NORTH CAROLINA
SOIL & WATER CONSERVATION
COMMISSION MEETING MINUTES
May 15, 2013

Cabarrus Room A
Hampton Inn Concord/Kannapolis
612 Dickens Place NE
Concord, NC 28025

Commission Members	Others Present	
Vicky Porter	Pat Harris	Stephen Bishop
Craig Frazier	David Williams	Jon Lanier
John Langdon	Pat Stanley	Joey Hester
Tommy Houser	Bobby Stanley	Chris Childers
Charles Hughes	Kelly Ibrahim	Walter Blizzard
Bill Yarborough	Ralston James	Carol Blizzard
	Ken Parks	Kari Riccobaldi
	Tom Hill	Dr. Richard Reich
	Melvin Womack	
Commission Counsel	Natalie Woolard	
Jennie Hauser	Tom Ellis	
	Jeff Harris	
Guest	Davis Ferguson	
	Lisa Fine	
	Dewitt Hardee	
	Dick Fowler	
	Kirsten Frazier	
	Randy McDaniel	

Chairwoman Vicky Porter called the meeting to order at 8:00 a.m. and charged the Commission members to declare any conflict of interest, or appearance of conflict of interest, that may exist for agenda items under consideration, as mandated by the State Ethics Act.

Chairwoman Porter welcomed everyone to Cabarrus County, her home county. She thanked everyone involved in the field day and tour in Stanly County the day before. She welcomed Mr. John Langdon to his first official meeting as a Commission member. She asked all of the Commission members and attendees to introduce themselves and reminded everyone to sign the registration sheet.

1. APPROVAL OF AGENDA:

Chairwoman Porter reviewed the agenda. Chairwoman Porter noted that Item #3 needed to be removed from the agenda, since there were no Statements of Economic Interest that need to be read at this meeting. Commissioner Frazier made a motion to approve the agenda as modified. The motion was seconded by Commissioner Houser. Motion carried.

2. APPROVAL OF MINUTES: The minutes of the Commission meeting held on March 20, 2013 were presented. Commissioner Houser offered a motion to approve the minutes as amended. Commissioner Yarborough seconded the motion. Commissioner Frazier noted a minor grammatical error on page 2. The change was acceptable to Mr. Houser and Mr. Yarborough. The motion carried.

IV. INFORMATIONAL ITEMS

4. Division Report: Ms. Pat Harris, Director of the Division of Soil and Water Conservation, presented the division report. Her presentation included the following:

- Introduced Joey Hester, Watershed Projects Coordinator
- Noted that Julie Henshaw gave birth to a son, Perry Russell Henshaw on April 18
- Thanked the planning committee from the Stanly and Cabarrus districts for their work on planning the soil health field day and Commission tour.
- Thanked Tom Ellis and the NC State Grange for their financial contribution to the soil health field day and for snacks and drinks for the tour.
- Announced that the Division was very close to hiring the new CREP Manager
- Reported supervisor travel funds are almost completely depleted. Per diem line item is exhausted, but still some funds available for mileage and subsistence.
- Recognized Davis Ferguson for 15 years of service and Kelly Ibrahim for 5 years of service to the Division .
- Reviewed the draft Nutrient Criteria Development Plan from the Division of Water Quality. Reported that the Agricultural Task Force had discussed and suggested the Commission be made aware of the process and timeline for developing the plan and of specific concerns about the plan.

The handouts for the Division report are included as Attachments 4A (NC Nutrient Criteria Development Plan) and 4B (copy of Director Harris' presentation summarizing the plan and concerns).

Commissioner Yarborough suggested the Commission submit comments expressing concerns about the process for the Nutrient Criteria Development Plan. He read a draft letter he had prepared in advance of the meeting and offered motion to send this letter under the Chairwoman's signature. Commissioner Frazier seconded the motion, and the motion passed. The letter is included as attachment 4C.

5. Association Report: Commissioner Houser, NCASWCD President, presented a brief overview on the following:

- Update on Market-based Conservation Initiative
- Status of the Association's Legislative Agenda
- Report on Outstanding Conservation Farm Family Judging
- Report on the Association's involvement in Southeast Regional Partnership for Planning and Stability (SERPPAS).
- Report on Conservation Education Contests and Events

The handout provided for item 5 is attached and has been made an official part of the minutes.

Chairwoman Porter asked why so few areas nominated farms for the Conservation Farm Family. Mr. Dick Fowler, Executive Director of the NC Association of Soil and Water Conservation Districts, reviewed

the recent enhancements aimed at increasing participation through financial incentives. Many districts recognize local farm families but do not submit them for consideration at the area level. One of the concerns noted previously in a survey was the cost of putting on the statewide farm family event. The financial award provided by the NC State Grange has substantially addressed this concern, yet the number of nominations remains low.

Chairwoman Porter and Commissioner Langdon, both prior winners of the Conservation Farm Family recognition, shared their testimony about the importance and significance of this recognition to them and to agriculture. Commissioner Yarborough recommended the Association do a video series to present to districts highlighting recent winners and encouraging more nominations.

6. **NRCS Report:** Mr. Melvin Womack, Acting State Conservationist for the National Resources Conservation Service (NRCS), referred to a handout and presented a brief overview of the following:
    - Reviewed Secretary Vilsack's Blueprint for Stronger Service, which has as its objective to cut costs and modernize operations. As part of this initiative NRCS Administrative services (e.g., leases, procurement, HR functions) are being centralized.

The handout provided for item 6 is attached and has been made an official part of the minutes.

Mr. Fowler related that North Carolina's experience with regionalization (e.g., cost lists) has not been positive. He is concerned that this effort will have a similar outcome.

Mr. Womack responded that NRCS is including focus groups and other processes to try to maintain strong state-level connections.

