

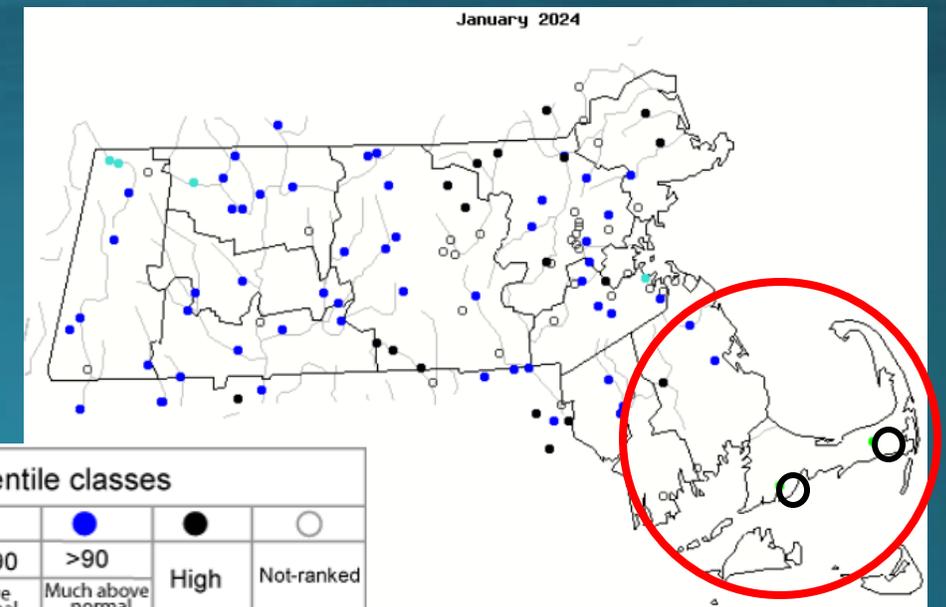
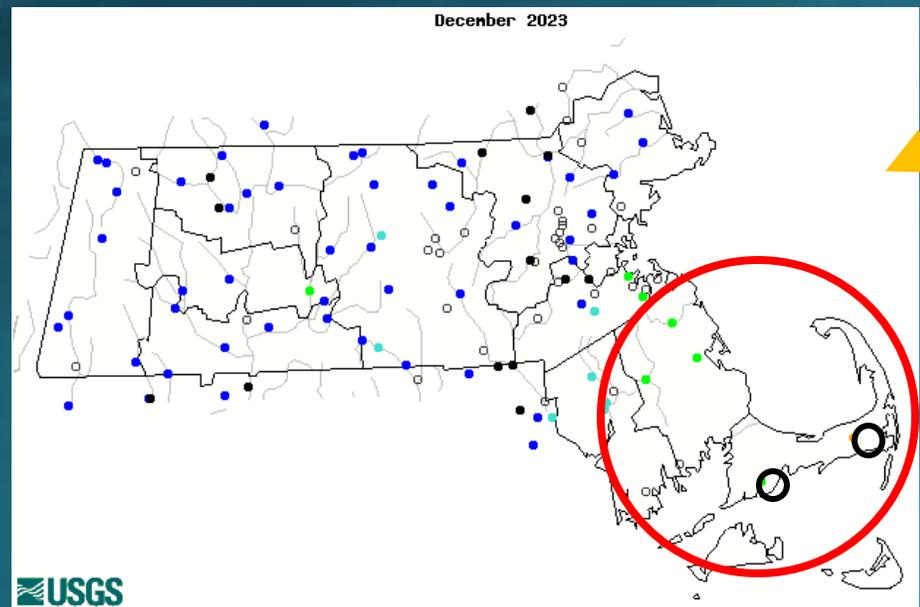
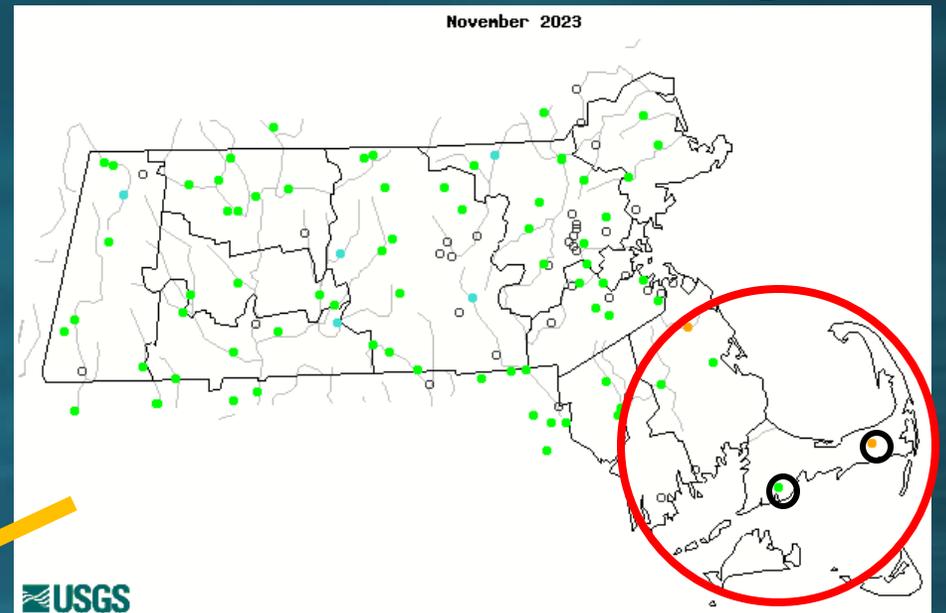
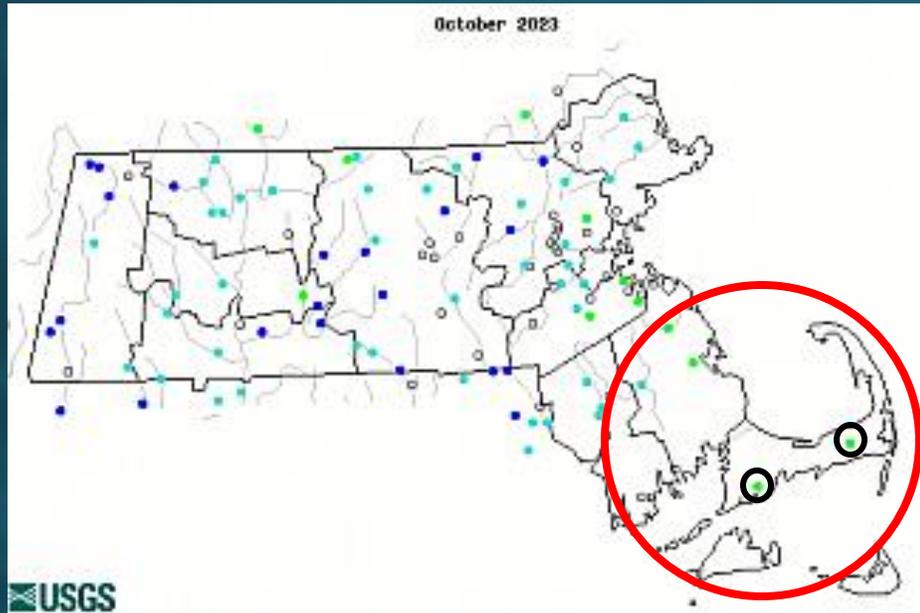
Streamflow and Groundwater Conditions in Massachusetts (Cape Cod and the Islands)

