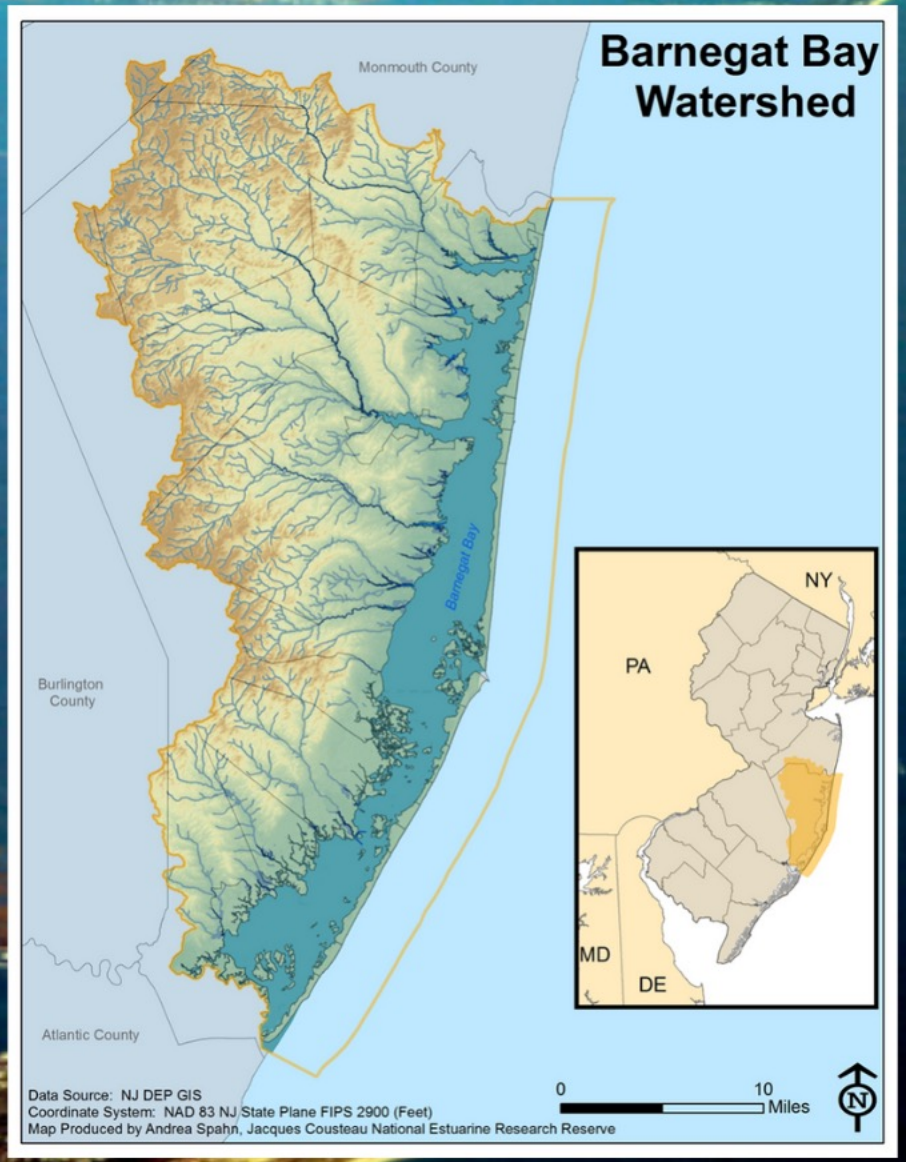

CLEAN OCEAN ACTION
SAVE BARNEGAT BAY
MATES · OCVTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NEW JERSEY
Rally for Barnegat Bay
Project Update

