

DWQ Fish Kill Summary Report



Waterbody CHOCOWINITY BAY

Total Fish Mortality

Location Chocowinity

6500

Kill Number	Date Reported	Date Investigated	Time Investigated
WA12002	7/10/2012	7/11/2012	1230
County	HUC:	Latitude	Longitude
BEAUFORT	03020104	35.510600	-77.0558600

Species Reported

- CATFISH
- FLOUNDER
- PERCH
- SHAD
- SPOT
- STRIPED BASS
- STRIPED MULLET
- SUNFISH

Suspected Cause	Other Species Affected	Waterbody Type	Duration	Kill Area
Bloom	BLUE CRAB	Estuary	1 day	1.5 sq miles

Tributaries Affected	Samples
NONE	PHYTO

Notes:

Conversations with local residents indicated the event most likely occurred overnight. Over 12 different species were observed along approximately 1.5 square miles from the headwaters of Crawford Creek downstream throughout Chocowinity Bay. Physical data indicated very little dissolved oxygen (~0.7-3.1 mg/L) near the headwaters of the Bay. DO levels seem to be more elevated downstream towards Twin Lakes and Cypress Landing Docks. Surface salinities range from 7-9 ppt, bottom salinities (1.5 meters) range from 10-11 ppt. pH values range from 6.7 to 7.1 along the Bay proper, with the highest value near 8.1 at Twin Lakes (% DO near 134 at the Lakes). The Washington area had been enduring extreme heat indexes for several consecutive days. The Bay had bloom activity recorded in the past. It is likely that bloom activity and the overnight localized storm activity (heavy rains, strong NW winds) created unfavorable scenarios for local fish and crab populations. Water samples were sent to DWQ's Laboratory Section for further analysis. The sample contained a bloom of the green algal flagellate *Nephroselmis* and the dinoflagellate *Gyrodinium instriatum*. Small round diatoms and the raphidophyte *Heterosigma* were also present in the sample. *Nephroselmis* has been present in local estuarine rivers for the past several years, but blooms are rarely observed here. It is not known to be toxic or harmful anywhere. *Gyrodinium instriatum* and *Heterosigma* frequently bloom in local estuarine rivers. The former has been cited in the academic literature as a nuisance species in Japan. The later has been cited as causing fish kills in other parts of the world. Neither alga has been known to cause fish kills in North Carolina.