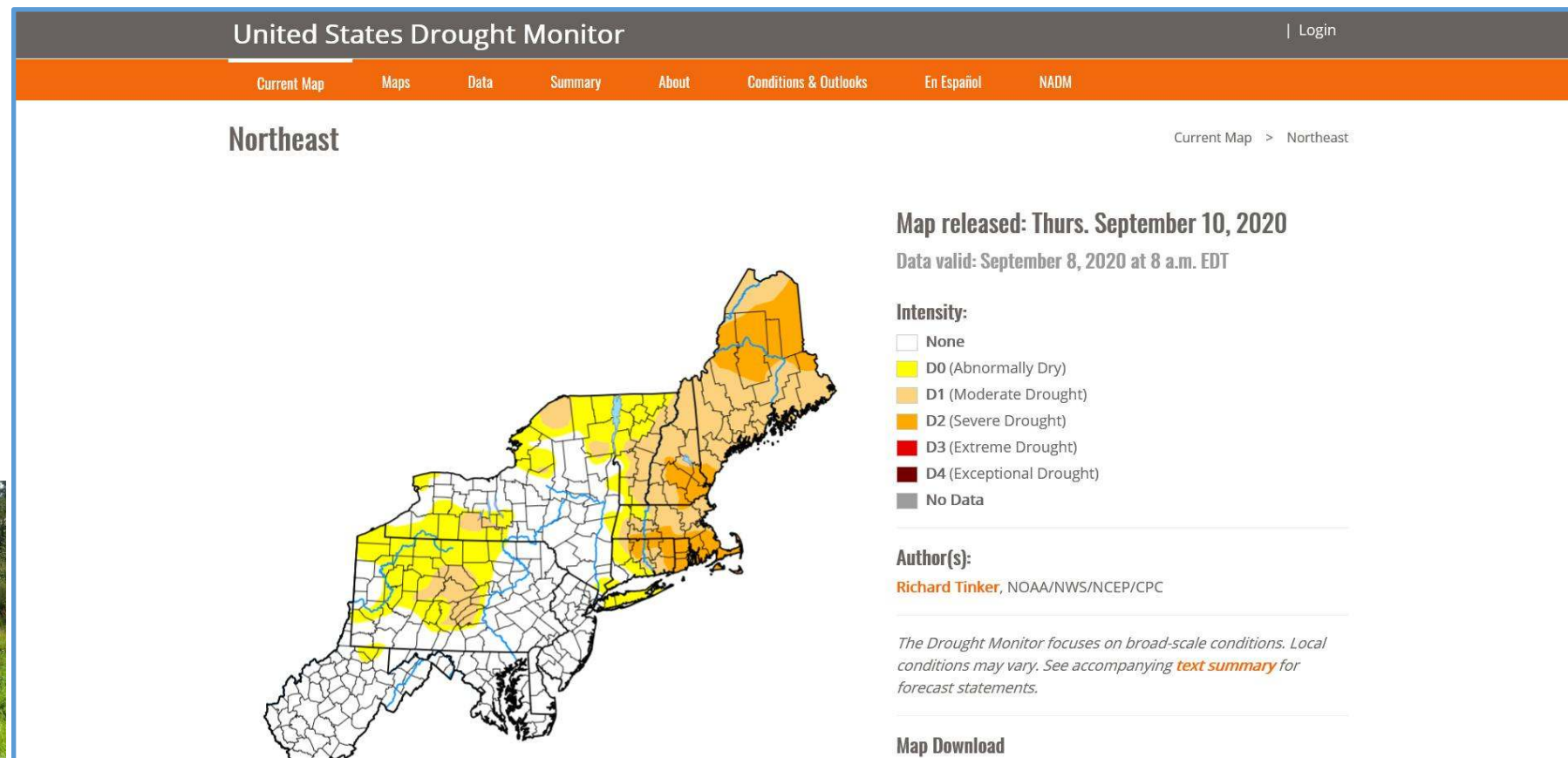
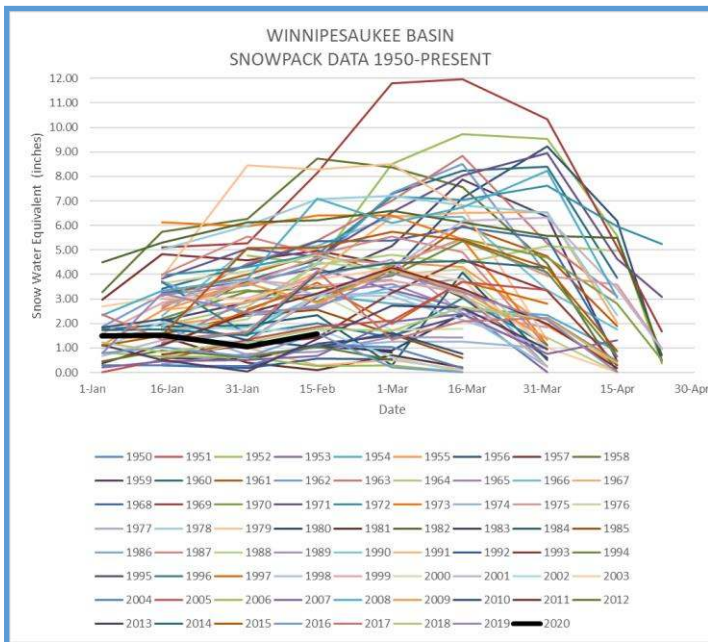
Land Resource Management (LRM) (Vacant)

