

**SOURCE WATER  
PROTECTION PLAN  
FOR  
Kerr Lake Regional  
Water System in  
Vance County, NC  
PWS ID # 02-91-010**



**August 28, 2006**

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## BACKGROUND

The North Carolina Source Water Protection Program (SWPP) is a voluntary program designed to support local efforts to protect public drinking water sources. The SWPP is administered by the Public Water Supply (PWS) Section of the North Carolina Department of Environment and Natural Resources (DENR). A key feature of the SWPP is that each PWS system develops its own local SWP plan based on local conditions and priorities. The SWPP affords PWS systems a broad range of options for protecting their water supplies. The SWPP also provides information about funding and other resources available to support such local protection efforts. The SWPP encompasses both surface water and ground water sources of drinking water. Communities are encouraged to establish source water protection plans which include the following:

Step 1. Obtaining a copy of the Source Water Assessment Program (SWAP) Report: The 1996 amendments to the Safe Drinking Water Act provided federal support and required states to conduct assessments of all public water systems. A source water assessment is a qualitative evaluation of the potential of a drinking water source to become contaminated by the identified potential contaminant sources (PCS) within the delineated area. The PWS Section completed assessments for approximately 10,000 public water supply sources in the state of North Carolina. A copy of the Kerr Lake Regional WS SWAP may be found on the PWS website <http://www.deh.enr.state.nc.us/pws/>.

Step 2. Forming a local Source Water Protection Team: The SWP Team will develop and implement the local SWP plan.

Step 3. Conducting a Potential Contaminant Source Inventory: Identification of potential contamination sources within the source water protection area.

Step 4. Developing Management Strategies: The goal of management is to minimize the potential for contamination to enter the drinking water supply. Management strategies may take the form of regulatory strategies (such as zoning or use permits) and/or non-regulatory strategies (such as education or household hazardous waste collection). The local SWP Team must decide what methods are appropriate for their PWS system.

Step 5. Developing a Contingency Plan: Develop an emergency contingency plan for alternative water supply sources in the event supply becomes contaminated and emergency response planning for incidents that may impact water quality.

Step 6. Developing a Schedule for Implementing and Updating the Local SWP Plan: Develop an implementation and maintenance schedule for the local SWP plan.

Step 7. Submitting the Local SWP Plan to the PWS Section: Submit the completed local SWP plan to the PWS Section for review and approval.

A copy of this plan should be forwarded to the Public Water Supply Section (PWSS) for their review and recommendations. The PWSS will provide the final approval for SWP Plans. Plans should be submitted to:

Source Water Protection Program Coordinator  
Public Water Supply Section  
1634 Mail Service Center  
Raleigh, North Carolina 27699-1634  
Phone 919-715-0827  
Fax 919-715-4374

## INTRODUCTION

A Source Water Assessment Program (SWAP) Report has been developed for Kerr Lake Regional Water System (KLRWS) by the NC Public Water Supply Section. Surface water sources can be threatened by many potential contaminant sources, including permitted wastewater discharges, urban storm water runoff, or other types of non-point source contamination such as runoff produced by agricultural activities and land clearing for development. A source water assessment is a qualitative evaluation of the potential of a drinking water source to become contaminated by the identified potential contaminant sources (PCS) within the delineated area. A SWAP Report consists of an assessment area delineation, a potential contaminant source inventory and map, a susceptibility rating, maps, tables, and figures for the surface water source, and a detailed description of North Carolina's SWAP approach. KLRWS' surface water source was assigned a qualitative susceptibility rating of moderate, based on a contaminant rating of lower and an inherent vulnerability rating of moderate. This rating process is described in detail in Sections 3 and 6 of the SWAP Report.

KLRWS is a public water system serving portions of Vance, Granville, and Warren Counties in the central northern portion of North Carolina. The System serves three bulk customers - the City of Henderson, City of Oxford, and Warren County - which currently supply water to the Town of Kittrell, Town of Norlina, Franklin County, Town of Warrenton and Town of Middleburg. The KLRWS consists of a conventional surface water treatment plant, distribution mains, storage tanks and water meters. John H. Kerr Reservoir (Anderson Creek on Kerr Lake) serves as the water supply. Storage consists of a 3 million gallon clearwell at the plant site, 2-750,000 gallon tanks in Henderson, 2-300,000 gallon tanks in Oxford and a 250,000 gallon tank at Soul City in Warren County for a total storage capacity of 5.35 million gallons. The system uses an average of 6 million gallons per day to supply a population of approximately 54,545 people.

Treatment of the raw water consists of sodium hypochlorite as a microbial deterrent, fluoride to promote good dental health in school-aged children, alum for coagulation, polymer to help with coagulation, caustic soda to regulate the pH, Corrguard to help slow down corrosion of the distribution lines and potassium permanganate to help with iron and manganese removal and taste and odor. There are currently ten certified operators that run the treatment plant.

Raw water quality at the plant is good and there is no history of contamination or non compliance with existing public water supply rules and regulations. There is a Water Supply Watershed Management and Protection Ordinance that was adopted by Vance County in December of 1993, and became effective January 1, 1994, which provides developmental and subdivision regulation for the 5,613 acre watershed area designated as a Public Water Supply Watershed by the NC Environmental Commission. The ordinance includes guidelines for cluster development, buffered area requirements and the issuance of building permits in the Watershed Protection Area, and may be found in its entirety at Vance County's website at [www.vancecounty.com](http://www.vancecounty.com). There is a watershed administrator appointed by the County Manager and a Watershed Review Board appointed by the Vance County Board of Commissioners.

## THE SOURCE WATER PROTECTION TEAM

As a result of discussions with the Team Leader, interviews held with citizens during the process of conducting the potential contaminant source inventory, and contact with the local USDA Office, a list of potential stakeholders was identified in the Henderson and Vance County area. Invitations were sent to all those who were identified as possibly having an interest in participating in the development of the source water protection plan. Also, an informational article published in The Daily Dispatch, the Henderson newspaper, invited anyone who was interested to participate in the process. The following is a list of stakeholders who contributed to the development of this plan.

<b>NAME/REPRESENTING</b>	<b>ADDRESS</b>	<b>PHONE</b>	<b>E-MAIL</b>
Christy Lipscomb Team Leader Chief Operator Kerr Regional Water System	KLRWS PO Box 1434 280 Regional Water Lane, Henderson, NC 27536	Phone 252-438- 2141 Fax 252-438- 7866	clipscomb@ci.henderson.nc.us
Elissa Yount Henderson City Council		Phone 252-492- 2344	eddieyount@earthlink.net
Lynn Harper Henderson City Council	233 Bellewood Drive Henderson, NC 27536	Phone 252-492- 2822	lynnharper@nc.rr.com
Ken Krulik Vance County Planning and Development Assistant Director/Senior Planner	156 Church Street Suite 003 Henderson, NC 27536-5574	Phone 252-738- 2080	kkruklik@vancecounty.org
Tom Anderson Vance County Planning and Development Code Enforcement Compliance Officer	156 Church Street Suite 003 Henderson, NC 27536-5574	Phone 252-738- 2096 Office 252-738- 2080	tanderson@vancecounty.org
Bryce Fleming NC State Parks Park Superintendent IV	6254 Satterwhite Point Road, Henderson, NC 27537	Phone 252-438- 7791	bryce.fleming@ncmail.net
Tracy Twisdale Sea Tow Girl Scout Camp	PO Box 118 Middleburg, NC 27556	Phone 252-738- 0732	seatow_kerrlake@seatow.com
Lawrence Elliott Landowner/Farmer	2055 Satterwhite Point Rd. Henderson, NC 27537	Phone 252-432- 0285	ltelliot@nc.rr.com

## POTENTIAL CONTAMINANT SOURCE INVENTORY

Using a United States Geological Survey (USGS) Topographic Map, with the Source Water Protection Area (SWPA) delineation taken from the Source Water Assessment maps, a windshield survey was conducted of the SWPA. The area delineated for this surface water source is the water supply watershed. The watershed is the geographic area of land draining to Anderson Creek and Kerr Lake where the surface water intake is located. The potential contaminant source (PSC) inventory map shows the delineated area for the surface water source and the PCSs that, if released to the environment, could reasonably be expected to be a risk or a potential for contamination to the drinking water supply. PCS identification includes those facilities or sites regulated under a state or federal regulatory program and are identified in electronic databases in the source water assessment and facilities or sites that fall into the following categories.

