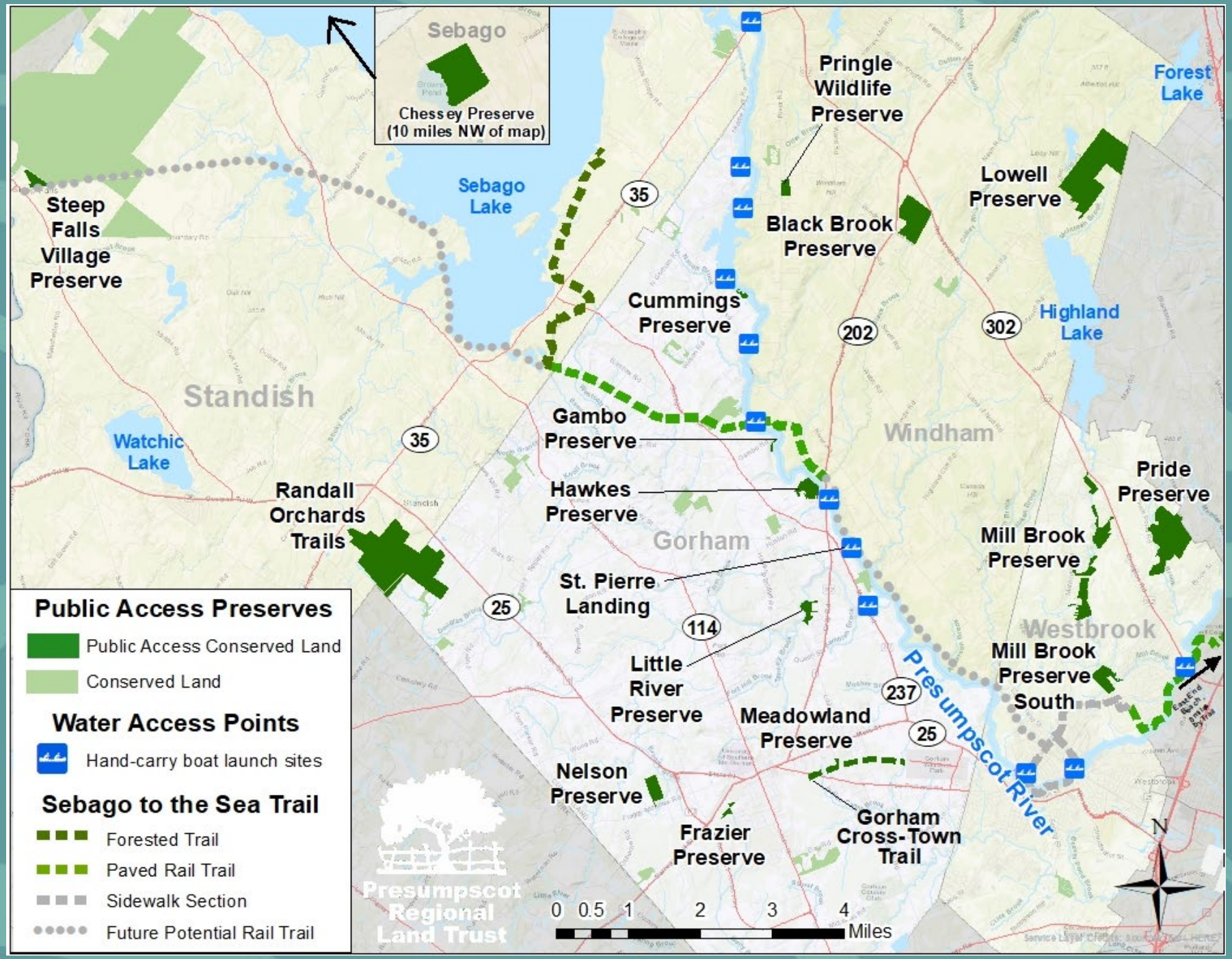
