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Great South Bay, Long Island, New York Summer Water Quality Monitoring Program

CERCOM, Molloy University

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Center for Environmental Research and Coastal Oceans Monitoring

(CERCOM)

Molloy College

Great South Bay, Long Island, New York

Summer Water Quality Monitoring Program

2018

FINAL REPORT

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Administrative Coordinator; Ms. Regina Gorney

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2018

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Thomas Dolan	Education	Molloy College
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Stephanie Mejia	Nursing	Molloy College
Shawn Martin	Earth & Environmental Studies	Molloy College
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Kevin Peteroy	Marine Biology	SUNY Maritime
Caroline Kane	Earth & Environmental Studies	Suffolk Community College
John Corallo	Marine Biology	Suffolk Community College

Water Quality Parameter Methodologies

Salinity, Dissolved Oxygen, Temperature Methodology

YSI Pro 2030 Professional Series; Probe

Clarity Methodology

8 inch Secchi Disk

pH Methodology

Orion Star model A121 pH Meter with low maintenance pH probe

Depth Methodology

Recorded from vessel's navigation GPS automatic system

Figure 1.
 2018
 WQ Averages:

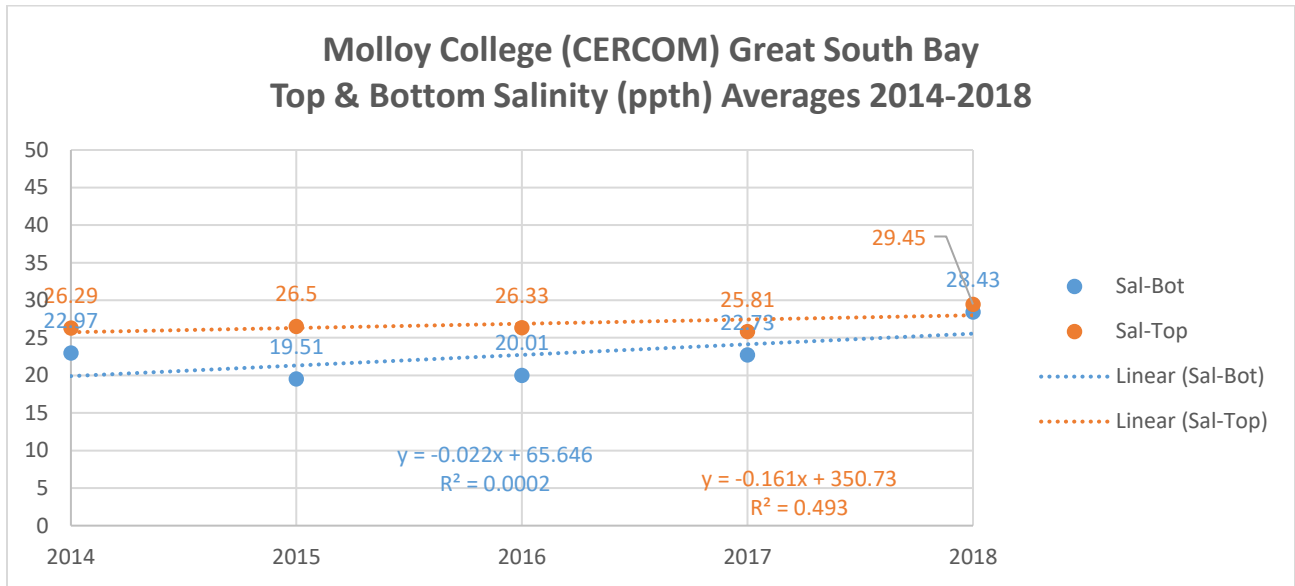
2018

Parameter/Site	Sexton	Ocean Beach	Ocean Bay Park	Sailor Haven	Cherry Grove	Pines	Barrett Beach	Davis Park	Watch Hill	Average
Depth (ft)	14.41	11.99	17.06	4.5	7.1	4.45	5.5	6.81	5.93	x
Clarity (in)	4.46	4.05	4.75	4.38	4.5	4.04	4.59	4.34	4.55	4.41
Sal-Bot (ppth)	28.5	29.15	29.36	28.37	28.22	27.65	28.85	28.14	27.63	28.43
Sal-Top (ppth)	34.80	29.25	29.31	29.03	28.58	28.29	28.78	28.47	28.57	29.45
Temp-Bot (oC)	23.67	23.79	23.86	24.13	24.03	24.22	24.16	23.42	24.02	23.92
Temp-Top (oC)	24.05	24.19	24.09	24.23	24.27	24.42	24.31	23.95	22.27	21.26
pH	7.78	7.75	7.80	7.79	7.82	7.83	7.81	7.69	7.69	6.04
DO-Bot (mg/L)	6.97	6.78	6.47	7.67	7.51	9.60	7.37	6.95	7.17	7.39
DO-Top (mg/L)	7.20	6.90	6.92	7.62	7.60	9.12	7.73	7.35	7.23	7.52

*All raw data is available upon request, held in reserve at CERCOM.

