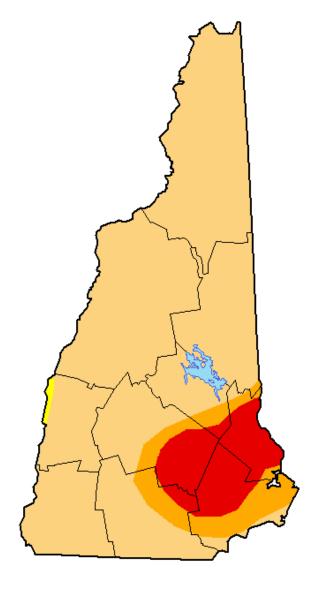
U.S. Drought Monitor New Hampshire



November 17, 2020

(Released Thursday, Nov. 19, 2020) Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	0.00	100.00	99.67	18.91	11.01	0.00
Last Week 11-10-2020	0.00	100.00	99.67	16.76	7.47	0.00
3 Month's Ago 08-18-2020	0.00	100.00	69.30	20.24	0.00	0.00
Start of Calendar Year 12-31-2019	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2020	0.00	100.00	100.00	95.06	10.59	0.00
One Year Ago 11-19-2019	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

<u>Author:</u>

Richard Tinker CPC/NOAA/NWS/NCEP







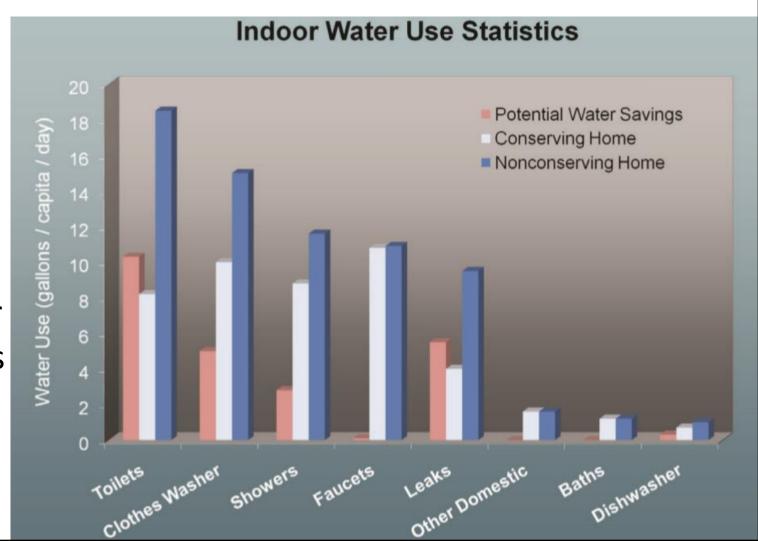


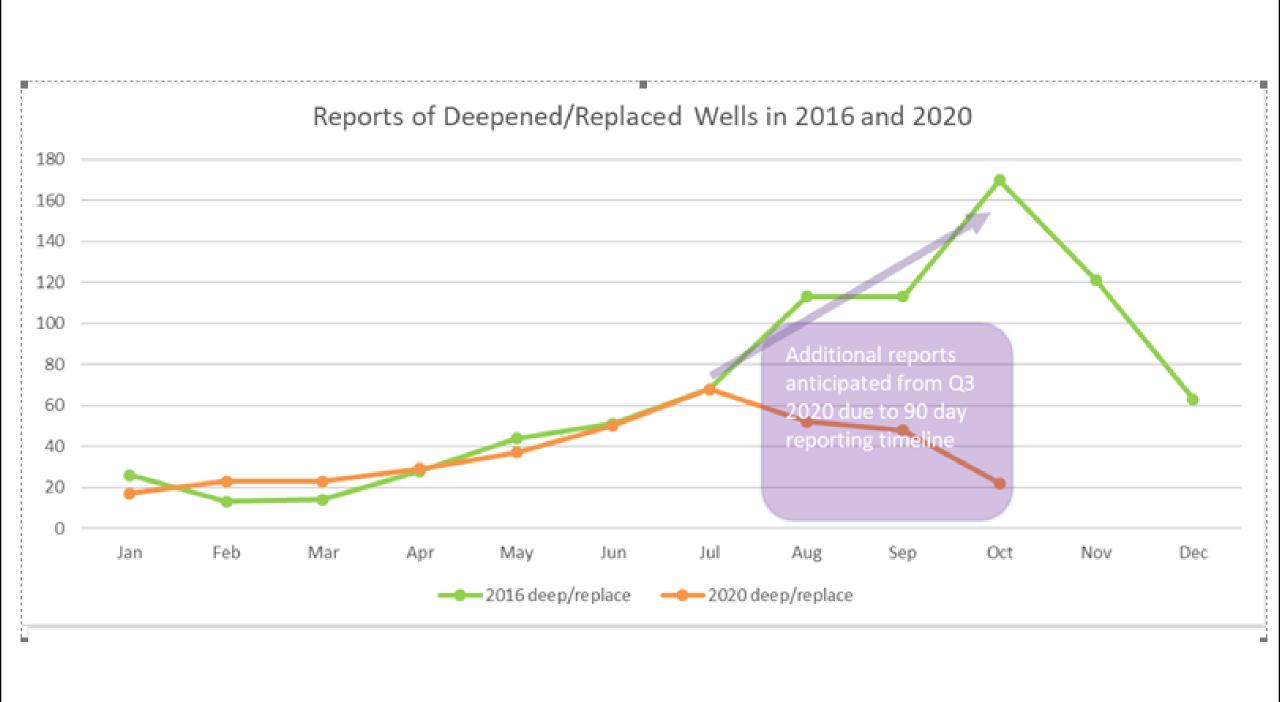
droughtmonitor.unl.edu



Water Conservation

- Ensure plumbing fixtures are not leaking & toilets are not running.
- Winterize water lines. Running water to avoid freezing could result in failed wells.
- Modernize appliances and fixtures and reduce indoor water use by up to 50% (toilets, clothes washer, showerheads & faucets)