<u>01</u> Abandoned Wells	<u>28</u> Lift Stations
<u>02</u> Aboveground Storage Tank	<u>29</u> Machine Shops
<u>03</u> Airport	<u>30</u> Major Highways
<u>04</u> Agricultural Facilities	<u>31</u> Major Railroads
<u>05</u> Animal Feedlot/Waste Storage	<u>32</u> Military Bases
<u>06</u> Asphalt Plant	<u>33</u> Mining
<u>07</u> Auto Repair	<u>34</u> Nurseries
<u>08</u> Body Shop/Salvage	<u>35</u> Oil/Gas Pipeline
<u>09</u> Car Washes	<u>36</u> Oil Wells
<u>10</u> Cemetery	<u>37</u> Photo Processor
<u>11</u> Chemical Production	<u>38</u> Printer
<u>12</u> Chemical Mixing/Storage	<u>39</u> Power Lines
<u>13</u> Drainage Canal	<u>40</u> Other Wells
<u>14</u> Dumps	<u>41</u> Refineries
<u>15</u> Electroplaters/Metal Finishers	<u>42</u> Refinishing
<u>16</u> Fertilizer/Pesticide Storage	<u>43</u> Road Salt
<u>17</u> Fertilizer/Pesticide Production	<u>44</u> Septic Systems
<u>18</u> Fertilizer/Pesticide Mixing	<u>45</u> Substations
<u>19</u> Funeral Homes	<u>46</u> Surface Water
<u>20</u> Gas Stations	<u>47</u> Sewage Plant
<u>21</u> Golf Courses	<u>48</u> Underground Storage Tanks
<u>22</u> Grain Storage Bin	<u>49</u> Waste Piles
<u>23</u> Holding Pond/Lagoon	<u>50</u> Wood Preserving
<u>24</u> Inactive/Abandoned Hazardous Waste Sites	Other (Specify)
<u>25</u> Injection Wells	<u>51</u> <u>Groundwater Remediation Site</u>
<u>26</u> Laboratories	_____
<u>27</u> Laundromat/Dry Cleaners	_____

Several state and federal databases were searched. A list of those databases is included in the Appendix. Information about the incidents that occur within the WHPA is provided below:

**Septic Tanks** – All residents and businesses within the source water protection area are using septic tanks as a method of waste disposal.

### Underground Storage Tank Section

- S. T. Wooten – Incident # 3412, Map Code 6A,
- 1986 oil in Anderson Creek, going to Kerr Lake
  - Year ending November 1997, 1,900 gallons of free product removed
  - December 1997, MW-13, 0.89 feet free product

- Middleburg Interstate Shell – Incident #15539, Map Code 51A
- 1994 Tank Closure, CSA 4,600 ppb Benzene at site

- CAP recommended Natural Attenuation
- Sample taken from well next door clean

Ace Hardware, Incident – Incident #16180 (Rose Mart # 17), Map Code 48A, 51C

- Discovered 1994 during tank installation
- 2005 Free Product Recovery Report – had recovered 41 gallons FP, less than 0.5 inches FP in RW-1
- January 2005, on-site well had 690 ppb. MTBE, (methyltertbutylether) oxygenate in gasoline. GW Standard 200 ppb.
- “Nearby stream” MTBE 22 ppb., 2005, No standard for drinking water, but 20-40 ppb. to avert taste and odor (EPA)
- April of 2005 Notice of Violation for failure to start corrective action, removal of free product
- Site hooked municipal water, so rank lowered

Exxon-Petro Mark, Incident #17579, Map Code 48F, 51B, I-85 and Satterwhite Point Road

- Site ranked high
- Reported 1997, spill, cap on line for UST not properly secured, ≈ 700 gallons diesel fuel lost
- 1998, 0.12 feet of free product in MW-2A
- 2003, removing FP using Mobile Multiphase Extraction (MMPE)
- Notice of Violation sent 2004

USTs – six gas stations

- Chex Truck Stop, last inspection 1996, ok
- R & R Food Mart, last inspection 2001, ok
- Rose Mart #17, Notice of Violation 2004, corrected violations
- Petromart, Inspected 2001, ok
- Steve’s Grocery, compliance assistance visit 1997, several corrections or changes needed, never reinspected
- Fast Break Convenience, no inspection on file

NPDES Permits

- Kerr Lake Regional WTP – NC0083101 – Water Plants and Water Conditioning Discharge – Anderson Creek
- Vulcan Construction Materials – Greystone – NCG020154 – Minerals, ground or treated, Mining activities Stormwater Discharge COC – Anderson Creek
- S.T. Wooten – NCG140120 – Ready Mix Concrete Stormwater/Wastewater Discharge COC
- S.T. Wooten – NCG160054 – Asphalt Paving Mixture Stormwater Discharge COC
- S.T. Wooten – WQ0004209 – Groundwater Remediation, Nondischarge

Tier II Site

- S.T. Wooten – CCB6E7A78F8F4A1785256CD9006825E0
  - Asphalt, diesel fuel #2, diesel fuel #4, gasoline, refined petroleum inside shop, used petroleum outside shop.

# Kerr Regional Drinking Water Assessment Area

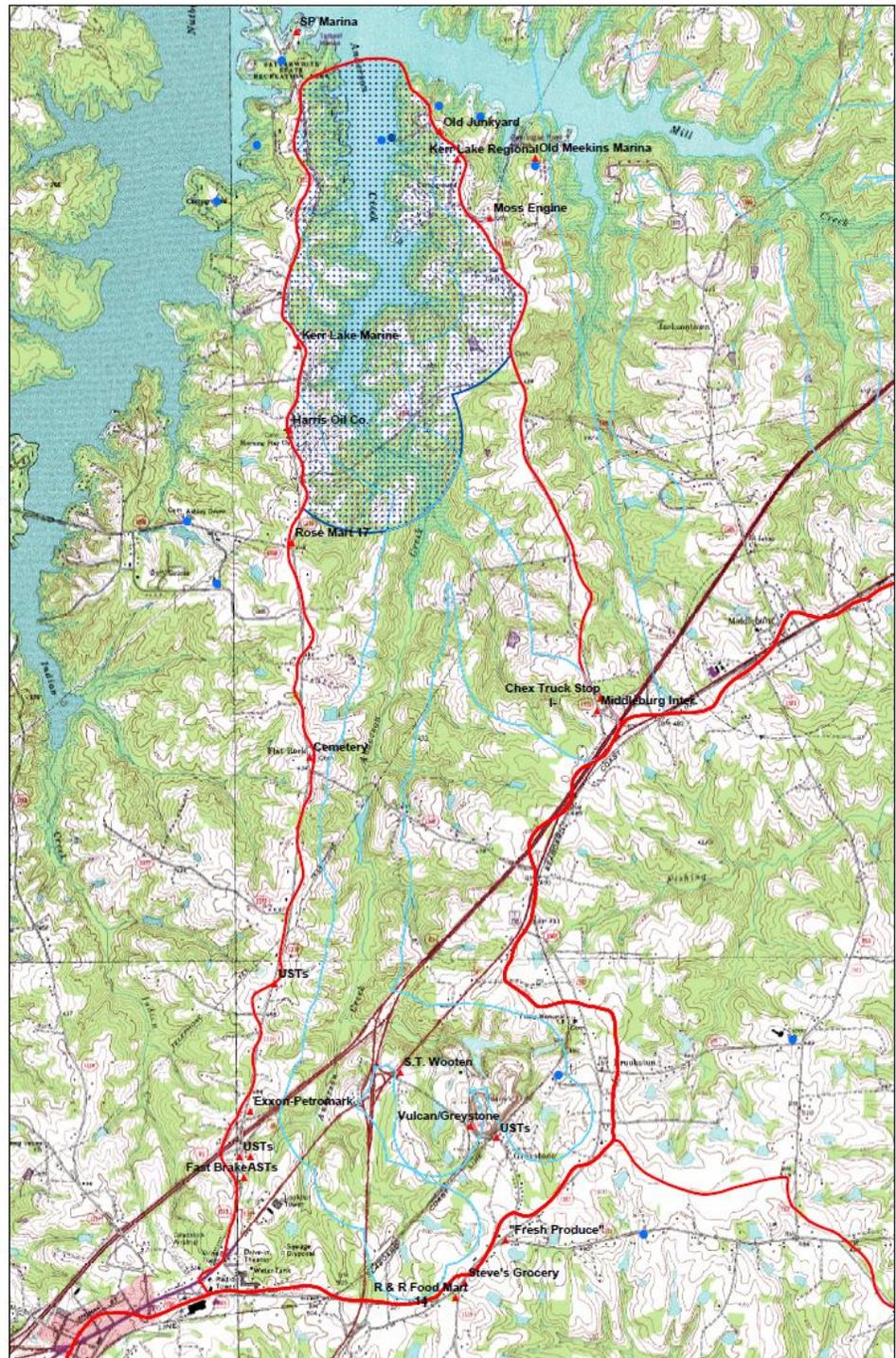
**Legend**

- Kerr intake
- PWS Systems

**Surface Water Assessment Areas - Zones**

**Watershed Zones**

- Critical Area (NA for WS-I)
- Protected Area Boundary (WS-IV, V only)
- Stream Zone
- Watershed Boundary
- surface\_water\_assessment
- ▲ Kerr PCS Inventory Events



1:24,000

## POTENTIAL CONTAMINANT SOURCES

The table below shows the potential contaminant sources (PCSs) listed in the order of the risk they might pose to the surface water intake. In determining this order, the PCSs' proximity to or likelihood that there is a direct pathway to the intake, quantity of contaminants on site, potential of health risk and history of compliance were taken into consideration. Risk was estimated and PCSs are grouped into categories of higher, moderate and lower risk.