V. ACTION ITEMS

7. Consent Agenda:

Commissioner Frazier made a motion to approve the consent agenda. The motion was seconded by Commissioner Yarborough, and it passed unanimously.

A. Appointment of Supervisors

- Mario Deluca; McDowell SWCD
- William Lonon; McDowell SWCD
- Clay Parker; Orange SWCD

Resignation letter from the following:

- Beverly Foster; McDowell SWCD
- C.A. Buckner; McDowell SWCD
- Larry Rogers; Orange SWCD

B. Approval of Cost Share Supervisor Contracts

Contract No.	District	Supervisor Name	Practice(s)	Contract Amount
02-2013-004	Alexander	David "Bill" Chapman	Livestock Exclusion System	$13,438

19-2013-805	Chatham	J. Lynn Mann	Agricultural Pond (AgWRAP)	$15,000
68-2013-005	Orange	Roger Tate	Waste Management System	$26,821
73-2013-008	Person	Eugene C. Berryhill, Jr.	Grassed Waterways, Diversions	$7,887
82-2013-012	Sampson	Henry E. Moore	Cropland Conversion – Grass	$3,376

C. Technical Specialist Designation
Waste Utilization Planning/Nutrient Management (WUP/NM)
Rick Bailey, NRCS District Conservationist in Surry and Yadkin SWCDs

The handouts provided for items 7A-7C are attached and have been made an official part of the minutes.

8. Cost Share Committee Recommendations

8A. Policy Regarding Use of Cost Share Program Funds as Match

Mr. David Williams called attention to the handout for items 8A, which is attached as an official part of the minutes. He noted that the recommended policy change was discussed at the March Commission Work Session. Commissioner Frazier recommended one change and moved to approve the policy as revised. Commissioner Langdon seconded the motion, and the motion was approved.

9. Cost Share Issues from Districts
Ms. Kelly Ibrahim called attention to the handout for items 9A – 9C, which is attached as an official part of the minutes.

9A. Approval for New Contract for Work Conducted under Expired Contract; Cleveland SWCD
Mrs. Kelly Ibrahim referred to the letter from the Cleveland SWCD (Attachment 9A) describing the error in notification about the expiration date of the 2010 contract. Mrs. Ibrahim introduced Randy McDaniel, Supervisor from Cleveland SWCD and Stephen Bishop, Cleveland Cost Share Technician who were present to answer questions. Mr. McDaniel asked the Commission for a favorable decision. Commissioner Yarborough moved to allow the district to establish a new contract to allow the work to be completed. Commissioner Hughes seconded the motion. The motion was approved.

9B. Post approval of a ACSP contract; Cleveland SWCD
Ms. Ibrahim explained that the Cleveland district is requesting Commission approval for post-approval of an ACSP contract for Ryan Ware. Commissioner Frazier made a motion to approve the post approval. The motion was seconded by Commissioner Houser, and the motion carried.

9C. Request for Exception for ACSP Eligibility; Randolph SWCD
Mrs. Kelly Ibrahim referred to the letter from the Randolph SWCD (Attachment 9C). Ms. Ibrahim noted that Craig Frazier, supervisor from Randolph SWCD was present to respond to questions. Commissioner

Frazier stepped down from the Commission to present the request on behalf of the Randolph district. Mrs. Ibrahim said that there was a cost share contract in place with a previous landowner. The new landowner did not yet have the documentation required to demonstrate eligibility. The District is seeking Commission approval for alternative documentation relying on the conservation plan to demonstrate eligibility. Commissioner Houser made a motion to approve the post approval. The motion was seconded by Commissioner Langdon, and the motion carried.

10. CREP Easement Noncompliance

Mrs. Jennie Hauser, Counsel to the Commission, referred the Commission to the letter from Director Harris to Mrs. Kari Ham Racobaldo and to the letter of response from Mr. Blizzard. She also described the statutory authority for CREP to acquire conservation easements and to the Commission's rules for the CREP program.

Chairwoman Porter invited Mr. Walter Blizzard and Mrs. Kari Ham Racobaldo to address the Commission with their request. Mrs. Racobaldo extended her time to speak to Mr. Blizzard.
Mr. Blizzard relayed that his dealings were with the federal agency. He said he was assured that he would be able to take out a portion of the enrollment for a house site. He would not have enrolled if he knew he could not. He argued the boundaries in the map and the fact that there was no mechanism to release the easement.

Chairwoman Porter reviewed the Commission's responsibilities and authorities with regard to CREP easements. The Commission has reviewed the request and stand ready to assist return of the easement to compliance.

Mr. Blizzard has talked to the County Executive Director of the federal Farm Service Agency office in Lenoir County. FSA has reviewed every CREP contract and has made changes to the procedures for enrollment in CREP in Lenoir County.

Ms. Hauser informed Mr. Blizzard that the Council of State and the Department of Administration has oversight authority and that there is no provision to allow release of conservation easements.

Mr. and Mrs. Blizzard expressed their disappointment that the Commission could not take action to satisfy their concerns.

Chairwoman Porter asked Director Harris to set up a special Commission teleconference to develop an official Commission position on long-term protection of conservation easements to share with legislators, partners, cooperators, and other interested parties.

VI. PUBLIC COMMENTS:

Chairwoman Porter asked if there were any public comments.

VII. ADJOURNMENT

With no further business, Commissioner Hughes offered a motion to adjourn, and Commissioner Langdon seconded the motion. The motion was approved, and Chairwoman Porter declared the meeting adjourned at 9:53 a.m.

Patricia K. Harris 7/17/2013

Patricia K. Harris, Director
Division of Soil & Water Conservation, Raleigh, N.C.
(Sign & Date)

David B. Will 7/17/2013

David B. Williams, Recording Secretary
(Sign & Date)

These minutes were approved by the North Carolina Soil & Water Conservation Commission on July 17, 2013.

