community water monitoring network

2021 Water Quality Results

This meeting
is being
recorded.
neponset river
WATERSHED ASSOCIATION

Agenda

2021 Water Quality Report

Neponset River and CWMN Background

2021 Water Quality

Into the future!!

Sean McCanty

neponset river
WATERSHED ASSOCIATION

NepRWA and CWMN Background

neponset river
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neponset river
WATERSHED ASSOCIATION

Increase Access

Ecological Restoration

Education

Water Quality

Community Water Monitoring Network

- 41 Sites in Neponset River Watershed
- Over 50 volunteers
- Monitor water quality
- Help to secure resources for water quality improvements

I-CHEM
Tuesday March 18
100% rec
copy pap

Nutrients

Dissolved Oxygen

pH

E. coli

X41 Sites

2021
Water Quality Results

neponset river
WATERSHED ASSOCIATION

Nutrients

Dissolved Oxygen

pH

E. coli

Nutrients Phosphorus

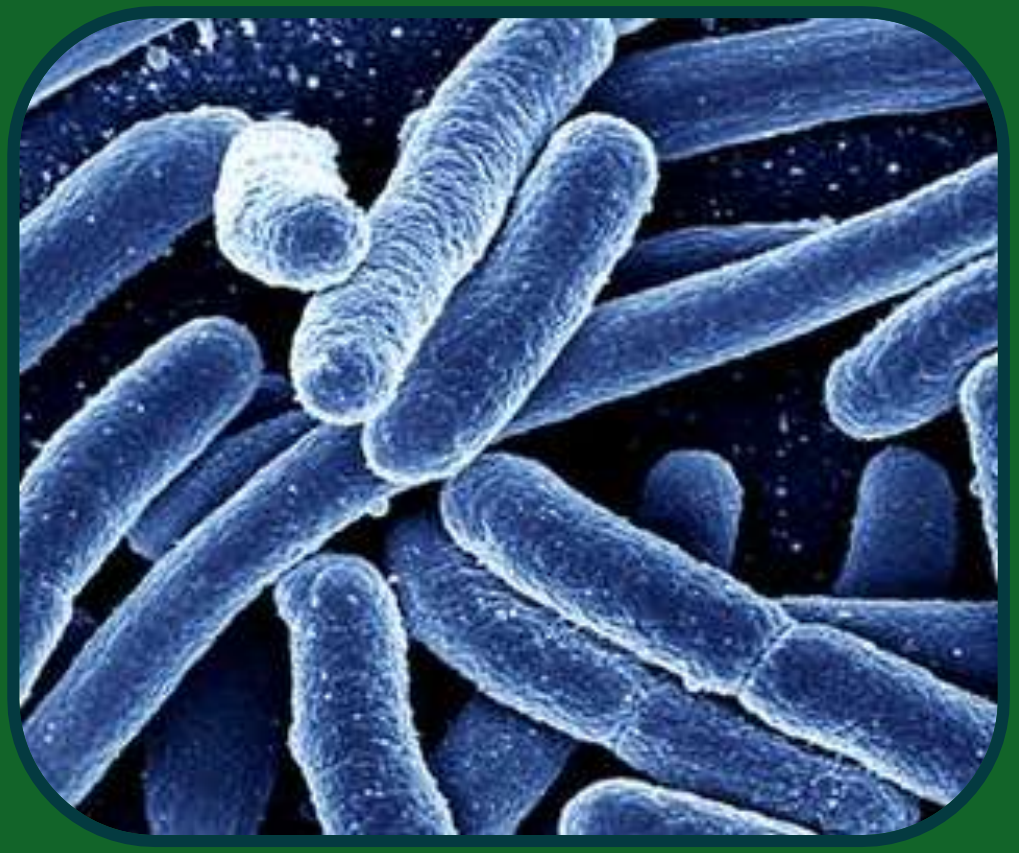
Dissolved Oxygen

pH

E. coli

Dissolved Oxygen

Phosphorus



E. coli

Community Water Monitoring Network

- 41 Sites in Neponset River Watershed
- Over 50 volunteers
- Monitor water quality
- Help to secure resources for water quality improvements

DO

Cold Water Fish

Warm Water Fish

Unhealthy

Phosphorus

Healthy

(Flowing water, Flowing into Pond, and Pond)

