

2017 Water Quality Update

Village of Mamaroneck WQAC

Planning Department

Greg Cutler | November 30, 2017



Agenda

- Village efforts
- Water quality standards
- Review of present status of water quality in Village of Mamaroneck
- Next steps



Village Efforts

- Water Quality Reporting Tool
 - Village of Mamaroneck Website → Water Quality → "Report a stream"
- Cured-in-place pipe lining
 - Creates a new sealed pipe within existing pipe. Thirty four percent (34%) of the sewer system relined in past 20 years.
- Arcadis IDDE and I&I investigations.- 2017 wq data has been received.
 - Valley Place investigations- no source detected.
 - I & I investigation report to be completed by January. Results will be in report. Village purchased smoke testing machine.
- GIS mapping of sanitary sewer and storm water conveyance systems.- Continues to be updated as new infrastructure is installed or repaired.
- Various illicit/illegal discharges discovered and eliminated, goose program initiated, catchbasins replaced and/or retrofitted, cleaning and inspection of sewer lines.
- Received \$150,000 grant for additional catchbasin retrofits- locations under review by Village Engineer. – Still under review.
- Proposed sewer lateral law.- ADOPTED
- Lateral grouting efforts are underway.

Water Quality Standards

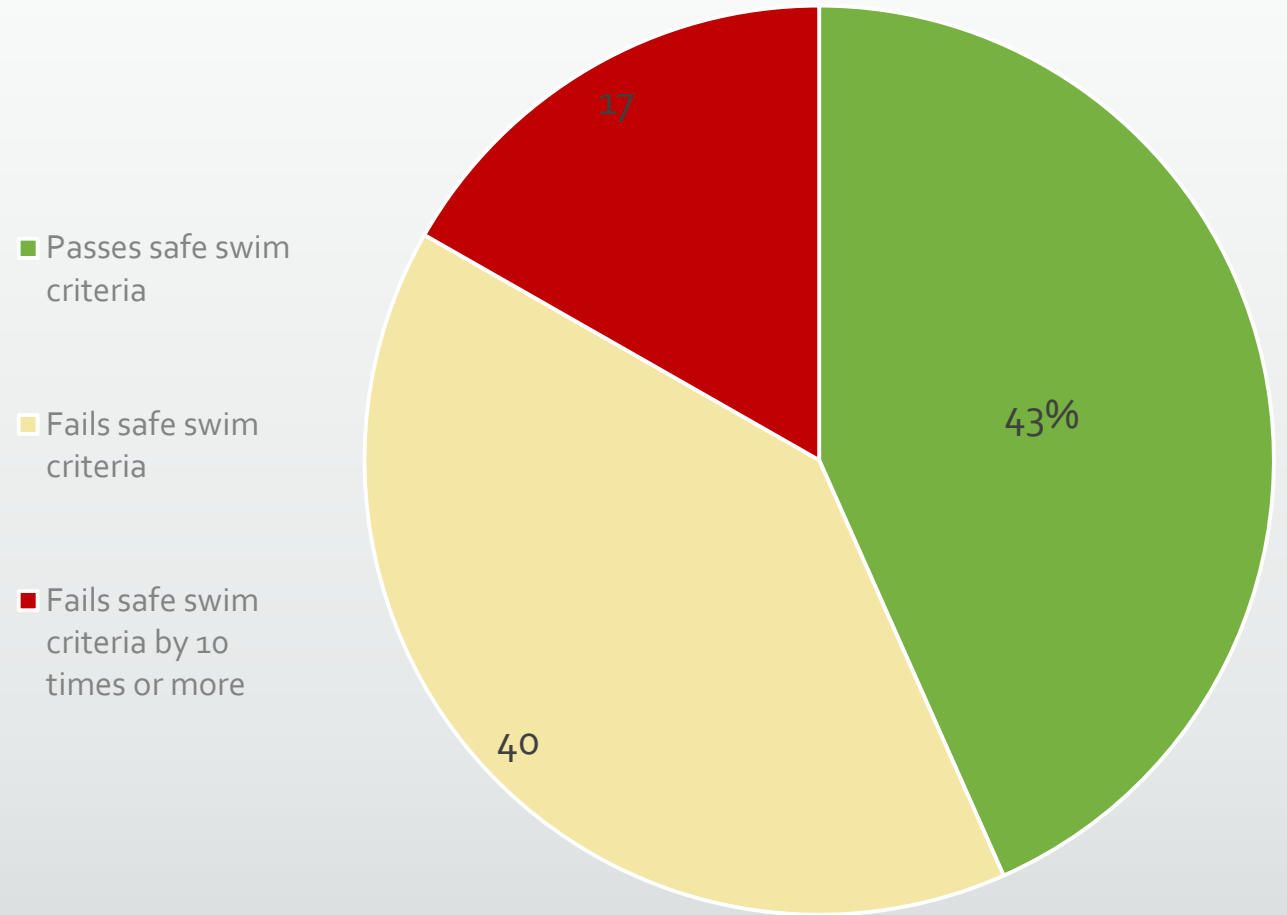
- New York State Department of Environmental Conservation establishes water quality standards for coliform that are outlined in NYS Regulation NYCRR Part 703.
- New York State Department of Health establishes water quality standards for fecal coliform related to the use of beaches:

Bacteria Measured	Acceptable Maximum for Safe Swimming
<i>Enterococcus</i>	Single Sample maximum = ≥ 104 cfu/100mL
<i>Enterococcus</i>	Geometric Mean = ≥ 35 cfu/100mL
Fecal coliform	Single Sample maximum = ≥ 1000 cfu/100mL
Fecal coliform	Geometric Mean = ≥ 200 cfu/100mL

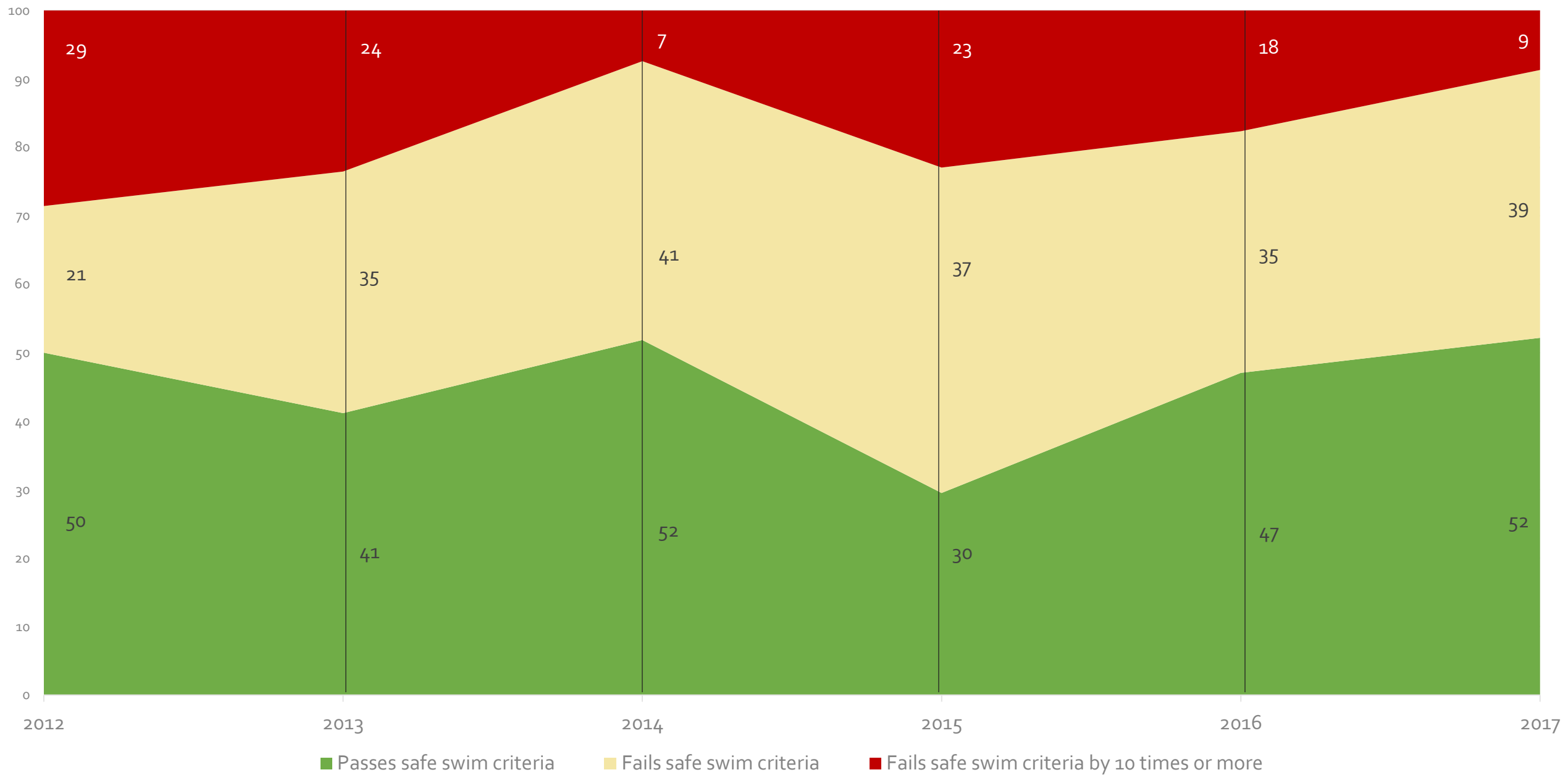
Status of Water Quality

- Based on available data the water quality is improving, particularly in the Harbor, but the Mamaroneck and Sheldrake Rivers as well as Beaver Swamp Brook remain impaired.
- Less than half of all river and stream samples passed safe swimming criteria.
- 32 water quality submissions to the new reporting system since launch.