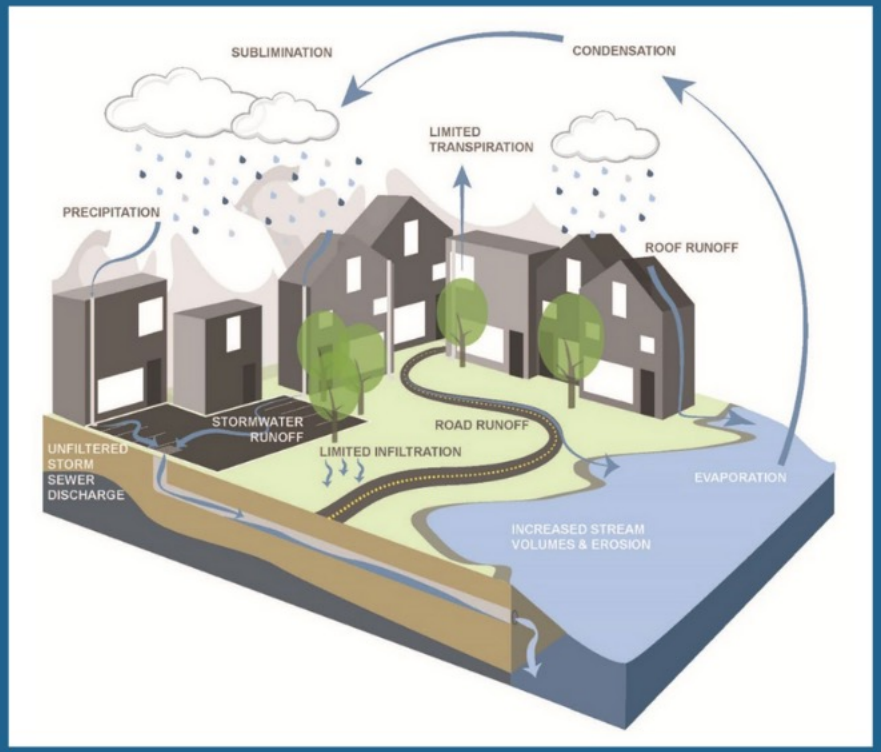

Rally for Barnegat Bay

Image Source: New Jersey Yards

WATERSHED: LAND AREA THAT DRAINS INTO A COMMON BODY OF WATER

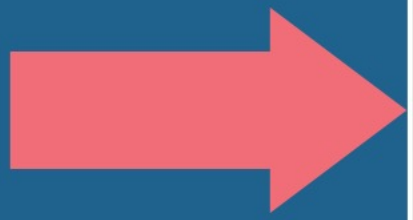


Non-point source pollution, stormwater runoff, and upstream human