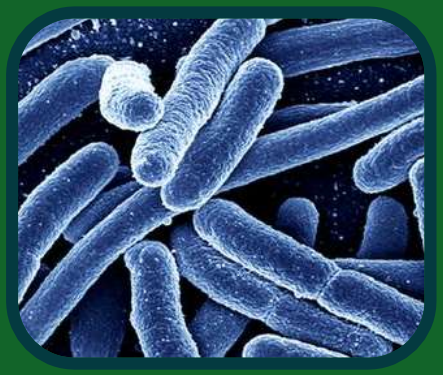
Unhealthy

E. coli

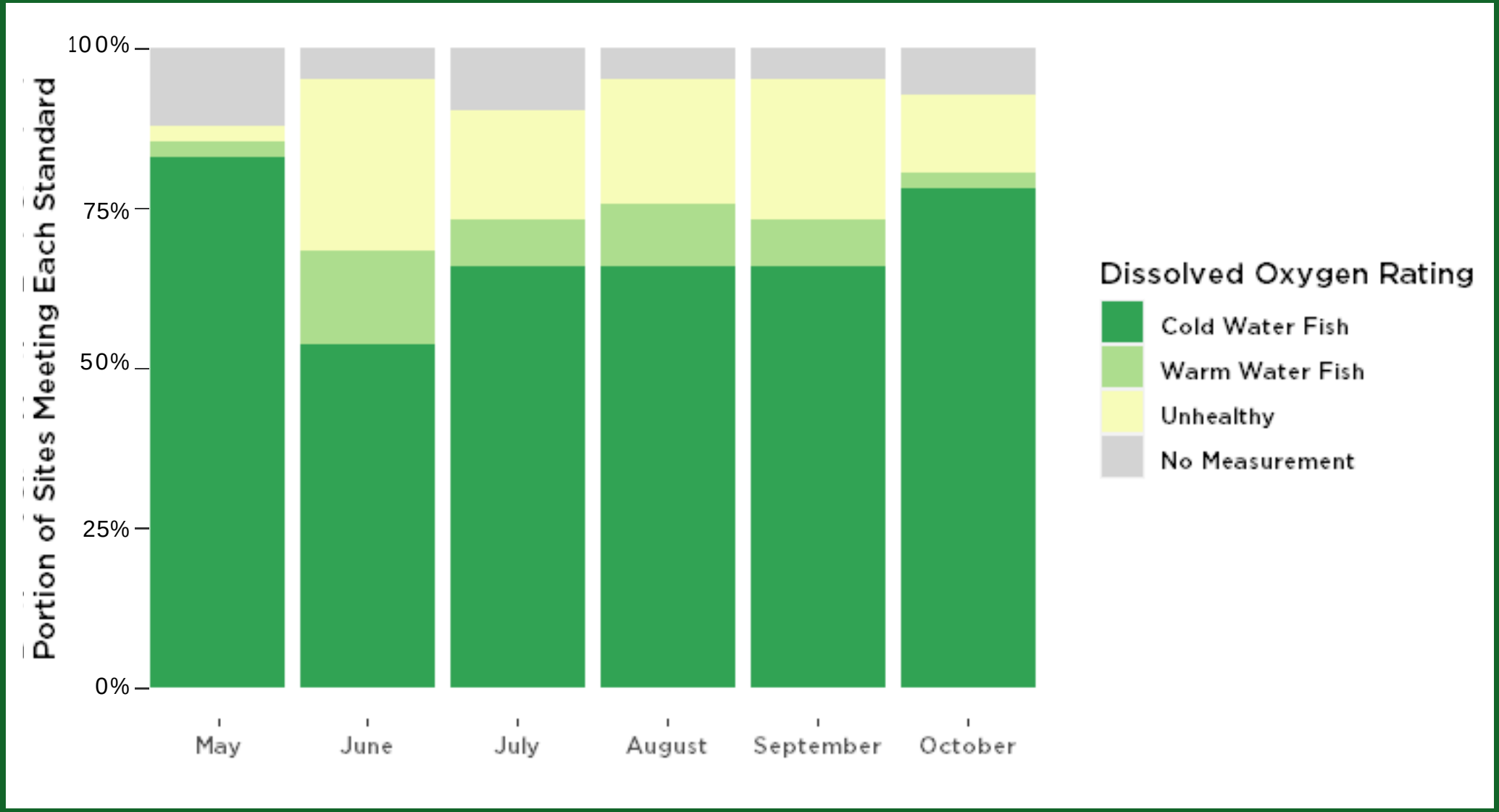
Safe for Swimming

Safe for Boating

Unsafe for Recreation



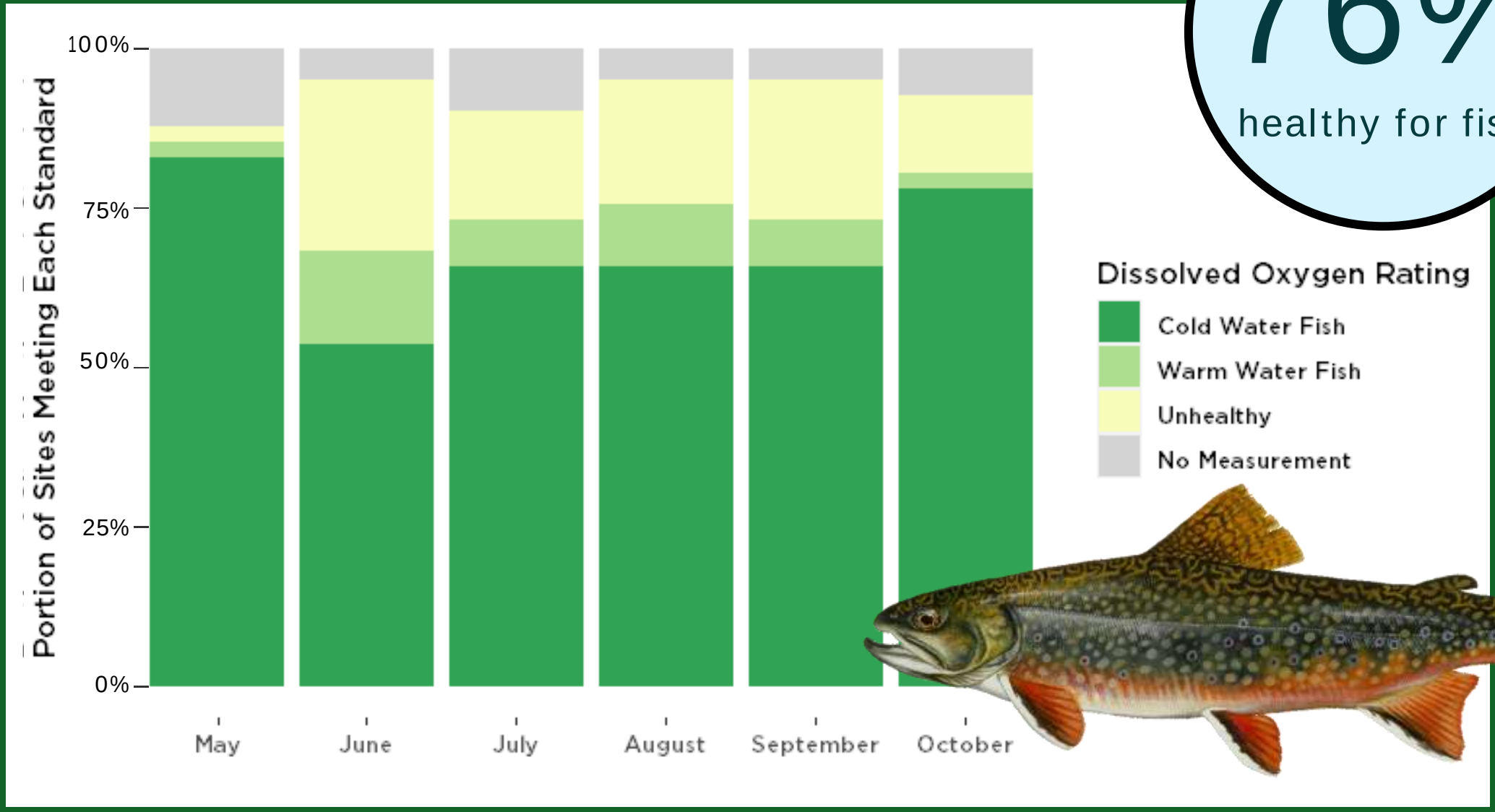
DO results

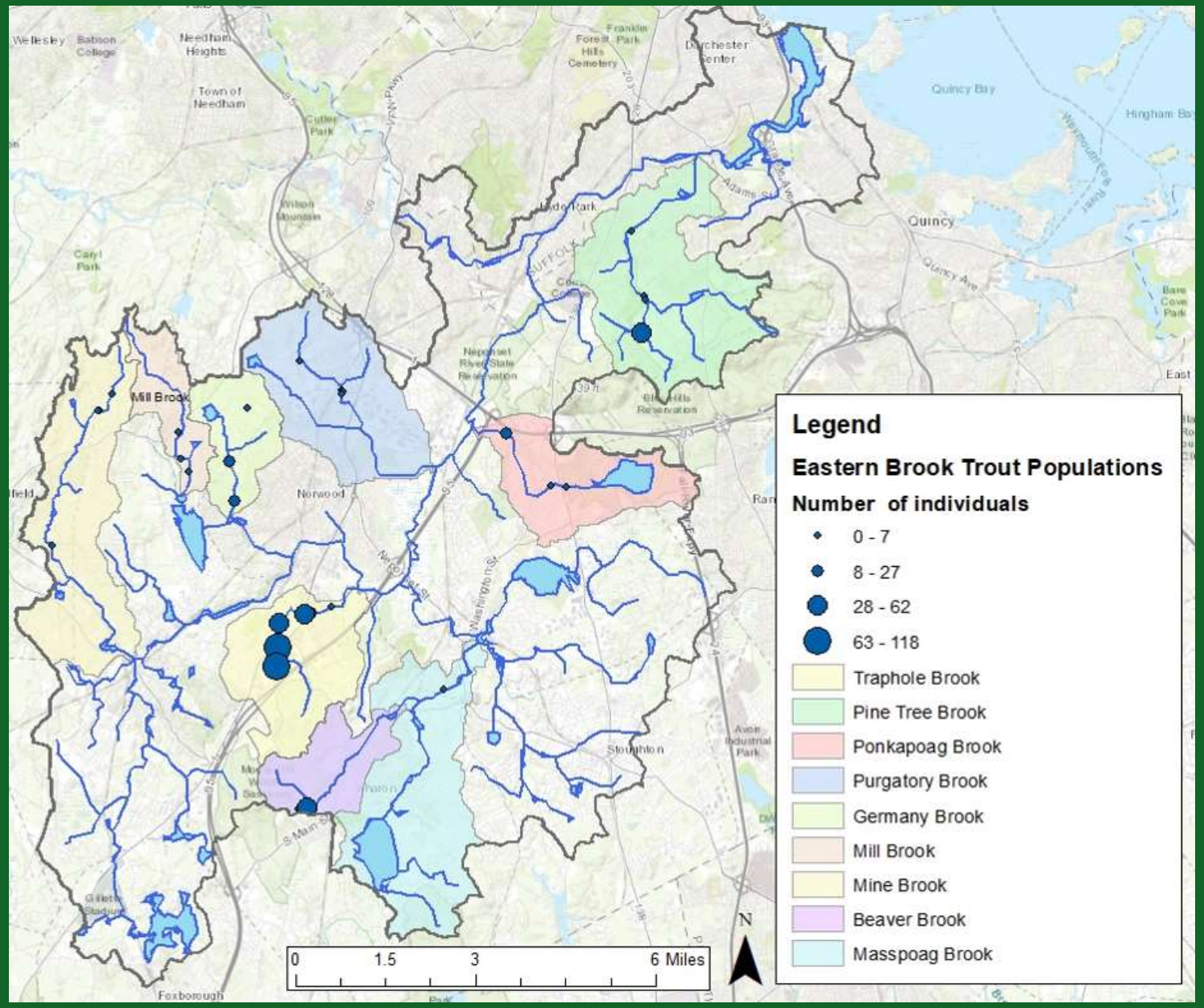

Portion of Sites Meeting Each Standard
100%
75%
50%
25%
0%
May
June
July
August
September
October
Dissolved Oxygen Rating
Cold Water Fish
Warm Water Fish
Unhealthy
No Measurement

