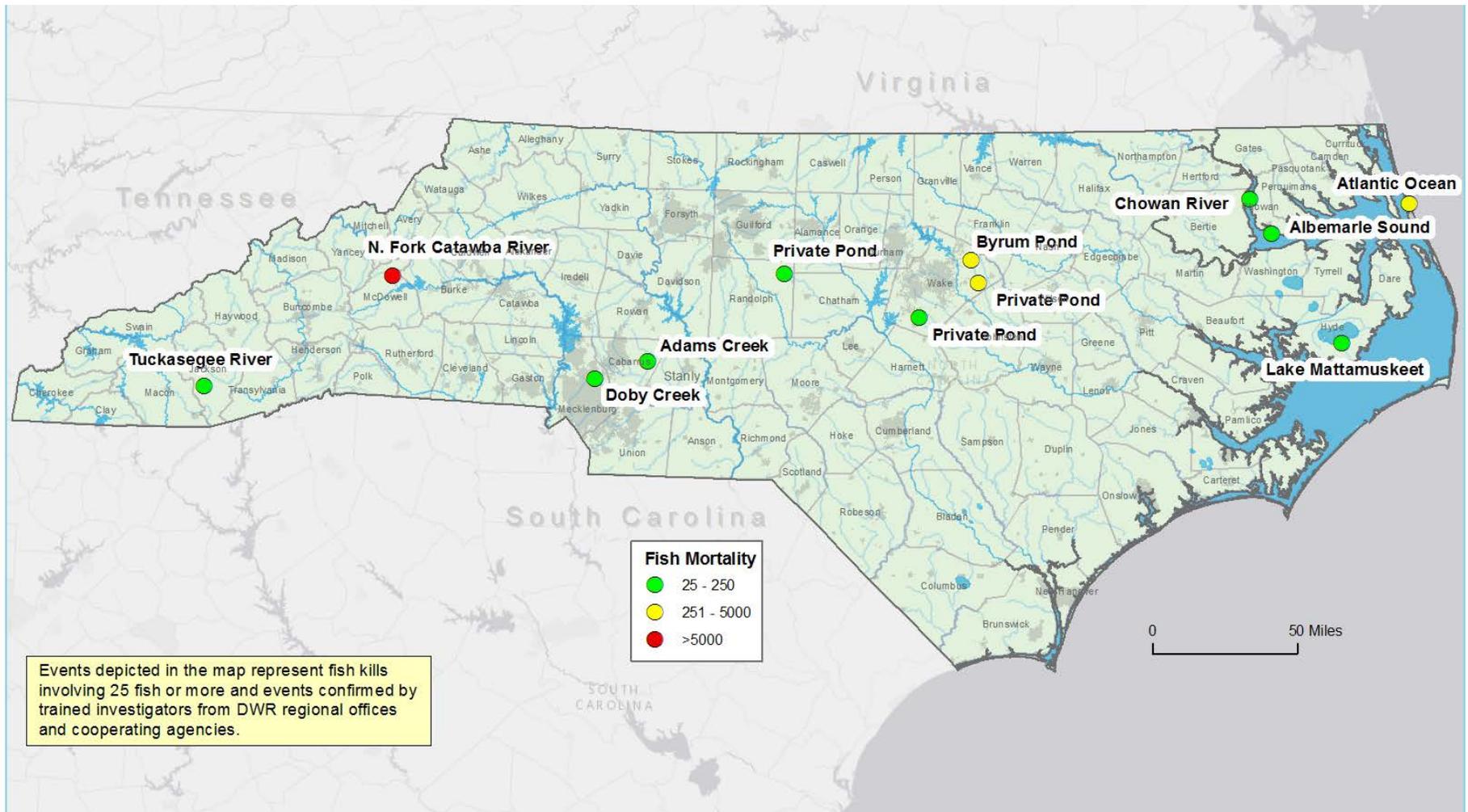
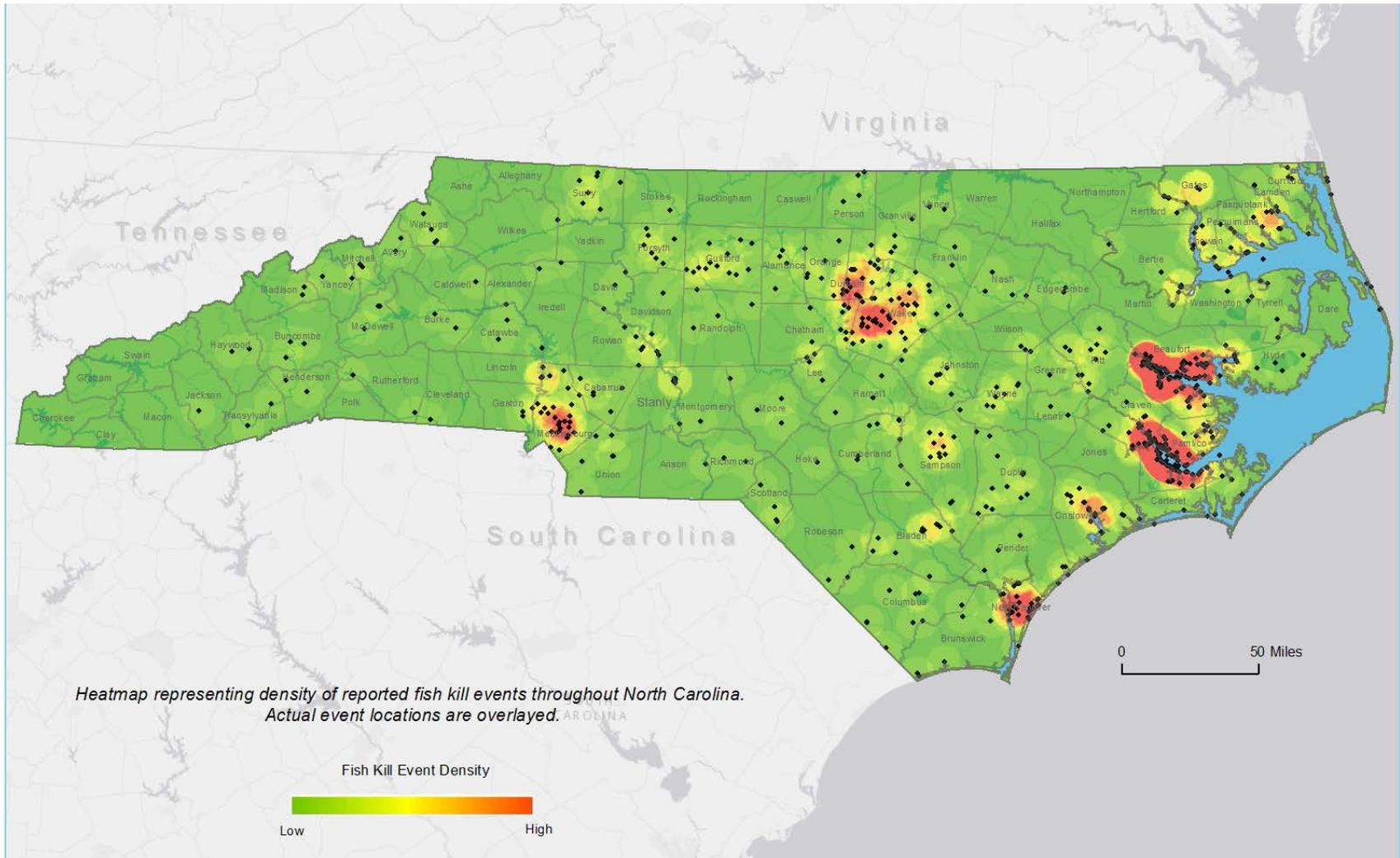