- Alteration of Terrain (Ridge Mauck)
- Subsurface Systems Bureau (Rob Tardif)
- Wetlands Bureau (Vacant)

Bureaus & Programs

- Dam Bureau (Jim Gallagher)
- Drinking Water and Groundwater Bureau (Brandon Kernen)
- Wastewater Engineering Bureau (Tracy Wood)
- Watershed Management Bureau (Ted Diers)
- Winnepesaukee River Basin Program (Sharon McMillan)





Key current impacts;

- Over 150 water systems implementing water use restrictions, serving about 400,000 people.
- Two rivers implementing actions, Souhegan and Lamprey.
- Agricultural impacts increasing.

Dams: Legislation for deficient dam owners passed in omnibus legislation

Capital budget, fleet health and asset management are issues

DWGB: Arsenic in public water systems: new MCL to 5 ppb ongoing, eff summer 2021

Watershed: Water Quality Certification, Connecticut River FERC relicensing

NPDES General Permit on Great Bay

Coastal Flood Risk Summary: Science and guidance completed, Sea Level Rise forecasts

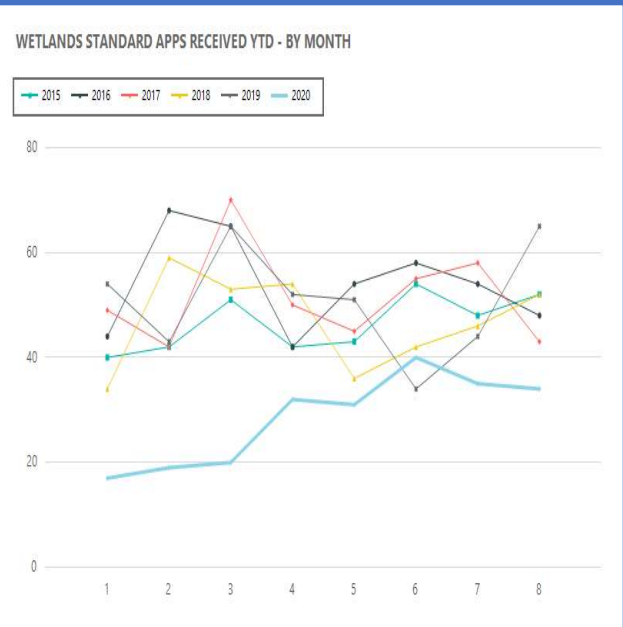
WWEB: Manchester CSO CD completed, Lebanon completing CSO construction