DO results

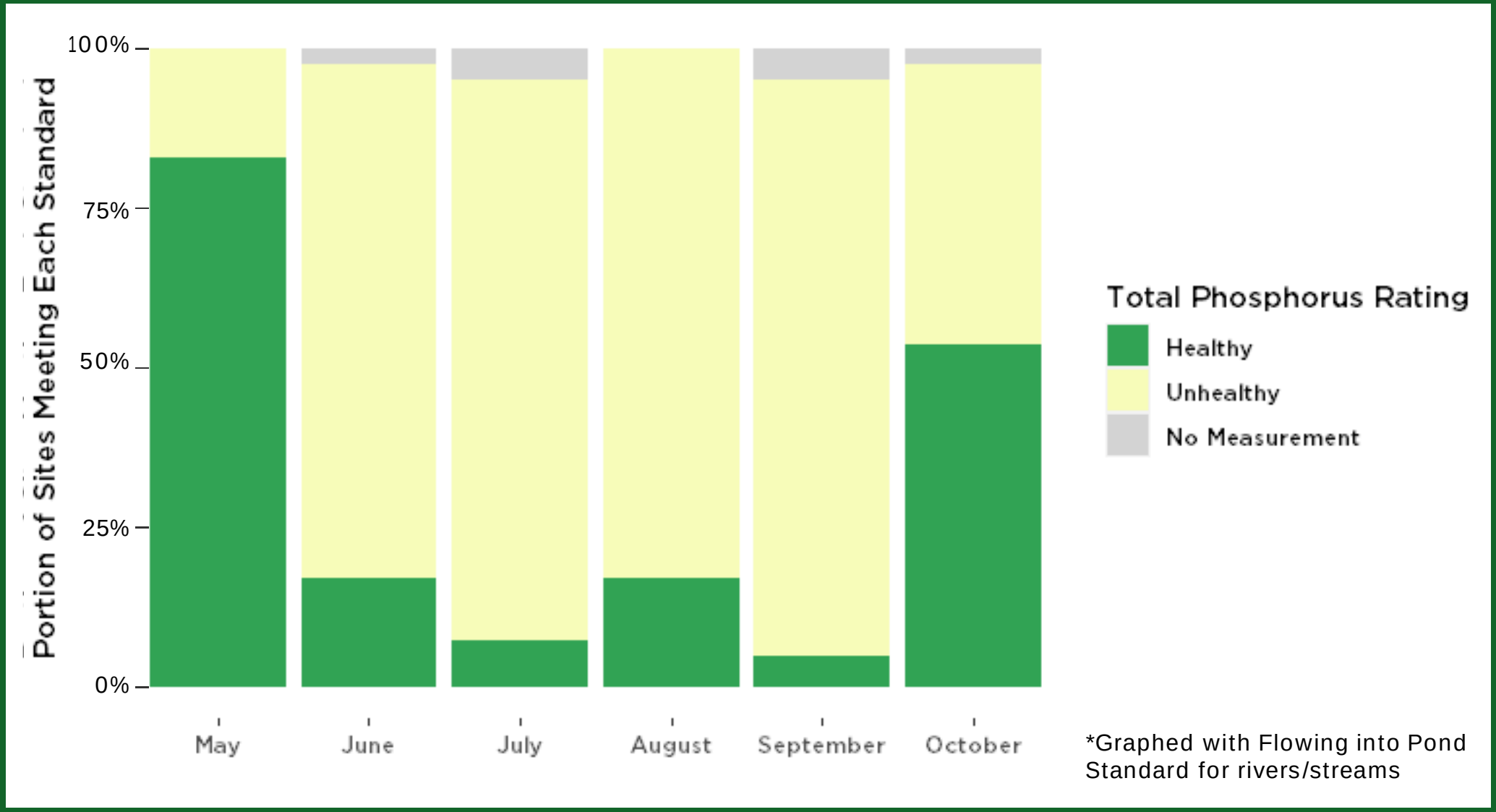
76%

healthy for fish



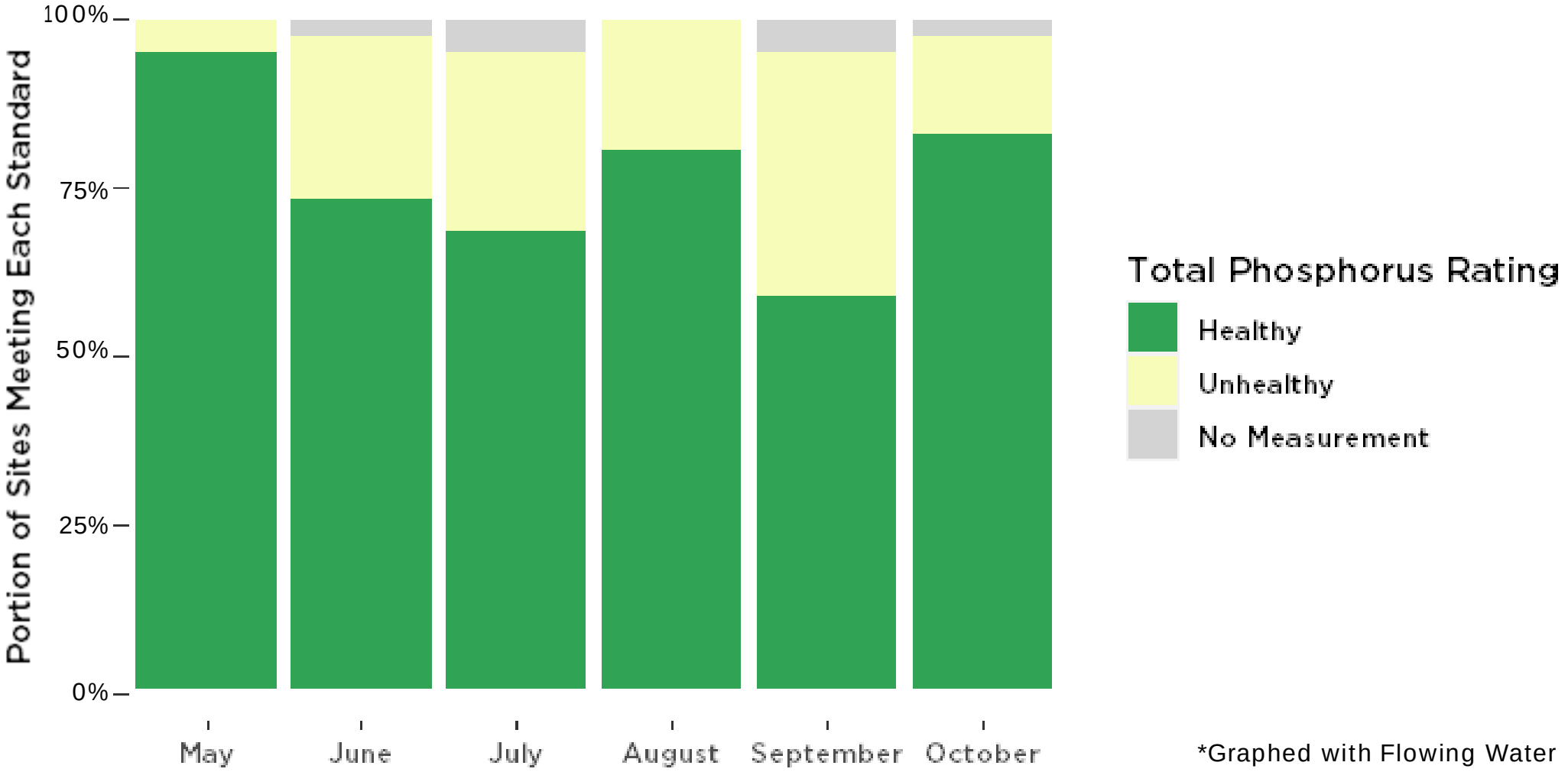

Legend
Eastern Brook Trout Populations
Number of individuals
0 - 7
8 - 27
28 - 62
63 - 118
Traphole Brook
Pine Tree Brook
Ponkapoag Brook
Purgatory Brook
Germany Brook
Mill Brook
Mine Brook
Beaver Brook
Masspoag Brook
0