activities contribute to the **routine decline in water quality** in the Barnegat Bay watershed.



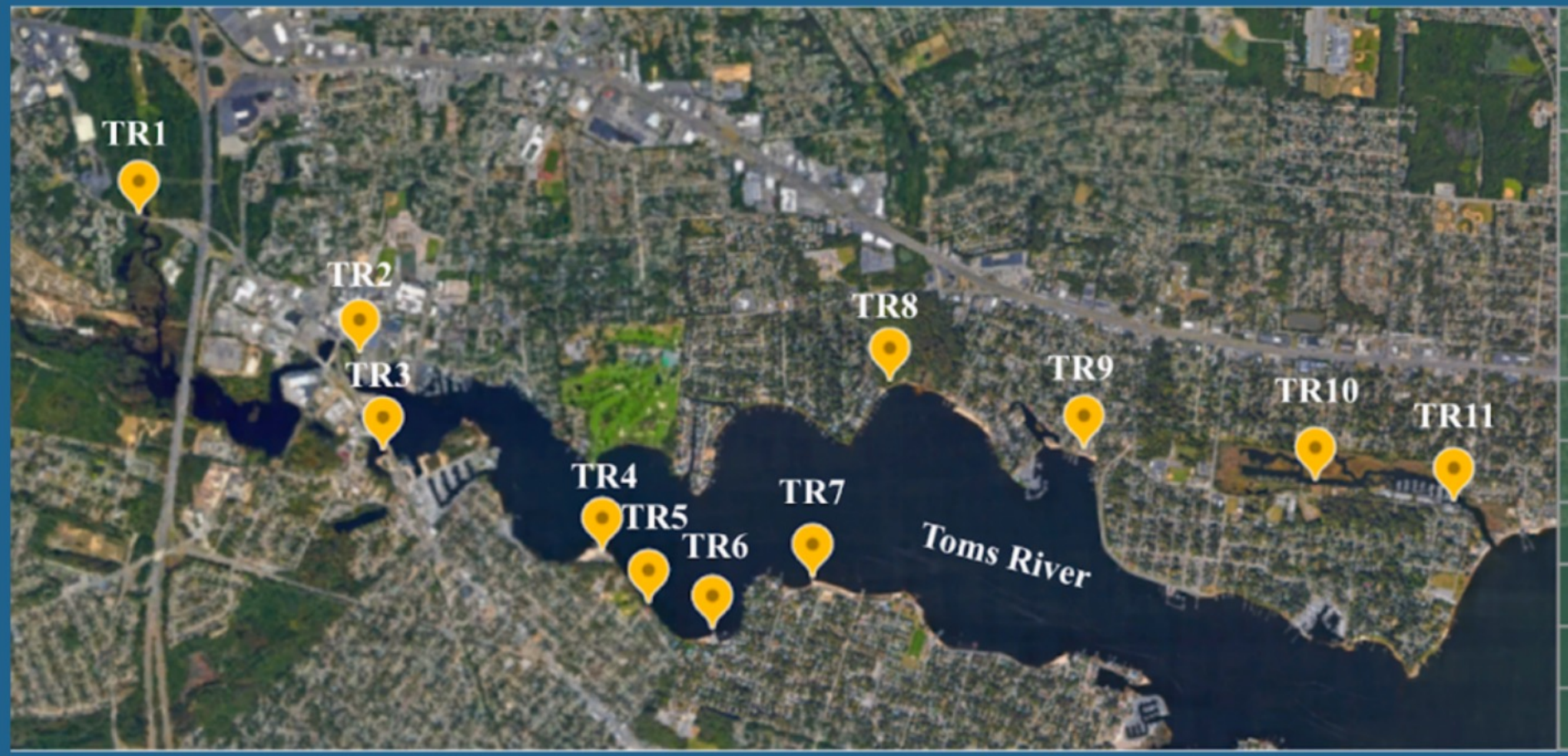
Nonpoint source pollution: diffuse contamination (or pollution) of water or air that does not originate from a single discrete source.

