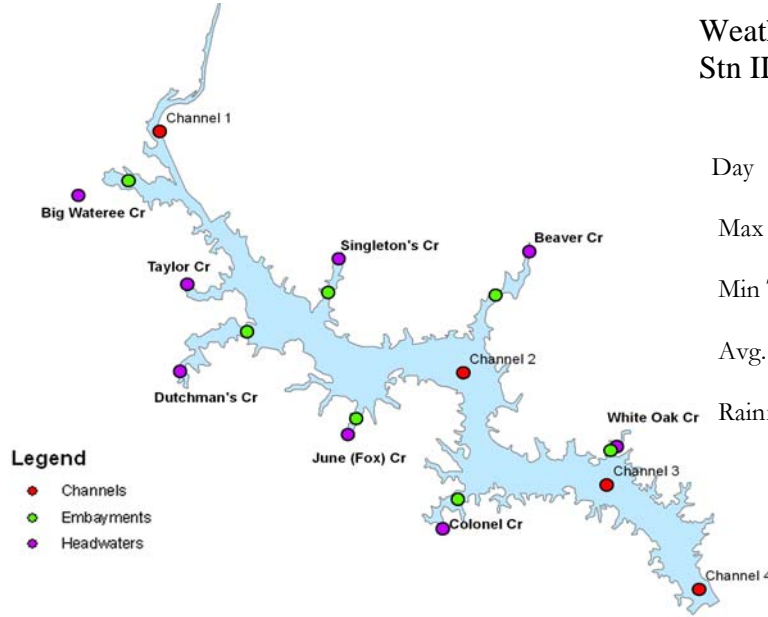


Report on Sample Run May 14, 2010

Our latest sample run was completed on Friday, May 14, 2010 at all twenty sample sites. Ken Koth skipped the Water Watch boat and along with Dan Tufford sampled the headwaters. For sampling the embayments and channels, Rick Noble was at the helm of his pontoon boat, Dick Foote was navigator, first mates were Sue Yates and Teresa Jones, and USC student Allyson Shea was the sampling supervisor. Finally there was sunshine and warmth on Lake Wateree.



Weather Conditions at Wateree Dam Stn ID: 388979

Day	Fri 14th	Thur 13th	Prev. 7 days
Max Temp	90	85	82.7
Min Temp	66	64	58
Avg. Temp	78	74.5	70.7
Rainfall (in.)	0.00	0.00	0.00

The water quality compliance index was 83%, compared to the historic index of 77% for the same time of year (May). This means that of the 59 surface water samples taken (i.e., those at 1 ft below the surface) 17% (or 10 of the 59 samples taken) were *not* in compliance with SCDHEC water quality criteria. The SCDHEC turbidity criterion (25 NTU) was exceeded at only two stations and not by large amounts. There was, however, an error with the turbidity reading at Beaver Creek Embayment and that quantity was removed from the data. This month the pH was the main source of exceedence, with eight of the twenty samples being out of compliance at greater than the upper range value of 8.5. In May the lake phytoplankton community was clearly back in bloom. High rates of photosynthesis cause elevated pH and dissolved oxygen (DO), both of which were observed in the sampling results.

In the historical data from 2000, 2002 and 2009, all three criterion were exceeded. Only one exceedence was due to a low DO value that occurred in 2002 at Channel 1. The largest source of historical exceedence comes from the pH values which occurred in all three years, and like this run, all are greater than the upper range value. Of the pH exceedences in all three years, none of them show a particular pattern, occurring in all three site types (channel, headwater, embayment).