Massachusetts Drought Task Force Meeting
February 7, 2024

U.S. Geological Survey
New England Water Science Center



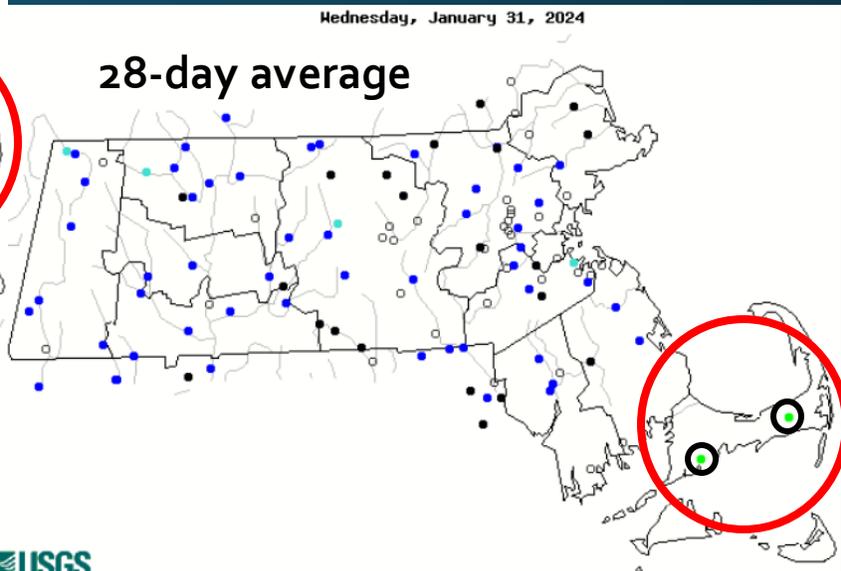
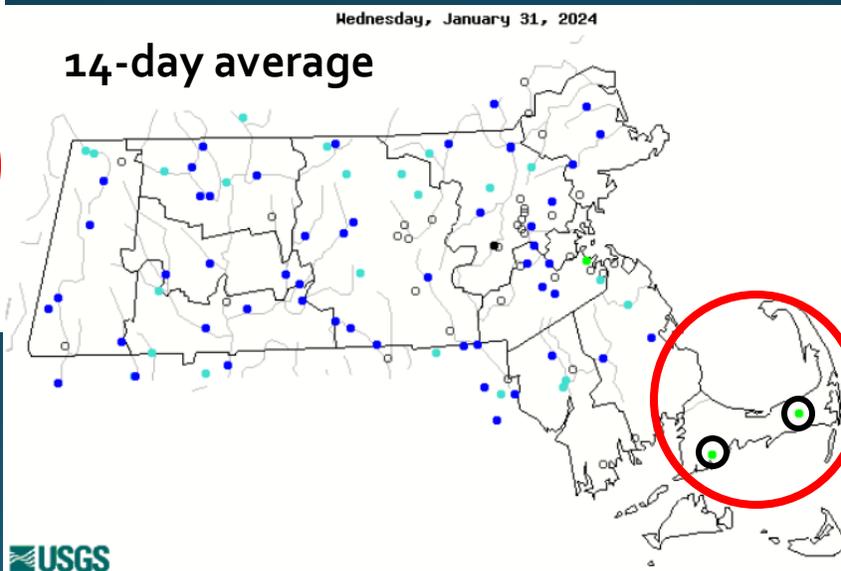
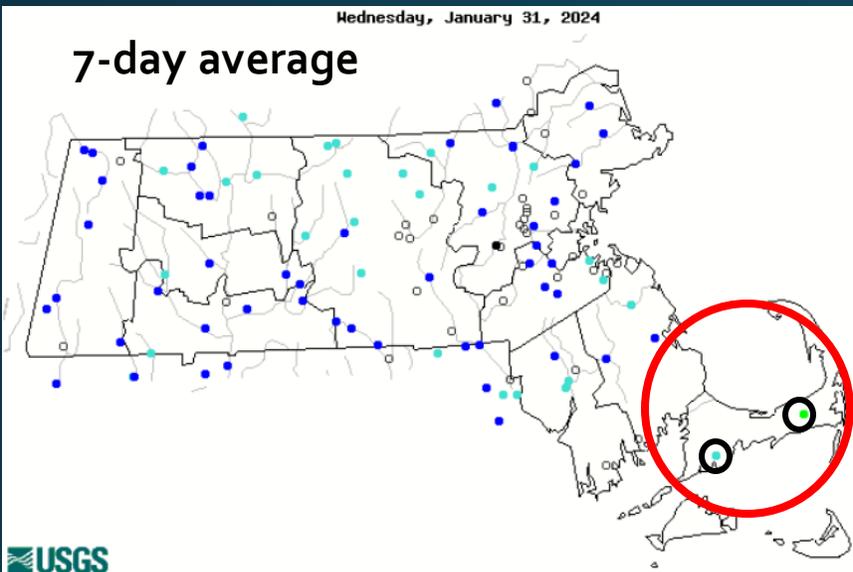
Streamflow Conditions – Monthly Average



Explanation - Percentile classes

●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Streamflow Conditions 7-, 14-, and 28-Day Average



