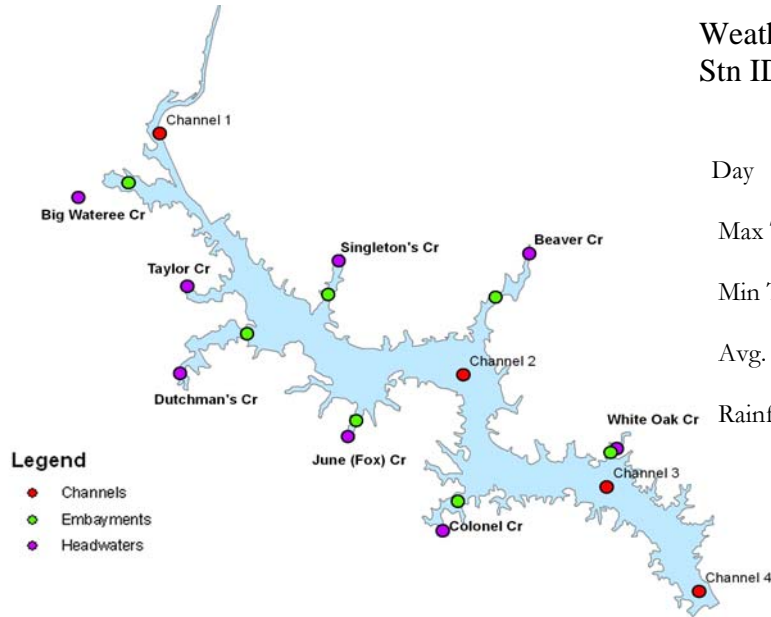


## Report on Sample Run July 9, 2010

Our latest sample run was completed on Friday, July 9, 2010 at all twenty sample sites. Dick Foote skippered the Water Watch boat and along with USC student Allyson Shea sampled the headwaters. For sampling the embayments and channels, Captain Ron Kadan was at the helm and navigator of his boat and Bob Smith, his grandson Coy, and Dan Tufford took care of the sampling. This month we were treated to rare visit by a Brown Pelican in Beaver Creek embayment. This species is common along the SC coast but very infrequent as far inland as the Piedmont. Maybe it just could not resist the opportunity to taste a Wateree Crappie.



### Weather Conditions at Wateree Dam Stn ID: 388979

Day	Fri 7th	Thur 8th	Prev. 7 days
Max Temp	103	101	91
Min Temp	74	69	63.2
Avg. Temp	88.5	85	77.3
Rainfall (in.)	0.00	0.00	0.00

The water quality compliance index was 81.7%, compared to the historic index of 83.9% for the same time of year (July). This means that of the 60 surface water samples taken (i.e., those at 1 ft below the surface) 18.3% (or 9 of the 60 samples taken) were *not* in compliance with SCDHEC water quality criteria. This month, similar to May and June, the pH was the main source of exceedence, with nine of the twenty samples being out of compliance at greater than the upper range value of 8.5. pH was the only parameter with readings not in compliance with the criteria for this month. Also similar to May, the high pH values probably reflect a high photosynthesis rate in the phytoplankton community. This was also seen in the high dissolved oxygen (DO) concentrations observed at stations with elevated pH.

In the historical data from 1999, 2000, 2003, 2008 and 2009, all three criteria were exceeded. Similar to what was found on this sampling run, the pH exceedences were always greater than the accepted range. The pH readings were the main source of out of compliance data from the historical bank with a compliance rate of 70%. There were only two out of one hundred and five DO samples out of compliance in the historical data; both occurred in separate years and at different sites. The years 1999 and 2000 supplied twelve of the thirteen out of compliance readings for Turbidity. Both Big Wateree Creek Headwater and Embayment were exceeded in both years.