Map Code	PSC Site	Owner Contact	Potential Contaminant	Quantity
<b>Higher Risk Sources</b>				
6A	S.T. Wooten-Henderson Asphalt Plant 3950 US 1 and US 158 697 Greystone Rd. Henderson, NC 27537 492-4031		Tier II Site CCB6E7A78F8F4A1785356CD9006825E0 NPDES Permits NCG140120 NCG160054 WQ0004209 Pollution Incident # 3412	
33A	Vulcan Construction Materials-Greystone SR 1508	Billy Stevenson Supervisor	NPDES Permit NCG020154	
2A	Satterwhite Point Marina 6470 Satterwhite Point Rd. Henderson, NC 27537 252-438-4441	General Managers Scott and Catherine Hughes	Gasoline ASTs Boat Storage Repair	
44A,2A	Old Meekins Marina	Max Bobbitt	Trailers w/septic tanks Fuel Oil AST One well	500 gallon
<b>Moderate Risk Sources</b>				
51A	Middleburg Interstate Shell SR 1371 Intersection (vacant lot across from Chex)		Pollution Incident # 15539	
48F, 51B	Exxon-Petromark Exxon I85 & Satterwhite Rd. 822 Satterwhite Point Rd.	Mcleod Oil Inc. PO Box 100 Hwy 70 Mebane, NC 27302	Pollution Incident # 17579	

<b>Map Code</b>	<b>PSC Site</b>	<b>Owner Contact</b>	<b>Potential Contaminant</b>	<b>Quantity</b>
48A, 51C	Rose Mart 17 2989 Nutbush Rd. Ace Hardware - Nutbush Satterwhite Rd (SR 1308 & 1319)	Rose Hill Oil Co. PO Box 706 Henderson, NC 27536-0706	UST Site 0-034271 Pollution Incident 16189	
48B	R & R Food Mart 1458 Warrenton Road Henderson, NC 27536	Rose Hill Oil Co. PO Box 706 Henderson, NC 27536-0706	4 USTs	
48H	Fast Brake Fast Break Convenience 578 Satterwhite Point Rd. Henderson, NC 27537	For Profit, LLC PO Box 1583 Henderson, NC 27536-1583	UST Site 0-036752	
48C	Steve's Grocery 1491 Warrenton Rd. Henderson, NC 27536	Steve Ray Ellington 1491 Warrenton Rd. Henderson, NC 27537-8274	UST Site 0-002602	
48K	Chex Truck Stop I-85 and Fleming Rd.	Woodmont Petroleum Co. PO Box 1938 Henderson, NC 27536-1938	UST Site 0-024836	
48G	Old Gas Station across from Fast Brake (Satterwhite 66)		Probable USTs	
48E	494 Greystone Rd.		Old gas pump, possible UST	
7B	Kerr Lake Marine Service	252-492-3095	Engine Repair	
14A	Old Junkyard 500 Intake Lane		Possible Fuel Onsite	
7A	Moss Engine Performance	252-438-4172	Small Engine Repair	
<b>Lower Risk Sources</b>				
12A	Kerr Lake Regional WTP Fleming Road (NCSR 1371)		NPDES Permit NC0083101	
39A	Progress Energy Power Lines			

<b>Map Code</b>	<b>PSC Site</b>	<b>Owner Contact</b>	<b>Potential Contaminant</b>	<b>Quantity</b>
48I	Harris Oil Co. Satterwhite Point Rd.		Possible USTs	
48D	"Fresh Produce" sign 1801 Warrenton Rd.		Old USTs, AST	
10A	Flat Rock United Church Satterwhite Point Rd.		Cemetery	
48J	Satterwhite Point Rd.		Possible USTs	
2B	Satterwhite Point Rd.		Large ASTs, Trucks, equipment	

## **MANAGEMENT OF THE DRINKING WATER PROTECTION AREA**

March 15, 2006 – An initial meeting was held with the KLRWS Chief Operator (Christy Lipscomb), the NCRWA SWP Specialist and the NCPWS SWP Coordinator in attendance. Ms. Lipscomb was given a copy of KLRWS' Source Water Assessment and a description of the source water protection planning process and agreed that she wanted to participate and she would be the designated Team Leader. She obtained a letter of intent to participate signed by the Henderson City Manager, a copy of which is included with this document.

A group of stakeholders was identified and they began to hold meetings monthly to discuss the best plan to protect the water quality in the Anderson Creek area. A press release was published in the Henderson Daily Dispatch that summarized the effort, listed the stakeholder group, requested involvement from the public, and promoted the PWS website.

A brief description of each of the subsequent meetings follows:

June 28, 2006 – Stakeholders were provided with an informational package that included a copy of the KLRWS Source Water Assessment and guidance on how to use the document and the PWS website for additional information. There was a stakeholders' role presentation by Jay Frick (PWS) and a Potential Contaminant Source (PCS) presentation by Debbie Maner (North Carolina Rural Water Association).

August 23, 2006 – The meeting was a brainstorming session. Ideas and opinions were presented by all attending about different concerns and issues regarding water quality in Kerr Lake. Many suggestions were made about different members of the community to get involved in the Source Water Protection Planning process and ways to proceed with source water protection.

September 20, 2006 – A brainstorming session where answers were obtained from each stakeholder present to the following questions:

1. **What activities could improve or protect water quality in Kerr Lake?**
2. **What do you see as major impediments to pursuing local watershed protection activities?**
3. **What strategies could make a protection plan dynamic? How can this effort be made "alive" and ongoing such that it gains momentum?**
4. **How can our efforts best be promoted at the local level? At the state level?**

October 18, 2006 – A summarization of the answers obtained at the September meeting identified the following four priorities as those that the stakeholders would like to see addressed.

### **I. Education**

- (i) Education campaign for boaters, campers, fishermen.
- (ii) Education targeted to kindergarten, water science (5<sup>th</sup> and 8<sup>th</sup> grade). Participate in Satterwhite Point field day and include tours of water plant.
- (iii) Add water education to the Clean Up Henderson Committee's Agenda.
- (iv) Provide education materials to new business and industry. Participate in the review process of Planning Board and Watershed Review Board.

### **II. Provide public outreach to groups that could decrease pollution in the drinking water assessment area**

Provide public outreach to targeted groups. Provide incentives to get public involved.

### **III. Pollution reduction measures**

Control and eliminate dumping, oil discharge, animal waste runoff, and septic system effluent.

#### **IV. Land conservation**

November 16, 2006 – There was a discussion and question and answer session about things that had been discussed to date. An assignment to identify the – **what, who, how and when** - for each of the priorities identified above was made to each of the stakeholders attending the meeting using the following guidelines.

##### **WHAT**

What exactly are you proposing to do? What action items will achieve the goal? What is the sequence of steps that must occur?

##### **WHO**

Who will actually do the work defined above? How many people will be needed? What type of special expertise will be required? Where will the participants come from? Who will make contacts and recruit them?

##### **HOW**

How will you get the job done? What resources will you need? Where will your resources come from? What is your proposed budget?

##### **WHEN**

When will all this take place? What is a reasonable time line for success? What are the project milestones and what date do you expect them to be achieved?