Patricia K. Harris 7/17/2013

Patricia K. Harris, Director
(Sign & Date)

North Carolina Nutrient Criteria Development Plan

Draft April 15, 2013

For Public Input – Comment period is from April 17th through May 24th 2013. Comments should be sent to Nikki Schimizzi through either one of the following:

- *Email –* nikki.schimizzi@ncdenr.gov
- *Mail - Nikki Schimizzi*
  DWQ Planning
  1617 Mail Service Center
  Raleigh, NC 27699-1617

Questions: Email or Phone: Nikki Schimizzi – 919.807.6413

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Executive Summary

North Carolina has established itself as a leader in site-specific, flexible nutrient control strategies through the implementation of a comprehensive nutrient management program for its surface waters. This existing program has included numeric nutrient response criteria, ambient monitoring programs, assessment methodologies, nutrient TMDLs, regulatory control of nonpoint sources, nitrogen and phosphorus permit limits, and an innovative supplemental classification of "Nutrient Sensitive Waters (NSW)" for certain waters of the State.

The State of North Carolina recognizes that additional nutrient control measures are warranted based upon the latest advances in the science of nutrient management. A careful review of current capabilities by the North Carolina Division of Water Quality (DWQ or the Division), including stakeholder input, revealed the need for additional criteria to assess, protect and restore rivers, streams and surface water supply sources including lakes and reservoirs. The Nutrient Criteria Development Plan (NCDP) has been designed to assist in addressing those needs. Additionally, the NCDP serves to meet the State's Clean Water Act Section 106 Workplan commitment of developing a mutually agreed upon nutrient plan of action with the United States Environmental Protection Agency (EPA) by July 2013. The NCDP provides an overview of nutrient criteria related activities within the state since 2001 and describes actions that the State will take to develop additional nutrient control criteria.

The Division has identified four tasks that will need to be completed as the state moves towards criteria development. These tasks include a systematic parameter review to determine which one(s) to investigate further toward criteria development; studies to compile additional data, if necessary, based on the parameter(s) selected; analysis of the available data or study results to determine appropriate parameter(s) for criteria development; and criteria development (includes implementation considerations and fiscal analyses).

Twelve parameters were identified by DWQ for potential criteria development consideration. No new parameters were identified through the public comment process. Ten of the parameters are considered response variables as they reflect a water's chemical and biological reaction to nutrient inputs: chlorophyll *a*, phytoplankton community, periphyton community, macrophytes, diurnal dissolved oxygen (DO) range, minimum DO, diurnal pH range, total organic carbon, algal toxins, and taste and odor phytoplankton species. The two causal variables are nitrogen and phosphorus. Parameters expected to be more representative of rivers and streams will be addressed first. The next priority will be parameters more specifically addressing surface drinking water supplies.

Execution of this plan requires collaborative work with other agencies, local governments, other stakeholders, and universities. The timeline and tasks may be adjusted based on the results of each activity and resource availability. Stakeholder involvement and updates to the North Carolina Environmental Management Commission are built into the timeline, which projects having the first potential criteria proposed by around 2020.

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Introduction

The State of North Carolina has a long history of requiring management practices to control for nutrient over-enrichment (known as eutrophication) from both point and nonpoint sources. North Carolina has established itself as a leader in the field of site specific, flexible nutrient control strategies through the implementation of a comprehensive nutrient management program for its surface waters. This existing program has included numeric water quality standards for nutrient response parameters, ambient monitoring programs, assessment methodologies, nutrient TMDLs, regulatory control of nonpoint sources, nitrogen and phosphorus permit limits, and an innovative supplemental classification of "Nutrient Sensitive Waters (NSW)" for certain waters of the State. This plan focuses specifically on strengthening the portion of North Carolina's nutrient management program that relates to the development of water quality standards to control nutrients. The inset box below provides a description of what is included in a water quality standard.

North Carolina recognizes that additional nutrient criteria are warranted as the current criteria may not adequately address protections for all waters of the state. Accordingly, the North Carolina Division of Water Quality (DWQ) has developed this plan, the Nutrient Criteria Development Plan (NCDP), to address weaknesses in existing nutrient criteria for NC's surface waters. The NCDP lays out a process by which criteria will be developed to address nutrient enrichment in North Carolina waterways.

The NCDP builds on existing research efforts, within and outside of the state, to determine a defensible linkage of cause to response to effect. This plan is one piece of an ongoing effort by the state to develop water quality management programs based upon the latest advances in nutrient management and the interests of many stakeholders. With this in mind, the North Carolina NCDP is a living document and is subject to change based upon the results of planned studies and emerging scientific knowledge on the subject of nutrient management.

What is a water quality standard?

Water quality standards define the goals for a waterbody by designating its uses, setting criteria to protect those uses, and establishing provisions to protect water quality from pollutants.

A water quality standard consists of four basic elements:

1. the designated uses of the state's waters, such as public water supply, recreation, propagation of aquatic life and wildlife, or navigation;
2. the water quality criteria specifying the amounts of various pollutants, in either numeric or narrative form, that may be present in those waters without impairing the designated uses (note - criteria include any one or more of three components: magnitude, duration, and frequency);
3. antidegradation requirements to maintain and protect existing uses and high quality waters, and
4. general policies addressing implementation issues (e.g., low flows, variances, mixing zones).

