

NCDWR Fish Kill Summary Report



Waterbody NEUSE RIVER

Total Fish Mortality

Location New Bern, Fishers Landing, Flanners Bea

10000000

Kill Number	Date Reported	Date Investigated	Time Investigated
WA13004	10/2/2013	10/2/2013	
County	HUC:	Latitude	Longitude
CRAVEN	03020204	35.034340	-76.9750500

Species Reported

ATLANTIC MENHADEN

Suspected Cause	Other Species Affected	Waterbody Type	Duration	Kill Area
Other	NONE	Estuary	15 days +	15 miles

Tributaries Affected	Samples
NORTHWEST CREEK, BROAD CREEK	PHYTO, FISH

Notes:

The DWR EMT responded to several fish kill calls from citizens residing from James city and Carolina Pines. EMT staff observed dead and dying menhaden near Union Point Park in New Bern all the way downstream to where the River meets the mouth of Slocum Creek. The kill extend across the river in some areas (particularly Flanner's Beach area and James City area), with densities of fish varying as the northerly winds push to the southern shore.

Three to five inch Menhaden were observed to be from several days old to recently dying and lethargic. Most of the menhaden observed (99%) had red sores/lesions. This has been observed in the past (almost exactly a year previous to date) and was documented as Ulcerative Mycosis caused by a slime mold Aphanomyces invadens.

Physical data recorded indicated algal bloom activity beginning mid morning. DO values ranged from 5.4 to 8.5 mg/L. Salinities were from 3 to 12 ppt. Algal bloom samples were collected and sent to DWR's chemical laboratory for further analysis. Dying fish with lesions were collected and will be frozen for further analysis by NOAA's Wayne Litaker et al when possible.

Given the large extent of the kill, it is difficult to enumerate this situation. A best educated estimate would put these numbers into the tens of millions.

****UPDATE****
10/09/2013

EMT staff continue to receive phone calls regarding dead fish. A resident of Northwest Creek (Fairfield Harbor area) called to report dead fish all the way up to its headwaters. So it should be expected to see adjaent tributaries affected by this slime mold and developing algal blooms during the days, paired with low DO events during the evenings.

Recent cloudy and rainy weather may decrease the impact of oscillating DO from algal blooms. However, the slime mold may continue to cause secondary mortalities.

Phytoplankton samples near James City indicated a bloom of the harmless dinoflagellate Polykrikos and small round diatoms. Total algal sample density was 12,000 units/ml.

Downstream samples near Slocum Creek indicated a bloom of small round diatoms and the harmless chain diatom Leptocylindrus. Total algal sample density was 16,000 units/ml. Algal community composition was typical for fall in local estuarine waters.