December 13, 2006 – Each of the stakeholders presented their responses to the assignment from the November meeting. Public education was identified as the top priority, and is a major component of each of the proposals addressing the remaining priorities. Another component of each of the proposals was to appoint a Committee to undertake each of the tasks identified above, so it is suggested that the first action in implementing the Plan is the appointment of a permanent Source Water Protection Committee (there is a list of names with contact information in the appendix who have been mentioned during the planning process as being interested in the plan), who will be ultimately responsible for following the implementation guidelines. The team should consist of a minimum of five people, preferably local residents, who are either education professional(s), natural science professional(s) or individual(s) with design and writing skills. The first step in the recruiting process will be to submit another press release to The Daily Dispatch and an insert into the water bills describing what has been done to date and requesting volunteers to help implement the plan. A second step in finding volunteers is to identify all organizations and individuals in the area who might want to participate in the project. Likely groups include civic associations, watershed associations, environmental advocacy groups, and government agencies. Individuals interested in volunteering might be waterfront property owners or commercial and recreational users of the lake. Retired citizens and disabled individuals can make outstanding volunteers. Schools in the watershed are also potential sources of volunteers. Speak with teachers at local elementary, middle, and high schools, and the community college. Strive to recruit volunteers from a wide range of backgrounds. This diversity helps establish the credibility of the program, ensures cooperation within the community, and provides the bonus of educating a greater variety of citizens in the community. A Public Meeting will be held to publicize the plan and if the stakeholders identified on page 4 are not able to serve on the permanent SWP Committee they will be asked to do their best to recruit volunteers who will be effective to serve on the Committee. The Team Leader will ultimately be responsible for making sure an effective permanent Source Water Protection Committee is recruited from the community.

The committee could contain a selection from the following:

1. Kerr Regional Water System Personnel. (KRWS Chemist is recommended)
2. Kerr Lake State Recreation Area Ranger Staff
3. Current or Retired curriculum professional(s) from local schools.
4. Person from local high school, VGCC, Library, etc. that brings layout/printing skills
5. Representatives from local group(s) or local agencies with related missions such as Clean Up Henderson Committee, Soil and Water and NC Cooperative extension.

For the sake of clarity, where there was overlap or repetition in the Stakeholder's proposals, the recommendations are combined into the following proposed actions to address elements of each of the priorities that have been identified. It was also suggested that the Committee create a slogan that can be used in its printed educational material. Two suggestions – Source Water - Keep It Clean, and Protect Our Source – You Dump It, You Drink It!

### **Short Term Goals**

#### **I. KLRWS SWP Education Plan**

##### Goal:

Educate the public about water as the foundation of life, the importance of maintaining clean drinking water sources, sources of pollution and ways the public can help protect drinking water. Specifically target the Anderson Creek Watershed and the Kerr Lake Regional Water System. The education campaign will target Kerr Lake's recreational users (campers, boaters, swimmers, fishermen), local residents, area schools and new and existing area businesses.

The committee should use a combination of flyers, display panel, information signs, museum exhibits and programming to educate the user groups about the importance of clean water, causes and effects of pollution and the purpose of the Kerr Lake SWPP. Materials and programming will contain a strong stewardship message.

##### Action Items and Sequence

1. Flyers
  - Determine information wanted for targeting each type of recreational user
  - Kerr Lake State Recreation Area (SRA) staff, the NC Division of Parks and Recreation (DPR) District Naturalist and Kerr Lake Regional Water System (KLRWS) staff will design the flyers. The flyers will be reviewed and approved by the stakeholders prior to printing and distribution.
  - They could be printed in BW at the Kerr Lake SRA office or possibly printed in color at City Hall.
  - Place flyers in entrance stations, campgrounds, Kerr Lake SRA office, church campground, Girl Scout camp, Vance County Travel and Tourism office and at local businesses by April 1, 2008. Insert in Water Bill – one sheet or card – goes to 9,684 connections.
2. Display panel

- It may be possible for one display panel on watershed protection to be funded by Kerr Lake SRA and installed at the park. Funding probably will not be available until FY 2007-2008.
  - The committee will work with Kerr Lake SRA and KLRWS to develop and design the panel. The DPR District Naturalist and DPR exhibits personnel will review the panel before fabrication. It may be modified during review to meet DPR wayside exhibit standards.
  - Install display panel by April 1, 2008.
3. Kerr Lake SWPP Information Sign at Area Boat Ramps.
- Committee will develop a simple metal sign that briefly explains the Kerr Lake SWPP and encourages stewardship and explains how to report pollution.
  - Funding will most likely need to be from a grant.
  - Primarily target ramps near Anderson Creek. (Flemingtown, Satterwhite Point and Bullocksville)
  - Committee must have permission before posting signs.
  - Install signs by Summer 2008.
4. Kerr Lake SRA staff will add a watershed/river basin protection program to the list of interpretive programs offered to the general public who visit the park. Park Staff will be the primary presenters of the program, but individuals associated with the Kerr Lake SWPP will also be encouraged to offer programs.

Similar programming should also be targeted at Camp Graham and the church camp.

## **II. Public Outreach**

### **Goals:**

To provide incentives to reduce or eliminate pollution in the waters, on the shoreline and especially within the drinking water assessment area delineated for the Kerr Regional Water System intake and the Anderson Creek area. One of the ways to accomplish this is to raise public awareness concerning the issue of water quality and educate the public on the importance of clean water.

### **Target One – Girl Scouts**

There is a Girl Scout Camp located immediately upstream from the Kerr Lake Regional Water Treatment Plant intake on Anderson Creek, which flows into Kerr Lake. An incentive program that could be incorporated into scouting activities is earning an Environmental Health Badge, if they don't already do it. If they do, maybe something could be added to the requirements relating to the source water protection plan.

### **Environmental Health Badge**

This earned age-level award is one of the many ways that girls focus on environmental issues in Girl Scouting.

A joint project of Girl Scouts of the USA and EPA, the Environmental Health Badge gives Girl Scouts the opportunity to learn about ways the environment affects their health, including its relationship to asthma, lead poisoning, and sun exposure—and the importance of safe fishing, smoke-free environments, and **clean water**. EPA and Girl Scouts have a long history of working together on environmental issues and projects to promote environmental stewardship and awareness. (EPA website)

## Action Items

1. The first step would be to acquire the cooperation of the program coordinator for the girl scouts. Girl Scout coordinator contact information is provided below:

### Vance County

<i>Field Director</i>	Suzanne Bragg Biegenzahn
<i>Mailing address</i>	P.O. Box 1879, Oxford, NC 27565
<i>Street address</i>	207 Orange Street, Henderson, NC 27536
<i>Telephone number</i>	252-438-8103
<i>Email</i>	<a href="mailto:sbiegenzahn@pinesofcarolina.org">sbiegenzahn@pinesofcarolina.org</a>
<i>Office hours</i>	Tuesday and Thursday, 8:15 a.m. – 5:00 p.m.

Call or email Suzanne Bragg Biegenzahn to set up an appointment to discuss Girl Scouting in Vance County.

2. There are several ways the Girls Scouts could impact water quality around the Kerr Regional water intake. They could organize a trash pickup campaign. They could be taught to be observers and report different types of pollution that might occur within the source water protection area to the correct local or state agency. They could pass out educational material to residents and businesses in an established area to help raise public awareness. They could be taught to discuss water quality with the public and distribute a survey to businesses asking for support and/or monetary prizes for a poster/slogan educational competition.
3. Finally, depending on the level of support that can be acquired, the Girl Scouts could be taught to collect water samples and analyze them for a number of parameters as part of a water quality education program and to establish baseline data regarding raw water quality in Anderson Creek. They could monitor and follow trends in parameters such as pH, ammonia nitrogen, orthophosphates, free and total chlorine, nitrates and dissolved oxygen that can be indicators about quality of the water being pumped into the treatment plant, depending on the age and level of education. One of NCRWA's Associate members sells surface water quality testing equipment and could be approached, once all the details are outlined, and asked to donate test kits for the program.

### Target Two - Public School System

4. An incentive to assist with the educational component would be to hold a poster competition in the local schools. The Committee would have to acquire local educator input as to which age group would be appropriate and they would also have to establish a theme for the contest. The contest would be judged at the local level and publicized in the local media. The posters would be displayed in the local library and/or other prominent locations and the winners would attend the North Carolina Rural Association Conference where awards could be presented. Local businesses could be approached about contributing prizes and plaques. Other agencies also might be willing to participate in awarding of recognition (i.e. PWS, EPA, etc.)

### **Additional Incentives for consideration and research**

5. Vance County offers tax incentives for agriculture and forestry projects. At a minimum, for the forestry tax credit to apply, requires 20 acres to be assigned to the forestry project. There may also be state incentives. More research is needed and the VC tax office is able to assist if asked.

### **III. Pollution Reduction Measures**

#### Goal:

To educate county residents, especially those surrounding the lake and along contributing streams, about the importance of maintaining high quality water and pollution prevention and reduction measures already established by local county ordinances.