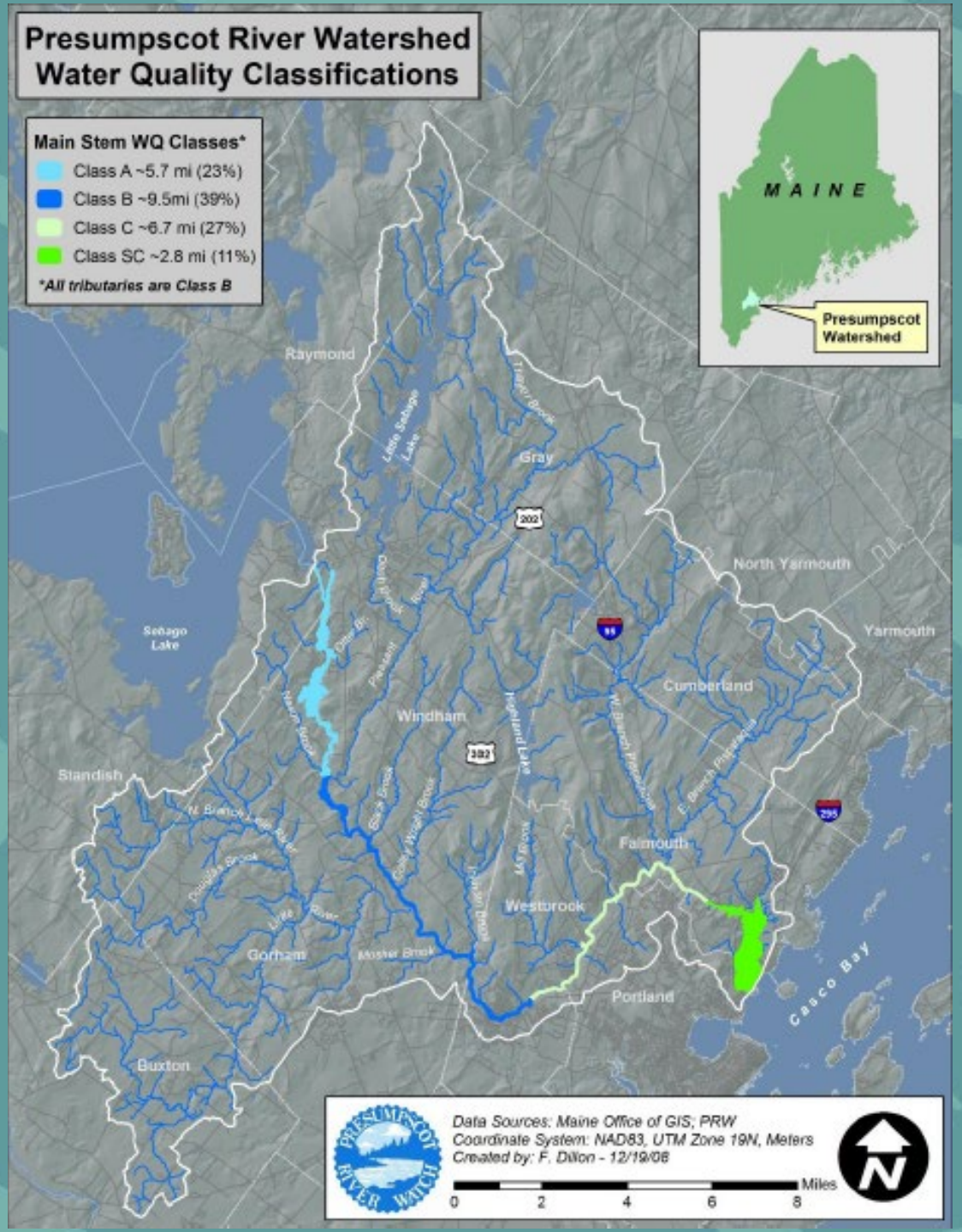