Clean Water Act Obligations

North Carolina receives monetary assistance from the federal government to manage various water quality programs through Section 106 funds. Section 106 of the Clean Water Act (CWA) authorizes the US Environmental Protection Agency (EPA) to provide federal assistance to states to establish and implement ongoing water pollution control programs. Prevention and control measures supported by Section 106 funds include activities such as permitting, development of water quality standards and total maximum daily loads, ambient water quality monitoring, and enforcement. The state enters into a cooperative agreement (106 Workplan) with the EPA under this program to provide appropriate water quality management under the Clean Water Act.

Under the North Carolina Department of Environment and Natural Resources (NC DENR) current Section 106 Workplan agreement – the state is obligated to *"continue progress toward development of Numeric Nutrient Water Quality Standards"* by:

- Revising the State's Nutrient Criteria Development Plan (NCDP), previously identified as the Nutrient Criteria Implementation Plan (NCIP) and to reflect current and proposed activities toward establishment of numeric nutrient criteria. (Due date 6/30/2013)
- Developing and meeting scheduled milestones for submitting a revised NCIP.
- Coordinating with EPA on the development of a revised NCIP and proposed nutrient criteria and provide status report on the drafts. (Due dates 12/31/2012 and 12/31/2013)
- Reporting performance milestone information on progress toward adoption of water quality standards for total nitrogen (TN) and total phosphorus (TP) for each water body type (lakes/reservoirs, rivers/streams, and estuaries). (Due date 12/31/2013)

Background on Federal and State Development of Nutrient Criteria Development Plans

The following is a brief overview of actions leading up to the drafting of this NCDP. A more detailed history is provided in Appendix A.

In 2001 the EPA, under the CWA, published ecoregional Section 304(a) criteria for total nitrogen, total phosphorus, chlorophyll *a* and Secchi depth in the Federal Register and specifically stated that the states were expected to adopt these criteria, or a revised version, into their surface water quality standards regulations. The federal register notice also indicated that the states were to develop plans by the end of 2001 for the establishment of state nutrient criteria if the state opted to not adopt federal 304(a) criteria into their regulations. The notice went on to specify that nutrient criteria should be adopted into state regulations by 2004 and that EPA may begin promulgation of nutrient criteria in those states that had not met this deadline.

North Carolina's first plan was called the NC Nutrient Criteria Implementation Plan (NCIP) and was approved by EPA in 2004[1]. It included anticipated timelines for development of nutrient related actions, an overview of the State's nutrient management strategies and a data inventory summary for NC's non flowing waters (lakes, reservoirs and estuaries). The Division revised the NCIP in October 2005 to extend the milestone timelines and requested that the updated plan become the mutually agreed upon plan. This modification was approved in 2006.

In accordance with the revised NCIP timelines, the DWQ began the more formalized stakeholder process by presenting to the Environmental Management Commission (EMC) in November 2008 an information item on the NCIP, including a state-wide approach to address nutrients, planned rule revisions and proposed rules for technology-based nitrogen and phosphorus controls. The proposed rules that were drafted as a result of the stakeholder process were presented to the EMC in November 2009 and January 2010. The rules were not adopted. The EMC requested that additional information be gathered regarding eutrophication and what other states were doing with respect to nutrient control regulations.

In response to the EMC's request, the North Carolina Forum on Nutrient Over-Enrichment was conducted in May 2012. This forum provided attendees with a review of the relevant science, regulatory issues, economic considerations, and other policy issues related to nutrient over-enrichment and options for avoiding water body impairments. Recognized experts presented their ideas and experience with nutrient issues to a Forum panel (consisting of two EMC members, one representative of local government and one environmental advocacy group representative) and the Forum's attendees. The Division is maintaining a website that provides information from the Forum as well as other nutrient related activities.[2]

In July 2012, DWQ staff and EMC Chairman Stephen Smith presented an information item to the EMC that summarized the materials presented at the Forum. The EMC assigned the Division the task of revisiting the original NCIP, taking into consideration the information gathered at the Nutrient Forum and additional stakeholder input.

In response to this request, the DWQ formed an internal workgroup in October 2012 to assist with development of the renamed Nutrient Criteria Development Plan (NCDP). The workgroup was guided by the Section 106 commitments, US EPA memorandums and federal register publications, knowledge gained from the Nutrient Forum, public input, national activities, and directives from the EMC. The workgroup goals were to identify, prioritize, and select options for criteria development to include in a revised NCDP for North Carolina. Specifically, the workgroup was to identify research project needs with specific questions to be answered, methods to be used and timelines and milestones to be met.

Staff presented an update on the progress of the NCDP workgroup at the November 2012 EMC meeting. The presentation informed the Commission about the state's CWA obligations related

[1] http://portal.ncdenr.org/web/wq/ps/csu/swstandards - scroll down to NC Nutrient Criteria Plan (1 Jun 2004).

[2] http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria

to nutrients under the FY12 and FY13 Section 106 Workplans and its proposed path forward. Additionally, staff provided a timeline for submitting the proposed plan to US EPA staff for review by June 30, 2013.

The DWQ hosted three public meetings on development of the NCDP in early December 2012. The meetings were held at various locations across the state to encourage stakeholder participation. Each meeting provided background information and allowed for questions and comments. The DWQ also accepted written comments on the NCDP development process from December 4, 2012 through February 4, 2013.

Written public comments were submitted by 20 individuals and 15 organizations. A summary of the comments organized by subject area is provided in Appendix B. All comments are provided at this website: http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria. Comments covered many topics including the following:

- Limitation of nutrients in discharges (19 postcards from individuals)
- Public review of the draft plan before taking to the EMC
- Establishment of a criteria development advisory group (although suggestions varied from a larger stakeholder process to an expert technical advisory group)
- Site specific approach for establishing criteria (comments for and against)
- Establishment of criteria for streams and rivers (comments for and against)
- Establishment of criteria for response variables in conjunction with nitrogen and phosphorus
- Establishment of criteria for response variables only
- Establishment of numeric criteria for nitrogen & phosphorus
- Inclusion of cost benefit analysis as part of the criteria development process
- Suggestions for specific locations/watersheds to focus on for criteria development

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NCDP Priorities

To assist in prioritizing the plan of actions, the DWQ internal workgroup focused on evaluating where additional efforts could be initiated to best serve the public. The workgroup evaluated the strengths and weaknesses of current regulatory tools and developed a preliminary list of parameters for focused investigation to address the identified weaknesses.