1.5
3
6 Miles
N
Mill Brook
Norwood
Quincy
Quincy Bay
Stoughton
Foxborough

TP results



*Graphed with Flowing into Pond Standard for rivers/streams

TP results



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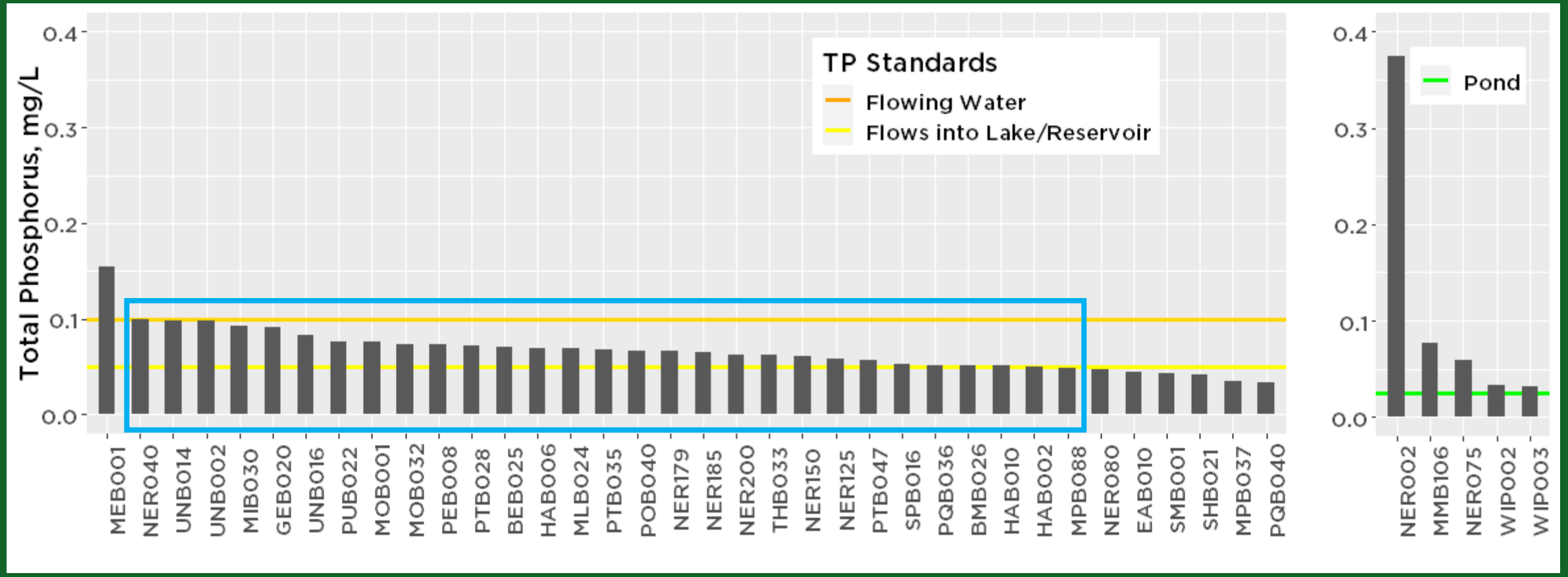
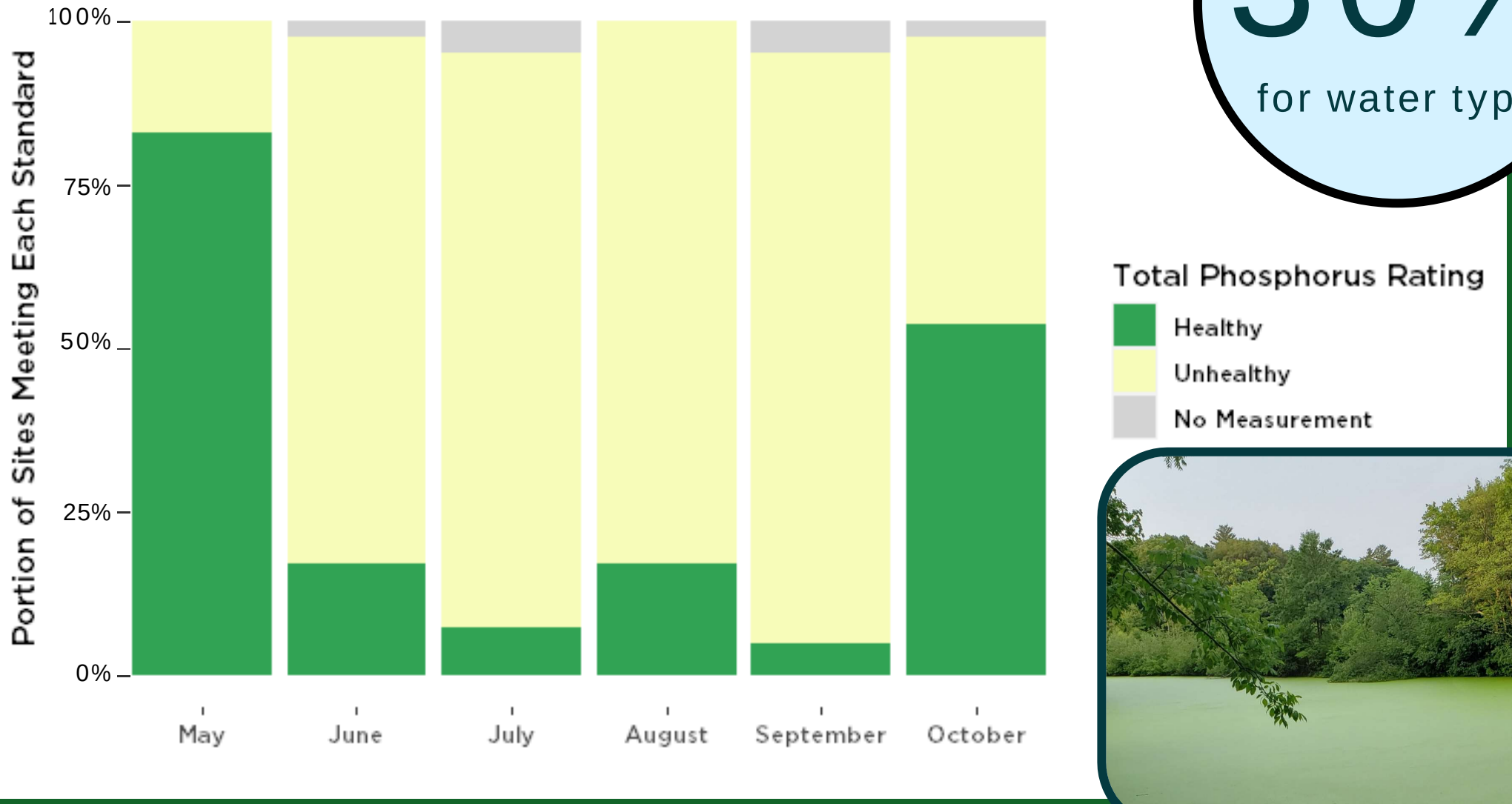
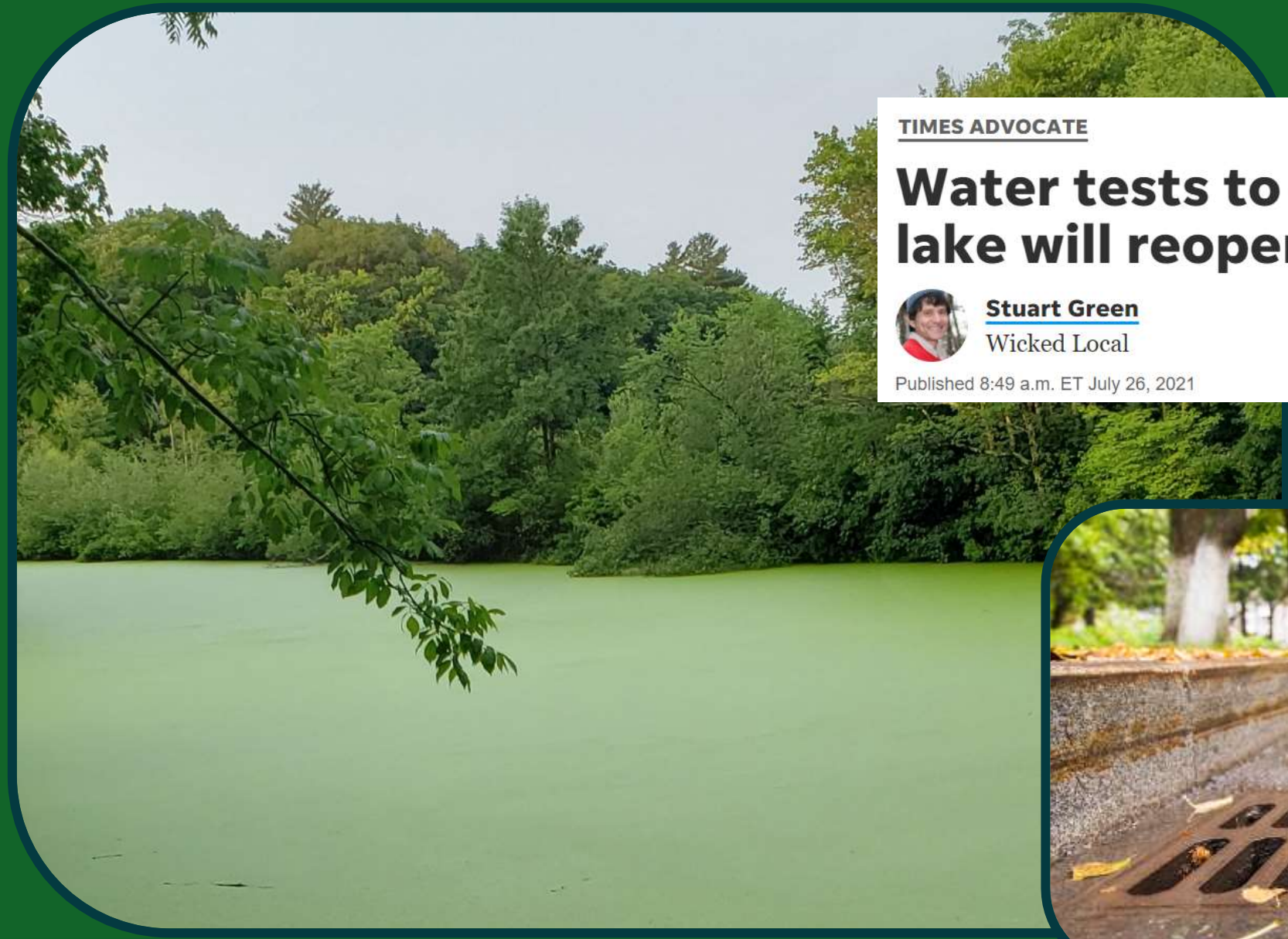