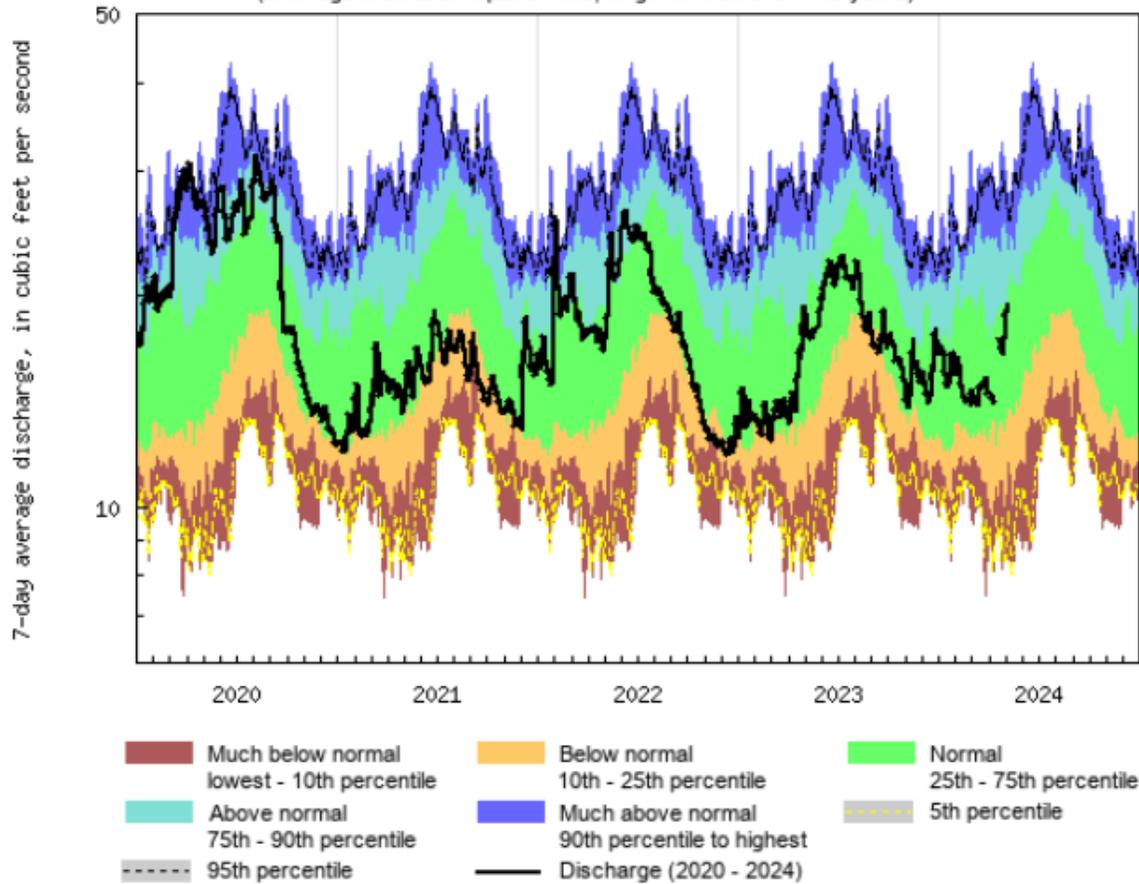
Explanation - Percentile classes

Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Cape Cod Region 7-Day Average 5-year period (WY2020-24)

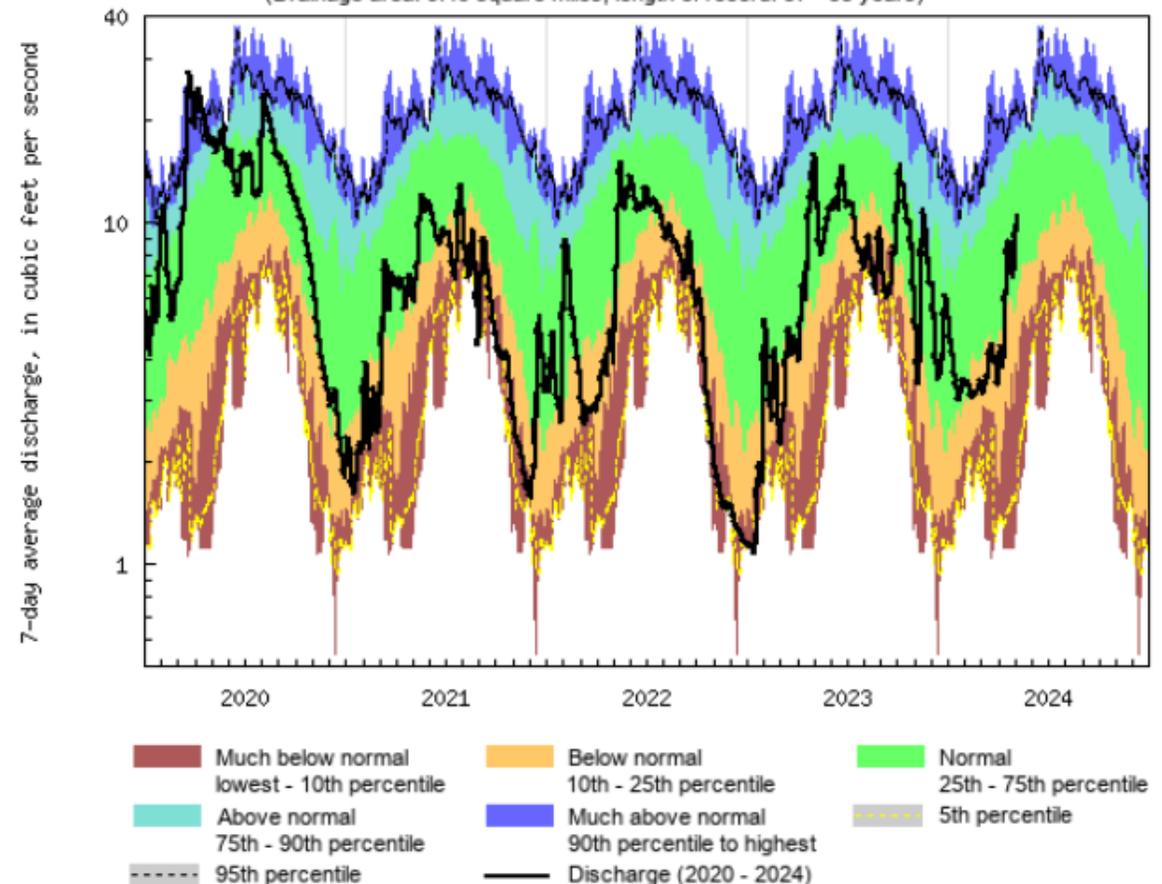
Western Part of Cape Cod Region

USGS 011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA
(Drainage area: 2.58 square miles, length of record: 34 - 35 years)



