

Lake Stewards of Maine



Casco Bay Monitoring Network

2024-05-14

Lake Stewards of Maine (LSM) Mission

is to protect Maine lakes and to promote lake stewardship through widespread citizen participation in the gathering and dissemination of credible scientific information pertaining to lake health.



LSM General Info

The oldest, and one of the largest state-wide citizen lake monitoring programs in the U.S.

Training and technical support for thousands of volunteer citizen scientists statewide

546 lakes are actively monitored by over 1,200 certified monitors



Collect water quality data on ~85% of all Maine lake acreage



LSM Water Quality (WQ) Monitoring 2023

Held 54 WQ training sessions

Over 55 new volunteers trained; over 250 volunteers recertified

Over 2,000 unique WQ sampling events took place and LSM staff reviewed over 1,500 volunteer datasheets

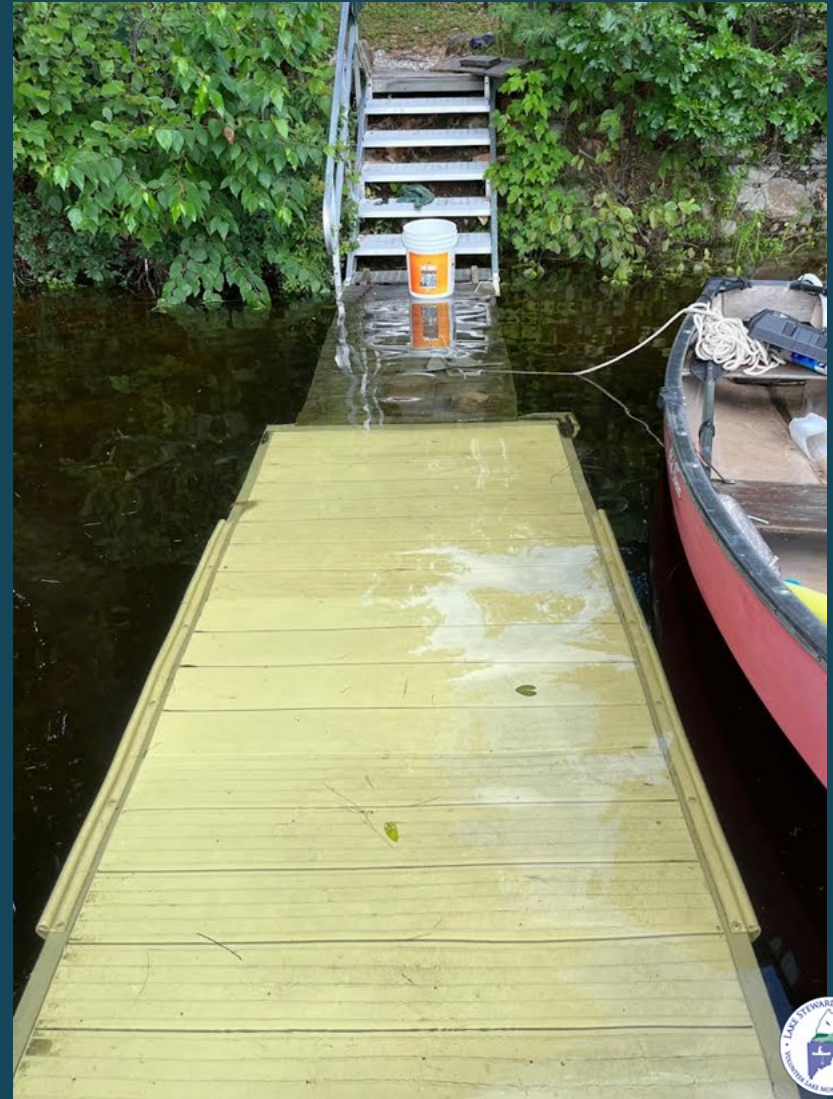
No alum applications were performed in 2023, but Togus this year



LSM Water Quality (WQ) Monitoring 2023

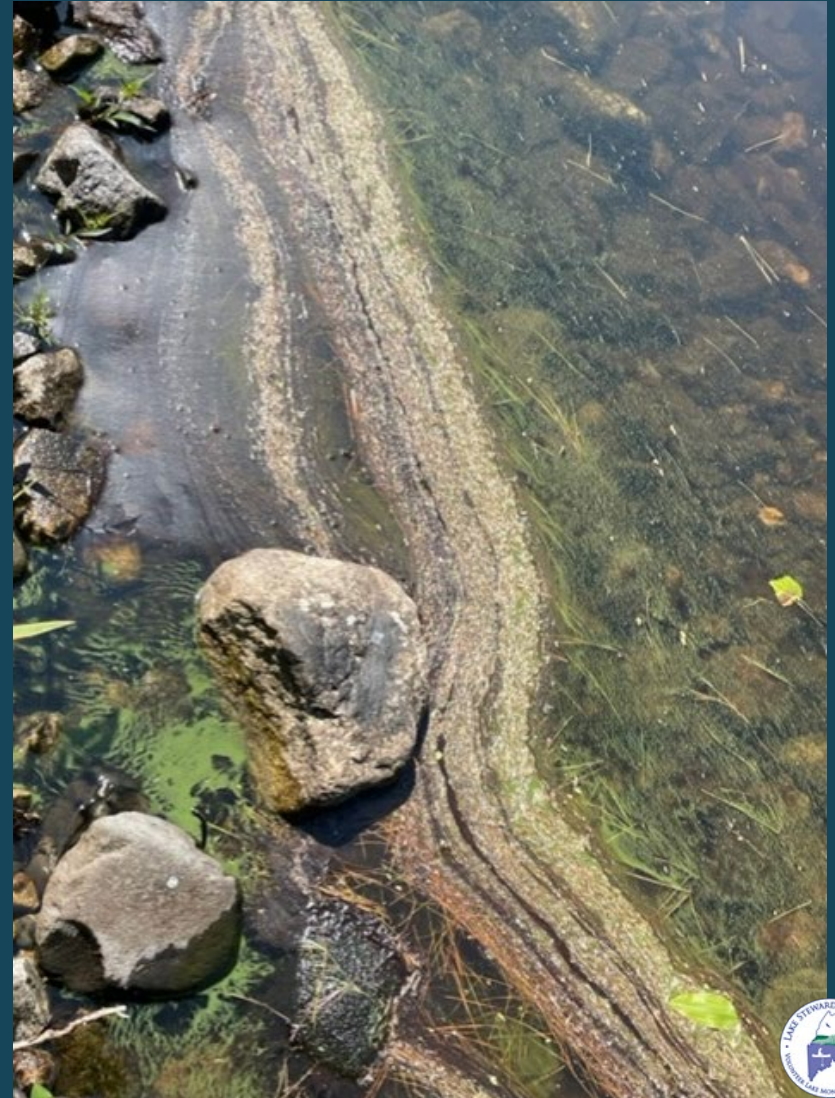
Wet early season, “grey summer overall”