Strengths and Weaknesses Analysis

To evaluate the state's strengths and weaknesses with regard to nutrient control, the group examined the regulatory tools currently available through the state's water quality standards regulations to assess, restore, and protect North Carolina's waters. A summary of this evaluation is provided in **Table 1**.

Table 1. Evaluation of North Carolina's Current Ability to Assess, Restore and Protect Surface Waters from Nutrient Impacts

Water Body Type	Capabilities of Current Water Quality Standards		
	Assess[1]	**Restore**[2]	**Protect**[3]
Reservoirs	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Mountain and Upper Piedmont water bodies may not be adequately protected by current criteria.[4]
Estuaries	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Ongoing efforts are in place through the current nutrient management strategies.[5]
Rivers & Streams	Inadequate	Where Chlorophyll *a*, Dissolved Oxygen & pH can be used	Where Chlorophyll *a*, Dissolved Oxygen & pH can be used
Drinking Water Supplies	Existing criteria may not reflect all responses to over-enrichment	Existing criteria may not reflect all responses to over-enrichment	Existing criteria may not reflect all responses to over-enrichment

[1] Assess refers to the ability to effectively use standards to determine if the water is experiencing undesired responses to nutrient enrichment.

[2] Restore means that there are standards that can be used as a target for cleaning up nutrient-impacted waters.

[3] Protect means that there are standards that keep waters from becoming impacted by nutrients.

[4] Chlorophyll *a* concentrations in the mountain and upper Piedmont lakes are lower than other parts of the state and there is concern that the 40 µg/L chlorophyll *a* standard is too high to prevent excessive nutrient over-enrichment and its impacts in these waters (DWQ Ambient Lakes Data 1981-2007).

[5] Implementation of nutrient management strategies involves re-evaluation of whether the targets are achieving restoration and protection of the waters.

The workgroup determined that, using North Carolina's existing current chlorophyll *a*, dissolved oxygen, and pH standards, nutrient impacts on reservoirs and estuaries can be assessed and restoration success can be measured. In terms of protection, the current standards provide some protection for some waters and there are nutrient management strategies and rules in place that target watersheds with nutrient impacts.[3]

A weakness identified by the workgroup in the current regulations is the inability to effectively use the current water quality standards for chlorophyll *a*, dissolved oxygen, or pH to fully assess nutrient impacts in free-flowing waters (rivers and streams). In free-flowing waters, phytoplankton (algae that grow in the water column) may not have the time or other requirements necessary to grow excessively in the water column; therefore, phytoplankton (as measured by chlorophyll *a*, dissolved oxygen, and pH) are not one of the best indicators of nutrient enrichment in those waters. For example, excess nutrients can result in over-growths of periphyton (algae that grow on substrates) that the public find a nuisance; however, DWQ's ambient water quality sampling indicates that chlorophyll *a* in the water column is below the existing criterion.

As part of the strengths and weaknesses evaluation, the workgroup also specifically evaluated the DWQ's ability to use the state's current nutrient standards to assess, protect, and restore waters designated for use as a drinking water supply. Recognizing that a variety of factors can impact the designated use of a water supply, the workgroup determined that additional knowledge on the interactions between various causal/response, chemical and/or physical properties that affect public water supply sources should be researched.

With strengths and weaknesses outlined, the NCDP workgroup noted that limited financial and staffing resources would require prioritization of next steps. **The group determined that developing criteria that strengthens the ability to assess, protect and restore rivers, streams, and waters that are classified as a drinking water supply should be the division's priority.**

Parameters Targeted for Evaluation

Rivers and streams are flowing water bodies. As noted above, flowing waters can be difficult to assess for nutrient impacts using the state's current water quality standards. Also from a regulatory perspective, readily measurable substances like chlorophyll *a*, dissolved oxygen, and pH can be inadequate standalone tools in water supplies.

In general, nutrient enrichment can cause increased biomass production, phytoplankton species composition changes, nuisance conditions such as taste and odor or surface scums, the establishment of nuisance species such as algae that produce toxins, dissolved oxygen depletion, changes to pH, increased carbon dioxide production, and fish kills. In rivers and streams, these impacts can be episodic or manifested in downstream settings where flow slows.

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[3] http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=521753&name=DLFE-38782.pdf

Further, environmental factors like temperature, streambed substrate, canopy cover, precipitation, and wind can exacerbate the expression of severe nutrient responses.

In North Carolina, the terrestrial habitats, land uses, and respective aquatic systems are extremely diverse and the rates at which nutrients are available for plant uptake vary spatially and temporally. Therefore, a single criterion, benchmark or tool that is protective for all waters, including flowing waters, throughout the entire state is not appropriate.

Accordingly, multiple parameters and approaches towards the development of nutrient criteria will be explored. The causative and response parameters shown in Table 2 are DWQ's priorities for consideration in the development of nutrient criteria. Based on resources and the need for better tools for assessing streams and rivers, parameters most appropriate for those waters will be the top priority. Waters classified for drinking water supply are covered fairly well by the current standards; therefore, further refinement of criteria of those waters will addressed following refinement of the criteria for streams and rivers.