Any one or a combination of the following regulatory ordinances can be considered source water protection measures and may be used to assist Vance County enforcement personnel:

- Ordinance 2- “Abandoned Vehicle Ordinance
- Ordinance 30- “Littering Ordinance”
- Ordinance “Watershed Protection Ordinance”

#### Action Items:

1. The SWP Committee will consult with Vance County government and research the enforceable pollution prevention and reduction measures that are already in place in the Drinking Water Assessment Area. The Environmental Health Department has jurisdiction over septic tanks/fields and should be consulted for guidance with this issue. The Soil and Water Conservation District has some control over confined animal waste runoff and should be consulted on this subject for input. The Agriculture Extension Service feels that unregulated home owners and golf courses unknowingly contribute to water quality issues through over fertilization. Although the state regulates the commercial application of landscape chemicals, it does not regulate homeowners. Several of the fishing clubs that use the lake voluntarily report environmental events such as leaky boat fuel tanks or trash dumping to the appropriate authorities. Vance County also has an “illegal dumping” problem.
2. With the cooperation of county code enforcement officials, the Committee will develop educational literature explaining existing County pollution prevention and reduction measures.
3. The SWP Committee will work to create a public information campaign to help citizens become aware of and involved in the enforcement process possibly recruiting their assistance as “watchdogs” to assure that local and state laws are being followed. This can be accomplished by distributing educational material and/or canvassing the area of influence and meeting with residents and businesses one on one.

Consulting Vance County Staff – The Watershed Review Board and Planning and Development.

4. The Committee will provide information to each business, industry, and farm located within the WHPAs on waste handling practices, best management practices, standard operating procedures, and waste oil disposal methods which could be employed to reduce the potential for water contamination. The Committee will also provide information regarding the North Carolina Division of Pollution Prevention and Environmental Assistance (DPPEA) to each business, industry, and farm located within the WHPA. Owners/operators of potential contamination sources will be encouraged to contact the DPPEA. The DPPEA provides free technical and other non-regulatory assistance to reduce the amount of waste released into the air and water and on the

land. The DPPEA serves as a central repository for waste reduction and pollution prevention information. The DPPEA emphasizes waste reduction through pollution prevention, encourages companies and government agencies to go beyond compliance, and provides information about the environmental permitting process. This information is provided at no charge to North Carolina businesses, industries, government agencies, and the general public upon request. For additional information, the DPPEA may be contacted at (919) 715-6500 or 800-763-0136.

### **Potential Long Term Goal**

#### **IV. Land conservation and conversion.**

##### Goals:

Create a program to encourage land conservation and conversion within the critical and protected areas of the Anderson Creek watershed. Publicize the program such that residents in the watershed and local government officials are aware of its existence.

##### *Definitions:*

Land conservation practice – Any activity that results in land remaining in a pristine, undeveloped, or natural state.

Legal conservation easement – A legal category of land conservation in which the owner is contractually bound to maintain land in a pristine, undeveloped, or natural state.

Land transformation practice - Any process that causes a change in land use category. For our purposes, land transformations should refer to those changes that could potentially protect the source water. An example would be establishing buffer strips along the streams or planting trees on cleared agricultural land.

#### **Schedule for Implementation**

Priorities I, II, and III are very similar and overlap significantly. They will be considered short term goals and will begin as soon as possible after approval of the SWP with the goal of being completed by the end of year 1. Priority IV will be considered a Potential Long Term Goal.

<b>Schedule for Implementation</b>					
	<b>June - September 07</b>	<b>October 07 – March 08</b>	<b>April – May 08, then every year</b>	<b>July – August every year</b>	<b>September – June every year</b>
<b>I. Education</b>	<b>Recruit Permanent Volunteer SWP Committee</b>	<b>1. Develop Flyers 2. Develop and Install Display Panel 3. Develop and Install Informational Signs</b>	<b>1. Distribute Flyers.</b>		<b>Update Literature and Progress Reports.  4. Poster Competition in schools – coinciding with Water Week in May if possible.</b>
<b>II. Incentives</b>		<b>1. Contact Girl Scout Leader and 2. Organize Campaign 4. Organize Poster Competition</b>	<b>5. Research and Educate about Tax Incentives</b>	<b>2. 3.</b>	
<b>III. Pollution Prevention</b>		<b>1. Consult with Vance County Officials</b>	<b>2.</b>	<b>2. 3. 4</b>	

### **Documentation**

Every action taken to implement this Source Water Protection Plan will be thoroughly recorded using documentation such as notebooks, articles, pictures, video, etc. Recordkeeping will identify what actions were successful and what actions failed and why so that the update described in the following paragraph will employ only the successful action items.

All activities will be publicized to the local media – newspaper, radio, television, etc. – to the greatest extent possible to help educate the public and to advertise any contributions made by local businesses. See appendix for partial list of suggested media contacts.

**Implementation of this Source Water Protection Plan will begin immediately upon its approval by the PWS Section and at the end of the first year and every subsequent year, a brief progress report will be submitted to DENR.** The Committee will develop a process to keep legislative representatives informed about activities and success stories and will send them copies of annual progress reports.

### **Future Source Water Protection**

The KLRWS is aware that an effective Source Water Protection Program is an ongoing process. Public water system officials or planning team members will review public records available at hazardous waste and waste disposal facilities and potential contamination source sites located within the drinking water assessment areas annually in order to ensure program compliance. Every three years, the contaminant source inventory will be updated using the same procedures used to develop the original contaminant source inventory and documentation of the implementation process will be reviewed to determine what action items have been successful and which have failed. The plan will be updated accordingly.

**Total Annual Budget Estimate \$3000**

Legal Consultation \$150

Printing Costs \$2250 (this category subsidized by free publications that are available)

Postage \$600

KLRWS is owned by the City of Oxford, Warren County and the City of Henderson who has a controlling interest. The SWP Team Leader will present a summary of this plan to the Advisory Board meeting of the partners and request that the budget amount be included in the yearly operating budget. There is additional information about funding sources in the Appendix and the City of Henderson is a client of ECIVIS, which is a grant information center and locator.

## EMERGENCY CONTINGENCY PLAN

The primary person responsible for implementing the emergency contingency plan is the Operator in Responsible Charge. The back-up person responsible for implementation is the City Utilities Engineer.

Should a major oil or chemical spill occur within the Drinking Water Assessment Area, appropriate emergency agencies would be notified. The first of these would include the Vance County Fire Department and the Vance County Emergency Coordinator.

### Vance County Fire Department

911

### Vance County Emergency Coordinator

252-438-8364

If power is lost at the intake there is a 1,000 KW emergency generator to supply power.

If evidence exists that indicates that there is contamination in the system, it will immediately be taken off line and not returned to service until it is determined that water quality from the intake is in compliance with standards governing public water supplies. If it were determined that contaminants had entered the distribution system, residents would be notified by radio, television and newspaper not to drink the water until further notice. The regional office of the Public Water Supply Section would be notified immediately of the situation and asked for assistance. Sampling (i.e. bacteriological, VOCs, SOCs, etc.) would begin to determine the contaminant involved and the extent of contamination. A systematic flushing of the distribution system would begin with follow-up sampling conducted as needed until the system was determined to be free of contamination and in compliance with standards governing public water supplies. After consultation with the Public Water Supply Section, residents would be notified that Kerr Lake Regional Water System's water was once again safe for consumption.

**Short and Long term contingency plan** – In the event of an emergency, KLRWS does not have an interconnection with another system. In the short term, immediately following a disruption in the water service for any reason, they would have to rely on whatever water they had in their 5.35 million gallon storage capacity. In the long term, if service could not be restored, they would have to have water delivered from an outside source.