Average temp for surface water: 21.22°C (stdev 5.15). As compared to 21.27°C in 2023. Bias with condition, location, and time periods, but this still illustrates fairly little difference in water temperature versus “warmer, sunnier” summers. Lakes ‘integrate’ heat.

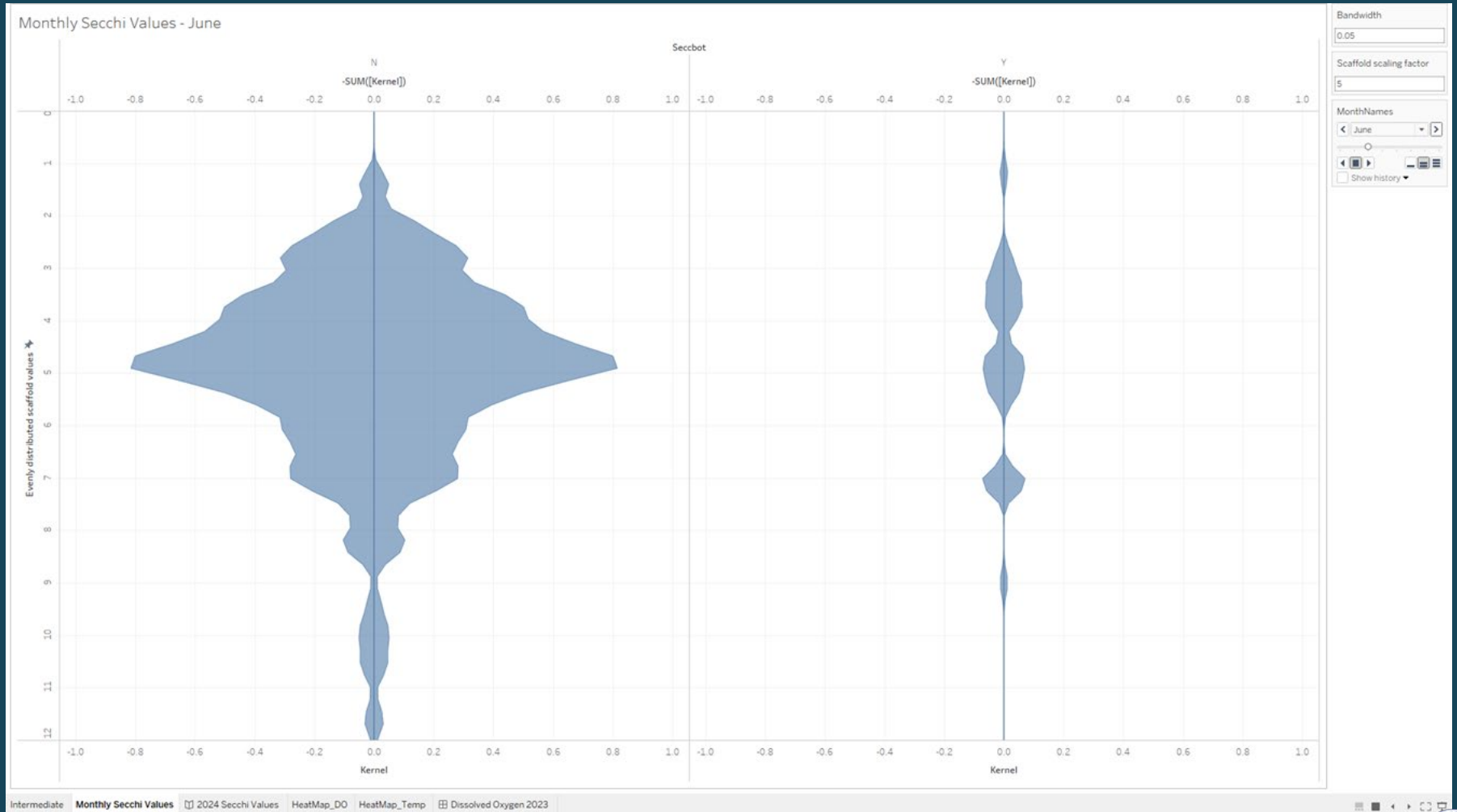


LSM Water Quality (WQ) Monitoring 2023

Few (relatively) cyanoblooms in the state. Notably for Casco Bay Watershed: Watchic.
Statewide higher dissolved organic carbon / tannin levels.
Very high water levels and, sadly, lots of erosion.