Total Phosphorus, mg/L
0.4
0.3
0.2
0.1
0.0
TP Standards
Flowing Water
Flows into Lake/Reservoir
MEB001
NER040
UNB014
UNB002
MIB030
GEB020
UNB016
PUB022
MOB001
MOB032
PEB008
PTB028
BEB025
HAB006
MLB024
PTB035
POB040
NER179
NER185
NER200
THB033
NER150
NER125
PTB047
SPB016
PQB036
BMB026
HAB010
HAB002
MPB088
NER080
EAB010
SMB001
SHB021
MPB037
PQB040
Pond
NER002
MMB106
NER075
WIP002
WIP003

TP results

30%

for water type





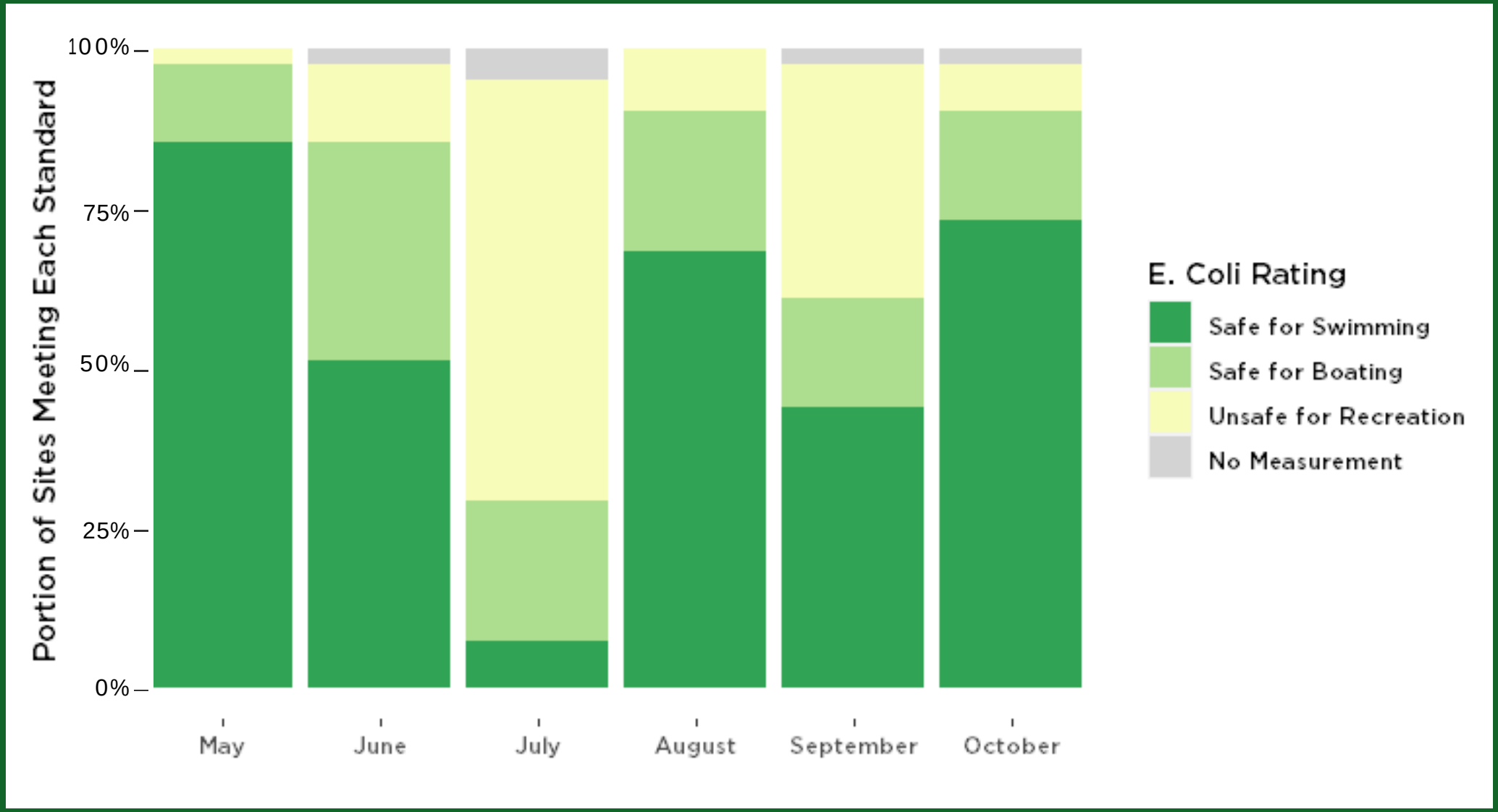
TIMES ADVOCATE

Water tests to determine if Sharon lake will reopen

Stuart Green
Wicked Local

Published 8:49 a.m. ET July 26, 2021

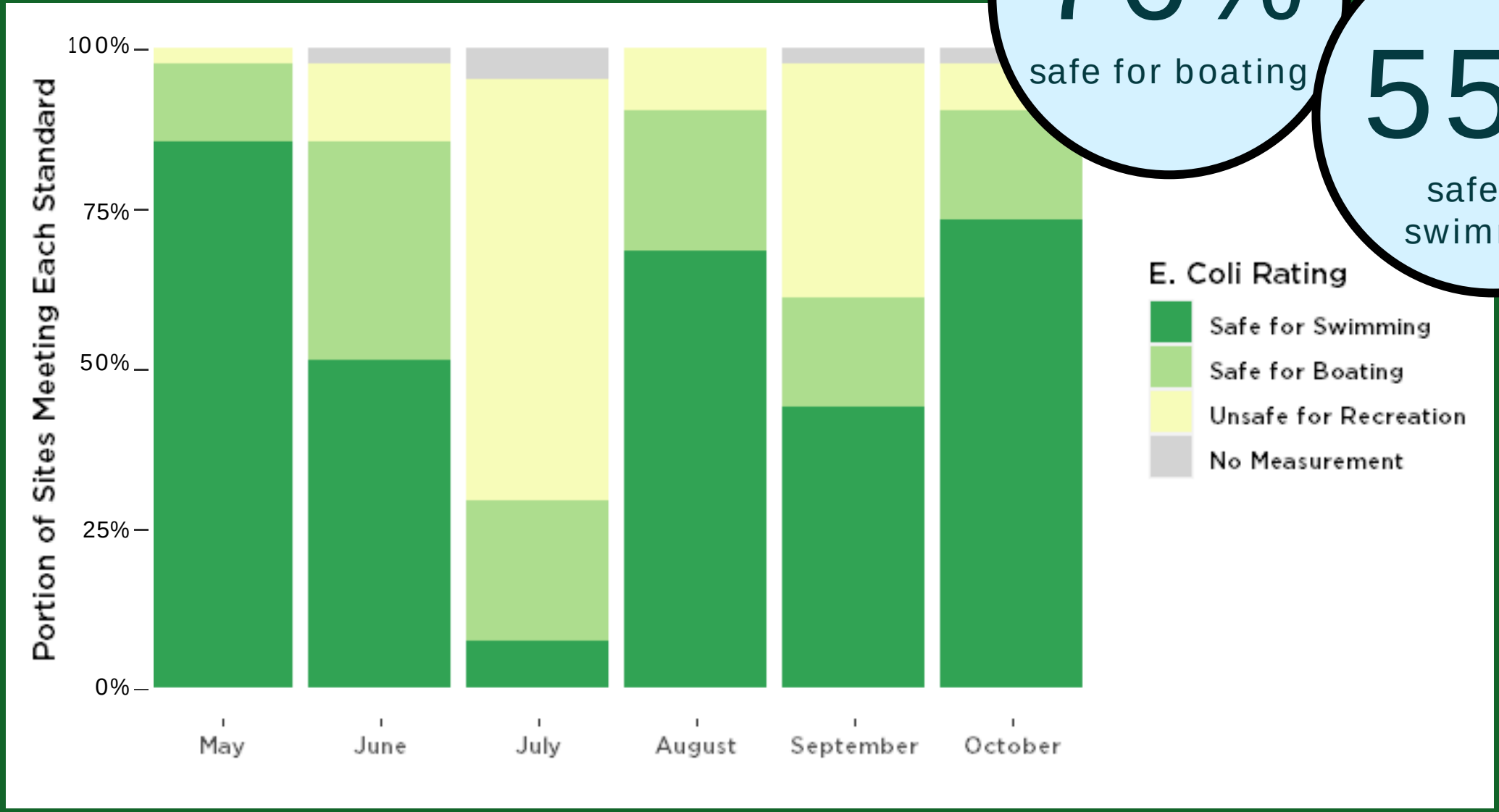
E. Coli results



E. Coli results

76%
safe for boating

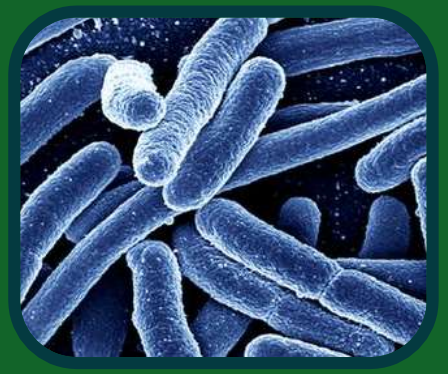
55%
safe for swimming



DO

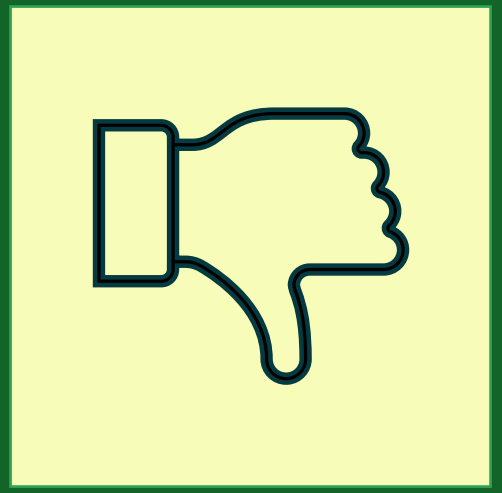
Phosphorus

E. coli



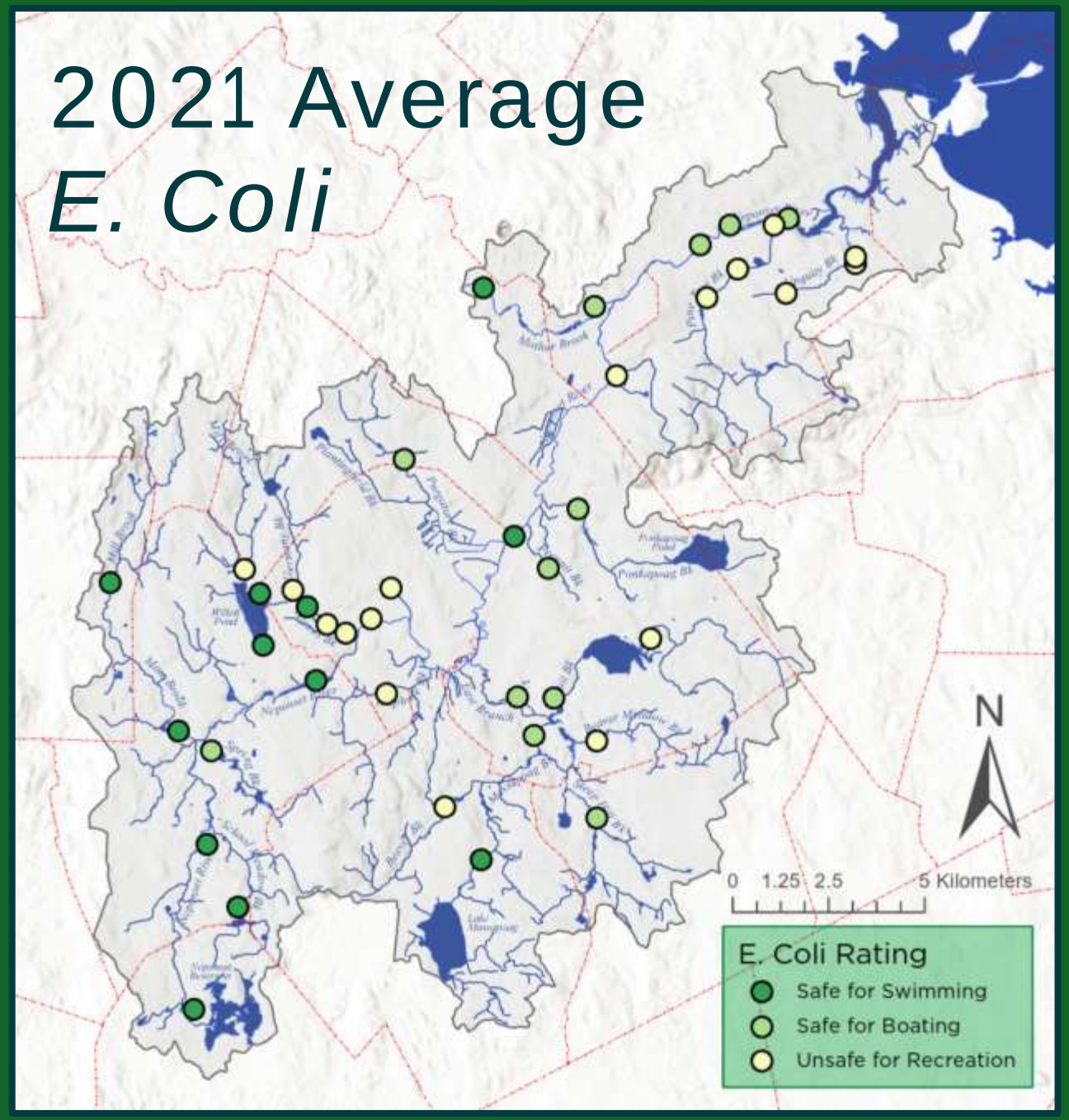
DO

Phosphorus



E. coli

But context is important!!



E. Coli levels vary by location

- Population
- Impervious surface cover
- Town resources to fix sewer issues

Rain, rain, and more rain!

MENU BOSTON.com

DAILY COVID #S · CHARTS · HALL OF FAME · TOP RESTAURANTS

Updated: The remnants of Ida arrive bringing heavy rains, flood threats to the region

Here's more from meteorologists on what to expect from the remnants Ida.

Lane Turner / The Boston Globe, File

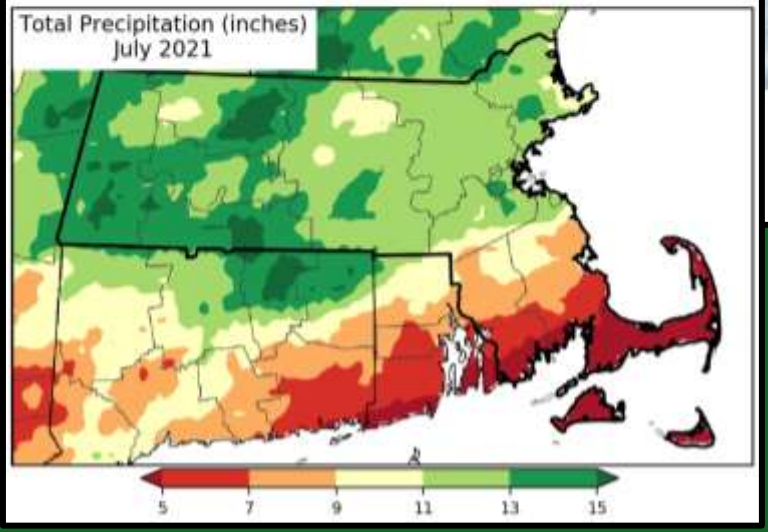
By Arianna MacNeill and Jack Pickell
updated on September 1, 2021

MASS LIVE Subscribe Sign in

Weather

July 2021 is officially the wettest Massachusetts July in history, breaking previous record by 1.34 inches

Updated Aug. 06, 2021, 11:59 a.m. | Published Aug. 06, 2021, 11:59 a.m.