Many areas within the watershed that do not meet the designated use assessment. The Toms River Estuary which does not support: general aquatic life, recreation, shellfish and fish consumption. **These waters also routinely do not meet the standards for bacteria quality for recreational use**.



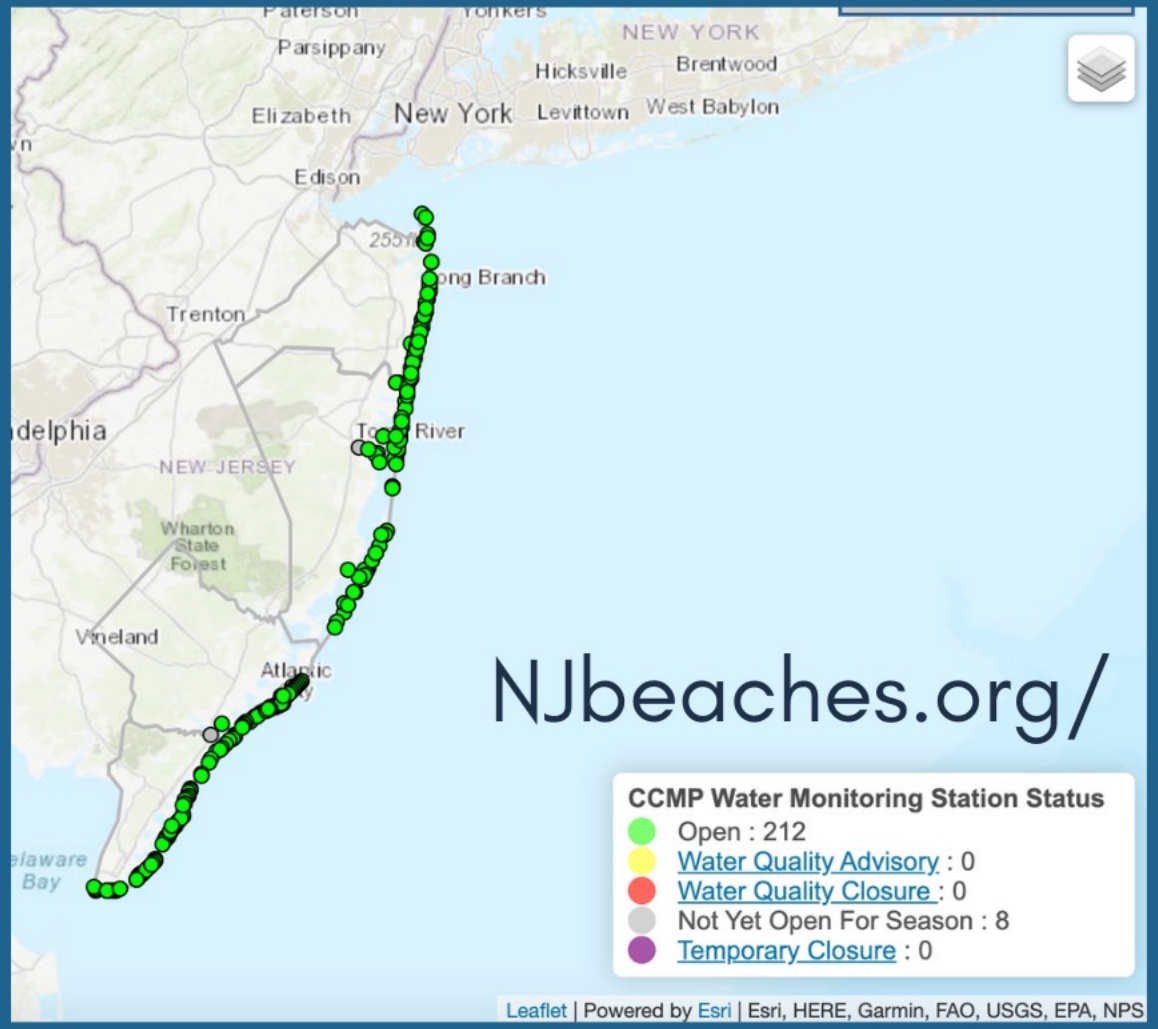
Assessment Unit Number	Assessment Unit Name	Aquatic Life - General	Recreation	Shellfish	Fish Consumption
Barnegat Bay 01	Point Pleasant Canal and Bay Head Harbor	Insufficient Data	Insufficient Data	Not Supporting	Insufficient Data
Barnegat Bay 02	Metedeconk R Estuary	Insufficient Data	Not Supporting	Not Supporting	Insufficient Data
Barnegat Bay 03	Metedeconk and Lower Tribs - Bay	Not Supporting	Fully Supporting	Not Supporting	Insufficient Data
Barnegat Bay 04	Toms R Estuary	Not Supporting	Not Supporting	Not Supporting	Not Supporting
Barnegat Bay 05	Barnegat Bay Central West	Not Supporting	Fully Supporting	Fully Supporting	Insufficient Data
Barnegat Bay 06	Barnegat Bay Central East	Insufficient Data	Fully Supporting	Fully Supporting	Insufficient Data
Barnegat Bay 07	Barnegat Bay Central Bottom	Insufficient Data	Fully Supporting	Fully Supporting	Insufficient Data
Barnegat Bay 08	Manahawkan Bay and Upper Little Egg Harbor	Not Supporting	Fully Supporting	Fully Supporting	Insufficient Data
Barnegat Bay 09	Lower Little Egg Harbor Bay	Not Supporting	Fully Supporting	Fully Supporting	Insufficient Data

Municipal Roundtable of River Towns: Toms River, South Toms River, Ocean Gate, Island Heights, Pine Beach, and Beachwood