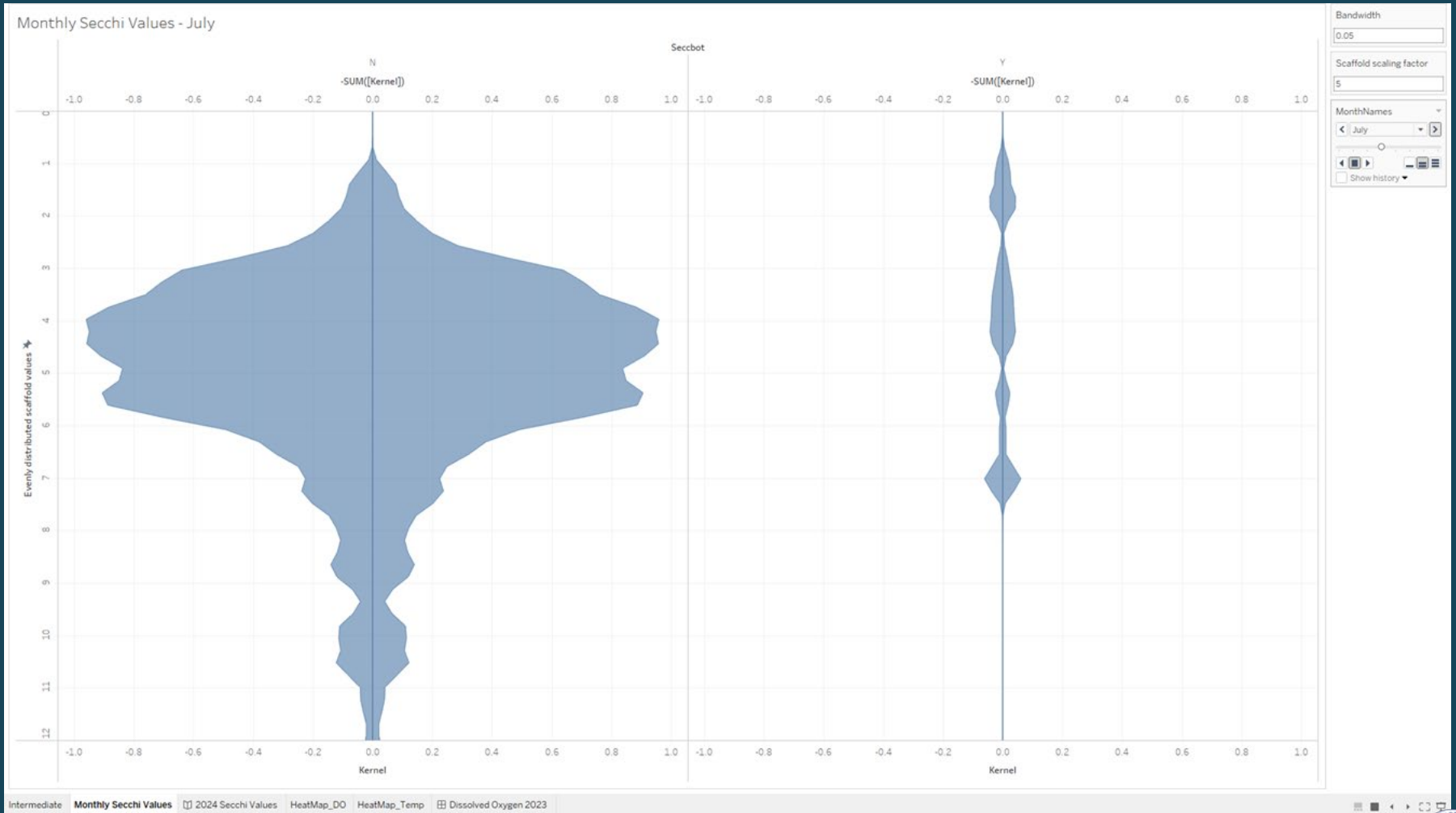
LSM Water Quality (WQ) Monitoring 2023



Statewide



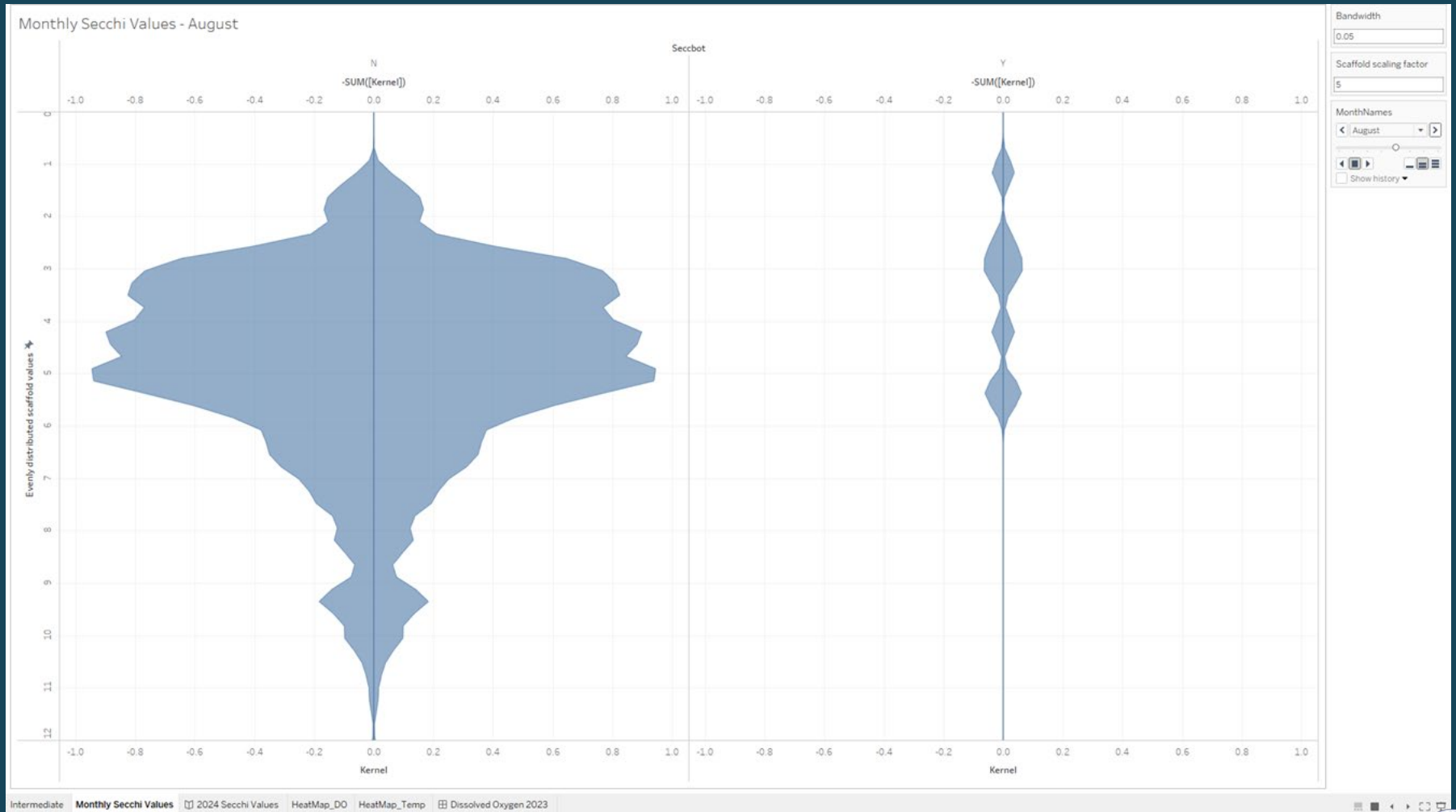
LSM Water Quality (WQ) Monitoring 2023



Statewide