Eastern Part of Cape Cod Region

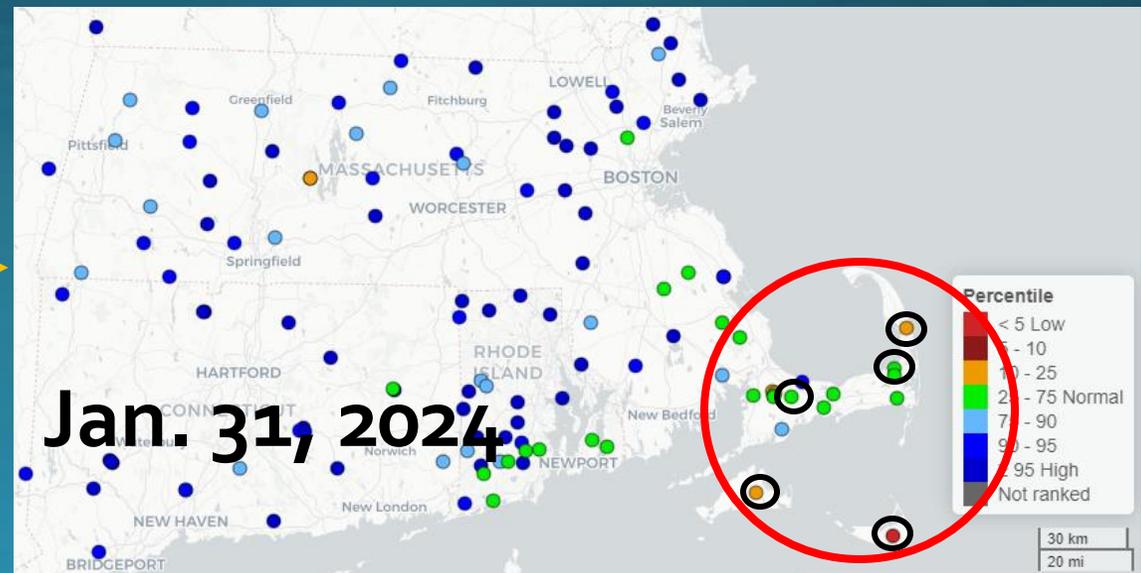
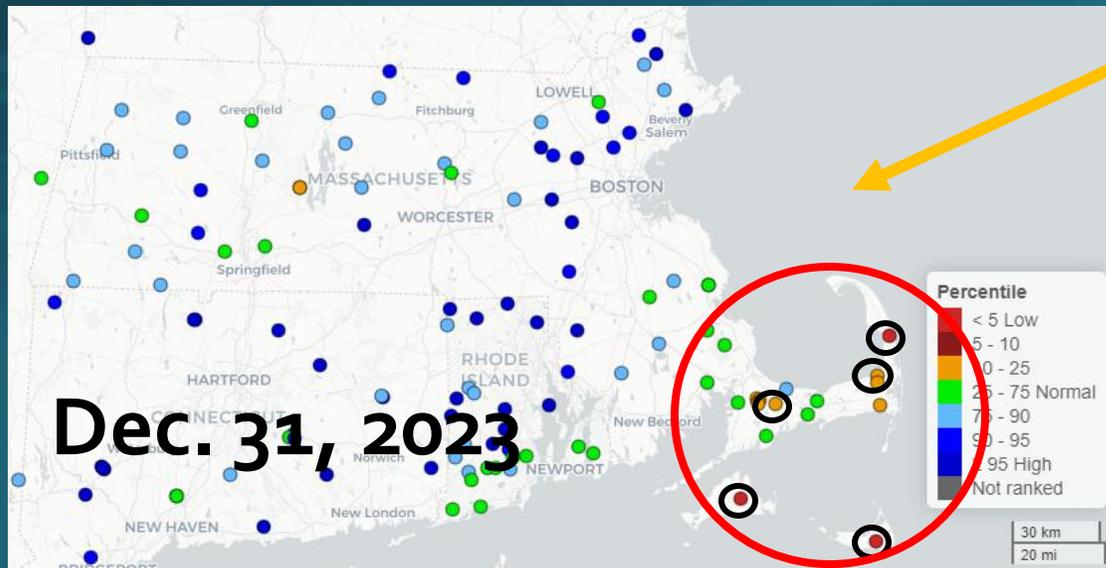
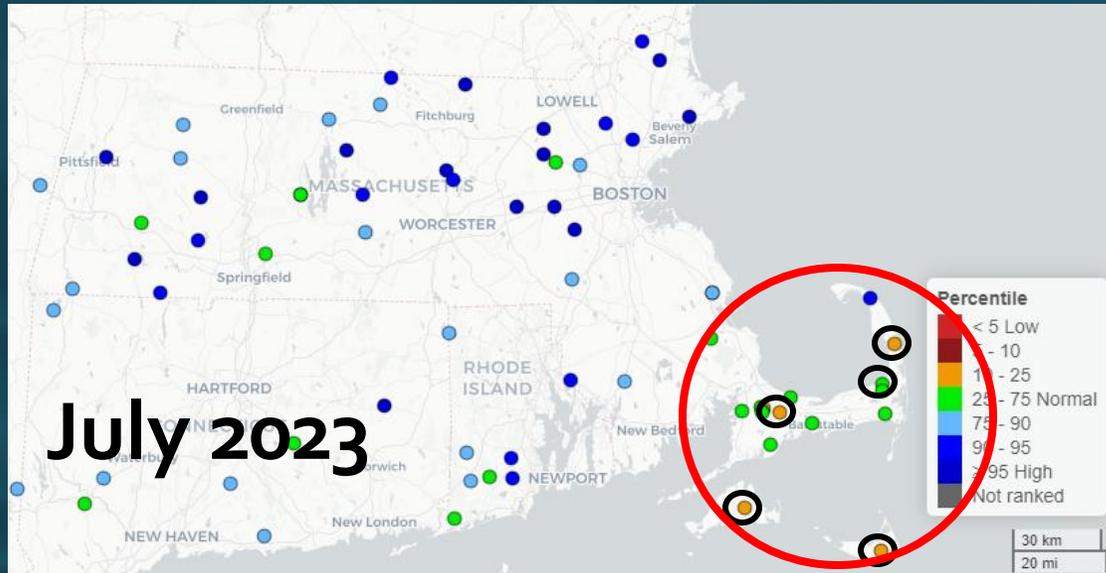
USGS 01105880 HERRING RIVER AT NORTH HARWICH, MA
(Drainage area: 9.40 square miles, length of record: 37 - 38 years)