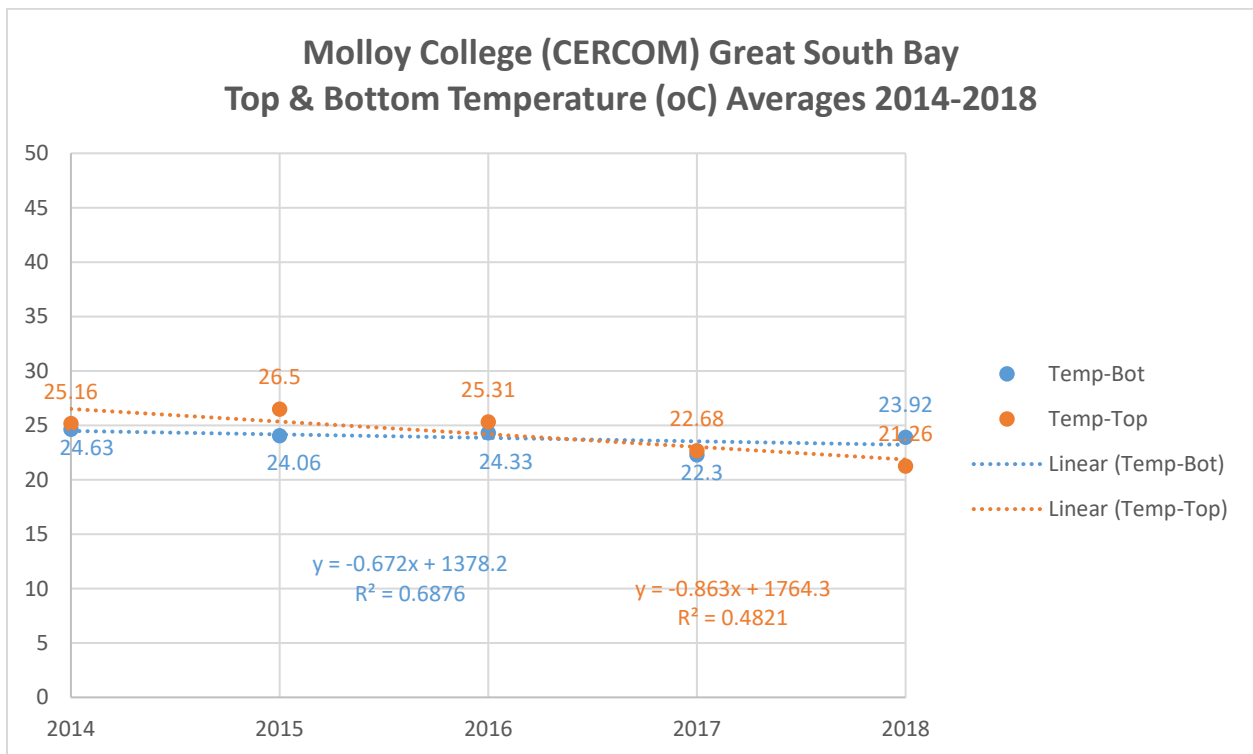
The Center for Environmental Research and Coastal Oceans Monitoring (CERCOM) visits 9 locations in the Great South Bay from Memorial Day – Labor Day to monitor for dissolved oxygen (DO), pH, salinity, clarity and temperature. This monitoring program has been conducted for the past 15 years. These parameters are critical in determining long term water quality conditions in Long Island estuaries.

Figure 2. 5 year trend of the Great South Bay top and bottom salinity values:



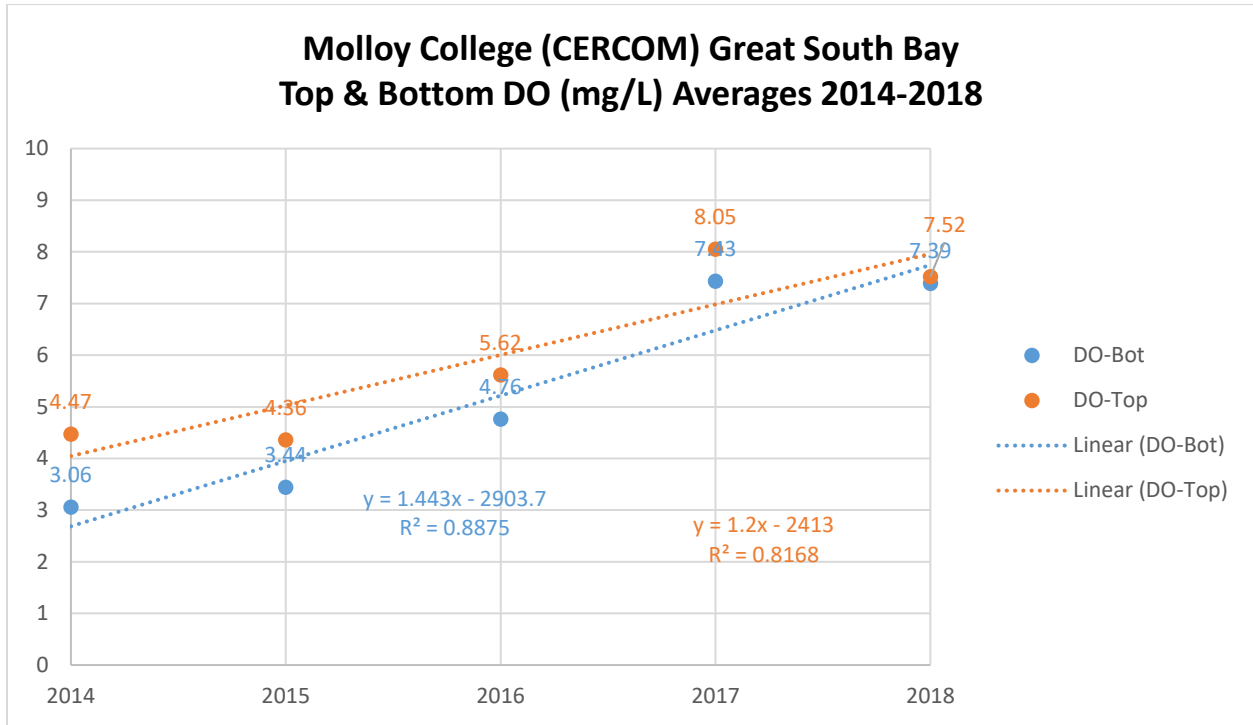
*All raw data is available upon request, held in reserve at CERCOM.