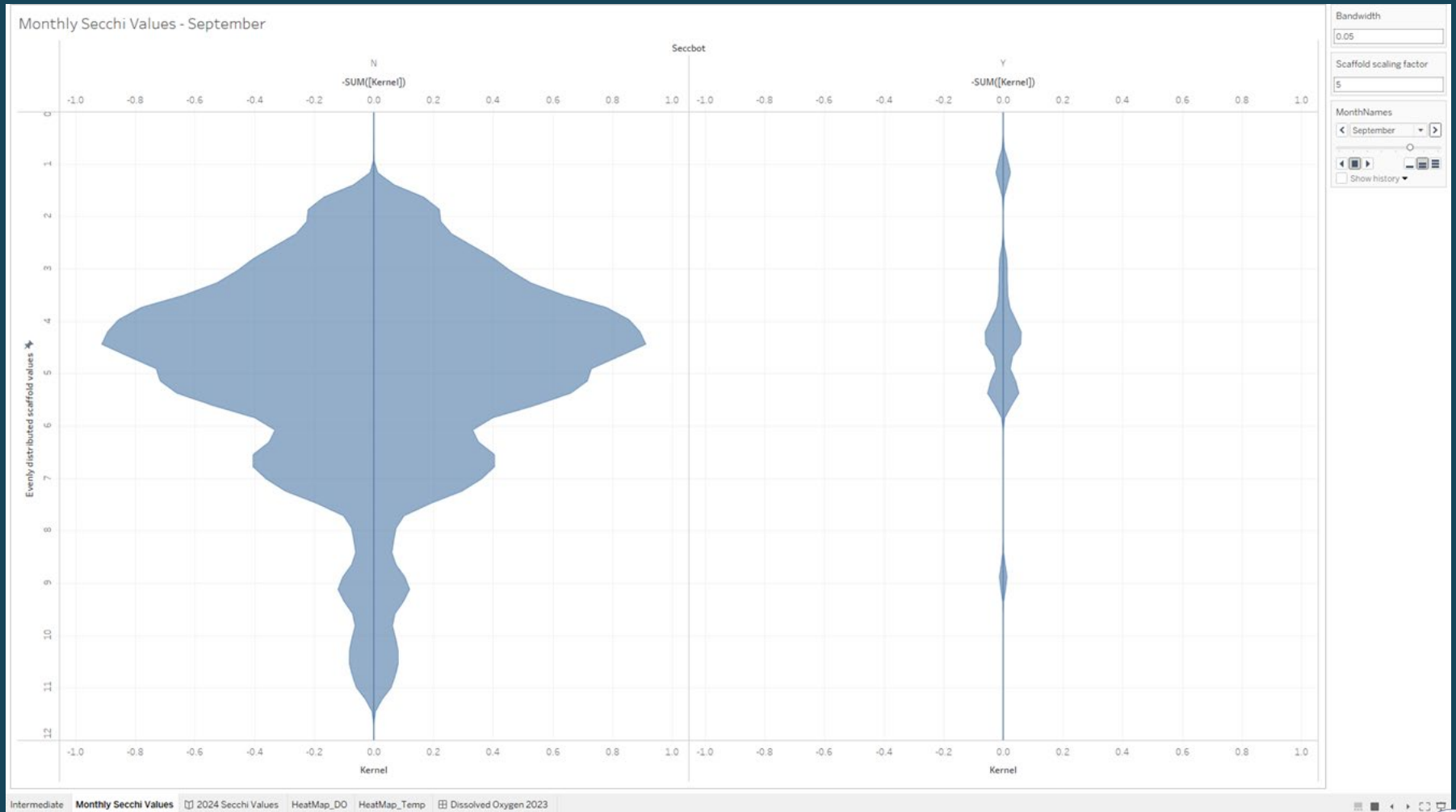
LSM Water Quality (WQ) Monitoring 2023



Statewide



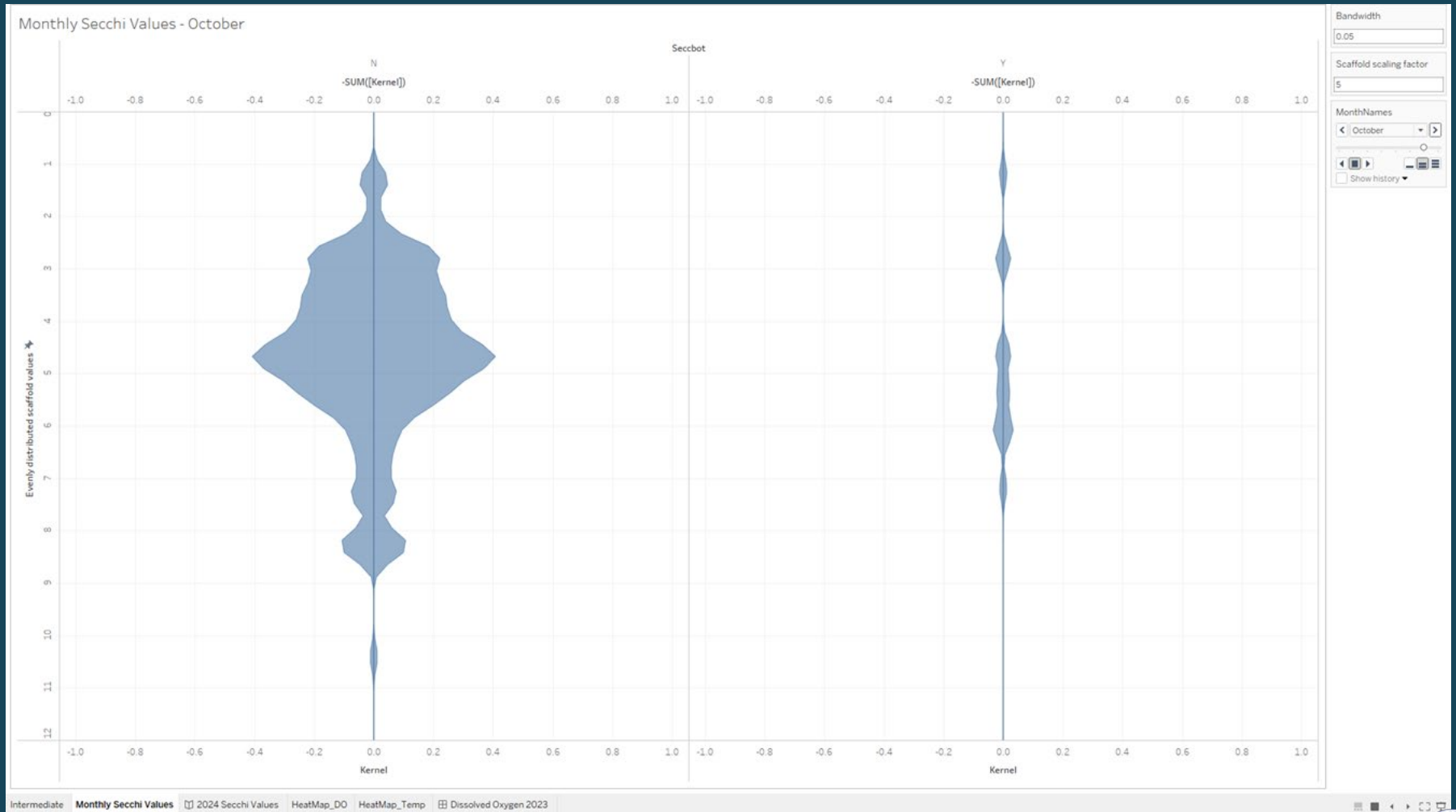
LSM Water Quality (WQ) Monitoring 2023



Statewide