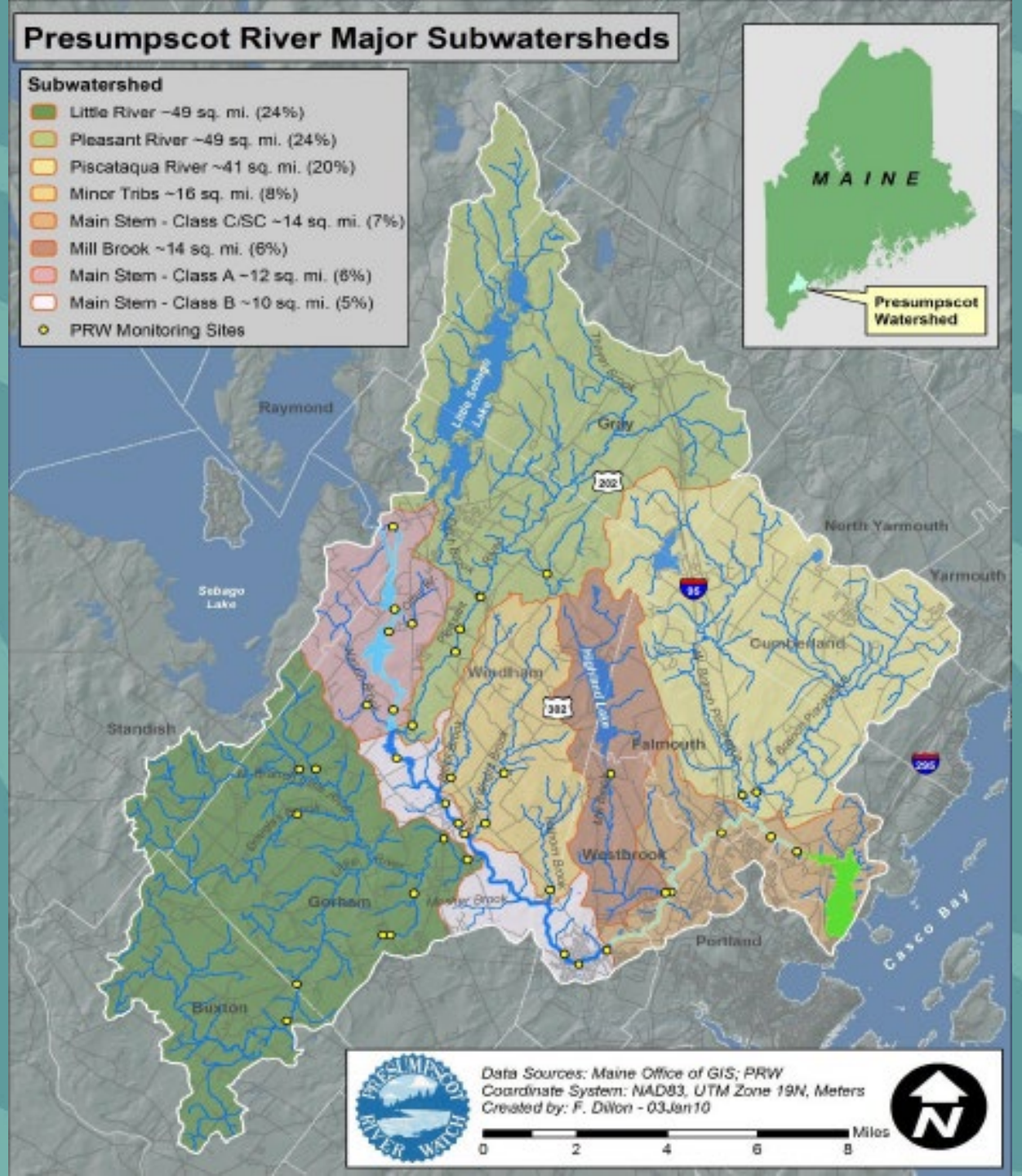
Water Quality Monitoring