CBS Boston MENU NEWS WEATHER 40°

Rain Totals For Boston Area In 2021 Have Already Passed 2020 With Four Months To Go

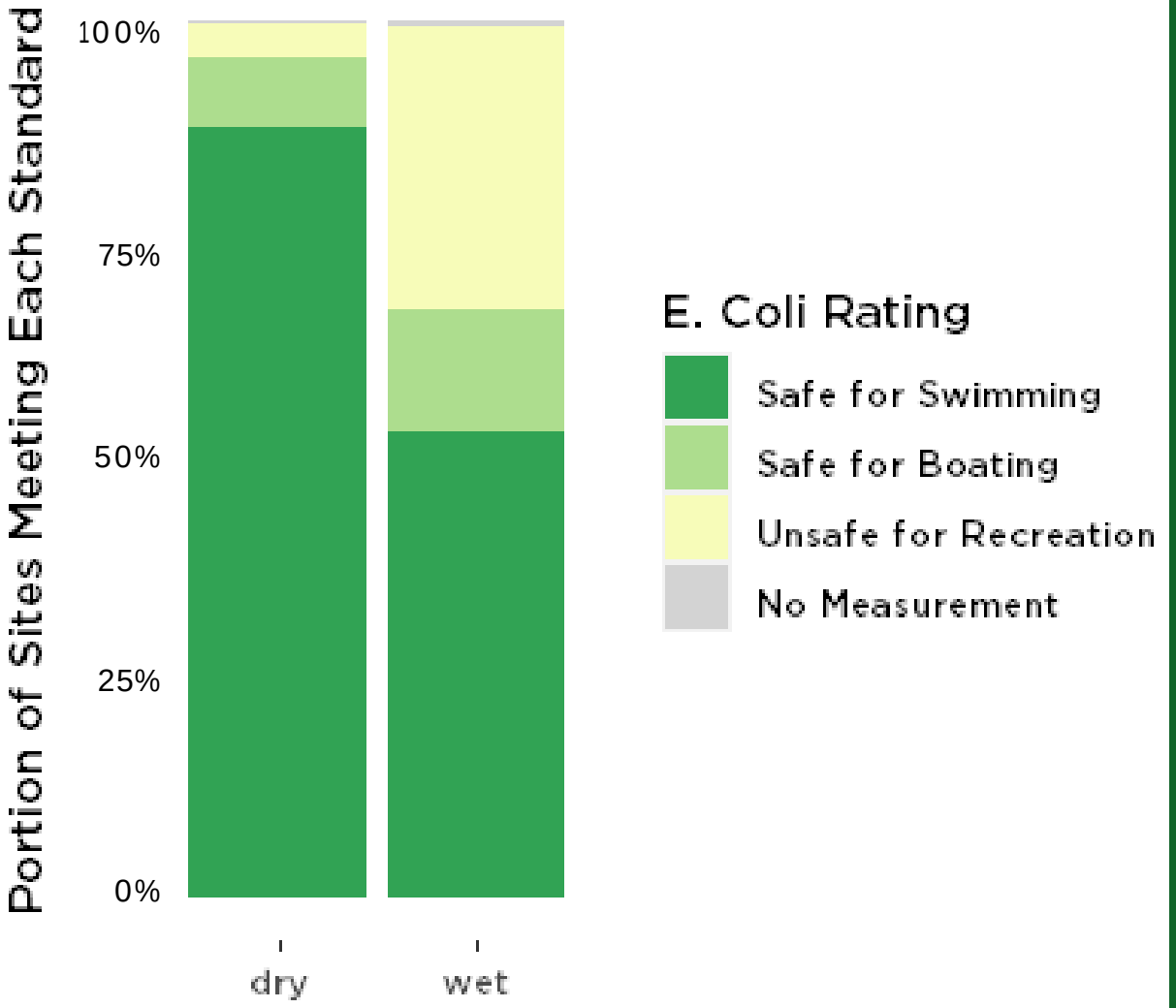
y Eliasen, Meteorologist, WBZ-TV Exec. Weather Producer

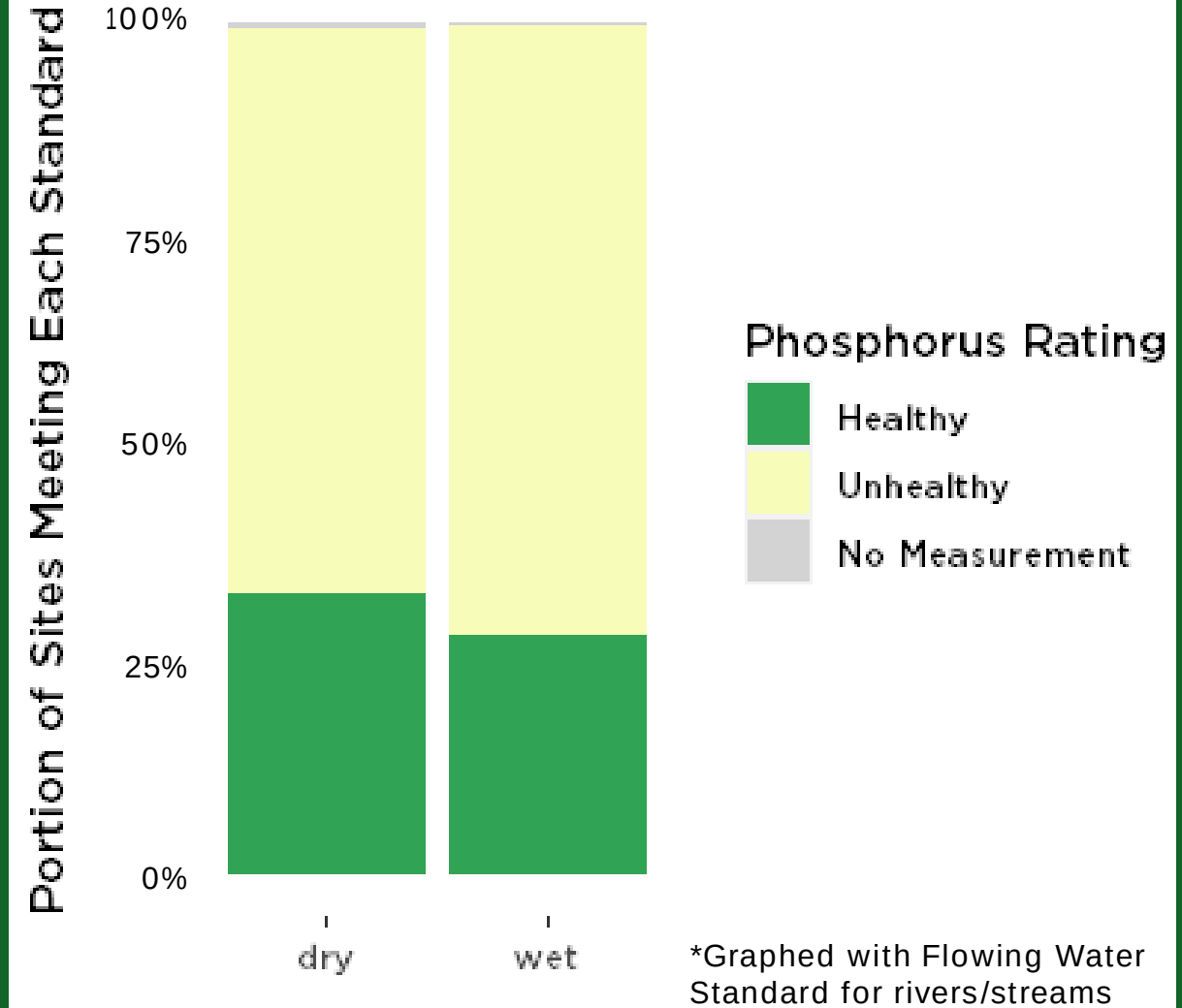
r 2, 2021 at 1:52 pm Filed Under: Beyond The Forecast, Boston News

1 US WEATHER MAPS
2 NATIONAL WEATHER SERVICE FORECAST
3 WIRELESS WEATHER SYSTEM
4 WIRELESS WEATHER FORECASTER
5 LIVE WEATHER SATELLITES
6 DOOR WEATHER SEAL
7 ASTHMA WEATHER FORECAST