Fish kill events and observed mortality reported to NCDWR during 2015



Fish Kill Event Density in North Carolina – 1996 to 2015



Total 2015 Fish Kills: 12
Total 2015 Fish Mortality: 21,615

2015 Fish Kill Events (by County)

Date	Kill Number	Waterbody	Location	Mortality	Comments
Cabarrus					
8/16/2015	MO15002	Adams Creek	Mt. Pleasant	100	Truck wrecked in creek on 8/14/15 , spilling motor oil, diesel fuel, hydraulic fluids and antifreeze from radiator. Due to low stream flow conditions fish downstream died off by Sunday 8/16/15. Town staff from Mt. Pleasant checked for any sewer line issues in this area to make sure there were no other impacts. No other impacts were identified.
Total Kills for County: 1 Total Mortality for County: 100					
Chowan					
7/17/2015	WA15003	Chowan River	near Colerain	200	At 14:11 hours on Friday 17 July, 2015 DMF received a report of a fish kill in the area between Nixon's Beach and the old dye factory, Chowan River, Chowan County side. No other information was provided except that there were largemouth bass, striped bass, catfish, and bream washed up on the beach between Nixon's Fishery and the dye factory. Blue green algae also observed in the water at the time of the kill.
7/21/2015	WA15002	Albemarle Sound	near Edenton	200	Low Dissolved Oxygen observed at time of investigation. Water in boat basin showed very little mixing. Prior weather was hot with little rain.
Total Kills for County: 2 Total Mortality for County: 400					
Dare					
3/18/2015	WA15005	Atlantic Ocean	Near Duck NC	1,000	Reports of dead menhaden on beach near the Duck Research pier. Hundreds to a thousand menhaden had washed up in the preceding high tide. A Marine Patrol officer investigated and confirmed menhaden washed up on the beach from the Currituck line south to the Avalon fishing pier. Seismic-type activity felt in the area prior to event. No commercial fishing operations observed in area.
Total Kills for County: 1 Total Mortality for County: 1,000					
Hyde					
10/15/2015	WA15004	Lake Matamuskeet	Central Canals	100	Main Canal at Lake Mattamuskeet,exhibited low oxygen concentrations, no struggling fish were observed during investigation and dead fish were a few days old. Dead fish in Central Canal were also a few days old but dissolved oxygen near the lake was 6.4 mg/L. Probable that most fish were able to make it to the lake to seek refuge but some that were far in the canals did not escape low dissolved oxygen. There were observations on the sound side of the water control structure at Main Canal that fish and crabs were gasping at the surface (not observed by NCWRC staff).
Total Kills for County: 1 Total Mortality for County: 100					

