

Long Island Sound Water Quality Monitoring Program Monthly Hypoxia* Summary

Cruise Name: **WQJUN11**

Cruise Dates: 31 May, 1 June and 6 June 2011

Number of Stations Sampled: 17

Survey conducted aboard R/V John Dempsey

Minimum DO: 5.19 mg/L at Station A4

General Weather at Bridgeport-

Avg. temp: 72°C

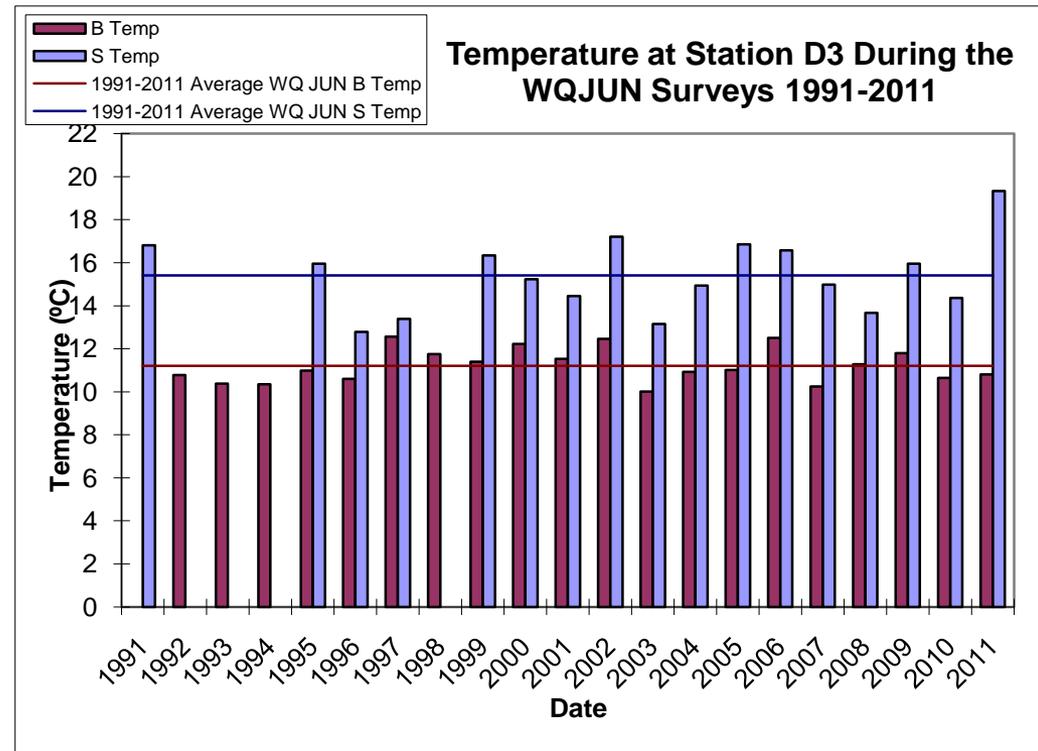
precipitation: 0.00

Wind speeds: 6.87mph avg. (max gust 25 mph on 6/1)

Maximum Bottom Temperature: 13.65°C at Station E1

Maximum Surface Temperature: 21.05°C at Station C1

Delta T at Station D3: 8.53(WQJUN 1991-2011 average= 4.01)



All DO values were greater than 5.0 mg/L, therefore, no hypoxia map was produced.

*NOTE: Hypoxia is defined as dissolved oxygen concentrations less than 3.0 mg/L

Thermal stratification began to strengthen during the April survey and by May Delta-T's at 11 stations were greater than two degrees C. During the June survey conducted 5/31, 6/1 and 6/6 aboard the R/V John Dempsey, thermal stratification continued to increase with Delta-T's greater than 3° C at all but three stations sampled. Station C1 exhibited an almost 10 degree temperature difference between the surface and bottom water.

Meanwhile, dissolved oxygen concentrations in the bottom waters have begun to fall. The DO at station A4 during this month's survey was down to 5.19 mg/L (lowest DO observed during the WQJUN11 survey) from 8.34 mg/L in April and 7.84 mg/L in May. This is lower than the 7.27 mg/L DO reading during the June 2010 survey..