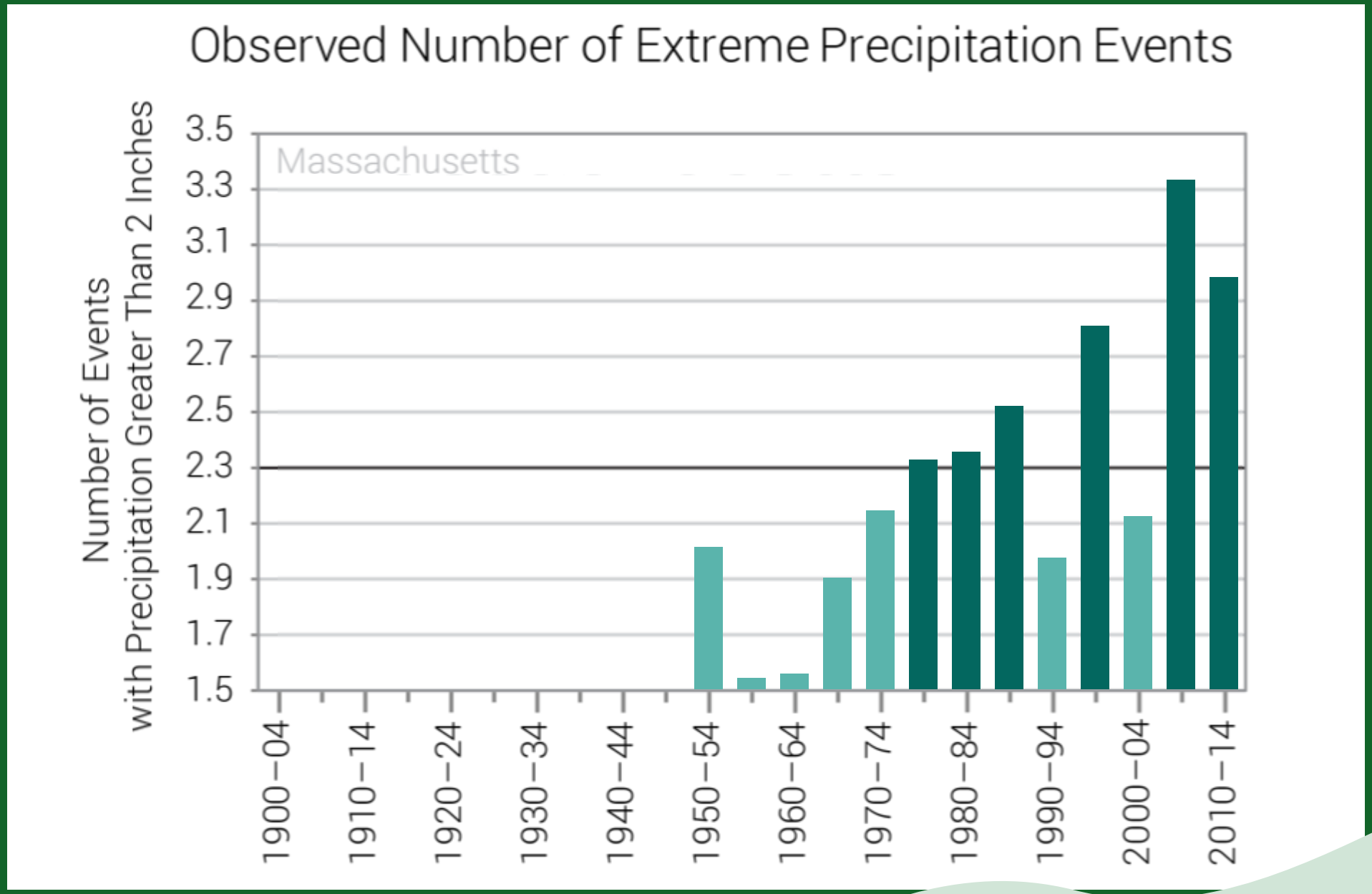
BOSTON (CBS) – Since the start of July, we have had four tropical systems, five tornadoes (and counting) and more than 21 inches of rain in Boston (already the second most for July-August-September on record)

EC and TP by dry and wet events





*Graphed with Flowing Water Standard for rivers/streams



https://statesummaries.ncics.org/chapter/ma/

Into the future!!
neponset river
WATERSHED ASSOCIATION

CWMN Plans

- Adding/moving sites
- Continuous data
- Follow-up on hotspot monitoring

Stoughton BMP

This infiltration basin allows stormwater to gather and infiltrate into the ground.

Mill Pond Dam Removal

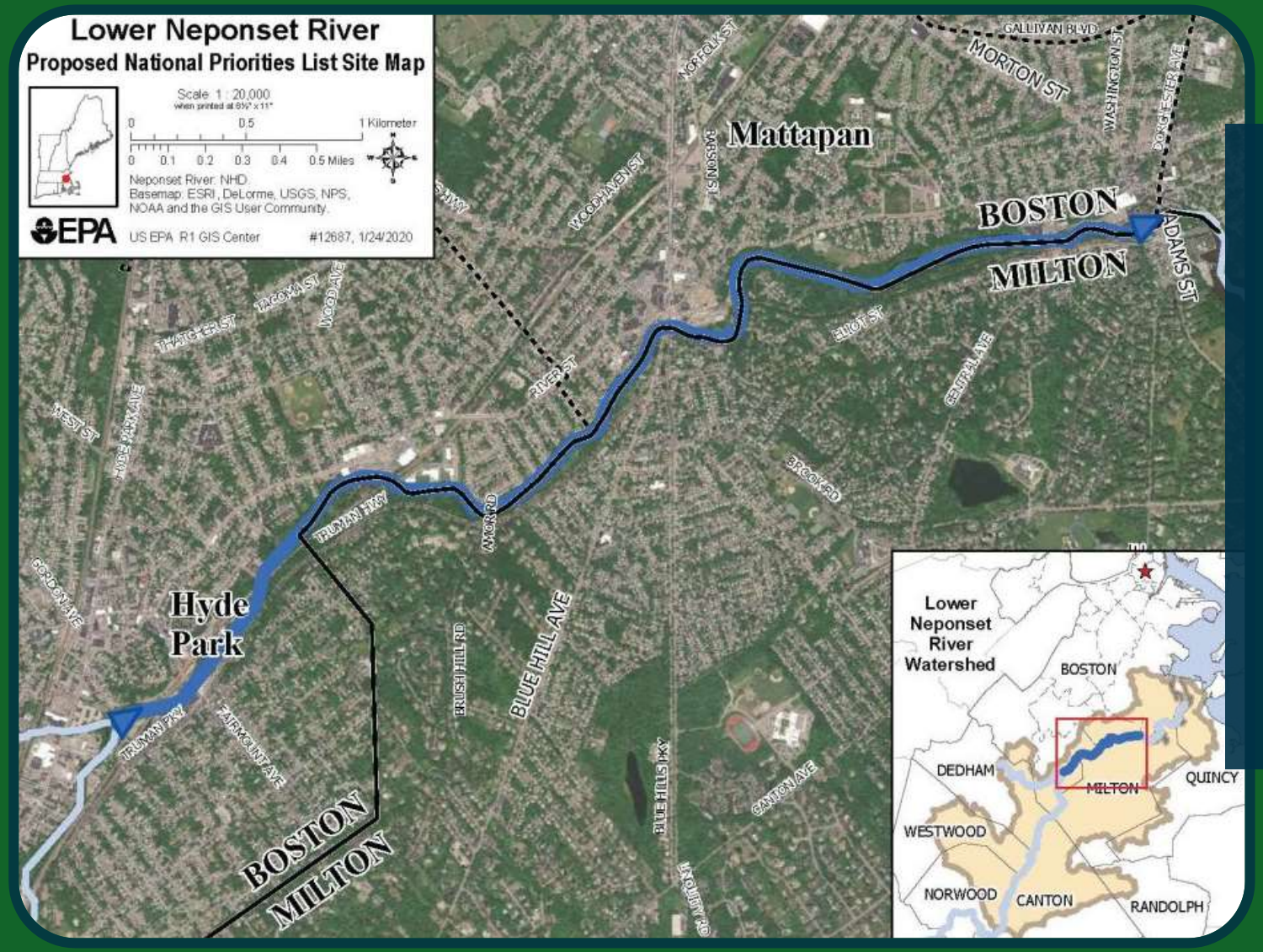
The Mill Pond dam is being removed from Traphole Brook.

Mill Pond Dam Removal

The Mill Pond dam is being removed from Traphole Brook.

Crackrock Pond

Study on feasibility of removing the dam at Crackrock Pond.



Proposed Superfund Site

3.7 miles of the Neponset River is being proposed for the National Priorities List.

CWMN Volunteers

The 2022 sampling season is approaching. Be on the lookout for more information in your email.

PC: Suzanna Sullivan, Sterling Worrell, Declan Devine and more!

Questions?