Water Quality Sampling Totals 2012-2017

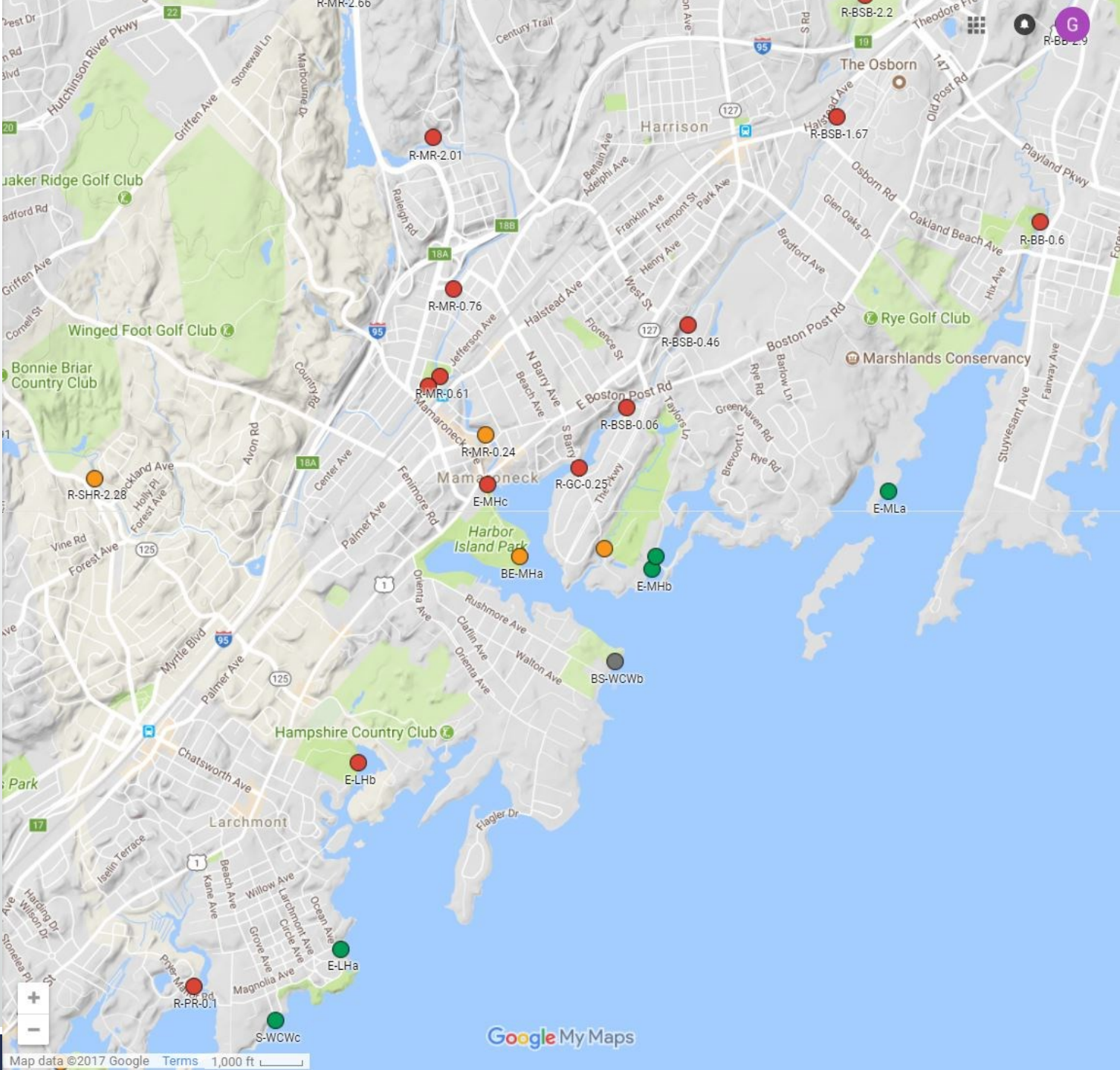


Water Quality Over Time 2012-2016