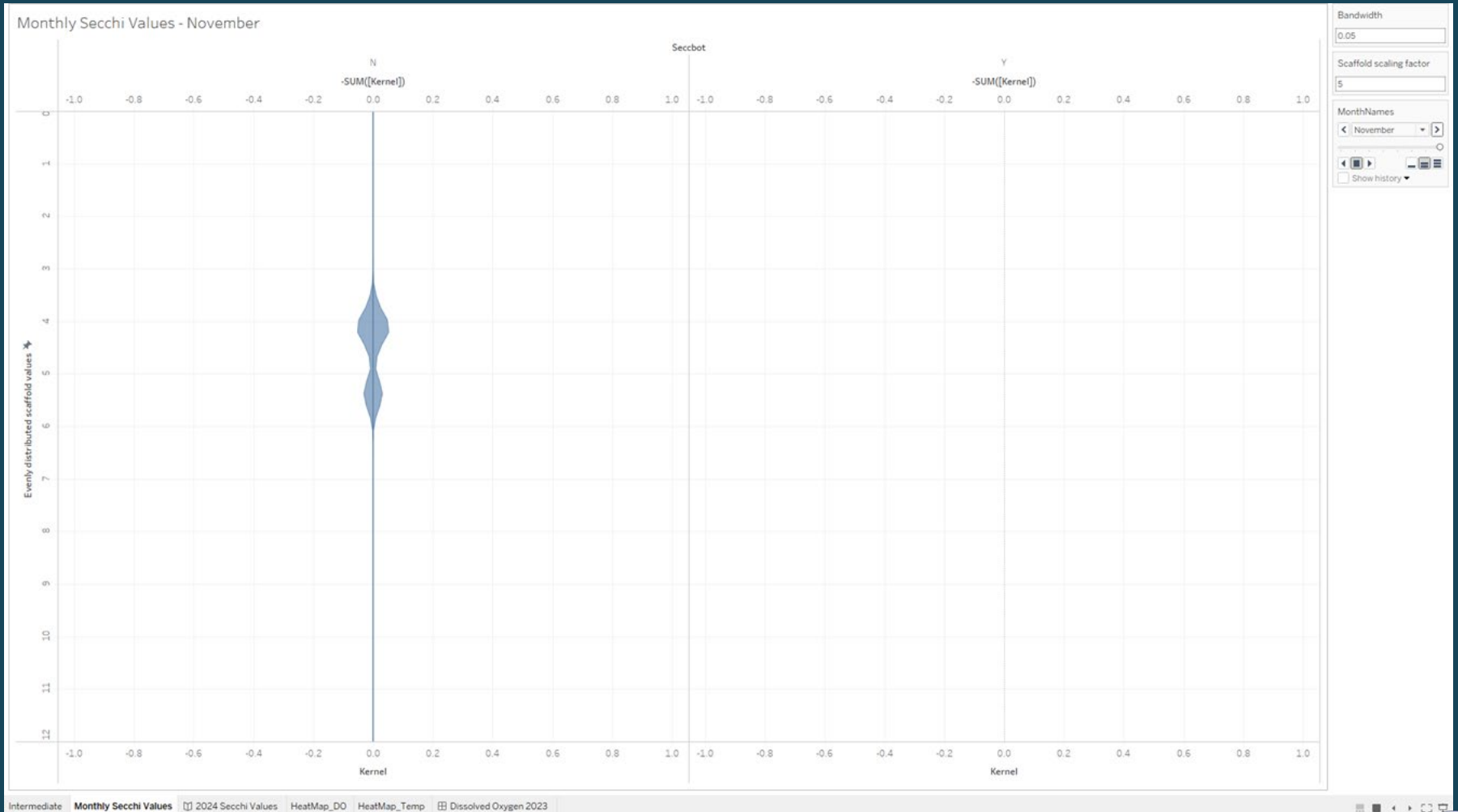
LSM Water Quality (WQ) Monitoring 2023



Statewide



LSM Water Quality (WQ) Monitoring 2023



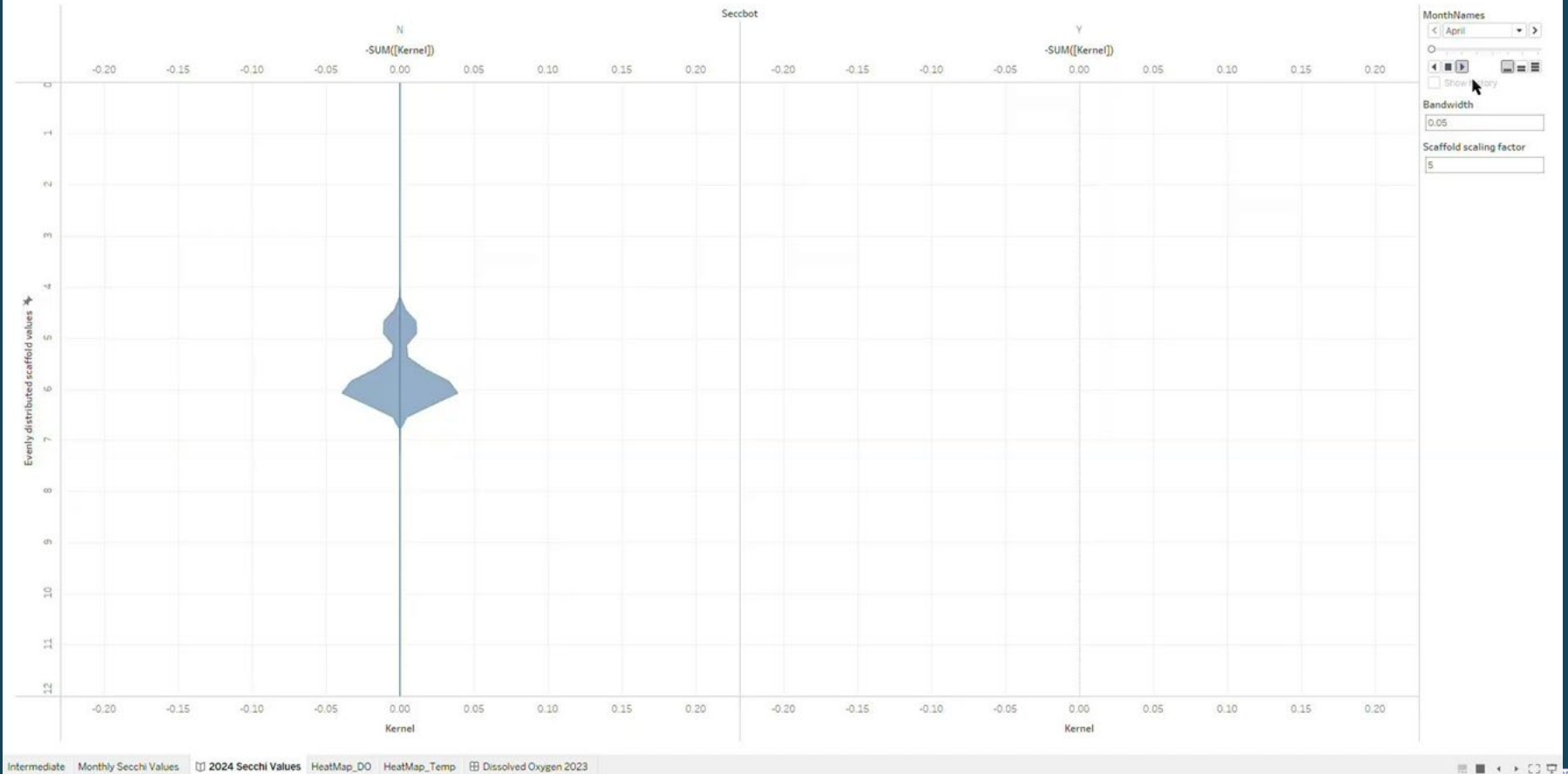
Statewide



