## Appendix V

## Pasquotank River Basin Workshop Summaries



## PASQUOTANK RIVER BASIN WORKSHOPS

South Pasquotank Workshop Manteo, North Carolina March 26, 2001

These questions were purposed to the participants:

Discussion Question 1: WHAT ARE THE MAIN <u>ISSUES</u> TO WATER QUALITY IN THE PASQUOTANK RIVER BASIN?

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

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

ISSUES	WHERE	RECOMMENDATIONS	WHO	WHERE DWQ ADDRESSES IN PLAN
◆ Septic system management	<ul> <li>Basinwide</li> <li>Dare County beaches due to high residential density</li> </ul>	<ul> <li>Promote decentralized wastewater management</li> <li>Educate about effective treatment</li> <li>Improve water quality testing</li> <li>Mandate particular systems on a case-by-case basis</li> </ul>	<ul> <li>Nags Head Model</li> <li>Roper facility</li> <li>North Carolina Cooperative Extension Service (NCES)</li> </ul>	
<ul> <li>Lack of wastewater treatment</li> <li>Failing systems</li> </ul>	♦ Nags Head	<ul> <li>Promote treatment alternatives</li> <li>Conduct inspection and monitoring effectively</li> <li>Eliminate regulatory restrictions to alternative technologies</li> </ul>	•	

<ul> <li>Submerged aquatic vegetation loss</li> <li>Turbidity concerns</li> </ul>	<ul> <li>Currituck Sound</li> <li>Northern Little River</li> </ul>	◆ Increase automated monitoring through the Knotts Island Ferry	<ul> <li>♦ Ferry system</li> <li>♦ State</li> </ul>
<ul> <li>Lack of information</li> </ul>	Basinwide	<ul> <li>Extend UNC/Duke's study to the northeast</li> </ul>	◆ Trained citizens
Aquatic growth	v Bushi vide	◆ Analyze data taking into account wind, flow,	◆ Public
◆ Salinity changes		salinity	◆ DWO
,		♦ Monitor more	
		♦ Conduct an assessment of where we need to	
		go in terms of future science needs	
		• Ensure regulations have enforcement teeth	
♦ Growth and development	♦ Elizabeth City	◆ Integrate DWQ basin planning into CAMA	♦ DMF Coastal Habitat
-	♦ Basinwide	(i.e., water/land use plan)	Protection Plans
	♦ Outer Banks	♦ Manage effectively	♦ Nature Conservancy
	♦ N. Pasquotank County	<ul> <li>Limit growth with a date for full build out</li> </ul>	♦ CAMA
	♦ Camden County	<ul> <li>Mandate smart growth approach which</li> </ul>	♦ Local governments
	<ul> <li>Currituck County</li> </ul>	prevents environmental degradation	♦ Federal government
		<ul> <li>Ensure funding for mandates</li> </ul>	
		<ul> <li>Identify and protect critical areas</li> </ul>	
		<ul> <li>Restrict uses in critical areas</li> </ul>	
		<ul> <li>Promote acquisition</li> </ul>	
		<ul> <li>Institute build-out restriction (i.e., short-term and long-term)</li> </ul>	
		◆ Serve as role model for other locations	
		♦ Institute build-out capacity or limits	



## PASQUOTANK RIVER BASIN WORKSHOPS

North Pasquotank Workshop Elizabeth City, North Carolina March 27, 2001

These questions were purposed to the participants:

Discussion Question 1: WHAT ARE THE MAIN <u>ISSUES</u> TO WATER QUALITY IN THE PASQUOTANK RIVER BASIN?