PRESUMPSCOT
Regional Land Trust

Engaging with communities to conserve, steward, and provide access to local lands and clean water, for current and future generations to enjoy.


Sebago
Chessey Preserve
(10 miles NW of map)
Pringle
Wildlife
Preserve
Forest
Lake
Lowell
Preserve
Sebago
Lake
Steep
Falls
Village
Preserve
35
Black Brook
Preserve
Cummings
Preserve
202
302
Highland
Lake
Standish
Watchic
Lake
35
Gambo
Preserve
Windham
Pride
Preserve
Randall
Orchards
Trails
Hawkes
Preserve
Gorham
Mill Brook
Preserve
St. Pierre
Landing
25
114
Westbrook
Mill Brook
Preserve
South
Little
River
Preserve
237
Meadowland
Preserve
25
Presumpscot River
Nelson
Preserve
Frazier
Preserve
Gorham
Cross-Town
Trail
Public Access Preserves
Public Access Conserved Land
Conserved Land
Water Access Points
Hand-carry boat launch sites
Sebago to the Sea Trail
Forested Trail
Paved Rail Trail
Sidewalk Section
Future Potential Rail Trail
Presumpscot
Regional
Land Trust
0 0.5 1 2 3 4
Miles
N


Presumpscot River Watershed
Water Quality Classifications
Main Stem WQ Classes*
Class A ~5.7 mi (23%)
Class B ~9.5mi (39%)
Class C ~6.7 mi (27%)
Class SC ~2.8 mi (11%)
*All tributaries are Class B
MAINE
Presumpscot Watershed
Raymond
Gray
North Yarmouth
Yarmouth
Cumberland
Windham
Standish
Sebago Lake
Falmouth
Westbrook
Gorham
Portland
Buxton
Casco Bay
Data Sources: Maine Office of GIS; PRW
Coordinate System: NAD83, UTM Zone 19N, Meters
Created by: F. Dillon - 12/19/08
Miles
0
2
4
6
8
N


Presumpscot River Major Subwatersheds
Subwatershed
Little River ~49 sq. mi. (24%)
Pleasant River ~49 sq. mi. (24%)
Piscataqua River ~41 sq. mi. (20%)
Minor Tribs ~16 sq. mi. (8%)
Main Stem - Class C/SC ~14 sq. mi. (7%)
Mill Brook ~14 sq. mi. (6%)
Main Stem - Class A ~12 sq. mi. (6%)
Main Stem - Class B ~10 sq. mi. (5%)
PRW Monitoring Sites
MAINE
Presumpscot Watershed
Raymond
Sebago Lake
Little Sebago Lake
Gray
North Yarmouth
Yarmouth
Cumberland
Windham
Standish
Falmouth
Westbrook
Gorham
Portland
Buxton
Casco Bay
Data Sources: Maine Office of GIS; PRW
Coordinate System: NAD83, UTM Zone 19N, Meters
Created by: F. Dillon - 03Jan10
Miles
0
2
4
6
8
N

2023 Dissolved Oxygen

2023 Water Quality Testing Results - Presumpscot River Watershed

Thank you to all of the volunteer Water Stewards who collected these data in 2023

Move the vertical slider bar on the map to switch between Bacteria and Dissolved Oxygen results, and click on each site for more information.

Water quality monitoring is an important way to assess the health of rivers and streams for both humans and wildlife. It can help us identify important places to conserve land and potential restoration projects.

An important indicator of water health for human use and recreation is when levels of ***E. coli* bacteria levels are low**. Aquatic life, like fish and invertebrates, requires **high levels of dissolved oxygen** to survive and thrive.