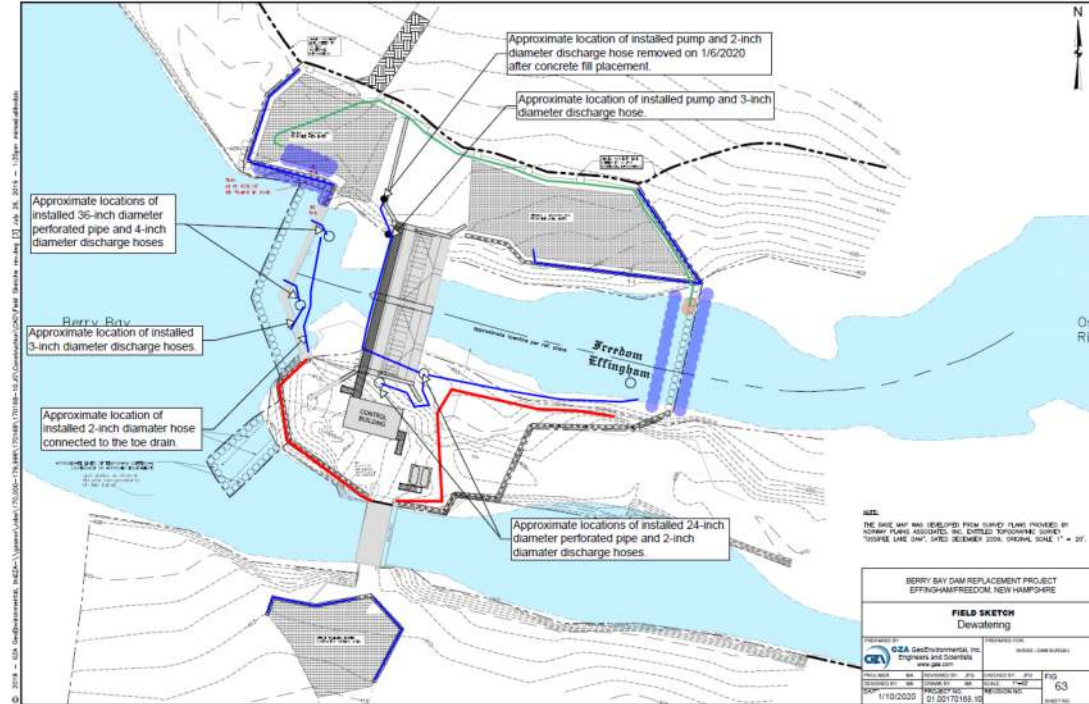
PMFH and five other hatcheries on ongoing NPDES wrt phosphorous

LRM: Meeting statutory timelines, applications low, but increasing

AoT: Threatened and Endangered Species Rule Process ongoing: next public session October

AoT: Chinook Solar Farm 30 MW 159 acres of panels, 581 acre site, Solar BMP's session October





<https://vimeo.com/446476058>

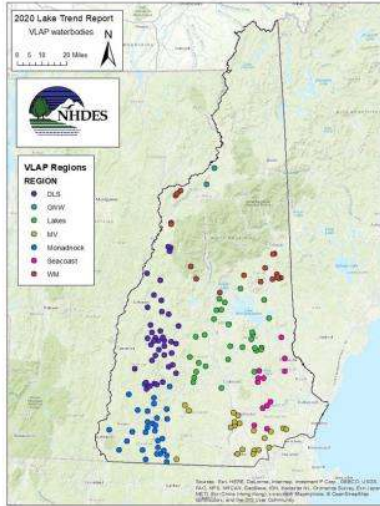
2020 Lake Trend Report

Status and Trends of New Hampshire's Water Quality Indicators



New Hampshire's surface waters are vital natural resources that provide habitat for aquatic life, recreational opportunities, tourism and economic benefits. The New Hampshire Department of Environmental Services (NHDES) is responsible for monitoring and reporting on the condition of the state's surface waters. The [Water Monitoring Strategy](#), published by NHDES in 2016, details the agency's approach for monitoring the condition of the state's inland surface waters. One component of this strategy is to provide regular reports on the status and trends of water quality conditions, including the Lake Trend Report released in 2020. This document provides a brief summary of that reports' findings. Find the full [2020 Lake Trend Report](#) on our website.

One-hundred-fifty lakes and ponds contributed ≥ 10 years of data from 1991 to 2018. A majority of the data were contributed by the Volunteer Lake Assessment Program (VLAP), but in some cases data from additional programs were utilized to evaluate waterbody condition. Data were analyzed to examine current conditions, long-term trends and short-term changes for individual waterbodies. Trophic class and regional trends were also examined.



Water Quality Indicators

Indicator Parameter	Parameter Description
Alkalinity	A measure of a waterbody's ability to resist acidic inputs, a.k.a. buffering capacity.
Bacteria	A measure of the concentration of E. coli, a common bacterium that is present in the fecal material of warm-blooded animals.
Chlorophyll-a	A photosynthetic pigment found in plants that serves as an measure of the abundance of suspended algae.
Cyanobacteria	Photosynthetic bacteria that are capable of producing toxic blooms. Occurs naturally in waterbodies, but can increase in abundance with excessive nutrients.
Dissolved Oxygen (1-meter below surface)	The concentration of oxygen in water used by plants and animals. Low or highly variable dissolved oxygen concentrations can result from decomposition of organic material.
Ice in/out records	Period of time a waterbody is covered in ice.
Invasive Aquatic Plants	Non-native species that are a threat to ecological, aesthetic, recreational and economic values of freshwater resources.
pH	A measure of the water's acidity.
Secchi Disk Transparency	A measure of water clarity.
Specific Conductance	A measurement of the water's ability to conduct electricity. Compounds such as road salts, fertilizers and other chemical compounds increase the specific conductance of water.
Total Phosphorus	Typically, the limiting nutrient for aquatic plants and algae in NH lakes. Total phosphorus concentration controls, in part, the amount of plant and algae growth, which relates to trophic status.
Water Temperature (1-meter below surface)	Aquatic communities are adapted to specific water temperature conditions. Water temperatures can be affected by air temperature, water clarity and global climate patterns.