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

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

ISSUES	WHERE	RECOMMENDATIONS	WHO	WHERE DWQ ADDRESSES IN PLAN
◆ Pollutants (i.e., mercury, dioxin, etc.)	<ul><li>◆ Lake Phelps</li><li>◆ Other areas</li></ul>	<ul> <li>Understand their source – is it natural/man made?</li> <li>Set acceptable standards</li> <li>Monitor</li> </ul>	◆ DWQ	
• Drinking water Trihalomethanes	<ul><li>♦ Elizabeth City</li><li>♦ Other areas</li></ul>	<ul> <li>♦ Use ammonia in water treatment</li> <li>♦ Monitor</li> </ul>	<ul> <li>Municipal water systems</li> </ul>	
◆ Erosion	♦ Basinwide	♦ Implement buffers	•	
◆ Sewer pipe breakage/leaks	♦ Elizabeth City	<ul> <li>Monitor</li> <li>Conduct enforcement actions</li> <li>Upgrade</li> </ul>	<ul><li>♦ Elizabeth City</li><li>♦ Grants</li></ul>	
<ul> <li>Septic systems</li> <li>Site differences</li> <li>Politics</li> <li>Different standards</li> </ul>	◆ Dare/Tyrrell counties	<ul> <li>Ensure proper maintenance and education</li> <li>Allow flexibility in siting (monitoring)</li> </ul>	<ul> <li>♦ NCES</li> <li>♦ Health department</li> </ul>	
♦ Organic loading	•	◆	•	

• Agriculture/Urban nonpoint surface runoff	◆ Basinwide	<ul> <li>Monitor</li> <li>Acquire background information</li> <li>Conduct education</li> </ul>	◆ DWQ
<ul> <li>Concerns regarding status of watershed (need more information)</li> </ul>	◆ Basinwide	◆ Conduct more education and research	<ul> <li>◆ DWQ</li> <li>◆ NCES</li> <li>◆ Universities</li> </ul>
♦ Work on major problems first	◆ Basinwide	<ul> <li>Conduct science</li> <li>Research</li> <li>Monitor</li> </ul>	◆ All agencies
• Enforce present regulations and provide assistance (i.e., be flexible!)	◆ Basinwide	♦ Use science	•
• BMPs (agriculture) (i.e., water control structures, sediment control and denitrification)	◆ Basinwide	<ul> <li>Use the systems the right way</li> <li>Educate</li> <li>Build in flexibility</li> </ul>	<ul><li>♦ NRCS</li><li>♦ NCES</li></ul>
◆ Continue forest BMPs	♦ Basinwide	<ul> <li>Monitor concerns in "critical areas"</li> </ul>	•
◆ Industry potential impact	◆ Rural areas	<ul> <li>Plan ahead</li> <li>Consider type of industry when permitting</li> </ul>	<ul> <li>♦ County planner</li> <li>♦ Economic development groups</li> </ul>
♦ Boating waste (i.e., petroleum concentration)	♦ Around marinas	<ul> <li>Enforce rules and regulations</li> <li>Advertise pumpout/disposal facilities available</li> <li>Increase education</li> </ul>	<ul> <li>Coast Guard</li> <li>Fish and Wildlife Services</li> <li>Marinas</li> </ul>
◆ Salt intrusion	<ul> <li>Northwest River</li> <li>Currituck Sound</li> <li>Pasquotank River</li> <li>Perquimans River</li> </ul>	◆ Monitor	◆ DWQ
• Salt wedge stratification and associated problems	•	•	•
◆ Impact of 4-lane Highway 64 (i.e., development)	<ul> <li>Washington County</li> <li>Tyrrell County</li> <li>Dare County</li> </ul>	<ul> <li>Plan and zone appropriately</li> <li>Conduct an environmental study through "Smart Growth" initiative</li> </ul>	◆ County planners
◆ Develop wastewater runoff	♦ Close to and along Virginia border	<ul> <li>Direct development to protect resources through zoning/ordinances</li> </ul>	♦ County/city
<ul> <li>Public does not know or is not made aware of water quality (specifically recreational use impairment)</li> </ul>	◆ Basinwide	<ul> <li>Publish information on a periodic basis</li> <li>Use Nags Head's program as example</li> </ul>	<ul> <li>♦ Local government</li> <li>♦ State government</li> <li>♦ County government</li> </ul>
♦ Water use/consumption	<ul> <li>Future growth in Elizabeth City area</li> <li>Southern portions of counties/waterfront development</li> </ul>	<ul> <li>Protect resources through development options</li> <li>Conduct a comprehensive assessment to protect resources (i.e., look at cumulative impacts)</li> </ul>	•
<ul> <li>Waterfront development</li> <li>Subdivisions are allowed to a point where wetlands fill is allowed (current regulations)</li> </ul>	•	•	<b>◆</b>
<ul> <li>Growth development</li> <li>USDA is piping the area</li> </ul>	<ul> <li>Pasquotank County</li> <li>Hwy 17 corridor</li> </ul>	<ul> <li>Reevaluate population projections</li> <li>Reevaluate seasonal flux</li> </ul>	♦ DWQ ♦ NCES

