Steve Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services

Memorandum September 11, 2007

To: Division of Water Quality

From: Dewitt Hardee, Environmental Programs Manager

RE: Comments on the Proposed Water Supply Nutrient Strategy for Jordan Lake

As proposed, the Jordan Lake Water Supply Nutrient Strategy addresses the concerns of agricultural contaminants flowing into the waters of Jordan Lake. As demonstrated in the Neuse and Pamilco watersheds, the agricultural community will be able to diligently tackle the concerns of nutrient contaminants in these sensitive waters. Division of Water Quality (DWQ) is commended for modeling the Jordan Lake watershed rules after the proven track records of the Neuse and Tar-Pamlico rules. Mirroring the Neuse and Tar-Pamlico strategies, and allowing state oversight of these reductions, will establish an efficient and trustworthy system to protect the Jordan Lake watershed. Dependence upon the limited resources of local governments would be risky and less likely to succeed. The following comments pertain to the specific areas of the proposed Jordan Lake water supply strategy.

15A NCAC 02B .0263JORDAN WATER SUPPLY NUTRIENT STRATEGY: NUTRIENT MANAGEMENT

As the watershed area transitions to more urban housing and the current farms are divided into smaller units, additional emphasis will be needed to educate and monitor the use of fertilizers by homeowners. These transitions will likely increase the amounts of impervious surfaces and diminish the groundwater recharge area for Jordan Lake. The land will most likely be subjected to an increased use of fertilizers as land use intensifies towards smaller hobby pastures and manicured lawns rather than traditional conservation tillage of commercial farming operations. These land use changes are likely to contribute to the eutrophication of the waters of Jordan Lake. Consideration should be given to help local governments educate homeowners on proper fertilization methods and soil testing before applying any nutrients. Exempting homeowners outright may have a negative affect on this nutrient strategy. Studies in Orange County NJ and elsewhere have documented that a large percentage of homeowners do not soil test before applying lawn products. Currently, the NCDA&CS Agronomic Division provides a free soil testing service for homeowners and practicing farmers.

15A NCAC 02B .0262 JORDAN WATER SUPPLY NUTRIENT STRATEGY: WATERSHED NUTRIENT REDUCTION GOALS

The goals set for nutrient reduction in the Jordan Watershed are inconsistent and may not be obtainable for the Upper New Hope area, especially with the increased land used for equine. Best Management Practices (BMPs) put in place after January 1 1997 should also be acknowledged as a part of the nutrient reduction strategy.

15A NCAC 02B .0264 JORDAN WATER SUPPLY NUTRIENT STRATEGY: AGRICULTURE

The Jordan Reservoir watershed agricultural land is used for plant nurseries, cropland for the production of corn, soybeans, wheat, or tobacco, and livestock pasturing for beef or dairy operations. The majority of tillage practices are quantified as no-till or minimal tillage systems. The livestock facilities using holding ponds or lagoons must be in compliance with a non-discharge (NPDES) permit and inspected regularly by DWQ. Due to the current restrictions and Best Management Practices (BMPs) already in place in the region (i.e. buffers and no-till), the potential for nutrient runoff is minimized. The use of these practices along with the economica incentive to reduce fertilizer usage due to increased cost of nitrogen based fertilizers and chemicals in recent years gives additional concern whether the nutrient load reduction targets designated for agriculture can be achieved or are practical. Properly maintained farmland aids in the production of clean water by enabling groundwater recharge. Jordan Lake nutrient strategy should give consideration to current farming practices in the Jordan Reservoir area and give adequate credit for these BMPs.

The Agricultural Cost Share program (ACSP) run by Soil & Water Conservation District, currently addresses nutrient concerns on family farms and assists with the implementation of the BMPs. Since 1984, the ACSP has designated over $6.1 million in BMP efforts that have significantly reduced the load of nutrients, sediment, and other potential water quality contaminants to the Jordan Lake watershed. During the last decade, NCDA&CS regional agronomists have also educated farmers and other agricultural interests in the Jordan Lake watershed area and provided technical assistance on how to further conserve land resources and the proper application of nutrients to pastureland and cropland. Therefore adequate credit should be given towards the proposed reduction goals for the agricultural sector designed for conservation and nutrient reduction strategies instituted since *January 1 1997.* Support and encouragement for the continuation of agronomic assistance and BMPs for farmlands should be a high priority in the Jordan Lake nutrient strategy plan.

15A NCAC 02B .0265 AND .0266 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR NEW AND EXISTING DEVELOPMENT

EPA states that stormwater pollution is a major contributor of heavy metals, e. coli, organic and petroleum contaminants due to runoff containing pet wastes, vehicle fluids, lawn care products, street litter, yard waste, etc. They also report that stormwater runoff from residential, commercial, and industrial areas is responsible for 21% of impaired lakes and 45% of impaired estuaries in the mid-Atlantic region. Lands that have transitioned from agricultural or forestry use to residential, commercial, or industrial become limited in ability of the soils to process these pollutants by the natural filtration and decomposition. Requiring improved engineered stormwater management practices for existing and new development would aid in the reduction of potential contaminants reaching the water of Jordan Lake. Hydraulic models should be consulted to fully understand how limiting natural infiltration and the flash flood characteristics of stormwater will degrade stream networks and reduce groundwater recharge rates in the Jordan Lake Basin. Perhaps the US Corp of Engineers design for the Jordan Basin area should be reviewed to reflect land use differences at the time of the Jordan Lake completion to current and projected future usage.

15A NCAC 02B .0267 JORDAN WATER SUPPLY NUTRIENT STRATEGY: PROTECTION OF EXISTING RIPARIAN BUFFERS

In section (6) “EXEMPTION WHEN EXISTING USES ARE PRESENT AND ONGOING” an effective date should be established in order to minimize the potential removal of buffers before the rule is in effect. Previous water basin rules have been limited in discouraging the removal of buffers prior to the rule coming into effect and not rewarding for continuance of the buffer. Oversight for riparian buffers should remain under state authority.

Section 16 states that the uses of pesticides are allowed in the buffer for forestry. We do not believe that this language can be used because the authority to regulate pesticides lies with the Pesticide Board and not the EMC.

Thank you for this opportunity to comment on these rules. Please contact the NCDA&CS Environmental Programs staff at 919-733-7125 if you have any questions or concerns on these comments.