### Emergency Contact Numbers and Additional Resources:

Name	Resource
Primary person responsible for implementing emergency contingency plan: Plant ORC, Clarissa Lipscomb Home - 434-572-9382 Cell – 434-579-7551	Emergency Response
Secondary person City Utilities Engineer	Emergency Response
Public Water Supply Section 1634 Mail Service Center Raleigh, NC 27699-1634 919-715-0827	Technical Assistance Regulatory guidance
NC Department of Environment & Natural Resources, Raleigh Regional Office Mail to: 1628 Mail Service Center	Regional Water Quality Section, UST Section, Aquifer Protection Section, Hazardous Waste Section, Spills, Regulatory information and technical assistance

Raleigh, NC 27699-1628 3800 Barrett Drive Raleigh, NC 27609 (Courier 52-01-00) 919/791-4200 FAX 919/571-4718	
Department of Transportation State Traffic Engineer Mr. Ken Ivey 1561 Mail Service Center Raleigh, North Carolina 27699-1561 252-733-3915	Emergency spill notification
NC Army National Guard 505 <sup>th</sup> Engineer Bn. 128 Dabney Drive Henderson, NC 27537 252-438-5028	Emergencies, as available: Generators, 400-gallon water trailers, bottled water, transportation
NC Rural Water Association Post Office Box 590 Welcome, NC 27374 336-731-6963	Technical assistance Education
North Carolina Cooperative Extension Service Campus Box 7602 North Carolina State University Raleigh, NC 27695-7602 919-515-2811 <a href="http://www.bae.ncsu.edu">www.bae.ncsu.edu</a>	Educational brochures, publications
US EPA Regional Office AST/SPCC Program Region IV 61 Forsyth Street Atlanta, GA 30365-3415 404-562-8761 <a href="http://www.epa.gov/oilspill">www.epa.gov/oilspill</a>	Above ground storage tank information
US EPA Regional Office Region IV Atlanta Federal Center 61 Forsythe St. Atlanta, GA 30303-8960 <a href="http://www.epa.gov">www.epa.gov</a>	Educational brochures, publications
Division of Pollution Prevention and Environmental Assistance Ron Pridgeon 1639 Mail Service Center Raleigh, NC 27699-1639 919-715-6517 <a href="http://www.p2pays.org">www.p2pays.org</a>	Technical and non-regulatory assistance to reduce waste
National Small Flows Clearinghouse West Virginia University Post Office Box 6064 Morgantown, WV 26506-6064 800-624-8301 <a href="http://www.nesc.wvu.edu/nsfc/nsfc_index.htm">www.nesc.wvu.edu/nsfc/nsfc_index.htm</a>	Pamphlets, brochures, training aids

## **Appendix**

## **Funding for Source Water Protection**

### **CLEAN WATER MANAGEMENT TRUST FUND**

NAME OF PROGRAM: Clean Water Management Trust Fund

ADMINISTERED BY: Department of Environment and Natural Resources

WEBSITE: [www.cwmtf.net](http://www.cwmtf.net)

CONTACT INFO:

D.G. Martin, Interim Executive Director

919-733-6375

[d.g.martin@ncmail.net](mailto:d.g.martin@ncmail.net)

Lisa Schell (Public Information Officer)

919-716-0057

[lisa.schell@ncmail.net](mailto:lisa.schell@ncmail.net)

Tom Jones (Senior Water Quality Advisor)

919-716-0054

[tjones@cwmtf.net](mailto:tjones@cwmtf.net)

FUNDING SOURCE: Federal moneys

CYCLE: Fall and Spring

APPLICATION DEADLINE: June 3rd, and December 1st

ELIGIBILITY REQUIREMENTS: applicant must be a state agency, local government, or other political subdivision of state, or combination of such entities, a nonprofit for preservation of NC's natural resources, no match required

SCOPE: enhancing and/or protecting water quality: enhance or restore degraded water, contribute to network of riparian buffers and greenways for environmental, educational, and recreational benefits.

EXAMPLES OF FUNDED PROJECTS: WPCOG Failing Septic System Repair Loan Program

**NC CLEAN WATER STATE REVOLVING FUND**

NAME OF PROGRAM: NC Clean Water State Revolving Fund

ADMINISTERED BY: NC Department of Environment and Natural Resources

WEBSITE: [www.nccgl.net/fap/cwsrf/index.html](http://www.nccgl.net/fap/cwsrf/index.html)

**CONTACT INFORMATION:**

Bobby Blowe  
919-715-6212  
[bobby.blowe@ncmail.net](mailto:bobby.blowe@ncmail.net)

FUNDING SOURCE: Legislative Appropriations, Federal Monies, and Bond Proceeds

CYCLE: Annual

APPLICATION DEADLINE: March 31st

**ELIGIBILITY REQUIREMENTS:**

- Applicant must be a unit of local government
- wastewater project
- must be included on Priority Funding List

SCOPE: wastewater treatment facility funding and projects associated with estuary and nonpoint source programs

EXAMPLE OF FUNDED PROJECT: New wastewater treatment facility for Hendersonville

#### EPA Source Water Protection Grants for Communities:

EPA provides funding to assist local communities interested in planning and implementing Source Water Protection (SWP) activities. This funding is in the form of grants, low interest loans, and cost sharing. The Catalog of Federal Funding Sources for Watershed Protection web site is a searchable database of financial assistance available to fund a variety of watershed protection projects ranging from outreach and education, forming community based partnerships for source water protection, point source control, non point source activities, agricultural best management practices (BMPs), floodplain/riparian zones, groundwater protection, pollution prevention, research, stormwater management and water conservation to name a few.

Entities eligible for funding assistance include:

- Source Water Protection Partnerships
- Non-profit Groups
- Private Landowners
- State and local government
- Businesses

The purpose of this funding is to assist local communities to transition from completed source water assessments to source water protection planning and implementation. North Carolina's SWAP reports were completed and released to the public in April 2004. The Public Water Supply Section encourages those interested in Source Water Protection financial assistance to use these assessments as the foundation for their funding application.

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Additional funding links include:

- The EPA Region 4 Grants site provides grant and financial information for applicants located in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
- The EPA periodically posts new grant opportunities for source water protection activities.

General questions regarding source water protection funding opportunities should be directed to the Public Water Supply Section at [swap@ncmail.net](mailto:swap@ncmail.net) or mail your questions to Attention: Source Water Assessment and Protection Program, Public Water Supply Section, NC Department of Environment and Natural Resources, 1634 Mail Service Center, Raleigh, NC 27699-1634.

**NATURAL HERITAGE TRUST FUND**

**NAME OF PROGRAM:** Natural Heritage Trust Fund

**ADMINISTERED BY:** NC Department of Environment and Natural Resources

**WEBSITE:** [www.ils.unc.edu/parkproject/heritage/nhtf.html](http://www.ils.unc.edu/parkproject/heritage/nhtf.html)

**CONTACT INFO:**

[linda.pearsall@ncmail.net](mailto:linda.pearsall@ncmail.net)

919-715-8697

1615 MSC

Raleigh, NC 27699

**FUNDING SOURCE:** Established by NC State General Assembly; personalized license plates taxes

**CYCLE:** Fall and Spring

**APPLICATION DEADLINE:** August 1st and February 1st

**ELIGIBILITY REQUIREMENTS:** Applicant must be a state agencies acquiring natural lands for state parks, preserves, wildlife conservation areas, coastal reserves, natural and scenic rivers, historic site properties, outdoor recreational areas

**SCOPE:** projects that protect areas of state or national ecological import

**EXAMPLES OF FUNDED PROJECTS:** Brunswick County's acquisition of Bird Island- an undeveloped area which has a population of threatened Seabeach Amaranth and threatened Loggerhead Turtles, In addition, Kemp's Ridley turtles nest there

## 205(j)

NAME OF PROGRAM: Section 205(j); from section 205(j) of Clean Water Act

ADMINISTERED BY: Division of Water Quality, Water Quality Section, Planning Branch

WEBSITE: currently only available through DWQ website of [www.h2o.enr.state.nc.us](http://www.h2o.enr.state.nc.us)

CONTACT INFORMATION:

Steve Zoufaly  
919-733-5083 ext. 566  
[steve.zoufaly@ncmail.net](mailto:steve.zoufaly@ncmail.net)

FUNDING SOURCE: Federal

CYCLE: annual

APPLICATION DEADLINE: May of each year

ELEGIBILITY REQUIREMENTS: applicant must be a Council of Governments;  
Project must be a water quality planning effort;  
No match required, but is preferred.

SCOPE: water quality planning projects

EXAMPLE OF FUNDED PROJECT: Piedmont Triad Council of Government's Assessment of Water Resources, Reuse and Wastewater.

## SECTION 319

NAME OF PROGRAM: Section 319

ADMINISTERED BY: Division of Water Quality

WEBSITE: [h2o.enr.state.nc.us/nps/](http://h2o.enr.state.nc.us/nps/)

CONTACT INFORMATION:

Division of Water Quality

Sean Groom

919-733-5083 ext.582

[sean.groom@ncmail.net](mailto:sean.groom@ncmail.net)

FUNDING SOURCE: federal money from EPA 319 Program

CYCLE: annually

APPLICATION DEADLINE: April 1 of year preceeding the year for which funding is desired

ELEGIBILITY REQUIREMENTS: non-federal match of 40%, monitoring for watershed projects and accompanying quality assurance plan, quarterly and final reports, project abstract upon selection, invoice to DWQ

SCOPE: enhancing and/or protecting water quality: enhance or restore degraded water, contribute to network of riparian buffers and greenways for environmental, educational, and recreational benefits.