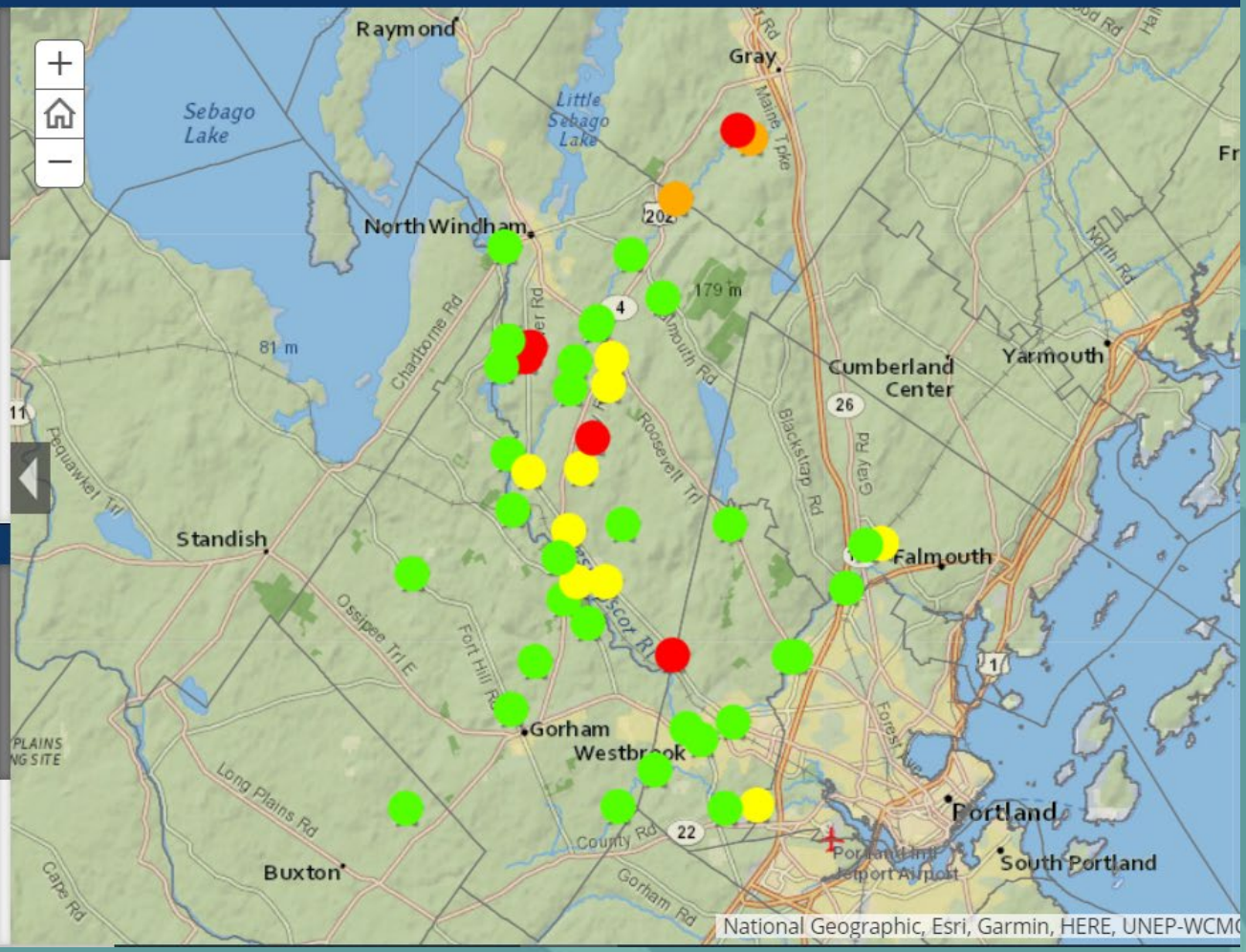
Leyenda

2023: Samples Meeting Bacteria Standard

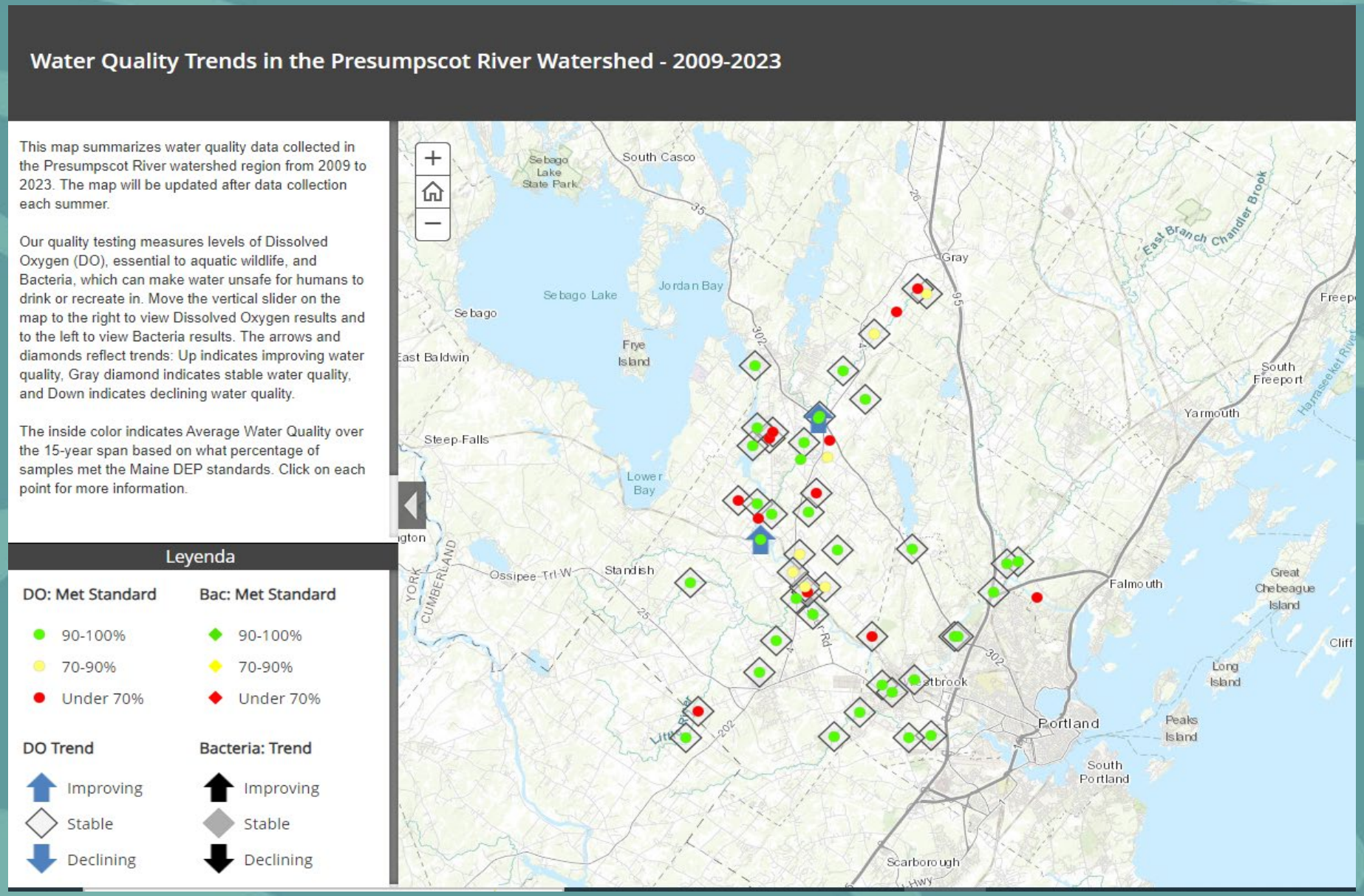
- 100%
- 70-99%
- 50-69%
- <50%

2023: Samples Meeting DO Standard

- 100%
- 70-99%
- 51-69%
- <50%



15-year Dissolved Oxygen



Dissolved Oxygen Data Takeaways After 2023

- The "main stem" of the Presumpscot River almost always met dissolved oxygen
- standards. This is true historically as well.

- In the Presumpscot River tributaries, dissolved oxygen results were generally improved from 2022. Historically, dissolved oxygen appears stable.

- Sites on the Stroudwater River mostly met dissolved oxygen standards (an improvement from 2022).

2023 Bacteria

2023 Water Quality Testing Results - Presumpscot River Watershed

Thank you to all of the volunteer Water Stewards who collected these data in 2023

Move the vertical slider bar on the map to switch between Bacteria and Dissolved Oxygen results, and click on each site for more information.

Water quality monitoring is an important way to assess the health of rivers and streams for both humans and wildlife. It can help us identify important places to conserve land and potential restoration projects.

An important indicator of water health for human use and recreation is when levels of ***E. coli*** **bacteria levels are low**. Aquatic life, like fish and invertebrates, requires **high levels of dissolved oxygen** to survive and thrive.

