Appendix V

Chowan River Basin
Workshop Summaries

CHOWAN RIVER BASIN WORKSHOPS

North Chowan Workshop
Ahoskie, North Carolina
March 22, 2001

These questions were purposed to the participants:

1: WHAT ARE THE MAIN ISSUES TO WATER QUALITY IN THE CHOWAN RIVER BASIN?

2: WHERE ARE THE PROBLEM AREAS OR WATERS AND WHAT RECOMMENDATIONS DO YOU HAVE FOR ADDRESSING THESE PROBLEMS/WATERS?

3: WHO SHOULD BE INVOLVED IN ADDRESSING THE PROBLEMS (i.e., local agencies or organizations, etc.)?

ISSUES	WHERE	RECOMMENDATIONS	WHO
♦ Overstocked with Canadian Geese	♦ Lots of areas in Merchant Millpond were cleared	♦ Institute resident goose hunting season	♦ NC Wildlife Resources Commission (WRC)
♦ Explore non-bulk head (bio-engineering) bank stabilization	♦ Development area – streams and sound	♦ Explore, look into alternatives	♦ NCSU ♦ CAMA
♦ Identify if farming Best Management Practices (BMPs) have improved water quality ♦ Erosion/nutrient load at points between rivers on north side of Albemarle Sound ♦ Sediment into rivers north and south of Albemarle Sound via drainage ditches	♦ Basinwide	♦ Continue forest BMPs & forest practice guidelines ♦ Monitoring ♦ Continue cost share programs and fine tune them ♦ Provide tax credit for no-till equipment - expand and increase	♦ NC Forest Service ♦ DWQ ♦ NRCS ♦ Soil & Water ♦ FSA ♦ NC State Government
♦ Restore fish spawning habitat	♦ Pollack Swamp and other areas	♦ Implement restoration	♦ Wetlands Restoration Program (WRP) ♦ NCSU Stream Restoration

♦ Failing septic systems ♦ State of NC is forcing municipalities to install land application sites without much support for success or flexibility to make it work. ♦ Individual residential septic tank systems and their impacts to water quality	♦ Basinwide ♦ High density areas – trailer parks ♦ Basinwide ♦ More in upper part of basin	♦ Education ♦ Continue to look at alternative systems ♦ Provide financial assistance for repairs ♦ Require pumpout (i.e., every 5 years) ♦ Be sure future sitings are appropriate locations (i.e., look at soil compatibility)	♦ Health Department ♦ NC Cooperative Extension Service (NCES) ♦ County Government
♦ Run-off in developed areas ♦ Stormwater from parking lots, farming operations (sediment, nutrients, pesticides, hog lot – sewage treatment)		♦ Education to homeowners & developers	♦ NCES ♦ Ag Service
♦ Development	♦ Chowan County ♦ Edenton ♦ Hammonds Point	♦ Develop sound land use plans ♦ Conduct county inspections on permits	♦ Local ♦ Division of Coastal Management ♦ County
♦ Status of Virginia's impact to NC waters	♦ Virginia	♦ Continue "pressure" to get memorandum of agreement with Virginia signed ♦ Land apply municipal waste (i.e., spray irrigation instead of discharge) ♦ Need communication and cooperation	♦ Legislators ♦ VA Government Legislature ♦ EPA ♦ DENR ♦ VA Dept of Conservation
♦ Wetland mitigation – mosquitoes ♦ Requiring double acreage replacement in a region that is already predominantly swampy		♦ Mitigation should be site-specific	♦ NCDOT ♦ WRP
♦ Buffers between development at waterside and waters ♦ Not allowing a landowner to trim trees within 50 feet of river even when the river is 2 miles wide and water temperature is not affected.		♦	♦
♦ Find a way to the end of CF Industries groundwater problem		♦	♦
♦ International Paper Industries: during peak discharge – the water turns brown and fish move out	♦ Chowan River	♦ Reduce nitrogen and phosphorus in discharge ♦ Increase monitoring ♦ Need status and trends document of Chowan River	♦ DENR ♦ VADCR
♦ Insufficient data relayed to citizens ♦ Insufficient problem identification ♦ Insufficient post-BMP monitoring ♦ A farmer continually plows his fields closer and closer to the road, until the field reaches the road. This area causes erosion and flooding, etc. ♦ Don't place responsibility/blame on a single group (i.e., farmers) for complex water quality problems (i.e., nutrient loading) ♦ Reduce phosphorus use by farmers (i.e., use low-phosphorus fertilizer) ♦ Need for more information and advice on how to reduce nutrient inputs (i.e., field borders)		♦ Conduct education with hard science in layman's terms with information on yield impacts	