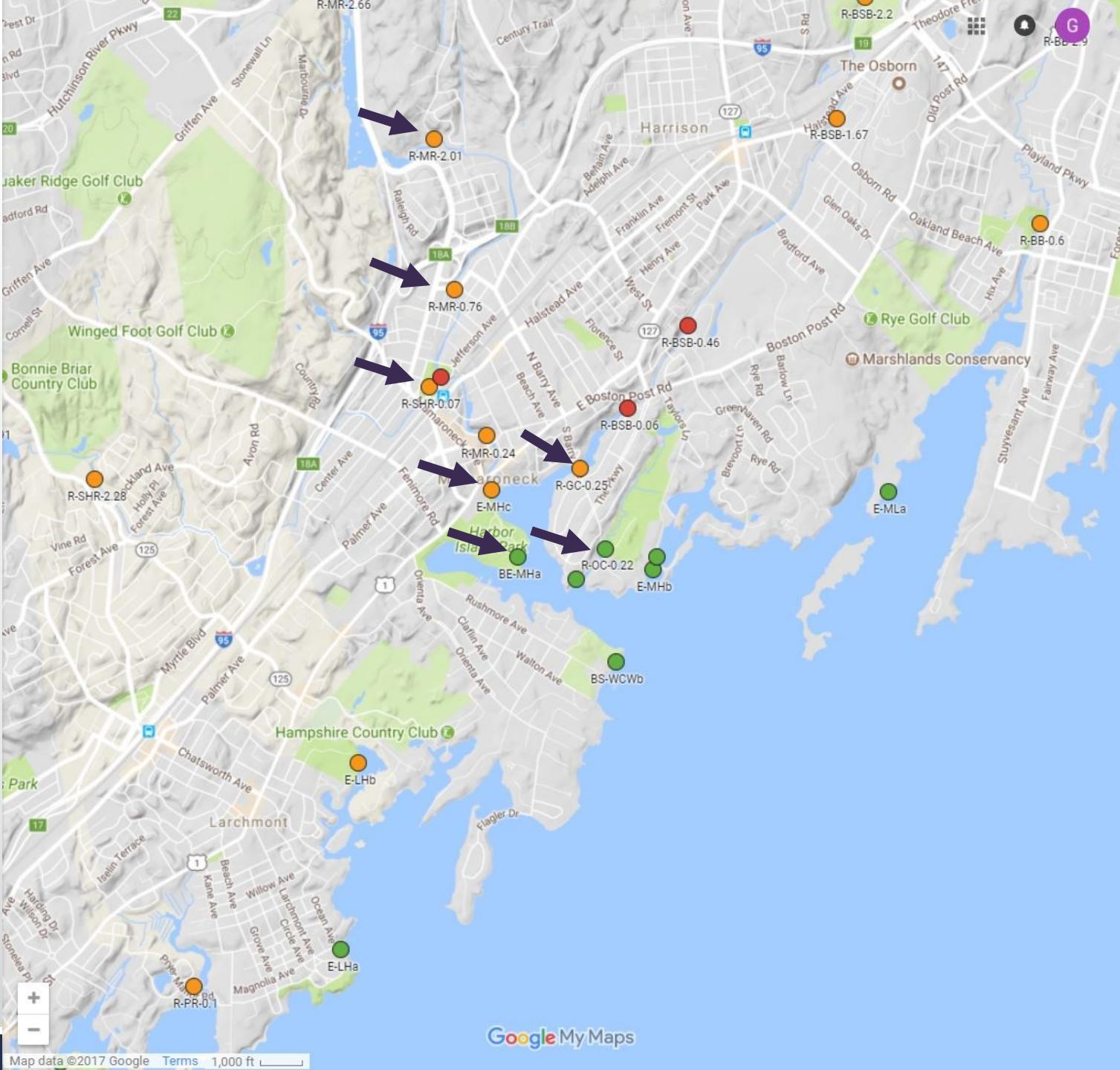


Save the Sound Data added to 2013,2014,2015,2016, and 2017. Numbers shown are percentages.