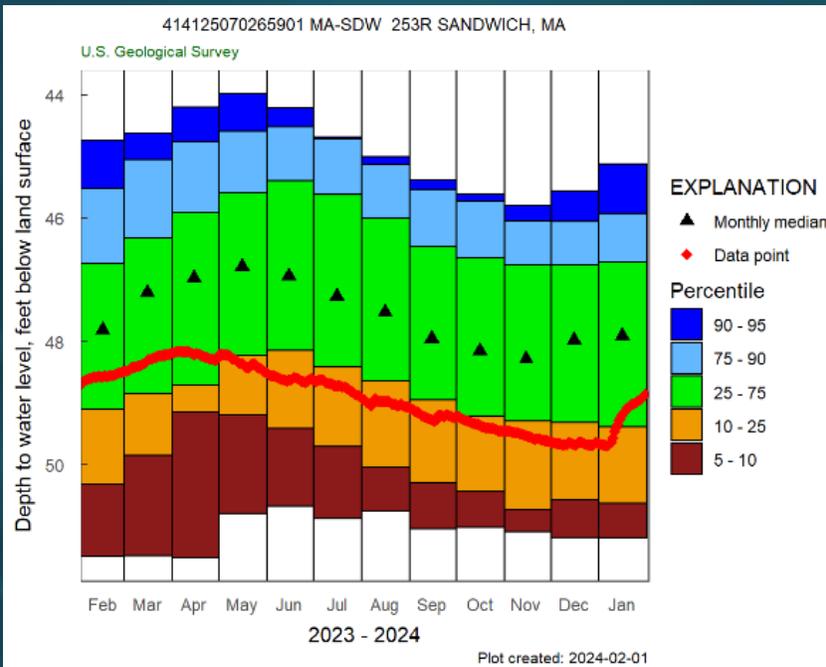
Summary of Streamflows on the Cape

- Western Cape streamflows (Quashnet River at Waquoit Village)
 - are currently normal
 - have been lower the last 3 years, but have still been mainly normal
- Eastern Cape Cod streamflows (Herring River at North Harwich)
 - are currently normal
 - have been below normal for a significant part of the last 3+ yrs (since fall of 2020)

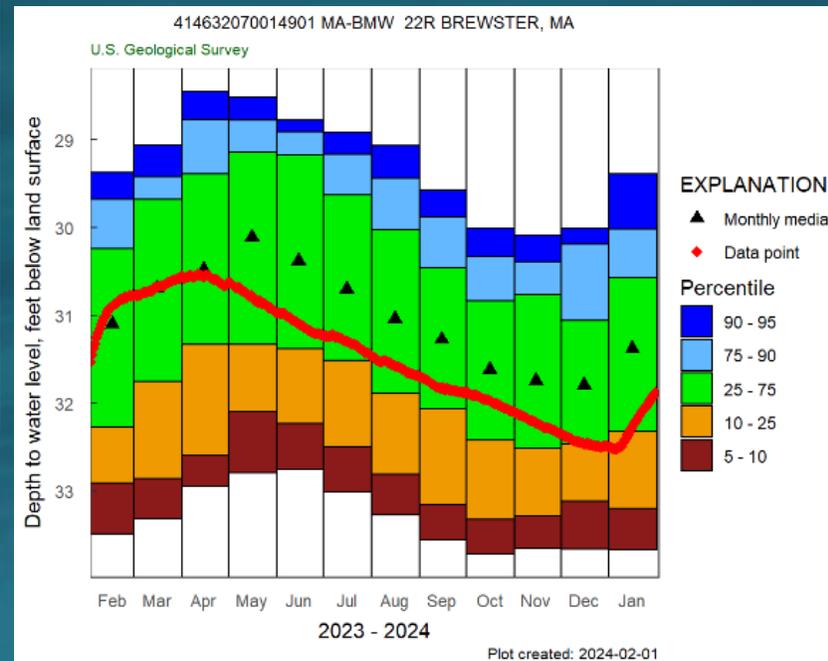
Groundwater Conditions



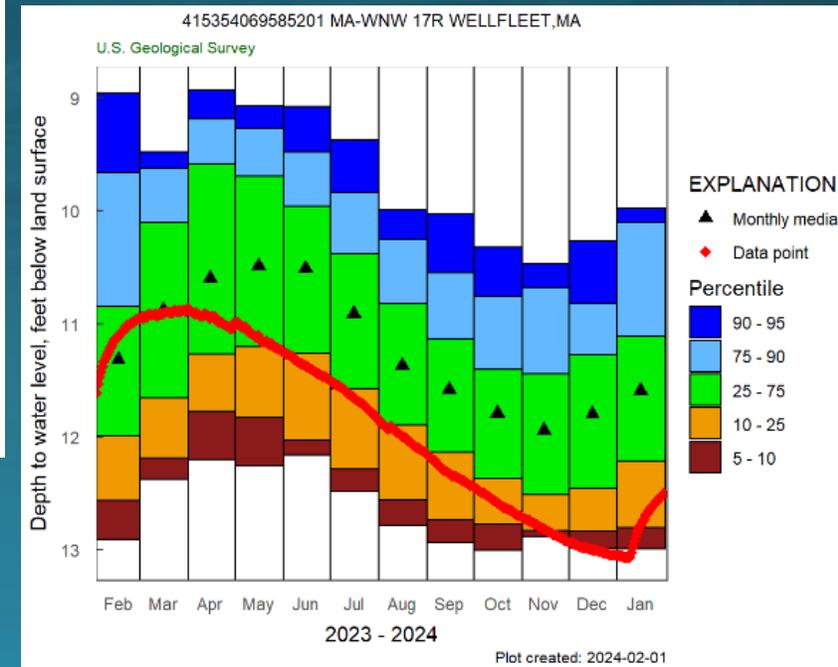
Cape Cod Region (West to East)