Table 2. Priority Parameters for Investigation

Streams and Rivers	**Waters Classified for Drinking Water Supply**
Response Parameters: • Chlorophyll *a* • Phytoplankton community • Periphyton community • Diurnal DO range • Minimum DO • Diurnal pH range	*Response Parameters*: • Total Organic Carbon • Algal Toxins • Taste and odor species
Causal Parameters: • Nitrogen • Phosphorus	*Causal Parameters*: • Nitrogen • Phosphorus

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Investigation Approach

The Division is proposing a process for criteria development to ensure that the criteria developed have strong scientific merit. The process consists of the following four tasks:

- Task 1 – Systematic Parameter Review
- Task 2 – Design and Implement Study Plans
- Task 3 – Determine Appropriate Parameters for Criteria Development
- Task 4 – Develop Criteria

This process also provides defined break points to allow for stakeholder participation and EMC review before proceeding to the next task. Depending on the results of each task, the plan may be modified to adjust timelines or priorities.

Each task is discussed in detail below.

Task 1. Systematic Parameter Review

The primary purpose of Task 1 is to assure that there are established scientific relationships between the various indicators of eutrophication and the concentrations of nitrogen and phosphorus. Task 1 will focus on gathering existing information to include literature review, review of progress in other states as they work to develop nutrient criteria, and an analysis of existing NC data for the priority parameters identified above. Information gathered at the NC Nutrient Criteria Forum will be included in this review. Task 1 will result in a detailed understanding of what research is already available, what has worked well in other states, and highlight where there are data or research gaps to be addressed in Task 2. The NCDP literature and data review efforts will consider the applicability of the research to North Carolina.

Two full time staff positions are expected to be used for this step over a one year period (Table 4). The proposed investigation approach is discussed in more detail below.

Literature Review

This phase of Task 1 is focused on identifying and reviewing current literature (scientific papers, reports, federal and state documents) which have established relationships between the parameters being investigated and the responses seen in the waters. Other state agencies will be asked to contribute to this review. The Division intends to collaborate with the local universities and academic community to further this review effort (e.g., North Carolina State University, University of North Carolina, Duke University and others).

Review of Progress in other States

Ongoing nutrient criteria development efforts of other states will be investigated in this phase of Task 1, focusing initially on states with federally approved nutrient criteria or acceptable assessment methodologies, and Southeastern states. This review aspect is anticipated to be an ongoing effort to gain a better understanding of nutrient control approaches.

Review of Available Data

The Division will conduct a review of available NC data. These efforts are intended to complement ongoing literature review efforts, data collection, and findings. Requests for existing data and the respective review may include the following sources:

- Division of Water Quality (DWQ). The Division will review existing in-house data. This includes ambient monitoring data, NPDES effluent data, NPDES upstream and downstream monitoring data, Coalition monitoring data, and DWQ lake monitoring data.
- NC Department of Environment and Natural Resources (DENR). The Division will request other divisions within DENR (Water Resources, Coastal Management, Marine Fisheries, Wildlife Resources, and Energy Mineral and Land Resources) to provide information and data that may be available for further review and analysis.
- Federal resource agencies such as the United States Geological Survey (USGS) and US Fish and Wildlife Service will be asked to participate in NCDP efforts.
- Collaboration with universities to discuss both past and ongoing research, monitoring data, models and other efforts will be pursued.
- Other. There are a variety of other sources that may have access to appropriate data (e.g., local governments, environmental groups etc.). DWQ will investigate ongoing monitoring and research efforts of other States to determine the utility and applicability of these data for North Carolina.

These efforts are anticipated to identify statistical analysis needs from data sets that are currently available and information or data gaps that remain to be addressed. Additional resources may be required to complete the statistical evaluation of the data collected. These resources may be in the form of outside research assistance to conduct data analysis, including evaluation of the relationship between the multiple causal and response parameters identified above.

A systematic investigation of the available data from permitted surface water intake locations and data in proximity to intake locations will be conducted to determine additional monitoring needs. Water treatment plants receive their source water in a variety of ways including direct river and lake intakes or intake from rivers or lakes and then storage in holding ponds; therefore, use of water quality data from these facilities requires a clear understanding of their operation and sampling protocols.

It is currently unclear if an adequate amount of “near intake” surface water data is available for analysis, especially during low flow growing season conditions. Accordingly, based on the

literature and available data review results, a study designed to address data collection needs may be initiated.

Geographic Scale

The geographic scope of Task 1 is intended to be broad as it is exploratory in nature. The applicability of parameters or combinations of parameters for investigation will be considered on the following descending (landscape size) spatial scales:

1. Regional physiographic application (e.g., Mountains, Piedmont, Coastal Plain physiographic regions),
2. River basins,
3. Differentiation of flowing stream vs. main-stem rivers by physiographic region,
4. A narrower habitat-related scale, and/or
5. Ecoregion and land use approach.

As a result of the investigation, some waters may need to be treated more site-specifically at one of the five spatial scales listed.

Results of Task 1

The information provided by the literature, state, and data review will result in refinement and focus on parameter(s) where it is possible to establish scientific linkage of cause to response and effect. Task 1 is expected to result in a more complete understanding of data gaps and should help identify other parameters that have significant utility and merit consideration. For example, these analyses may include consideration of seasonal effects, physical water quality parameters, chemical water quality parameters, severity of nuisance conditions, and morphology of the water body.

It is understood that these efforts may illuminate other functional approaches that are beyond the scope of what is presented in this current plan. If this occurs and a more suitable pathway is revealed, the DWQ intends to revisit and modify this NCDP with mutual agreement from the EMC and EPA. This modification will accommodate new information and address any new investigation priorities. This information will be communicated to the EMC and the public for consideration of application suitability.