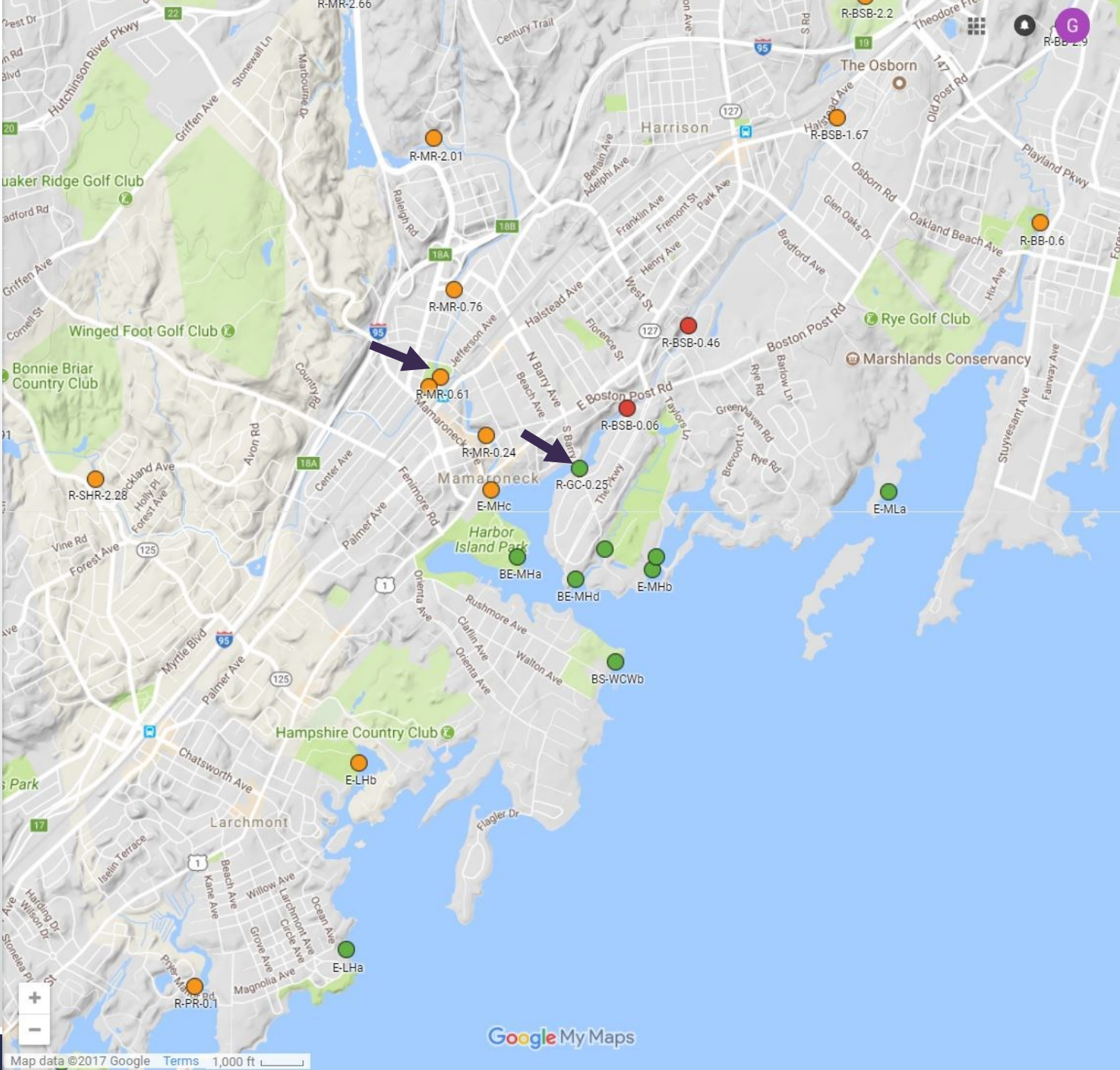
Save the Sound 2015



Save the Sound 2016

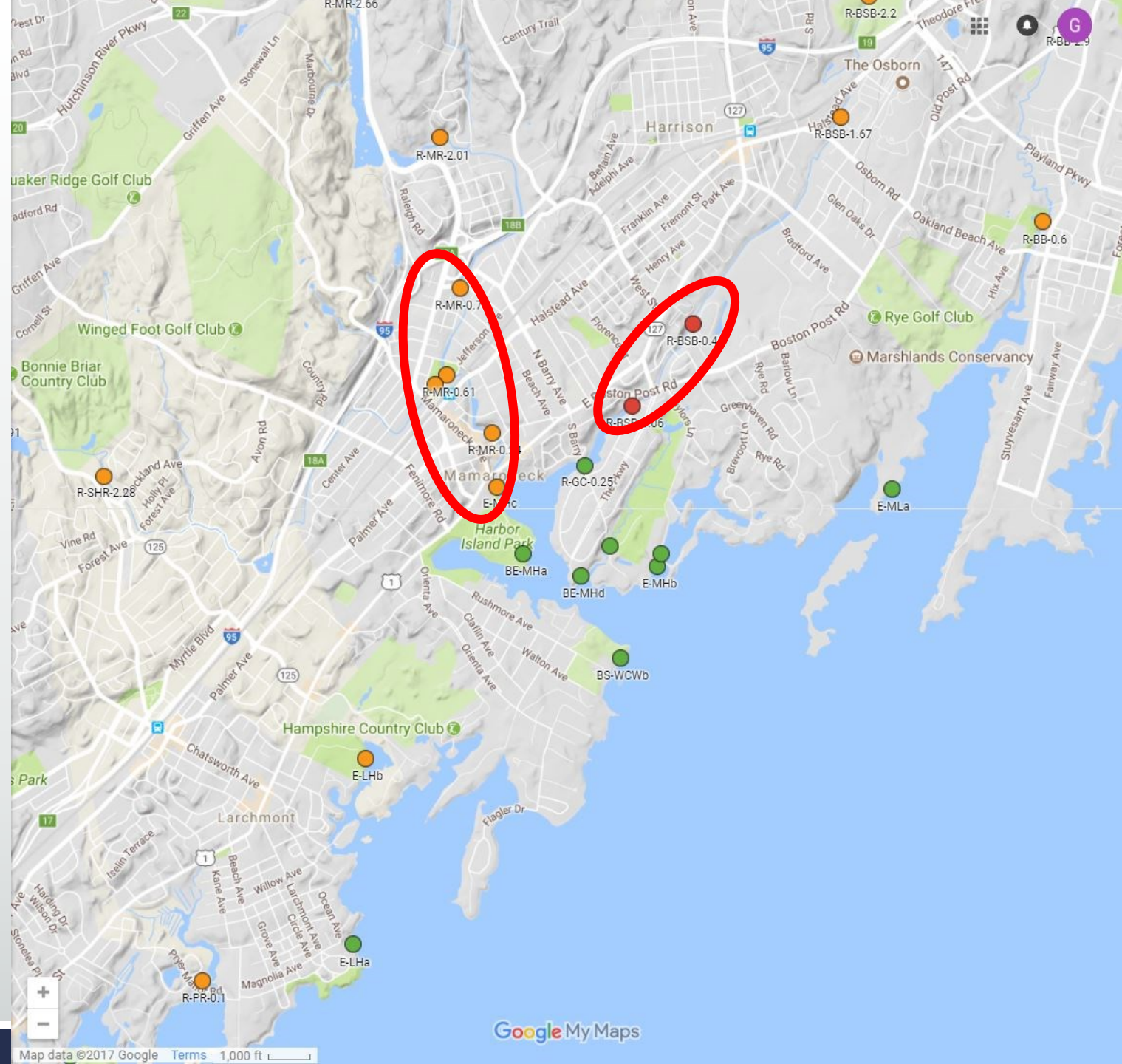


Save the Sound 2017



Proposed Focus Areas

- Beaver Swamp Brook has not seen improvements since first sampling. All samples are still 10x the safe swimming limit.
- Mamaroneck and Sheldrake Rivers saw the moderate improvement between 2015 and 2016 but saw limited improvement in 2017.



Demo Links

Water Quality Page:

- http://www.village.mamaroneck.ny.us/Pages/MamaroneckNY_WaterQuality/index

Interactive Water Quality Map:

- <http://arcg.is/1L4TuH>

Next Steps

- Conduct increased periodic sampling of all Village waters to
 - (I) effectively identify pollutants and possible point and non-point sources of pollutants and
 - (II) allow analysis of changes in water quality of different Village waters over time
 - Focus investigations by consultants on areas that continuously underperform.
- Provide public reporting of all sampling results.
- Establish clear water quality objectives.