Period of Record: 61 yrs;
continuous 11 yrs

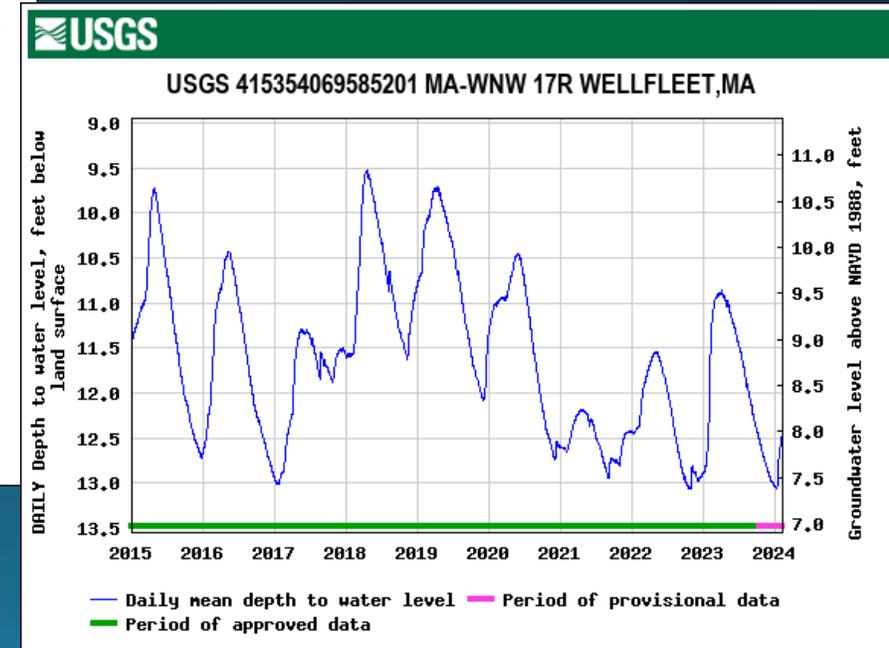
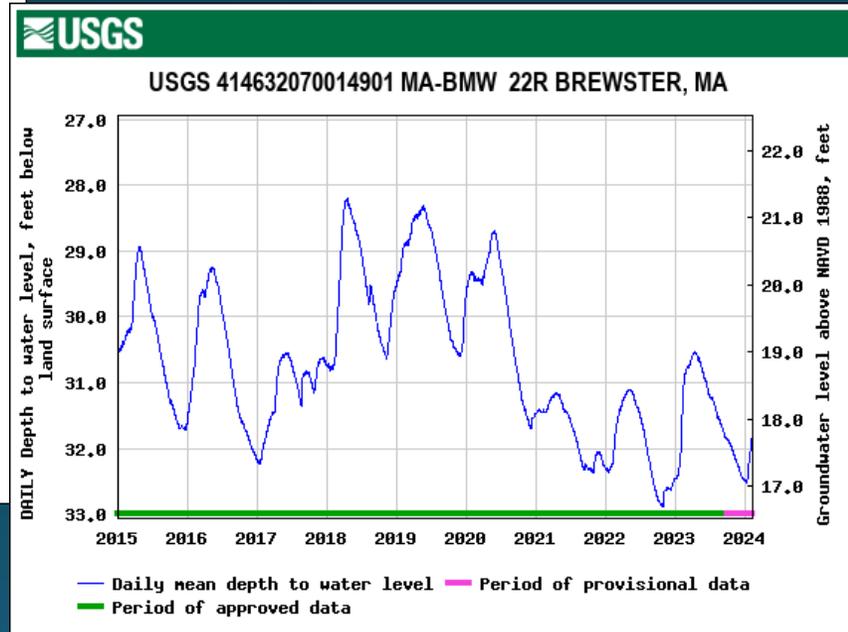
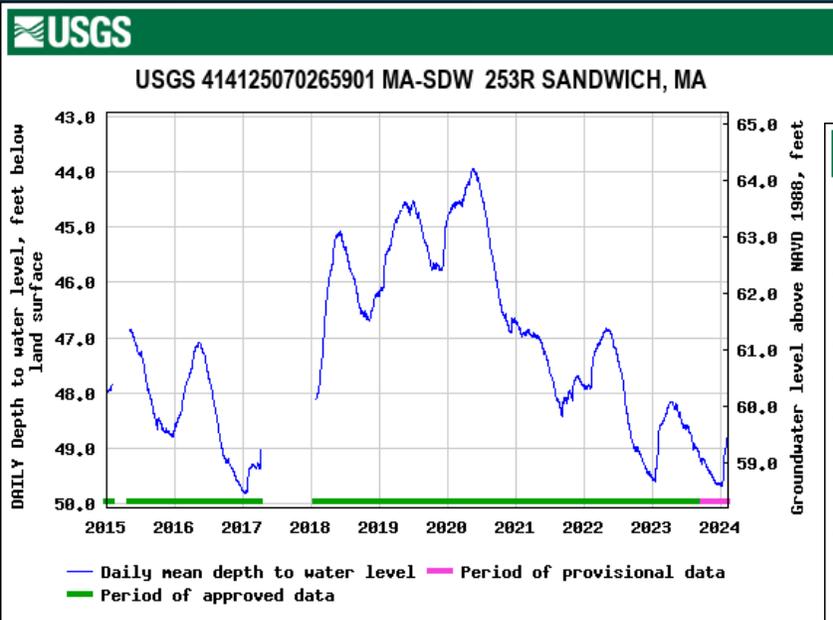


