Division of Water Quality Surface Water Protection Section April 7, 2009

MEMORANDUM

To:

Wilmington Regional Files, Duplin County

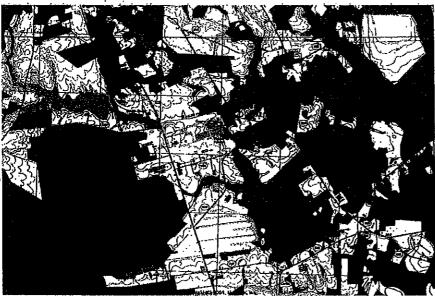
From:

Stephanie Garrett, Environmental Senior Technician

Subject:

Fish Kill on Beaverdam Branch

Incident # 200900892

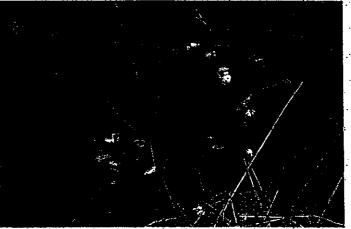


complainant stated he thought the kill was from agricultural spray. There was no visible indication of any causes, although two mechanical sprayers were observed traveling the roads in the vicinity. The following day, Linda Willis and Jean Conway investigated potential sources, and took physical measurements in the creek and feeder tributaries. The dissolved oxygen had recovered somewhat at the station on SR 1911 (4.7 mg/l and 50% saturation) and the feeder creeks appeared to be normal. Over the next couple of weeks, Willis and Conway concentrated inspections in the area and found that some of the facilities in the watershed (Parker Bark, two Nash

Johnson feed mills, and the House of Raeford) needed

On March 31, 2009, the WIRO received an incident report of a fish kill in Beaverdam Creek, between the towns of Magnolia and Rose Hill. The kill was first observed on or before March 23rd and was reported to involve 20 to 50 assorted fish, believed to be the result of agricultural runoff.

WIRO staff investigated the kill the next morning. A few decomposed fish were observed in the creek at SR1915. Due to the age of the kill, no samples were collected. Physical measurements were taken at SR1915 and SR1911 and DO was depressed (2.6 mg/l 26% sat) at the downstream station (SR1911). DO was 6.0 mg/l and 60% saturation where the dead fish were observed. The



to be covered under NCG Stormwater permits. Samples at Parker Bark indicated the potential for impacts from BOD (100 mg/l) and COD (380 mg/l).

Further action consists of working with the facilities to get them under the appropriate NCG permits and the required monitoring of stormwater discharge. It is strongly believed that reducing stormwater impacts from the adjacent facilities, while possibly not the cause of the kill, will provide considerable improvement to water quality in the area.