	◆ Little River	• Educate that agricultural lands could provide	Health department
	<ul> <li>Currituck County</li> <li>Dare County</li> <li>Virginia</li> </ul>	<ul> <li>service for urban waste</li> <li>Allow clustering for residential development to allow open space: promote concept and offer incentives</li> </ul>	<ul> <li>Local governments</li> <li>USDA</li> </ul>
◆ Loss of wetlands (quantity and quantity)	•	◆ Preserve wetlands	<ul> <li>US Army Corps of Engineers</li> <li>Division of Coastal Management</li> <li>NC DWQ</li> </ul>
<ul> <li>Point source pollution (i.e., untreated waste discharged)</li> </ul>	<ul> <li>Elizabeth City</li> <li>Discharge to Pasquotank River</li> </ul>	♦ Use wetlands for treating waste	◆ DWQ
<ul> <li>Accidental/illegal discharge events</li> </ul>	<ul> <li>Pasquotank River</li> </ul>	<ul> <li>Provide information/education on operations and maintenance</li> <li>Ensure effective planning for capacity needs</li> </ul>	•
◆ Lack of state employees to enforce existing regulations (i.e., erosion/sediment control, wastewater treatment oversight)	<ul> <li>◆ Basinwide</li> <li>◆ State</li> </ul>	<ul> <li>Adequately staff the state employees</li> <li>Evaluate existing regulations and get ineffective ones out before making new ones</li> <li>Ensure better coordination of activities</li> </ul>	<ul> <li>DENR</li> <li>US Army Corp of Engineers</li> <li>Federal agencies</li> <li>General Assembly</li> <li>Governor</li> </ul>
<ul> <li>Groundwater</li> <li>Overuse of drinking water</li> <li>Deplete acquifer</li> </ul>	*	•	•
<ul> <li>Direct disturbance of contaminated sediments in rivers due to lack of adequate review in the permitting process</li> </ul>	•	•	•
<ul> <li>Discharges to surface waters from water treatment plants</li> <li>Inadequate planning for dischargers</li> <li>Incorrect surface water classifications</li> <li>Concerns about discharge constituents</li> <li>Adjacent waterbody becomes impacted</li> <li>High salinity discharges</li> <li>Negative impact on local vegetation</li> <li>Inadequate impact studies by consultants (especially cumulative and long-term)</li> <li>Existing loopholes due to incorrect classifications</li> <li>Inadequate review of permit applications (by state)</li> </ul>	<ul> <li>Roper</li> <li>Camden County</li> <li>Dare County</li> <li>Tyrrell County</li> <li>Kendricks Creek</li> </ul>	<ul> <li>Research suitable discharge sites</li> <li>Address classifications of adjacent waterbodies – are they right?</li> <li>Evaluate where discharge should go</li> <li>Review recent scientific studies</li> <li>Determine if issue is more widespread than we are aware</li> <li>Staff state agencies adequately</li> <li>Close reclassification loopholes</li> <li>Conduct adequate assessments using current flow data and water quality data</li> </ul>	<ul> <li>DWQ</li> <li>Consultants</li> <li>Division of Marine Fisheries</li> <li>Wildlife Resources Commission</li> <li>NCSU</li> <li>Weyerhaeuser</li> <li>General Assembly</li> <li>Governor</li> <li>Division of Water Resources</li> </ul>
♦ Are the waters around the Avon area polluted – is it safe to fish there?	<ul> <li>▲</li> </ul>	•	•
◆ Nutrient enrichment	◆	•	•
<ul> <li>Water quality effects on submerged aquatic</li> </ul>	<ul> <li>Currituck Sound</li> </ul>	◆	◆

vegetation in Currituck Sound and Back Bay	y l		
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