Task 2. Design and Implement Study Plans

Task 2 will build off of the results of Task 1 by designing and implementing study plans at the appropriate geographic scale to address any identified data gaps for parameters that were deemed appropriate for continued development. Rather than evaluating parameters individually, the intent is to complete Task 1 and design studies that can evaluate multiple parameters.

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If the results of Task 1 indicate the need for additional data collection to accommodate the identified data gaps in order to support the nutrient criteria investigation, resources may be sought. These funding sources may include 106 grants, 104(b) grants, 319 grant funds, and other sources that may be available for nutrient criteria development efforts.

Task 3. Determine Appropriate Parameters for Criteria Development

Based on the results of Tasks 1 and 2, parameters and the appropriate geographic region for applicability will be selected for development of criteria. Stakeholder participation and education will be conducted to ensure that environmental, regulatory and economic concerns are documented and addressed in determining the appropriate parameters for criteria development.

Task 4. Develop Criteria

This task involves development of appropriate magnitude, duration, frequency, language, implementation plans and fiscal analyses to finalize the criteria for the intended protected uses. Stakeholder, EPA and EMC input will be included.

Timeline

It is anticipated that the NCDP will require collaborative work with other agencies, local governments, and universities. Additionally, these literature review efforts, data review, analysis efforts of existing data, and implementation of investigation approaches will require staff and resource allocations. These resources are necessary to organize and manage a multidiscipline investigation / development plan of this scale (Table 4). The estimated timeline may change in future revisions of the NCDP given research or resource changes.

Conclusion

It is the goal of North Carolina to protect surface waters from eutrophication by developing additional nutrient criteria that can be used for sound evaluation of nutrient related impacts and for development of appropriate management strategies. This Plan is designed to build upon and refine the effective nutrient control that has already been achieved by the State.

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Table 4. Estimated Task Duration and Full Time Employee (FTE) Needs.

Plan Components (Tasks)	Time	FTEs
EPA approval of NCDP	3 months	
Initial NCDP Organizational efforts	6 months	1
EMC update(s)	Annual	
Task 1 - Systematic Parameter Review		
Literature Review • Review and assess literature • Criteria development plan review from other states	1 year	2
Available Data (concurrent) • Review • Statistical Analysis and assessment		
Stakeholder & EMC Update	2 months	
Task 2 – Design and Implement Study Plans		
Study Design Development	9 months	1
Stakeholder & EMC Update	2 months	
Implementation of Study	2 years	2
Task 3 – Determine Appropriate Parameters for Criteria Development		
Analysis, assessment and write up of results	6 months	2
Stakeholder & EMC Update	2 months	
Task 4 - Develop Criteria		
Criteria Development	1 year	1
Stakeholder & EMC Update	2 months	
Total	**6.7 years**	

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Appendix A. History of the North Carolina Nutrient Criteria Development Plan Through March 2011

2001

In January of 2001, the US Environmental Protection Agency (EPA), under the Federal Water Pollution Control Act (Clean Water Act or CWA) authority initiated efforts for states to adopt nutrient standards, specifically total nitrogen, total phosphorus, chlorophyll *a* and Secchi depth, into their state water quality standards by publishing Section 304(a) criteria in the Federal Register. These published criteria were aimed at reducing and preventing eutrophication on a national scale. The Federal Register notice specifically outlines that states are "expected to adopt or revise EPA ecoregional nutrient criteria … into State … water quality standards by 2004." The notice includes directives for states to complete a plan for this adoption by the end of 2001. If states had not met this obligation by the end of 2004, EPA proposed to promulgate protective nutrient criteria in those states/tribes.

Division of Water Quality (DWQ) staff initiated meetings to determine the applicability and utility of the published federal ecoregional documents and immediately questioned the science of the recommended concentrations for chlorophyll *a*, total phosphorus and total nitrogen. These concerns were expressed by NC and other states to US EPA regional and national staff. The US EPA recognized the problems associated with the short compliance timelines and in November 2001 issued a memorandum known as the 'Grubbs memo'[4] that clarified the requirements for states to derive an EPA "*mutually agreed upon*" "*plan of action*" by 2004 with the intended purpose to reduce nutrients. The guidance noted that if a state had developed a plan of action or initiated its administrative process to adopt nutrient criteria by the end of 2004, EPA would conclude that a federal promulgation of rules was not appropriate.

2002 - 2004

From early 2002 through June 1, 2004, DWQ staff drafted the 'North Carolina Nutrient Criteria Implementation Plan' (NCIP) to accomplish the federal mandate of developing a *"plan of action"* for submission to the EPA Region IV. The US EPA Region IV provided a *"mutual agreement"* letter approving North Carolina's initial plan on September 4, 2004. This submittal included anticipated timelines for development of nutrient related actions, an overview of the State's nutrient management strategies and a data inventory summary for NC lakes and reservoirs. The first NCIP for NC was finalized in September 2004.

2005 - 2006

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[4] http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/upload/nutrient_2001_Grubbs_Memo.pdf

In October 2005 the DWQ staff informed the EMC about the Triennial Review of water quality standards and the relationship of the proposed chlorophyll *a* standards and the NCIP.

On October 25, 2005, the passage of NC General Assembly Session Law 2005-190 pertaining to the protection of drinking water supply reservoirs created significant demands on staff resources. The Division revised the NCIP in October 2005 to extend the milestone timelines and requested that the updated plan become the mutually agreed upon plan. This request was made in accordance with the Grubbs memo and timelines were adjusted to meet both the needs of SL 2005-190 and the Federal Register 2001 requirements. The US EPA Region IV agreed with the request in July 2006.