Figure 3. 5 year trend of the Great South Bay top and bottom temperature values:



*All raw data is available upon request, held in reserve at CERCOM.

Figure 4. 5 year trend of the Great South Bay top and bottom Dissolved Oxygen values:

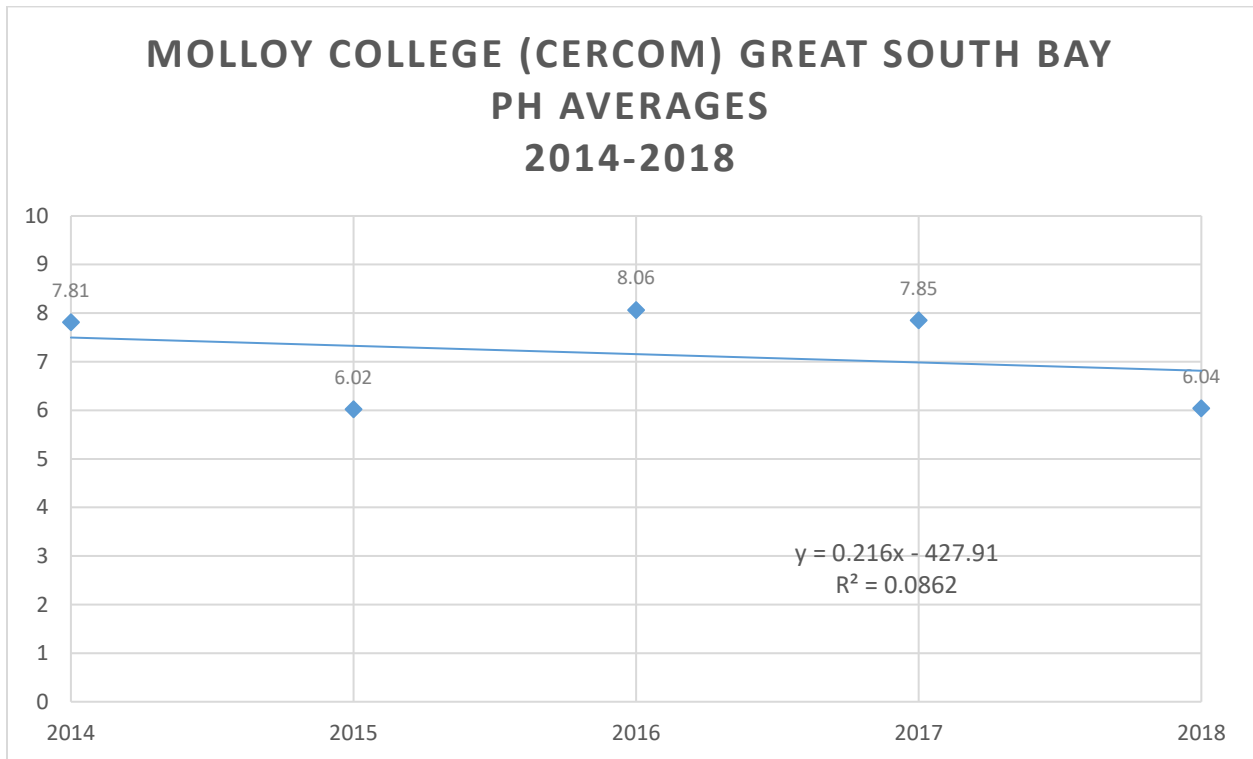


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Ocean Acidification monitoring; Great South Bay 2018

pH (Potential Hydrogen)

Figure 5. 5 year trend of the Great South Bay pH values:



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