2015 Fish Kill Events (by County)

Date	Kill Number	Waterbody	Location	Mortality	Comments
Jackson					
5/30/2015	AS15001	Tuckasegee River	near Lake Glenville	200	Blueback Herring are an introduced species commonly found in the lake. On May 11, from 10 AM - 4 PM, there was a recreation release of water from the Lake Glenville dam into the West Fork Tuckasegee River. NCWRC investigators were confident that the Blueback Herring were caught up in the release, which cascades over several large waterfalls directly downstream of the dam. ARO investigators estimated on Saturday May 30, 2015 greater than 200 dead fish at the base of Cullowhee falls but additional dead fish could be seen upstream and downstream of the falls. They estimated that the fish kill extended more than 1 mile from the Lake Glenville Dam and down the West Fork Tuckasegee River. Many of the dead fish were caught in flood debris that was between 3 -5 feet above the current water level, which is consistent with the recreational water release. All of the fish were in a advanced state of decay.
			Total Kills for County: 1 Total Mortality for County: 200		
McDowell					
7/2/2015	AS15002	N. Fork Catawba River	Near Marion NC	17,300	<p>Commission staff was notified of the kill on the evening of July 1 and conducted a formal enumeration on July 2. The kill incorporated approximately 3.9 miles of the river. Staff visually identified and counted dead fish from three 100-meter segments within the fish kill reach.</p> <p>An estimated 17,275 fish were killed within the affected reach of the North Fork Catawba River from the confluence of Limekiln Creek and the North Fork Catawba River downstream to Cannon Road . Species included Central Stoneroller, Warpaint Shiner, Whitetail Shiner, Bluehead Chub, Sandbar Shiner, Eastern Silvery Minnow, Roseyside Dace, Redbreast Sunfish, Bluegill, Smallmouth Bass, Rainbow Trout, Brown Trout, White Sucker, Notchlip Redhorse, Striped Jumprock , Northern Hogsucker, Flat Bullhead , Tesselated Darter, and Fantail Darter.</p> <p>Responsible party was identified as Coats American, Sevier Facility. On the evening the fish kill was initially reported, investigators detected elevated pH levels (11+) and very low DO in an impoundment created by a beaver dam in the unnamed tributary (UT) to Limekiln Creek at a location adjacent to the Coats American WWTP. Subsequent investigation of the Coats American facility showed that plant staff were not aware of all stormwater drains around the facility draining to the UT. Floor drains in water filtration area (where caustic chemicals are used) which plant staff thought were connected to the WWTP were actually connected to the storm sewer (and eventually drained to the UT).</p>
			Total Kills for County: 1 Total Mortality for County: 17,300		
Mecklenburg					
7/23/2015	MO15001	Trib to Doby Creek	Charlotte	115	Kill event resulted from a spill of chlorinated water from new water line installation. Some fish displayed lesions and sores.
			Total Kills for County: 1 Total Mortality for County: 115		

2015 Fish Kill Events (by County)

Date	Kill Number	Waterbody	Location	Mortality	Comments
Randolph					
6/8/2015	WS15001	Private Pond	near Staley	200	Rainy and cool the previous week. Cows in pond at time of investigation.

Total Kills for County: 1 Total Mortality for County: 200

Wake					
5/23/2015	RA15001	Private Pond	Fuquay Varina	200	Investigators noticed numerous dead crappie, sunfish, grass carp and bass. Black vultures were actively feeding on dead fish so unable to get a good count. Dead fish were also observed being drug away on the shore line. Young of year fish were seen jumping out of the water and gasping. Follow up investigation performed on Tuesday. Again, multiple vultures seen feeding on dead fish. YOY seen struggling. Investigator was stopped by a home owner who told her that they had been having trouble with aquatic vegetation and about a week ago contacted Foster lake and pond management about the 'duck weed' issue they were having. The homeowner was advised to wait for the 'duck weed' to be blown to one side of the pond and to apply herbicide and place grass carp into the pond. The homeowner did this about a week ago. Fish kill was reported on Saturday 5/23 but evidence of fish starting to decay was noted. Phytoplankton samples were collected along with physical conditions as part of the investigation. Results of Analysis: Physical conditions at the time the sample was collected found very little oxygen in the pond. Analysis of the phytoplankton found very little algae (< 100 units/ml) and could not be fully completed due to the high concentration of decaying Wolffia, commonly called watermeal.
6/12/2015	RA15002	Private Pond	Wendell	1,500	Kill event caused by runoff from parking lot asphalt sealant. Asphalt was sealed during a rain event that discharged into the pond. Nearly all fish in pond were killed. NOV issued by RRO to parking lot owner and contractor.
8/11/2015	RA15003	Byrum Pond	Rolesville	500	Low dissolved oxygen appeared to be the cause of the kill, due to pond turnover, which occurred during and after a storm event on 8/7/2015. At the time of investigation, the condition of the pond seemed back to normal. No signs of spills upstream of the pond were observed.

Total Kills for County: 3 Total Mortality for County: 2,200