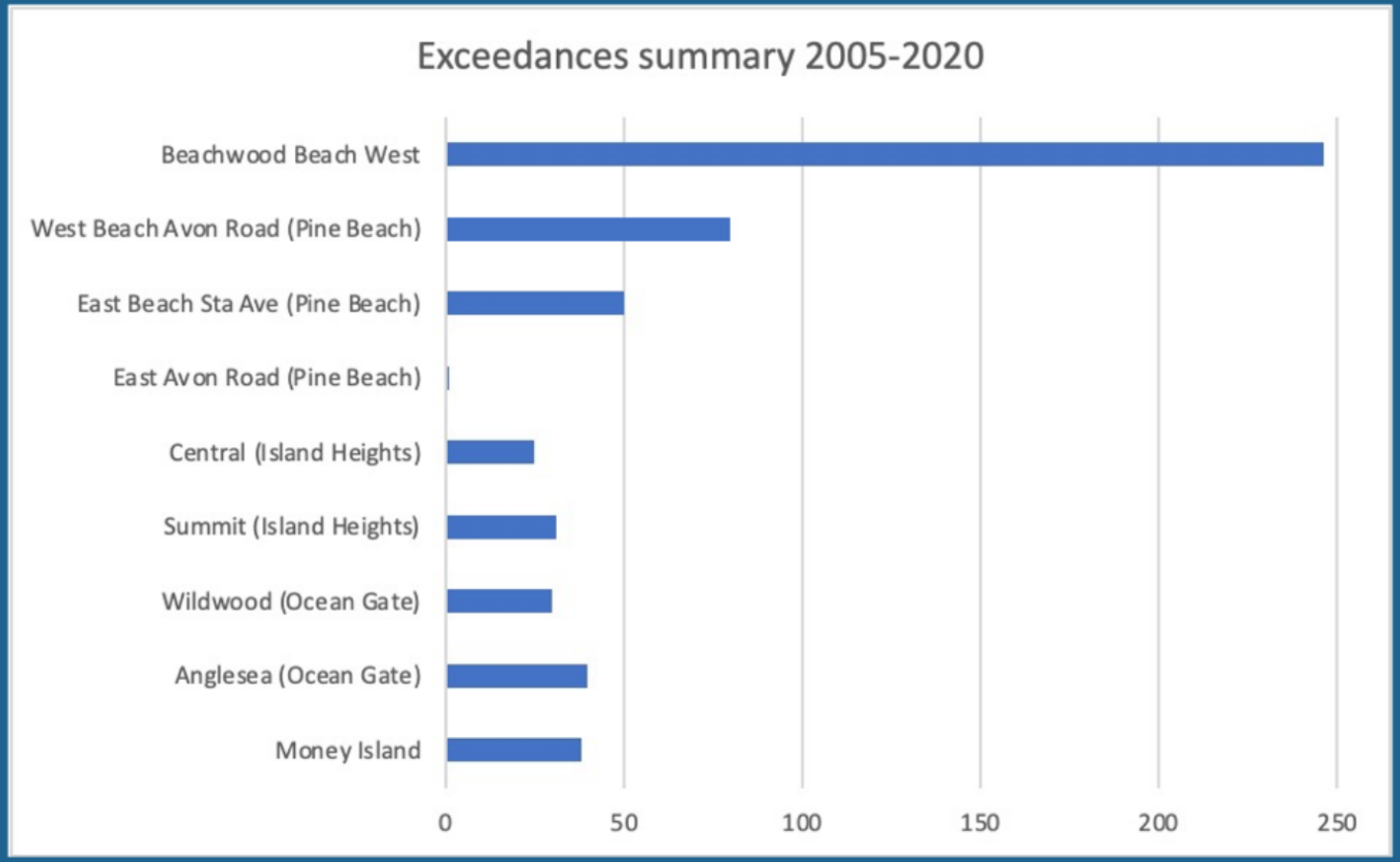


Site	Location
TR1	Lakehurst Road
TR2	Huddy Park
TR3	Jakes Branch
TR4	Beachwood Beach
TR5	Harpoon Beachwood
TR6	Windy Cove Pine Beach
TR7	Avon Road Pine Beach
TR8	SBB Waterfront
TR9	Money Island Riviera
TR10	Dillon's Creek
TR11	Dillon's Creek Marina

Beach Closure Data



Weekly updates with NJDEP data on COA social media
Instagram: @CleanOceanAction
Facebook: www.facebook.com/CleanOceanAction Twitter: www.twitter.com/CleanOcean


Exceedances summary 2005-2020
Beachwood Beach West
West Beach Avon Road (Pine Beach)
East Beach Sta Ave (Pine Beach)
East Avon Road (Pine Beach)
Central (Island Heights)
Summit (Island Heights)
Wildwood (Ocean Gate)
Anglesea (Ocean Gate)
Money Island
0
50
100
150
200
250

OBJECTIVE ONE: ESTABLISHING THE FRAMEWORK FOR SUCCESS

Timeline: November 2020-ongoing

Outcomes:

- Compiled summary report on water quality in the Toms River
- Established strategy for source trackdown investigation
- Submitted Quality Assurance Project Plan (QAPP) to NJDEP for approval
- Engaged municipal leaders and established Municipal Round Table
- Public outreach and engagement

OBJECTIVE TWO: TRACK DOWN SOURCES OF SANITARY SEWAGE

Timeline: August 2021-ongoing

Tasks and Anticipated Outcomes:

- Engage screening methods, canine field investigations, and analytical verification to identify potential sources of human sanitary sewage
- Results shared in December 2021
  - Outcome: Prioritized list of "hot spot" areas for further investigation and monitoring

We are here!