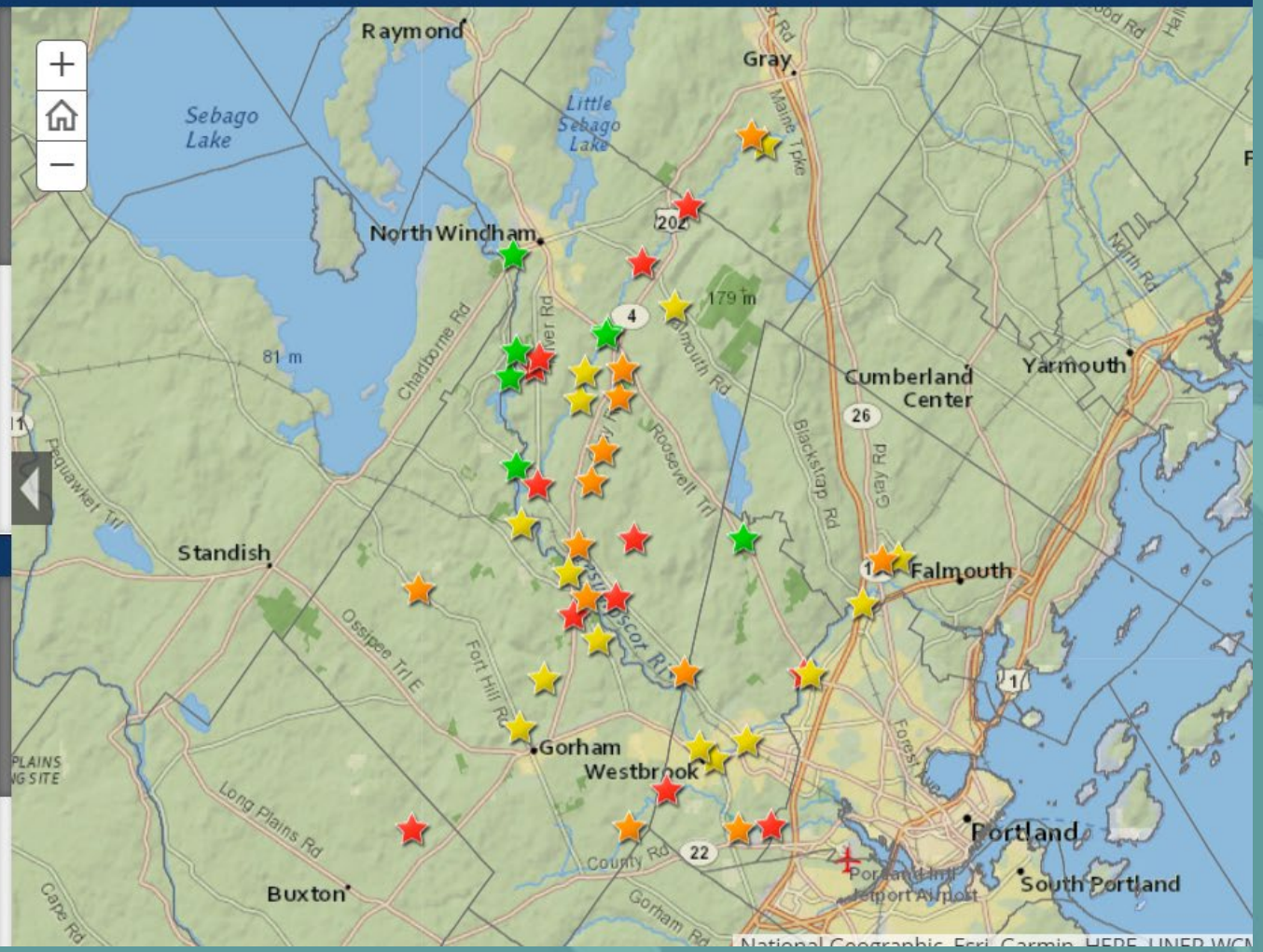
Leyenda

2023: Samples Meeting Bacteria Standard

- 100%
- 70-99%
- 50-69%
- <50%

2023: Samples Meeting DO Standard

- 100%
- 70-99%
- 51-69%
- <50%



15-Year Bacteria

Water Quality Trends in the Presumpscot River Watershed - 2009-2023

This map summarizes water quality data collected in the Presumpscot River watershed region from 2009 to 2023. The map will be updated after data collection each summer.

Our quality testing measures levels of Dissolved Oxygen (DO), essential to aquatic wildlife, and Bacteria, which can make water unsafe for humans to drink or recreate in. Move the vertical slider on the map to the right to view Dissolved Oxygen results and to the left to view Bacteria results. The arrows and diamonds reflect trends: Up indicates improving water quality, Gray diamond indicates stable water quality, and Down indicates declining water quality.

The inside color indicates Average Water Quality over the 15-year span based on what percentage of samples met the Maine DEP standards. Click on each point for more information.