Reach Meghan Slocombe via email at slocombe@neponset.org

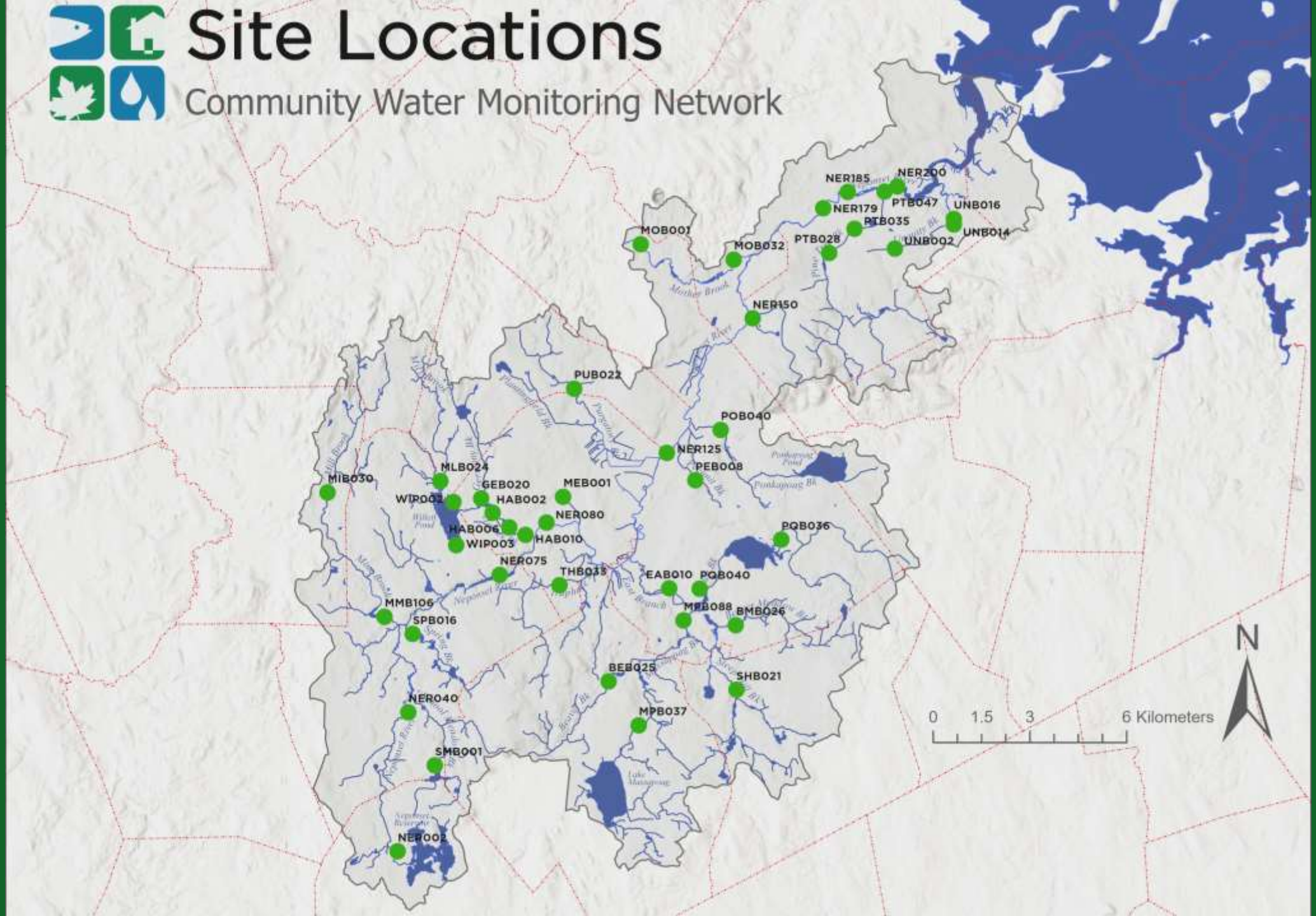
neponset river
WATERSHED ASSOCIATION

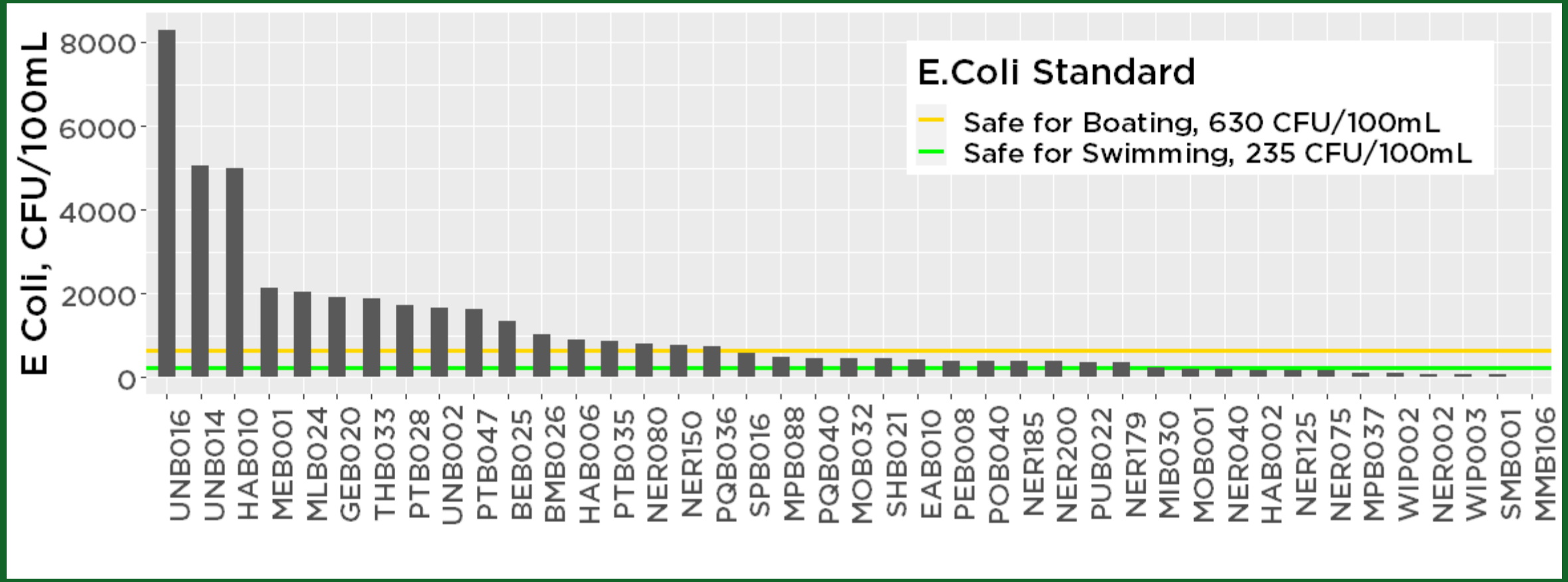
Sean McCanty

neponset river
WATERSHED ASSOCIATION

Site Locations

Community Water Monitoring Network




E Coli, CFU/100mL
8000
6000
4000
2000
0
E.Coli Standard
Safe for Boating, 630 CFU/100mL
Safe for Swimming, 235 CFU/100mL
UNB016
UNB014
HAB010
MEB001
MLB024
GEB020
THB033
PTB028
UNB002
PTB047
BEB025
BMB026
HAB006
PTB035
NER080
NER150
PQB036
SPB016
MPB088
PQB040
MOB032
SHB021
EAB010
PEB008
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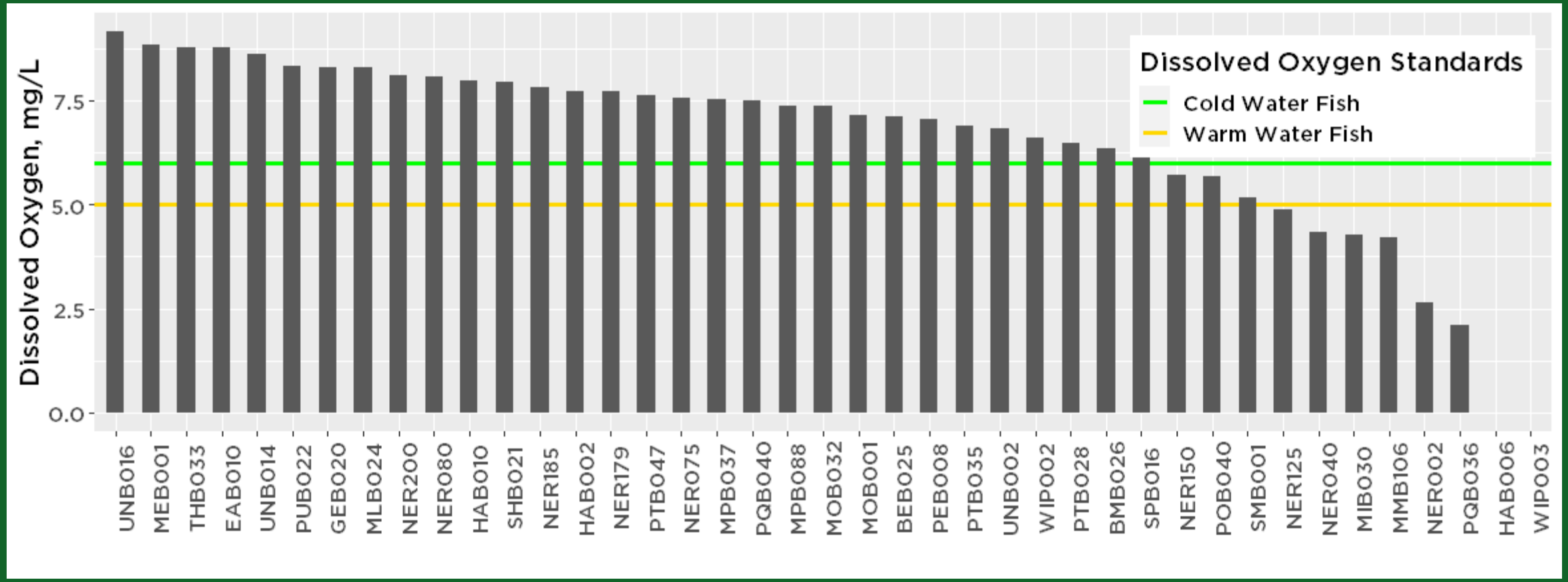
PUB022
NER179
MIB030
MOB001
NER040
HAB002
NER125
NER075
MPB037
WIP002
NER002
WIP003
SMB001
MMB106


Dissolved Oxygen, mg/L
7.5
5.0
2.5
0.0
Dissolved Oxygen Standards
Cold Water Fish
Warm Water Fish
UNB016
MEB001
THB033
EAB010
UNB014
PUB022
GEB020
MLB024
NER200
NER080
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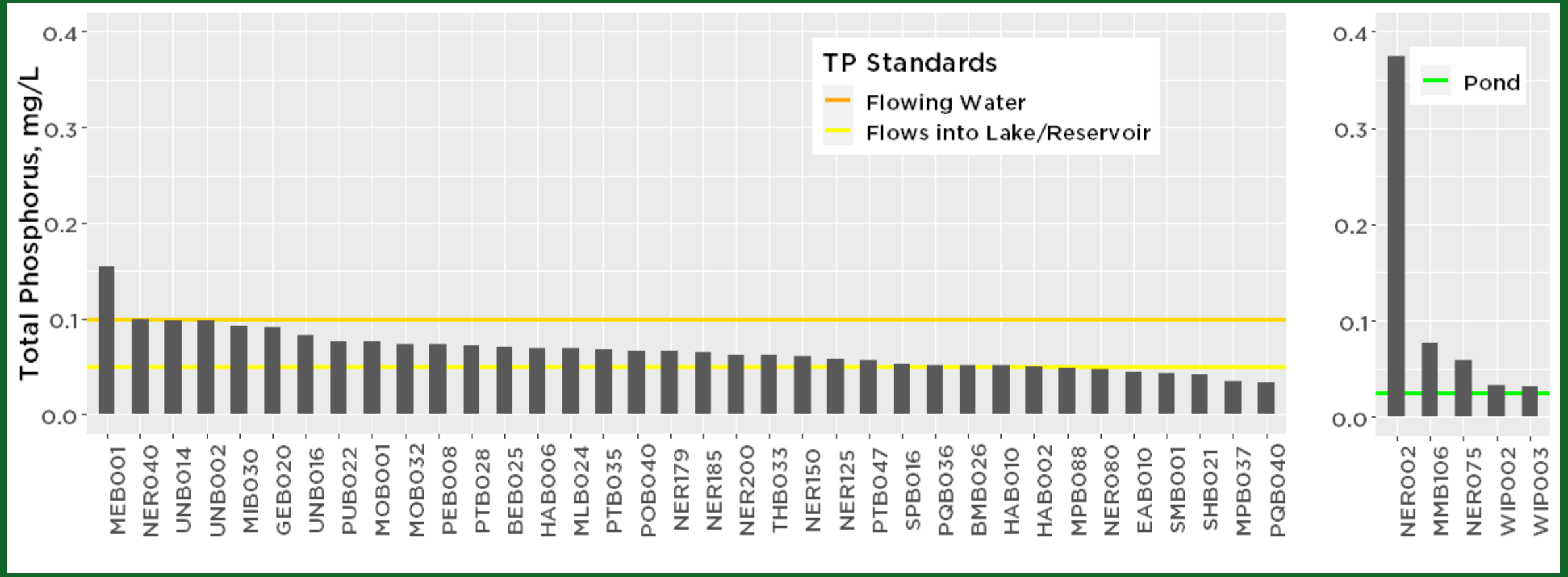
WIP003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