EXAMPLE OF FUNDED PROGRAM: Cullasaja River Project- inventory problem stemming from development. Implement streambank stabilization, and riparian restoration over a three-year period

## ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

NAME OR PROGRAM: Environmental Quality Incentives Program

ADMINISTERED BY: USDA through Natural Resources Conservation Service (NRCS)

WEBSITE: [www.nrcs.usda.gov/programs/eqip](http://www.nrcs.usda.gov/programs/eqip)

### CONTACT INFORMATION:

NRCS: Jacob Crandall (Assistant State Conservationist for Water Resources)  
873-2103

FUNDING SOURCE: Federal moneys

CYCLE: annually

APPLICATION DEADLINE: accepted year-round, priority areas identify their own dates to select projects; typically this is done in March or April

### ELIGIBILITY REQUIREMENTS:

- Applicant must be farmer or rancher producing crops, livestock, or other agricultural commodities
- OR
- On occasion, other organizations such as districts with taxing authority, sporting clubs, scout troops, tribal councils, and cooperative grazing associations

### SCOPE:

- Provides technical assistance, and education to producers to address a broad range of soil, water, air, wildlife, and related natural resource concerns
- Contracts may include cropland, hay land, grazing land, wetlands, wildlife land, or forest land

### COST SHARING:

- Pays 75% of costs for installing the practices in a USDA conservation plan (up to \$10,000 per year and \$50,000 per contract)
- Provides incentive payments for producers to try new management practices such as Erosion Control and Related Practices, Livestock Practices, Wildlife Practices, and other Water Quality Practices

EXAMPLE OF FUNDED PROJECT: funds 75% of eligible costs associated with proper well abandonment

## NC RURAL ECONOMIC DEVELOPMENT CENTER

NAME OR PROGRAM: Water and Sewer Grants Programs:

Program 1. Supplemental Grants Program

Program 2. Capacity Building Grants Program

Program 3. Unsewered Communities Grants Program

ADMINISTERED BY: Rural Center

WEBSITE: [www.ncruralcenter.org/grants/water.htm](http://www.ncruralcenter.org/grants/water.htm)

## CONTACT INFORMATION:

Julie Haigler (Program Director)

[jhaigler@ncruralcenter.org](mailto:jhaigler@ncruralcenter.org)

919-250-4314

FUNDING SOURCE: Legislative Appropriations, proceeds of Clean Water Bonds

CYCLE: biannually

## APPLICATION DEADLINE:

- 5:00 pm on last business day of March for August award
- 5:00 pm on last business day of September for February award

## ELIGIBILITY REQUIREMENTS:

- For Programs 1 and 2, local governments and non-profit organizations located in rural counties
- For Program 3, all counties; must be unserved by wastewater collection or treatment systems
- Priority given to projects from economically distressed counties of the state as determined by the Department of Commerce

## SCOPE:

1. Supplemental Grants- improvement of local water and sewer systems; maximum award is \$400,000
2. Capacity Building Grants- provides funding for local governments to undertake planning efforts that support strategic investments in water and sewer facilities; maximum award is \$40,000
3. Unsewered Communities Grants- provides funding for the planning and construction of new central, publicly owned sewer systems; will cover 90% of the total cost of a project, but will not exceed \$3 million

## EXAMPLE OF FUNDED PROJECT:

Program 1: may address public health, environmental, and/or economic development critical needs

Program 2: funds typically used to prepare preliminary engineering reports, master water/sewer plans, capital improvement plans, water/sewer feasibility studies, and rate studies

**Z. SMITH REYNOLDS FOUNDATION**

**NAME OF PROGRAM:** Z. Smith Reynolds Foundation

**ADMINISTERED BY:** Trustees of Z. Smith Reynolds Foundation

**WEBSITE:** [www.zsr.org](http://www.zsr.org)

**CONTACT INFORMATION:**

[info@zsr.org](mailto:info@zsr.org)

Tom Ross, Executive Director

**FUNDING SOURCE:** private endowment

**CYCLE:** Biannual

**APPLICATION DEADLINE:** February 1 for May consideration and August 1st for December

**ELEGIBILITY REQUIREMENTS:** applicant must accomplish charitable works in NC, must be non-profit, tax exempt, charitable organization

**SCOPE:** This fund covers 5 areas: community economic development, environment, issues affecting minorities, pre-collegiate education, and issues affecting women.

**EXAMPLE OF FUNDED PROJECT:** Foothills Land Conservancy acquisition of land around Lake James

## Clean Water Grants

**The grant application is now available. ONLINE APPLICATION The Clean Water Grant deadline is February 1, 2007. Go to <http://www.boatus.com/foundation/cleanwater/grants/>**

Naturally, an understanding of our environment makes us want to do what we can to keep it healthy. Our Clean Water Grants program looks for projects that encourage boaters to learn to love their waterways. We're looking for education projects that help boaters understand and appreciate their local boating habitat, as well as learn hands-on boating strategies that will keep the water and local habitat healthy and accessible for future boaters.

Each year, the BoatU.S. Foundation awards local nonprofit volunteer organizations up to \$4,000 for the promotion of clean boating education. Over the past 6 years the Foundation has awarded almost \$100,000 to local community organizations, yacht clubs, flotillas and squadrons. We're looking for creative and innovative projects that teach boaters to reduce their impact on the waters they use for boating. Topics can range from petroleum pollution prevention to pumpout education to keeping trash out of our waterways.

Are you interested in applying for a BoatU.S. Foundation Clean Water Grant? If so:

**Think about the environmental issues that affect your local waterway.** Are there positive steps boaters can take to make the water cleaner? How can they reduce their environmental impact? **Explore our grant writing guides.** The sample application and FAQ's web pages are posted to help you during the application process. **Sign up for our e-newsletter.** This will keep you up-to-date about what the Foundation is doing and what new services are available to you. With this service, you will be the first to know when applications become available for all of our programs. **APPLY** - To be eligible for grant funding, your organization must be volunteer and non-profit. The 2006 application will be available on this website in Fall 2005. The deadline for the 2006 Clean Water Grant Funding Cycle is February 1, 2006. The grants will be awarded in late April 2006.

If you have any questions regarding this program, please email the Grant Administrator, or call 703-823-9550 x8358. Free brochures are also available for print or order <http://www.boatus.com/foundation/brochure/brochure.asp>



**Above:** Coastal Water Watch and Southport Sail and Power Squadron (of Southport, NC) worked together to print signs reminding boaters not to litter. Partnerships between environmental and boating nonprofits are strongly encouraged in 2006.



**Above:** With the help of Boy Scouts completing their Eagle Scout projects, the Tropical Audubon Society constructed monofilament fishing line recycling bins and installed them at fishing piers in Miami, FL.



**Above:** Everglades for Everyone wrote and printed a brochure called "Code of Ethics for Boaters and Fisherman" which they distributed at Everglades National Park in Southwest Florida, as well as at nearby marinas and bait shops.

### The Adopt-A-Highway (AAH) program

The Adopt-A-Highway (AAH) program was established in 1988 by the North Carolina Department of Transportation (NCDOT) in response to growing public concern regarding litter along the state's highways. The AAH program is administered by the NCDOT Office of Beautification Programs, and is a joint effort between community volunteers and the NCDOT. Its purpose is to decrease the amount of litter on North Carolina's roadsides and improve the beauty and quality of the environment.

Additional information and free brochures

[http://www.ncdot.org/doh/operations/dp\\_chief\\_eng/roadside/Beautification/highway/](http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/Beautification/highway/)

Help Reduce Water Pollution Along N.C. Highways:

The NCDOT Division of Highways has established the Illicit Connection and Illegal Dumping (ICID) program to comply with the Department's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit.

By reporting pollutants we will be able to achieve our goal in protecting the water quality in our lakes, rivers, streams and coastal waters for current and future use.

The ICID program is administered by the NCDOT Office of Beautification Programs and the Hydraulic Unit. The ICID is designed to utilize the resources of the Adopt-A-Highway program and NC Department of Correction inmates to report pollution sightings.