LSM Water Quality (WQ) Monitoring 2023

Water Quality Secchi by Month

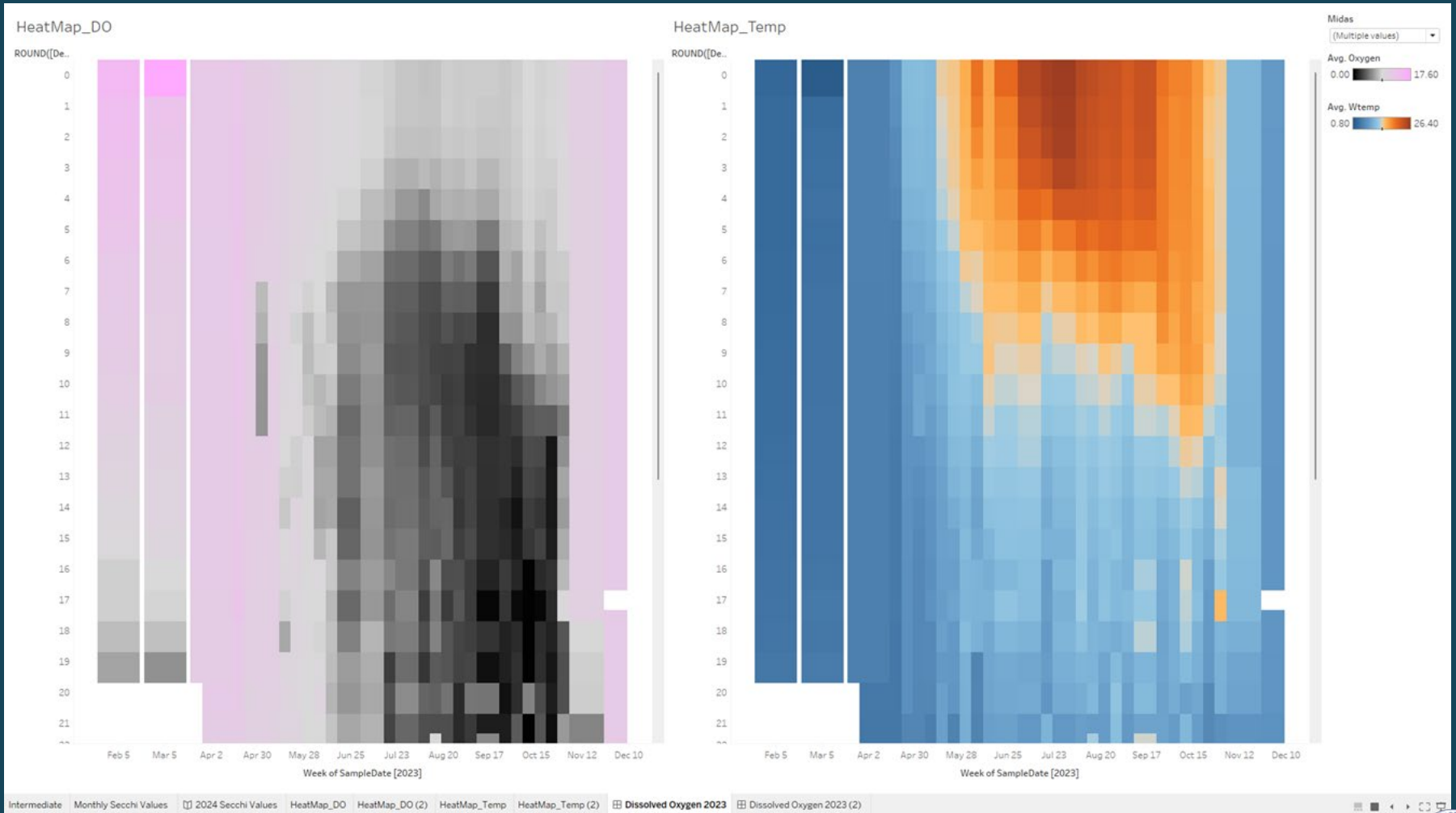
Click the play button on the right-hand side to see the data density of Secchi measures for 2024.