Precipitation Deficit - Inches	/ % of Normal
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	Rockingham	Strafford
November	-1.64 / 33%	-1.5 / 42%
30 Days	-2.18 / 49%	-2.24 / 49%
60 Days	-2.86 / 66%	-2.16 / 74%
90 Days	-4.2 / 65%	-3.87 / 68%
180 Days	-10.11 / 57%	-9.03 / 62%
Year to Date	-12.92 / 69%	-10.64 / 74%
365 Days	-9.65 / 79%	-7.04 / 85%

Emergency Drought Assistance

Drought Response Calls/Survey as of 11/12/2020

- a. Surveys received 115.
- b. By county:
 - Belknap: 8
 - Carroll: 13
 - Cheshire: 7
 - Coos: 4
 - Grafton: 16
 - Hillsborough: 13
 - Merrimack: 14
 - Rockingham: 24
 - Strafford: 9
 - Sullivan: 5
 - Incomplete/Unknown: 2

\$ 1.5 million from the Drinking Water & Groundwater Trust Fund

Funding assistance to income eligible households

- Short-term bottled water
- Long-term mitigation to address drought impacted wells

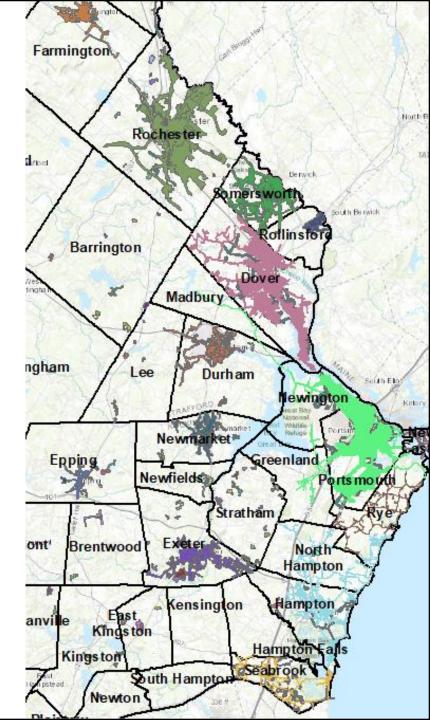
Applications Received, Approved, Denied – 9 applications received **Funding Status** – G&C approval 11/18/20 and fiscal approval requested 11/20/20.