[http://www.ncdot.org/doh/operations/dp\\_chief\\_eng/roadside/Beautification/download/Pollutionwhatsourconnectionbrochure.pdf](http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/Beautification/download/Pollutionwhatsourconnectionbrochure.pdf)

## Additional Contacts and Resources

Vance County Soil and Water District – Randy Ball

Local activist Kym Tyler has an interest in the project. Her e-mail is [Kymeone1@aol.com](mailto:Kymeone1@aol.com) phone is 430-6769. She lives on Nutbush Rd

Roanoke River Basin Association: the local representative is Nancy Wilson in VC Tourism 438-2222. She would also like to participate

Clean Water for North Carolina Hope Taylor 919-401-9600

Steve Wing, UNC School of Public Health 919-966-7416

NC Rural Center Nina Baccanari ([baccanari@ncrcap.org](mailto:baccanari@ncrcap.org))

Rick Seekins who is with the Kerr-Tar Cog and a Board Member of the Roanoke River Basin Association would also like to participate with this project when we get to that point of soliciting committee members

## Media Contacts

### NEWSPAPERS

The Daily Dispatch  
P.O. Box 908  
304 South Chestnut St.  
Henderson, NC 27536  
BUS PHONE: (252) 436-2700  
FAX NUMBER: (252) 430-0125  
E-MAIL: [news@hendersondispatch.com](mailto:news@hendersondispatch.com)

The News & Observer  
215 S. McDowell St.  
P.O. Box 191  
Raleigh, NC 27601  
BUS PHONE: (919) 829-4500  
FAX NUMBER: (919) 829-4808

### TELEVISION

WRAL –TV Channel 5  
WRAL – DT Channel 53  
Box 12000  
2619 Western Blvd.  
Raleigh, NC 27605  
BUS PHONE: (919) 821-8500  
FAX NUMBER: (919) 821-8566  
WEB ADDRESS: <http://www.wral-tv.com>  
E-MAIL: [newstip@wral-tv.com](mailto:newstip@wral-tv.com)  
Affiliate – CBS

**RADIO**

WRAL – FM 101.5  
711 Hillsborough Street  
Raleigh, NC 27605  
BUS PHONE: (919) 890-6101  
FAX NUMBER: (919) 890-6146  
E-MAIL: [jformicola@wralfm.com](mailto:jformicola@wralfm.com)  
WEB ADDRESS: <http://www.wralfm.com>

WYFL FM 92.5  
120 East Belle Street  
Henderson, NC 27536  
BUS PHONE: (252) 492-9511  
FAX NUMBER: (252) 492-9511 (when phone rings press start button)  
E-MAIL: [wyfl@bbnradio.org](mailto:wyfl@bbnradio.org)

WIZS AM 1450  
535 Radio Lane  
Henderson, NC 27536  
BUS PHONE: (252) 492-3001  
FAX NUMBER: (252) 492-5594  
E-MAIL: [wizs@vance.net](mailto:wizs@vance.net)

WHLQ 102.5 FM  
227 Highway 561 East  
P.O. 463  
Louisburg, NC 27549  
BUS PHONE: (919) 496-3105  
FAX NUMBER: (919) 496-5864

WICE-Cool Oldies 98.3  
615 Lewis St.  
Oxford, NC 27565  
BUS PHONE: (919) 693-7900  
FAX NUMBER: (919) 693-9585

WYRN 1480 AM  
227 Highway 561 East  
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## Henderson develops water protection plan

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By DAVID IRVINE, *Daily Dispatch* Writer

The city of Henderson has taken action to develop a plan to protect sources of water supplying Henderson and the region.

The plan focuses on the Anderson Creek area of Kerr Lake, the intake point for the Kerr Lake Regional Water Plant. The plan will be a pilot program to serve as a model for other providers of public water across the state.

The plant supplies drinking water to more than 50,000 people in Vance, Granville and Warren counties. Each day the system distributes approximately 6 million gallons of water to the area.

A team of stakeholders has been assembled to develop the plan. Team members include:

- Christy Lipscomb, the Kerr Lake Regional Water Plant chief operator and team leader;
- Elissa Yount, a member of the Henderson City Council;
- Lawrence Elliot, local landowner;
- Ken Krulik, Vance County planner;
- Bryce Fleming, Satter-white Point State Park Recreation Area superintendent;
- Tracy Twisdale, Girl Scout retreat coordinator; and
- Bryce Mendenhall, director of utilities in Franklin County.

The group has active partnerships with the state Department of Environmental and Natural Resources and the state Rural Water Association.

“We have assembled a high-quality group of folks,” Lipscomb said. “Everyone is enthusiastic to see this effort go forward.”

At a recent meeting, the group discussed a number of issues, including potential contamination sources, public outreach ideas, demonstration projects and emerging contaminants.

The quality of public drinking water is regulated through the federal Safe Drinking Water Act and North Carolina Rules Governing Public Water Systems. To comply with requirements of SDWA amendments, North Carolina has completed source water assessments for approximately 10,000 drinking water sources in the state. The assessments included compiling an inventory of potential contaminant sources and ratings of how susceptible water sources are to contamination.

Source water is untreated water from a stream, lake, river or ground water aquifer before it is processed by a water plant. The assessments did not reflect the quality of water after it is treated.

Potential contaminants include runoff or spills at industrial sites, improper disposing of petroleum products, spills of oil or gasoline from boats, and leaking of old storage tanks.

A recent assessment of the Anderson Creek watershed provides evidence to reassure local citizens about the source of water feeding into the Kerr Lake Regional Water Plant. The assessment showed “low” potential for contamination and a “moderate” vulnerability rating. Vulnerability considers the number of potential sources of contamination as well as the volume of water in the lake. A large lake dilutes a contaminant more than a small lake does. According to Lipscomb, the ratings for the Anderson Creek watershed are better than those for most other public water systems in North Carolina.

Jay Frick, program coordinator from the state Department of Environment and Natural Resources, expressed his enthusiasm for the local actions.

“We are very excited that Henderson officials have taken this initiative. Their effort is purely voluntary and demonstrates a proactive commitment to maintain high quality drinking water for this community,” he said.

Any citizen or local group wishing to participate in the work of the stakeholder's group may contact the Kerr Lake Regional Water Plant at (252) 438-2141.

More information about how water sources are rated can be found online at: <http://www.deh.enr.state.nc.us/pws/SWAP> and then by clicking “SWAP Reports” at the bottom of the page.

Contact the writer at [dirvine@hendersondispatch.com](mailto:dirvine@hendersondispatch.com).

## Federal and State Database Search

### Non-Discharge Databases:

- 1) Animal Operations Database DWQ
- 2) Solid Waste Facilities DWM/SWS  
<http://wastenot.ehnr.state.nc.us/swhome/permfr.htm>
- 3) Pollution Incident Reporting Form (PIRF) DWQ/GWS  
<http://gw.ehnr.state.nc.us/WebClass1.ASP>
- 4) Underground Injection Control (UIC) DWQ/GWS
- 5) Pre-sanitary Landfills

A Multi-System Query at [http://www.epa.gov/enviro/index\\_java.html](http://www.epa.gov/enviro/index_java.html) provides information about all of the following:

- 6) National Pollutant Discharge Elimination System (NPDES). Identifies permitted facilities that discharge to surface waters.
- 7) Toxic Release Inventory (TRI)
- 8) Hazardous Waste Handler
- 9) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). EPA/DWM/Superfund Section.
- 10) Biennial Reporting System. EPA/DWM/Superfund Section. Information from Large Quantity Generators (LCG) and Treatment

**References**

North Carolina Department of Environment and Natural Resources, Division of Environmental Health, Public Water Supply Section, The North Carolina Source Water Protection Guidebook, Developing a Local Surface Water Protection Plan, 2006

North Carolina Department of Environment and Natural Resources, Division of Environmental Health, Public Water Supply Section, North Carolina's Source Water Assessment Program Plan, October 21, 1999

North Carolina Department of Environment and Natural Resources, Division of Water Quality, UST Section, Raleigh Regional Office files, 3800 Barrett Drive, Raleigh, NC 27609

## **Glossary of acronyms and abbreviations**

AST-Above ground Storage Tank  
CAP-Corrective Action Plan  
DPPEA-Division of Pollution Prevention and Environmental Assistance  
DWM-Division of Waste Management  
DWQ-Division of Water Quality  
EPA-Environmental Protection Agency  
GPD-gallons per day  
Gpm-gallons per minute  
NCDEH-North Carolina Department of Environmental Health  
NCDENR-North Carolina Department of Environment and Natural Resources  
NOV-Notice of Violation  
NPDES-National Pollutant Discharge Elimination System  
PCS-Potential Contamination Source  
Ppb-parts per billion  
Ppm-parts per million  
PWS-Public Water Supply  
PWSS-Public Water Supply Section  
RRO- Raleigh Regional Office  
SOC-Semi-volatile Organic Compound  
SPCC-Spill Prevention Control and Countermeasures  
SWPA-Source Water Protection Area  
SWPP-Source Water Protection Program  
UIC-Underground Injection Control  
USDA-United States Department of Agriculture  
UST-Underground Storage Tank  
VOC-Volatile Organic Compound