Conduct monitoring of hot spots for fecal indicator bacteria and water quality conditions

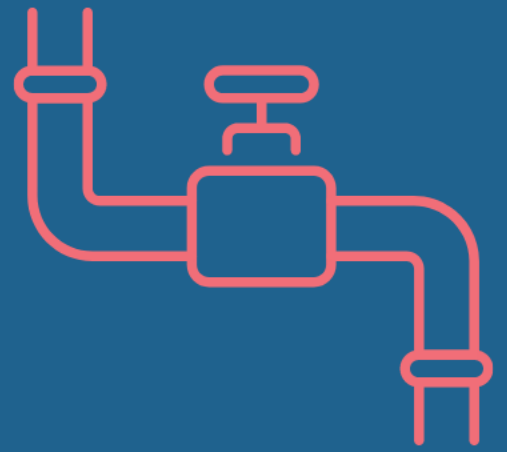
- Conducted by COA, MATES, and trained citizen scientists
- Outcome: Better understanding of variables influencing bacteria levels at hot spot areas

Collaborate with municipalities to investigate infrastructure in hot spot areas

- Funding available: $60,000 total; $10,000 for each town
- Outcome: Causes of sanitary sewage sources identified

OBJECTIVE THREE: ELIMINATION OF SANITARY SEWAGE SOURCES THROUGH MINI-GRANTS

Timeline: January 2022-ongoing



Tasks and Anticipated Outcomes

- Provide mini-grants to municipalities for elimination of sanitary sewage sources
- Process for application will be established, including criteria and reporting
- Funding available: $180,000 total; $30,000 for each town
- Outcome: Sanitary sewage sources eliminated

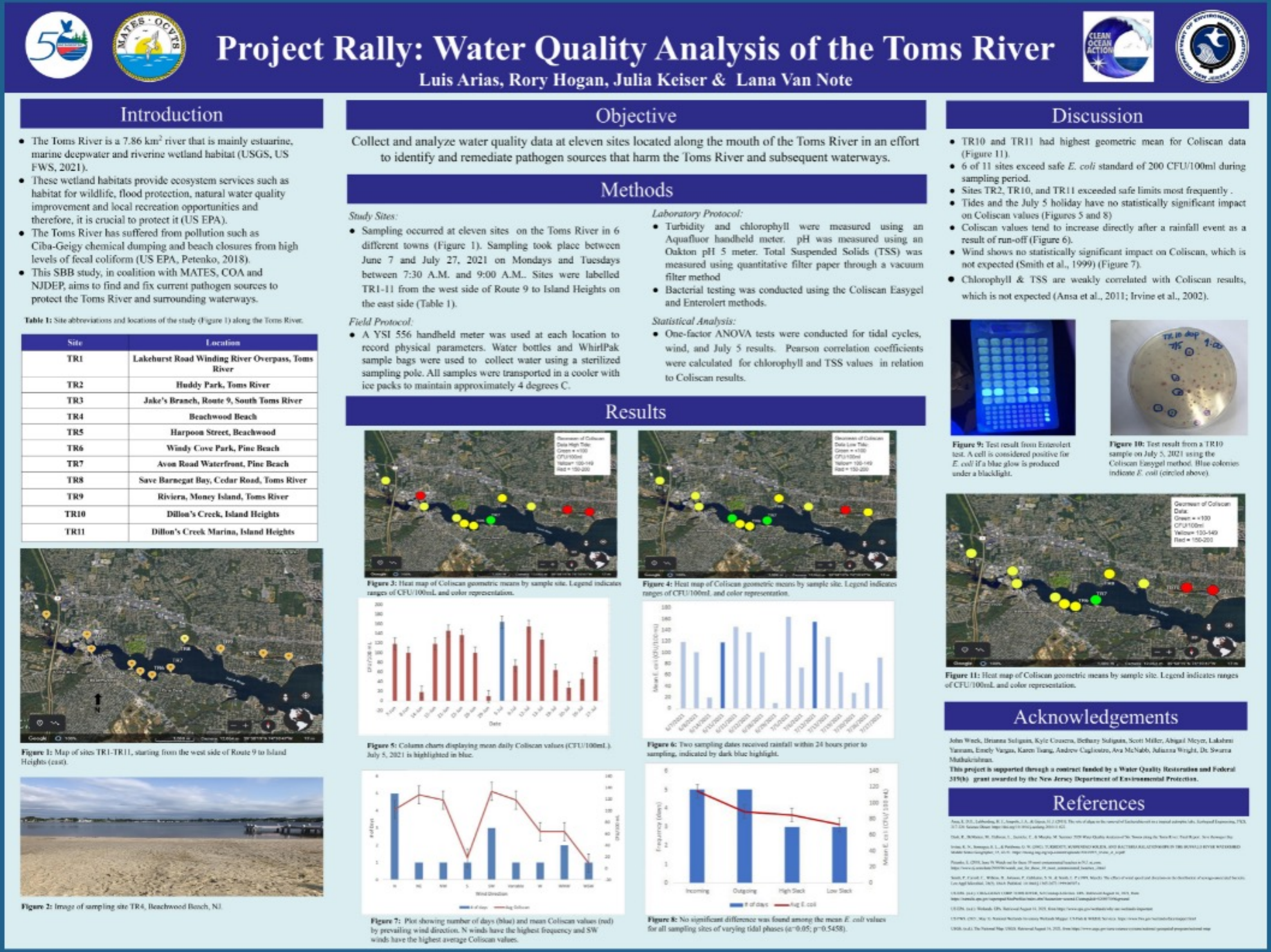
Once fixes are completed, confirm elimination of sources with water quality monitoring