Period of Record: 61 yrs;
continuous 22 yrs

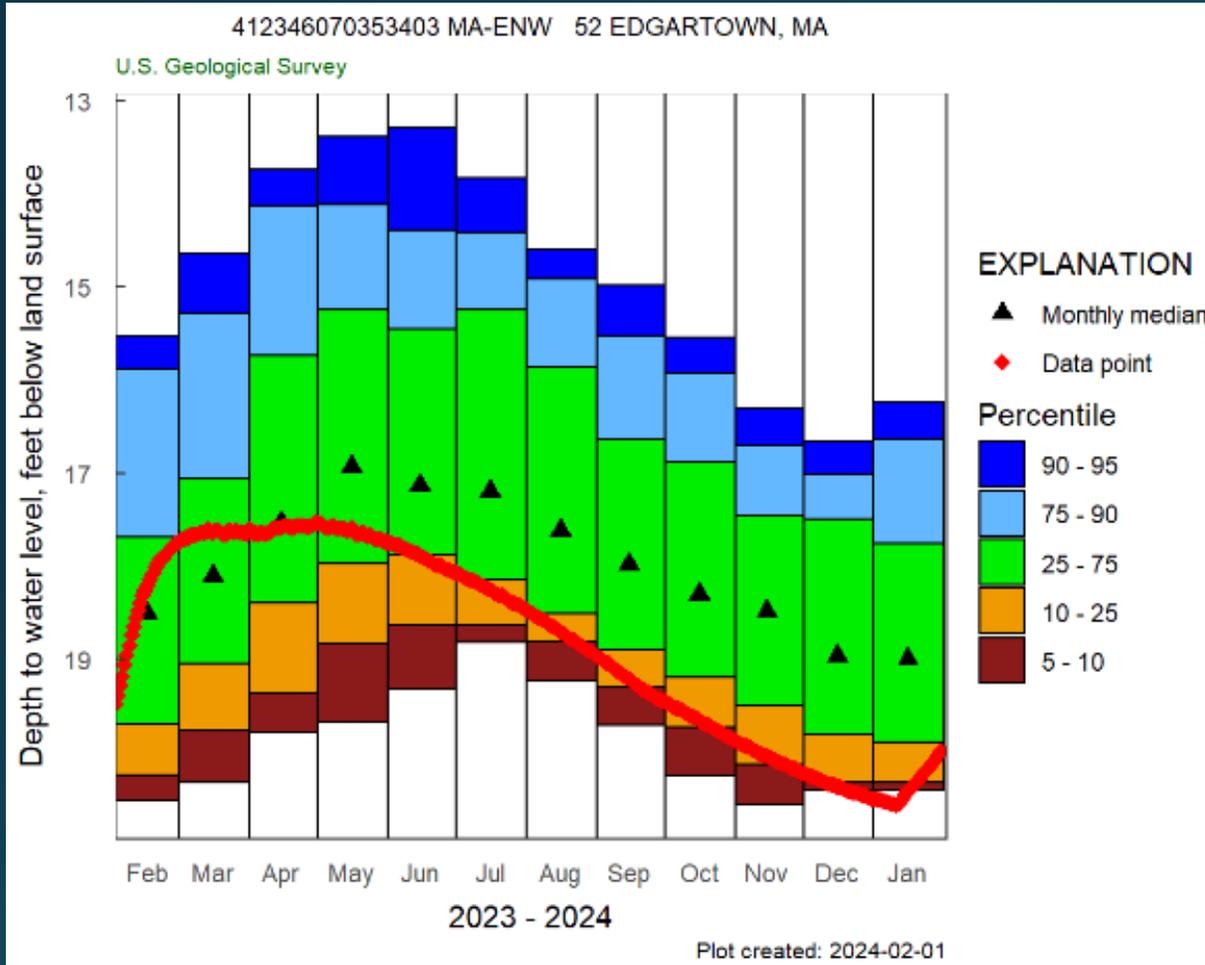


Period of Record: 61 yrs; cont. 11 yrs

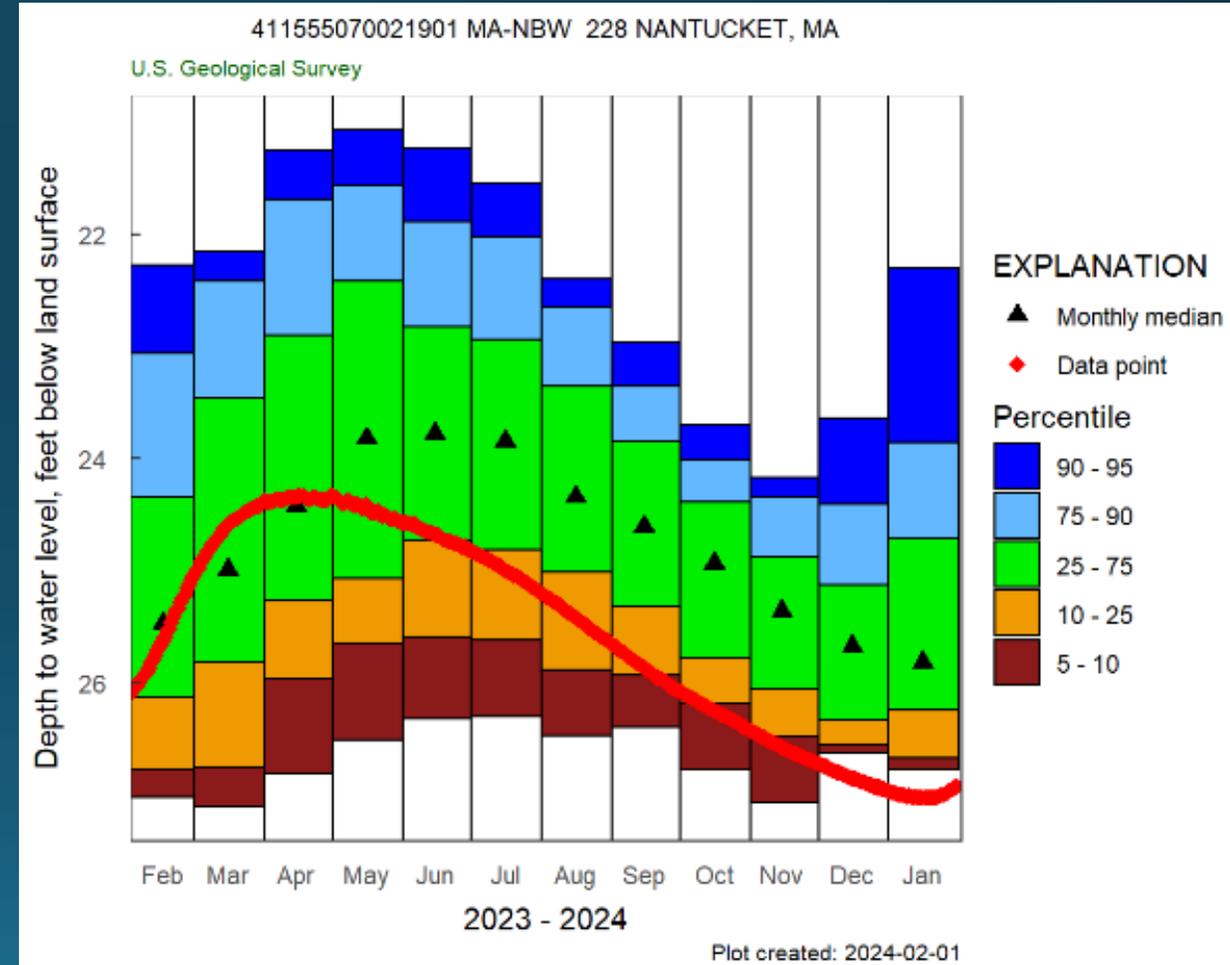
Cape Cod Selected Cont. WL Data (West to East) 10-year period (WY 2015-24)