150 Lakes and Ponds of all trophic types
Minimum of 10 years of data, several over 100 years

Alkalinity

Increasing

Bacteria (E. coli)

Increasing

Cyanobacteria

Increasing

Dissolved oxygen

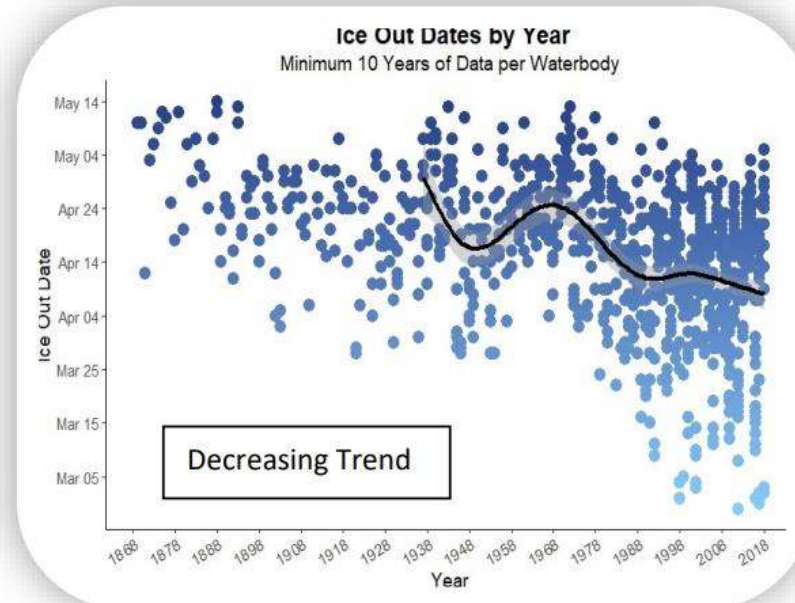
Decreasing

Invasive Plants

Increasing

Ice Out

Earlier



“Meanwhile...”

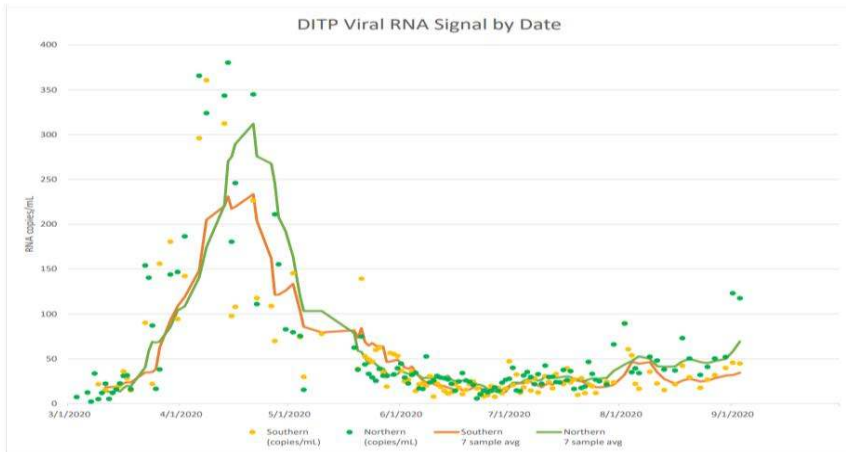
State Revolving Fund (SRF):

CWSRF: 108 Pre-Apps requesting \$284M (Asset Management, Planning, Energy Audit Measures Implementation, Design, Construction, etc), funding available (Cap Grant & State Match \$19 million, Repayment Account \$55M; total available for new loans (\$50M) and amendments to existing loans (\$24M)) \$74 million.

DWSRF: 85 Pre-Apps requesting \$127M (21 Small, 61 Large, 3 Ineligible), and funding available \$21 million.

Covid detection in wastewater, Environmental Surveillance

Cyanobacteria season: Active, similar to last two years,....



Lyngbya wollei, found in Spofford Lake