MEMORANDUM

TO: Alan Clark
THROUGH: Dianne Reid
FROM: Elizabeth Kountis
DATE: June 21, 2011
SUBJECT: **Proposed Reclassification of Portions of the Neuse River and Quarry in Johnston County (Neuse River Basin) to Class WS-IV Critical Area (CA) and WS-IV (Protected Area or PA)**

The Division of Water Quality (DWQ) is requesting that the Environmental Management Commission (EMC) grant staff permission to proceed to public hearing with the proposed reclassification of portions of the Neuse River and an abandoned quarry (Johnston County, Neuse River Basin). Johnston County requested this reclassification. The quarry is to receive water from a proposed Neuse River intake, and is to be reclassified from Class C to WS-IV CA. The subject portions of the Neuse River are to be reclassified from WS-V and WS-IV (PA) to WS-IV (PA) and WS-IV CA, respectively. The reclassification is needed to construct the public water supply intake and utilize the quarry's water as a public water supply, in order to meet water demands projected through 2050; thus, this reclassification serves the public interest per Executive Order #70.

Division of Water Resources staff have no objections to the proposal, and Division of Environmental Health staff support it. A Finding of No Significant Impact (FNSI) has been issued for this project. Finally, the waters to be reclassified meet water supply standards according to 2011 DWQ studies, except for high chloride levels in the quarry, which are likely due to high evaporation rates and residence times. Dilution and reduced residence times in the quarry, which will occur once river water is pumped in it, should result in lowered chloride levels.

The quarry is located about two miles north of the Town of Princeton, and along the western bank of the Little River; the boundary of its proposed CA consists of the top of the quarry. The riverine CA would extend along the river from the intake proposed at Richardson Bridge Road (SR 1201) to a point nearly 0.5 miles upstream of that intake**.** There is a portion of one named tributary to the Neuse River in the proposed CA, which is to be reclassified to WS-IV CA. The PA would extend along the river from a point about 1.7 miles upstream of Bawdy Creek to a point nearly 1.4 miles downstream of Gar Gut**.** A portion of one named tributary to the Neuse River exists in the proposed PA, and this water is to be reclassified to WS-IV (PA). Approximately 19 acres, 136 acres, and 7,500 acres are included in the subject quarry's CA, river's CA, and river's PA, respectively. There is a portion of the watershed draining to the intake, which exists between the proposed CA and the proposed PA, that is already classified as PA for an existing downstream WS-IV intake on the Neuse River.

If reclassified, wastewater discharge and new development restrictions will apply. There are currently no permitted land application sites in the proposed CA, and no wastewater discharges in the entire proposed water supply watershed. There are not any known planned land application sites in the proposed CA, or known planned wastewater discharges or developments in the entire proposed area, according to Raleigh Regional Office and local government staff. The subject watershed area is primarily undeveloped with limited crop lands.

Johnston County is the only local government with jurisdiction in the reclassification area, and the only local government that would need to modify its water supply watershed protection ordinance within the required 270 days after the reclassification effective date. Given that Johnston County requested the reclassification, it did not need to provide a resolution. As a reminder, the purpose of a resolution is to indicate whether or not a potentially impacted local government will implement the water supply rules within its jurisdiction once a reclassification becomes effective. A fiscal analysis for this proposal has been drafted, and the analysis' quantifiable results revealed a one-time cost of approximately $600 to the state and $500 to Johnston County.

Staff recommends sending this item to the July 2011 WQC meeting to request permission to proceed to the full EMC at their September 2011 meeting. The effective date of this proposal is estimated to be July 1, 2012.