Islands Region

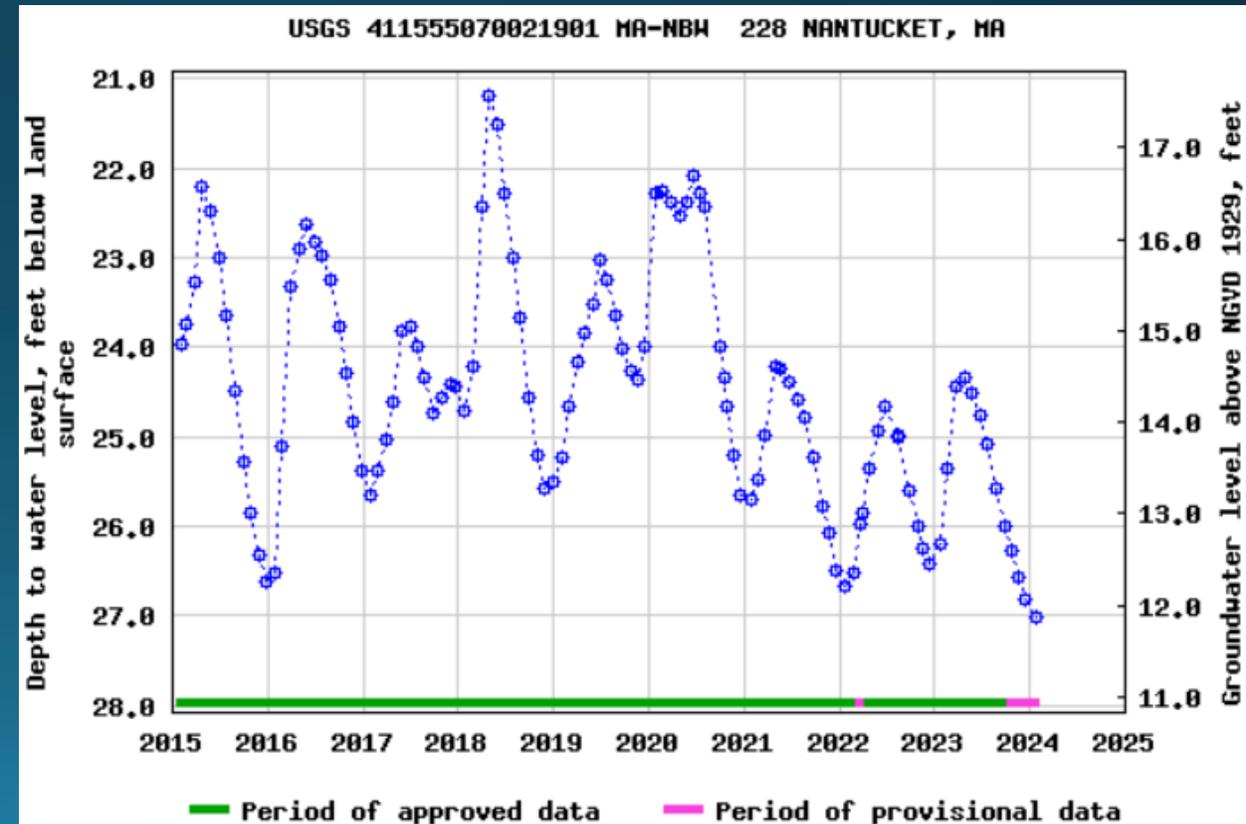
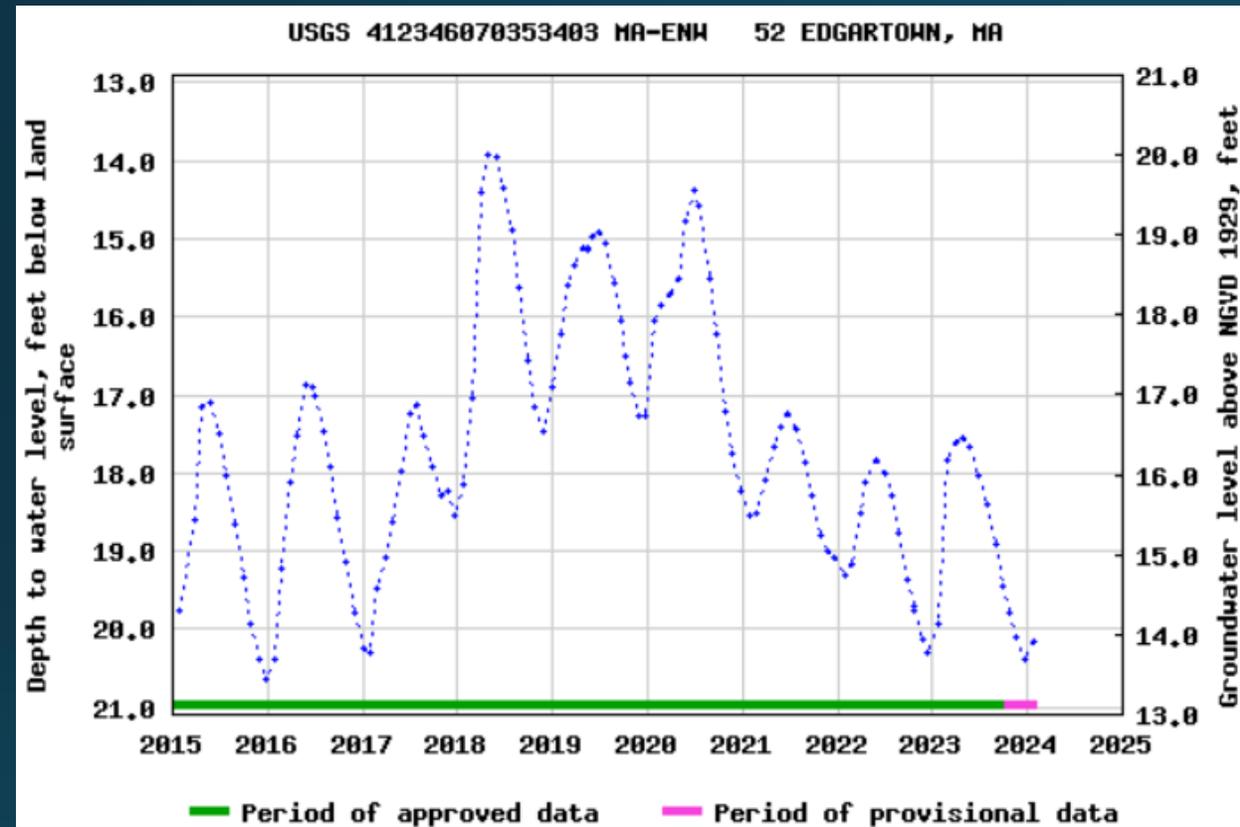


Period of Record: 47 yrs; continuous 4 yrs



Period of Record: 47 yrs; continuous 1 yr

Islands – Martha's Vineyard and Nantucket WL Meas. 10-yrs period (2015-24)



Summary of GW Levels for Cape and the Islands

- Groundwater levels and all 3 wells shown from the Cape started to rise in early January
- Cape wells shown – GW levels at Sandwich 253R and Brewster 22R rose into the normal range by the end of January, and Wellfleet 17R rose from below the 5th percentile into the below normal range
- GW levels in the Martha's Vineyard and Nantucket wells started to rise in mid- and late-January, respectively
- GW levels in Edgartown ENW52 rose from below the 5th percentile into the below normal range, and Nantucket NBW228 is still below the 5th percentile