Casco Bay Watershed (HUC 010600)



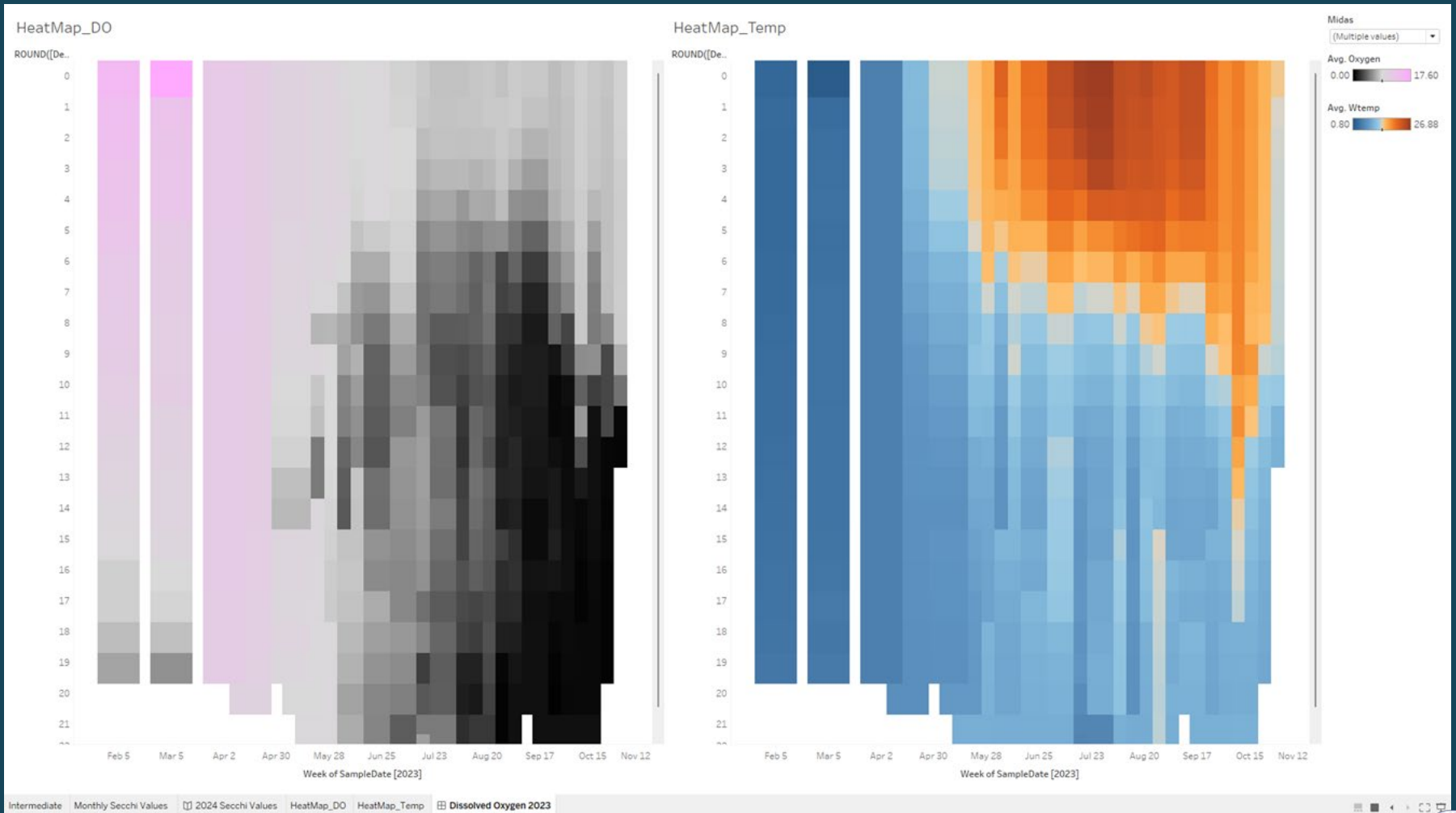
LSM Water Quality (WQ) Monitoring 2023



Statewide



LSM Water Quality (WQ) Monitoring 2023



Casco Bay Watershed (HUC 010600)