- **Outcome:** Water quality results show reductions in bacteria levels as a result of fixes

Prepare a detailed report on the activities and findings of the project

- **Outcome:** Report submitted to NJDEP; citizen-friendly public document produced and shared

Student Grant Program Data



Discussion

- TR10 and TR11 had highest geometric mean for Coliscan data (Figure 11).
- 6 of 11 sites exceed safe *E. coli* standard of 200 CFU/100ml during sampling period.
- Sites TR2, TR10, and TR11 exceeded safe limits most frequently .
- Tides and the July 5 holiday have no statistically significant impact on Coliscan values (Figures 5 and 8)
- Coliscan values tend to increase directly after a rainfall event as a result of run-off (Figure 6).
- Wind shows no statistically significant impact on Coliscan, which is not expected (Smith et al., 1999) (Figure 7).
- Chlorophyll & TSS are weakly correlated with Coliscan results, which is not expected (Ansa et al., 2011; Irvine et al., 2002).

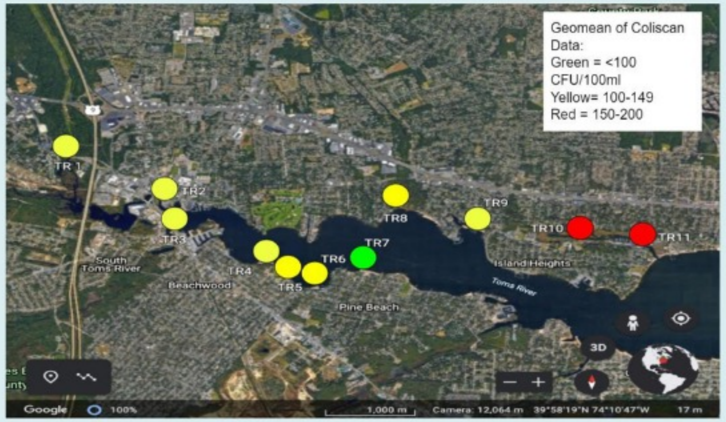


Figure 11: Heat map of Coliscan geometric means by sample site. Legend indicates ranges of CFU/100mL and color representation.

Student Grant Program


Empowering the next
generation of
scientists since 2007

Community Science Water Sampling

Team of local volunteers looking to help out and learn more about water quality in their communities

Next training: June 28th @ 1-3PM

Contact:
Programs@CleanOceanAction.org

PADDLE FOR THE BAY

Calling all adventurers! We are attempting to break a world record of most canoes/kayaks in a parade.

Register at RaceForum.com/PaddleForTheBay

When: Saturday August 20th - 8:00 AM (Rain or Shine)

Where : Pine Beach, NJ - Start is at Avon Avenue Beach
(You need not launch here, but must paddle to this beach for boat number and wristbands)

How Much: $10.00 registration fee per boat

This project is funded by a Non-point Source (NPS) Water Quality Restoration and Federal 319(h) grant awarded by the New Jersey Department of Environmental Protection to address pathogen pollution in the Barnegat Bay Watershed.