Regional Water Supply Management Planning — Considerations for the New Hampshire Seacoast

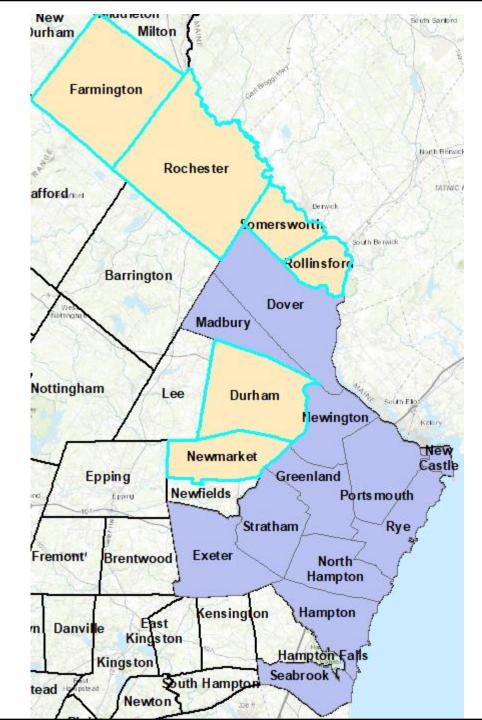
Seacoast Drinking Water Commission November 17, 2020

Large Water Systems in NH Seacoast

Aquarion (parts of Hampton, N. Hampton & Rye)	18,950	
Rye Water District		
Portsmouth Water Works (parts of Greenland, Newington & N. Castle)		
Seabrook Water Department		
Town of Exeter		
City of Dover		
Subtotal>>>	<u>110,450</u>	
Adjacent Water System Non-Commission Members		
Farmington Water Department	3,250	
Newmarket Water Works	5,030	
Somersworth Water Works	12,000	
Rollinsford Water Dist	1,688	
Rochester Water Dept	25,000	
UNH/Durham Water System	16,000	
Subtotal>>>	<u>62,968</u>	
TOTAL>>>	<u>173,418</u>	



SEACOAST MUNICIPAL POPULATIONS				
Commission Municipalities				
Dover		31,795		
Exeter		15,382		
Greenland		4,146		
Hampton		15,207		
Madbury		1,846		
New Castle		968		
Newington		800		
Noth Hampton		4,582		
Portsmouth		22,206		
Rye		5,479		
Seabrook		8,904		
Stratham		7,559		
	Subtotal>>>	<u>118,874</u>		
Other Nearby Municipalities				
Durham		16,085		
Farmington		6,883		
Newmarket		9,460		
Rochester		30,992		
Rollinsford		2,579		
Somerswort	h	11,844		
	Subtotal>>>	<u>77,843</u>		
	TOTAL>>>	<u>196,717</u>		



Regional Cooperation in Managing Drinking Water – Key Points

- Does not mean that local water systems need to give up control
- Objective of regional cooperation can evolve overtime
- State/NHDES can have a minor or major long-term role (does not have to be the lead)
- Towns and water systems must shape and trust the process
- Outside/non-local sources of funding act as a catalyst for regional projects. Local/state funding likely needed.

Why think Regionally??

- The seacoast of NH has limited potential for developing new sources of water
 - Proximity to saline water/desalination is very costly even with emerging technologies
 - Lack of major rivers/lakes/aquifers
 - Current Federal and state surface and groundwater withdrawal statutes are very protective of water resources and/or water users Hard to develop new sources of water
- Population growth
- Economic development/increased manufacturing/economic challenges
- Contamination including emerging contaminants
- General emergency preparedness/Terrorist events
- Climate change impacting existing sources
 - Surface water/harmful algal blooms/increased nutrients
 - Drought
 - Extreme precipitation/flooding/tidal surge/sea level rise
 - Power outages/infrastructure damage
- Economy of Scale
 - Certain water supply projects may be very feasible with numerous partners
 - Regionalization could include purchasing cooperatives (southern Maine example)
 - Major water supply projects with Maine or Massachusetts are possible (see So. Maine report)
 - Shrinking workforce in the drinking water sector