Looking Ahead: WQ Monitoring 2024

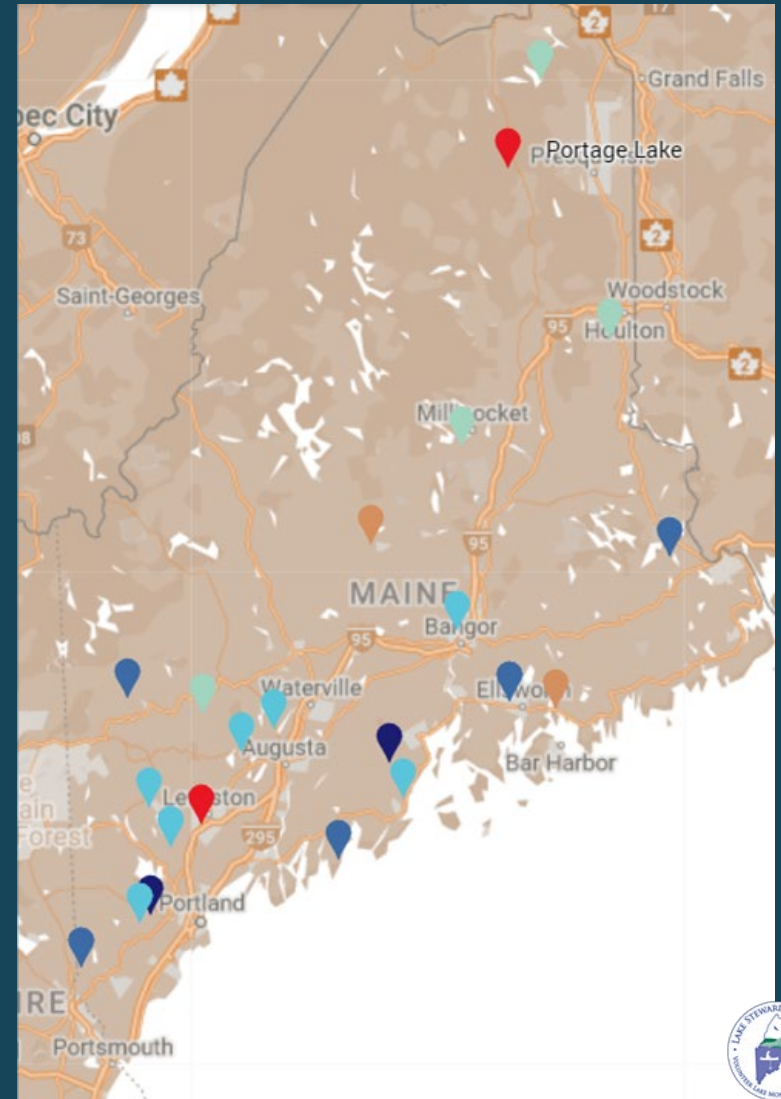
35 WQ training sessions planned (map to right)

15 of the 16 counties have trainings offered in them.

MOHF study for Freshwater Healthy Beaches Program will wrap up report.

Environmental Justice Lake Score list developed.

Shout-out to Portland Water District for some bacterial collection method comparison.



Looking Ahead: LSM AIS 2024


Additional AIS species designated by legislature.
Information (& video) on LSM website.
Utricularia inflata was found in 2022 and 2023.

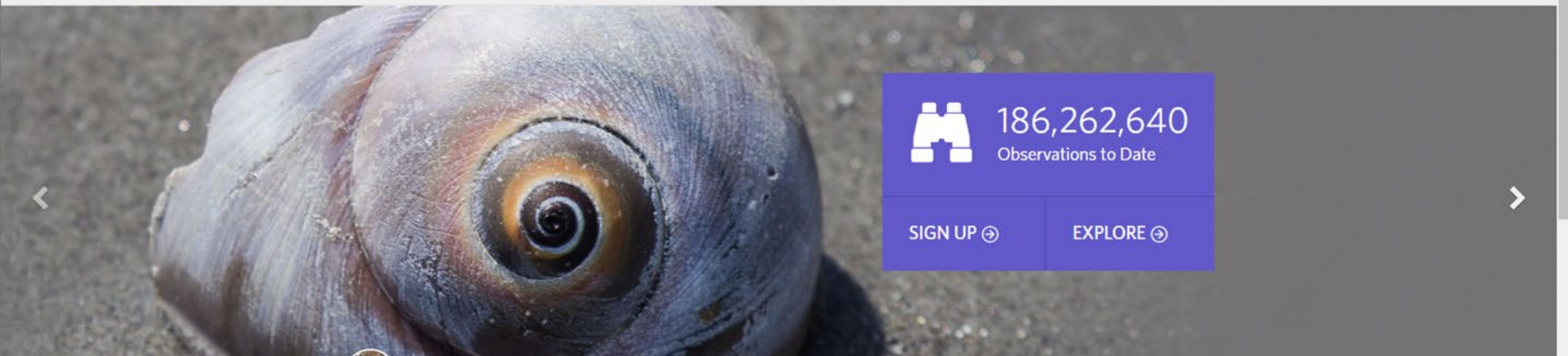
New AIS Survey123 field form, quick keys, and poster.


Continuing work in Northern Maine and on a tiered certification system for AIS volunteers






AIS LSM Field Guide

iNaturalist  Explore Community ▼ More ▼ Log In or Sign Up



 186,262,640
Observations to Date

[SIGN UP](#)  [EXPLORE](#) 

 BJ Stacey - Shark Eye Snail from Essex County, Massachusetts, USA

How It Works



LakesOfMaine.org Data Repository

Page views (2023): ~1,100,000

New developments for the site in the next year include: interactive maps, & navigation (wayfinding, UI/ UX) improvements

Notices and advisories

ScoreCard launch this year

The screenshot shows the homepage of the Lakes of Maine website. At the top, there is a navigation bar with links for Home, Your Lake, Data Visualizations, Library, Conservation, Understanding, Resources, and About / Contact. The main header features the logo for 'LAKE STEWARDS OF MAINE' and 'Lakes of Maine'. Below the header is a large image of sailboats on a lake. To the right of the image is a search box titled 'SEARCH for YOUR LAKE' with input fields for LAKE, TOWN, COUNTY, ZIP, and MIDAS. Below the image is a featured article for Damariscotta Lake (Lincoln County) with a credit to Bill Buchholz. The page is divided into three columns: 'FEATURED LAKE' (Damariscotta Lake), 'WHAT'S NEW?' (Nearby Lake Navigation Map), and 'DID YOU KNOW?' (LSM / VLMP Celebrates 50 Years!).



Questions?