Leyenda

DO: Met Standard

- 90-100%
- 70-90%
- Under 70%

Bac: Met Standard

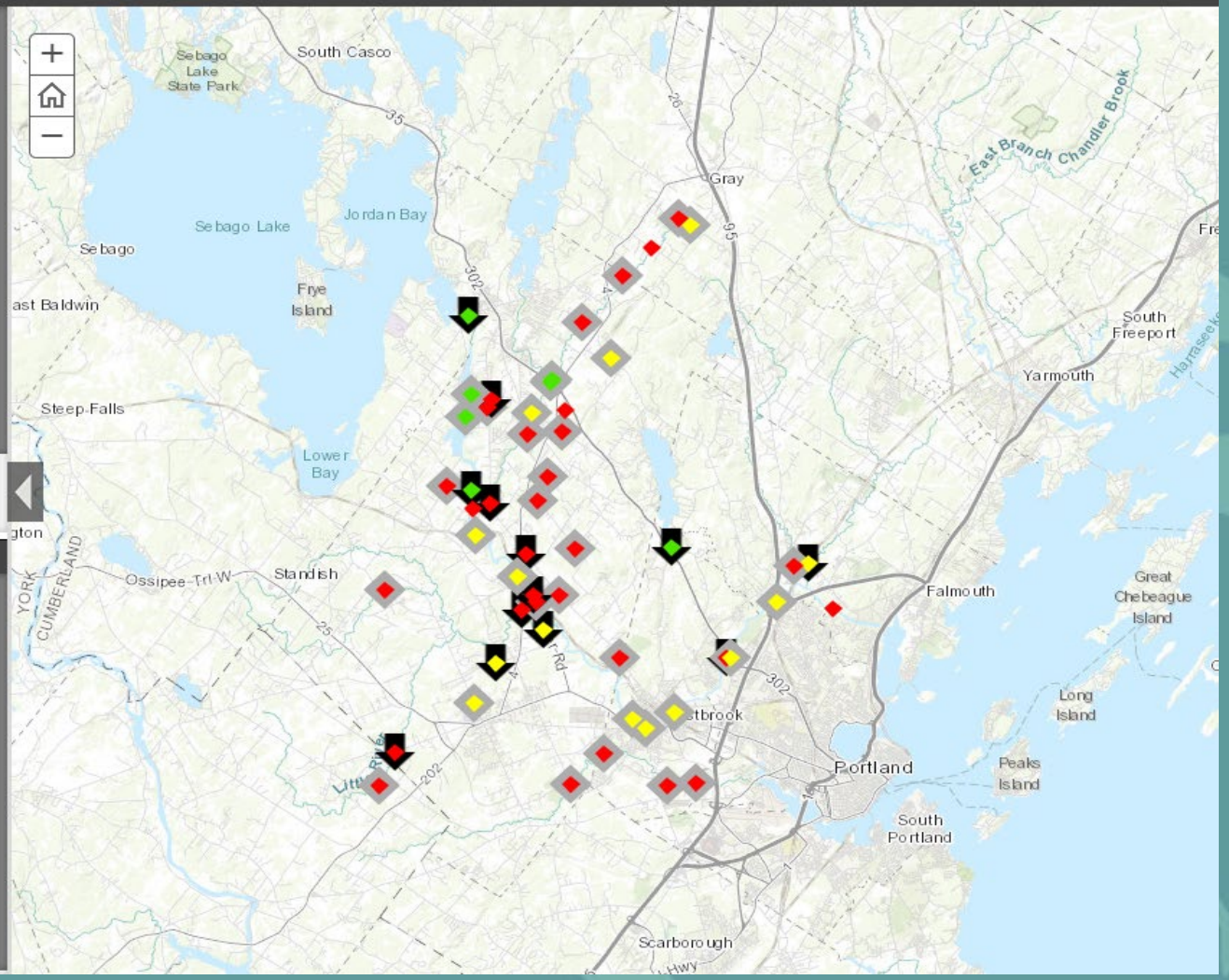
- 90-100%
- 70-90%
- Under 70%

DO Trend

- Improving
- Stable
- Declining

Bacteria: Trend

- Improving
- Stable
- Declining



Bacteria Data Takeaways After 2023

- The "main stem" of the Presumpscot River mostly met bacteria standards. This is true historically as well though bacteria levels are increasing.

- In the Presumpscot River tributaries, bacteria results were generally improved from 2022. Historically, bacteria levels are increasing.

- Sites on the Stroudwater River showed variable bacteria results.

- Please see www.prlt.org/water to view data maps and learn more.

Thank You!

Thank you to Casco Bay Estuary Partnership, Maine DEP, the Town of Windham, and community volunteers for supporting this work.