♦ Poorly performing sanitary treatment plants due to them being undersized ♦ Sedimentation/turbidity ♦ Nutrient source loading – What are the sources? ♦ Industry, municipality, agriculture should cross education to make better solutions!		♦ Site outfalls appropriately ♦ Implement vegetated filters ♦ Use sedimentation ponds ♦ Use constructed wetlands ♦ Develop regulations ♦ Promote education ♦ Increase staffing ♦ Increase enforcement ♦ Institute local watches (i.e., Stream Watch)	♦ WRP ♦ Locals
♦ Groundwater usage vs. Chowan River surface water	♦	♦	♦
♦ Out board motors ♦ Increased traffic – jet skis impacts	♦ Chowan River	♦ Learn more about this issue – especially EPA's new emission standards ♦ Education	♦ EPA

CHOWAN RIVER BASIN WORKSHOPS

South Chowan Workshop
Edenton, North Carolina
March 27, 2001

These questions were purposed to the participants:

1: WHAT ARE THE MAIN ISSUES TO WATER QUALITY IN THE CHOWAN RIVER BASIN?

2: WHERE ARE THE PROBLEM AREAS OR WATERS AND WHAT RECOMMENDATIONS DO YOU HAVE FOR ADDRESSING THESE PROBLEMS/WATERS?

3: WHO SHOULD BE INVOLVED IN ADDRESSING THE PROBLEMS (i.e., local agencies or organizations, etc.)?

ISSUES	WHERE	RECOMMENDATIONS	WHO
♦ Over-fertilization from the residential community ♦ Nutrients ♦ Lawn fertilization ♦ Commercial/lawn care and golf course upkeep	♦ Future development ♦ Basinwide	♦ Educate ♦ Institute buffers between lawn and ditch	♦ NCES ♦ Some regulators ♦ DWQ?
♦ Septic systems and municipal systems ♦ Poor soils for septics ♦ Affect rural wells ♦ Health concerns ♦ Lack of information distributed on how to operate systems ♦ During home purchase – no paperwork relay between owners	♦ Eastern NC	♦ Distribute information at time of permitting on maintenance ♦ Survey existing geographic areas of problems – use soil survey map as indicator ♦ Ensure broader distribution of information especially to rural areas ♦ Give incentives for septic upkeep (pump-out) (i.e., Nags Head's program) ♦ Provide cost share opportunities for maintenance ♦ Allow alternative systems ♦ Educate on maintenance and operation	♦ Health Department ♦ NCES ♦ Local government

♦ Waste water treatment systems ♦ Poor compliance ♦ Land application limitations ♦ Likely high levels of violations ♦ Lack of resources to do good operation and maintenance ♦ Lack of coordination ♦ Broken hydrants?	♦	♦	♦
♦ Get info on waters that are not currently monitored	♦ Non-monitored sites	♦ Work out monitoring program logistics/glitches ♦ Need more data	♦ DWQ
♦ Livestock runoff and waste	♦ Poultry and hog operations	♦ Address – work with the animal operations	♦ DWQ
♦ Delisting on 303(d) list	♦	♦ Revisit	♦ DWQ
♦ Too many geese	♦ Merchants Mill Pond and other areas	♦ Educate ♦ Make it less attractive to the geese ♦ Hunting	♦ Fish and Wildlife Service ♦ Wildlife Resource Commission ♦ County Government
♦ Sedimentation due to agriculture ♦ Forestry ♦ Development	♦ Basinwide	♦ Encourage BMPs ♦ Encourage Conservation Reserve Enhancement Program conservation till farming ♦ Seek alternatives to bulkheads (i.e., vegetative stabilization, etc.)	♦ NRCS ♦ Soil and Water Conservation District
♦ House Bill 515 ♦ Nitrogen limit for discharge to nutrient sensitive waters ♦ Needs to address nitrogen forms (i.e., is the nitrogen bioavailable?)	♦	♦ Revisit House Bill 515 language	♦ Legislature
♦ Nucor	♦	♦ Monitor above and below plant discharge	♦ DWQ
♦ Unrecycled gray water	♦ Basinwide	♦	♦ County Health Department
♦ Land use – conversion	♦	♦	♦ County ♦ DWQ
♦ Permitted dischargers	♦	♦	♦ County ♦ DWQ
♦ Salinity – over use of water	♦	♦	♦ County ♦ DWQ
♦ Interactions with Virginia	♦	♦	♦ County ♦ DWQ
♦ Agriculture ♦ Agriculture community is: ♦ Working hard ♦ Has high participation ♦ $$ is frozen due to the state ♦ Farmers are reducing nutrients	♦ Lift Ag Cost share funding freeze ♦ Educate on land application rates and effective locations, disposal, amount of	♦	♦ Soil and Water Conservation Division for Ag Cost Share Funds ♦ NCES ♦ Master Gardener's

♦ Agriculture is an easy target for management ♦ Agriculture is blamed for residential community's impacts ♦ Increased growth and development ♦ Stormwater runoff ♦ More restrictions on agriculture sector and there is an exam with fee requirements ♦ Ignorance on where water flows – (i.e., runoff flows directly to storm drains)	applications ♦ Foster formal training		Program ♦ Dept of Agriculture Pesticide Division