REGIONAL WATER SYSTEM MASTER PLAN STUDY

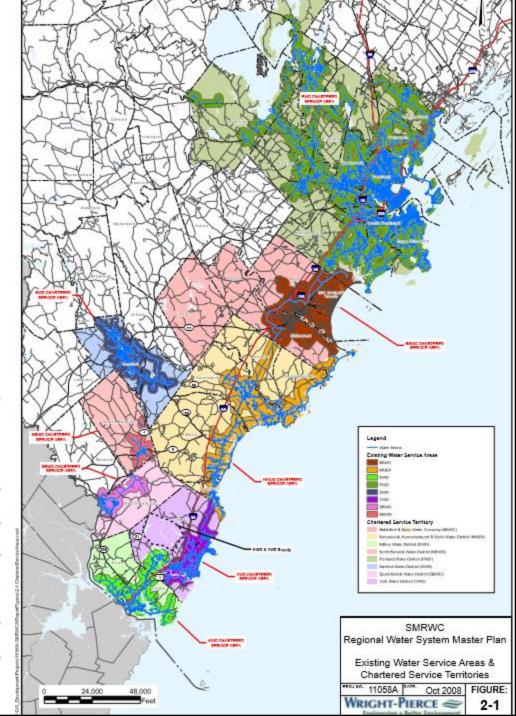
FOR THE

SOUTHERN MAINE REGIONAL WATER COUNCIL

OCTOBER 2008

8.8.7 Consider Establishment of a Sub-committee to Interface with New Hampshire Water Supply Stakeholders

The seacoast region of New Hampshire has had regional supply deficit that has been a concern and unresolved for decades. A possible outcome of a regional water supply system for southern Maine is the extension of the system to New Hampshire seacoast border communities. This concept could fund portions of the regional distribution infrastructure and be a driver towards formation of a regional water supply entity. The SMRWC should consider establishing a committee to initiate discussions in the State of New Hampshire and determine if cooperation can become a driver to begin a regionalization plan in southern Maine.



Regional Water Resources Planning – Potential Topics

- Drinking water (adequate quality and quantity)
- Critical drinking water infrastructure replacement needs
- Wastewater management (quality, recharge, quantity)
- Stormwater management (quality, recharge, quantity)
- Source water protection (land use controls and education to protect water quality and quantity)
- Land conservation
- Climate change adaptation Infrastructure damage due to expanded coastal flooding, rising sea levels and increased groundwater levels
- Mutual aid/firefighting

Goals & Objectives of Southern Maine Master Plan Study

"The primary goal and objective of this study was to gain a technical understanding of existing supply capacity and supply vulnerabilities, as well as determining what the future water supply needs will be locally and regionally. These findings have led to the development of specific action plans for each utility and have identified preliminary technical solutions needed to assure long-term service to the region's customers."

Information Provided in the Southern Maine Water Resources Master Plan

- Identified existing and potential sources of supply in the region.
- Established the present and projected water needs in the region.
- Identified the limitations and risks of the existing and future supplies.
- Explored the logistics, benefits and impediments of creating an integrated, regional water supply system.
- Detailed the hydraulic considerations and infrastructure required to supply water over a large geographical area.
- Evaluated potential water quality issues associated with blending various supplies.
- Considered existing and future interconnections between systems.
- Developed short-term strategies for mutual-aid and sharing of resources.
- Developed an action plan to protect identified resources for future generations.
- Developed an integrated water supply plan for the entire region.
- Considered potential governance models for a regional supply organization.

NH Seacoast Water District — Established into Chapter Law by HB 197 1995

- 42:1 Seacoast Water District Authorized.
- I. The formation of a water district is hereby authorized. The water district shall be subject to the provisions of RSA 53-A.
- II. The members of the district may include but not be limited to Hampton, Portsmouth, Newington, Seabrook, Exeter, Rye, North Hampton and Stratham. Other communities in southeastern New Hampshire may be affiliated, if they vote to do so.
- III. The district shall address intersectional distribution, source location and any other issues related to water resources.
- 42:2 Effective Date. This act shall take effect upon its passage.

Approved: May 3, 1995

Effective: May 3, 1995 District has never been active

Potential Next Steps

- Develop a scope of work/project focus & presentation
- Determine if regional water planning is needed/wanted by sharing information with municipalities and water systems & receiving input
- Revise scope/focus if there is support
- Estimate study cost and funding approaches
- Determine project management approach (Regional Planning Commissions, Qualified Consultants and/or Advisory Board)