2007

The US EPA continued to stress the importance of taking appropriate actions and on May 25, 2007, Benjamin Grumbles, Assistant Administrator, US EPA issued a 'Memorandum on Nutrients'[5], which further encouraged states to "accelerate" adoption of nitrogen and phosphorus (as causal variables), and chlorophyll *a* and transparency (as response variables) into states' water quality standards. North Carolina responded to this memo by submitting clarifying information to explain our proactive nutrient management approach.

2008 - 2009

In accordance with the proposed NCIP timelines, the DWQ began the more formalized stakeholder process by presenting to the Environmental Management Commission (EMC) in November 2008 an information item on the NCIP, including a state-wide approach to address nutrients, planned rule revisions and proposed rules for technology based nitrogen and phosphorus controls.

Beginning in January 2009, stakeholder groups and EMC information items provided the public and the EMC with:

1. Proposals to change water quality standards, including chlorophyll *a*,
2. Overviews of the proactive nutrient management approach which included chlorophyll *a* thresholds levels derived from the NCIP,
3. Water bodies identified through the NCIP investigations that would likely be affected by any proposed changes to water quality standards or to regulations pertaining to point and nonpoint source control.

The proposed thresholds and proactive strategies were not water quality standards and were not subject to EPA approval. They were, however, a result of the mutual agreement with the EPA for actions to be undertaken to achieve stronger controls on nutrients as directed by the

[5] (http://portal.ncdenr.org/c/document_library/get_file?folderId=521753&name=DLFE-13932.pdf)

January 2001 Federal Register notice and subsequent memorandums. The review of the chlorophyll *a* standards was required under the CWA Triennial Review process and the NCIP mutual agreement.

In November 2009, DWQ submitted a request to EPA Region IV staff to further extend NCIP timelines for adopting revised chlorophyll *a* standards and the establishment of chlorophyll *a* threshold rules with their associated management strategies. These revisions to the timelines provide additional time for the administrative rule making process. Approval of this timeline modification has not been granted, so 'mutual agreement' has not been re-established.

The Division continued to pursue proposed changes to the chlorophyll *a* water quality standards (15A NCAC 2B .0200) in conjunction with proposed chlorophyll *a* threshold rules (15A NCAC 2B.0600) and presented these proposals in November 2009 to the EMC. Commission members requested that additional stakeholder meetings occur on the proposed chlorophyll *a* threshold regulations before moving forward.

2010

Planning staff requested and obtained permission to proceed with changes to water quality standards in 15A NCAC 2B .0200, which included the modifications to the existing chlorophyll *a* standards. In accordance with the NCIP proposals, these draft rules included a regionally specific chlorophyll *a* standard for the mountains and upper Piedmont. Permission was granted by the EMC in March 2010 to take the rule package to public hearing. This package did not include the proposed nutrient chlorophyll *a* threshold rules. As part of the rule-making process, the state began to document the potential fiscal impacts of the proposals. That process is still underway.

Separately, the EMC requested that additional meetings be held regarding the proposed nutrient chlorophyll *a* threshold rules. Two meetings were held in October 2010 to gain insight from a number of interested parties, including representatives of the League of Municipalities, Home Builders Association, Association of County Commissioners, North Carolina Conservation Network and agricultural interest groups. As a result of these meetings, staff presented additional revisions and modifications of the nutrient chlorophyll *a* threshold regulations to the EMC. The EMC did not approve the proposals to move forward and directed staff to address six specific areas of concern in greater detail:

1. Review alternatives to threshold rules and indicators/criteria for determining eutrophication
2. Develop a clearer statement of the underlying science in the form of a white paper or other form
3. Provide more detailed review of costs and cost savings
4. Consider basing the threshold on something other than chlorophyll *a*
5. Consider other indicators of trending or change
6. Increase education on nutrient over-enrichment

2011

To more closely consider the EMC's concerns, the DWQ proposed holding a public scientific nutrient forum to obtain relevant knowledge as to the environmental and economical impact of implementation of proactive management of nutrients. The EMC agreed with the plan and subsequently, the DWQ and the EMC hosted 'The North Carolina Forum on Nutrient Over-Enrichment' (Forum)[6] in May 2012.

In March 2011, the US EPA issued an additional memorandum to states "Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions", (Nancy Stoner, Acting Assistant Administrator). The memorandum reaffirmed EPA's commitment to make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to the nation's waters. The memorandum indicated eight principals that are guiding and that have guided the US EPA in working with states to achieve near-term reductions in nutrient loadings. The Division concurred with several elements of the memorandum particularly that states need to provide leadership in addressing nutrients and that there must be room to innovate and respond to local situations.

2012 to Present

The North Carolina Forum on Nutrient Over-Enrichment' was conducted in May 2012. This forum provided attendees with a review of the relevant science, regulatory issues, economic considerations, and other policy issues related to nutrient over-enrichment and options for avoiding water body impairments.

Recognized experts presented their ideas and experience with nutrient issues to a Forum panel (consisting of two EMC members, one representative of local government and one environmental advocacy group representative) and the Forum's attendees. The Division is maintaining a website that provides information from the Forum as well as other nutrient related activities.[7]

In July 2012, DWQ staff and EMC Chairman Stephen Smith presented an information item to the EMC that summarized the materials presented at the Forum. The Division was assigned the task of revisiting the original NCIP, taking into consideration the Nutrient Forum and additional stakeholder input.

The DWQ formed an internal workgroup in October 2012 to assist with development of the NCDP. The workgroup was guided by the Section 106 commitments, US EPA memorandums and federal register publications, knowledge gained from the Nutrient Forum, public input,

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[6] http://www.ncsu.edu/mckimmon/cpe/opd/NCFONOE/index.html

[7] http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria

national activities, and directives from the EMC. The workgroup goals were to identify, prioritize, and select the options that may work best for North Carolina. Specifically, identify research project needs with specific questions to be answered, methods to be used and timelines and milestones to be met.

Staff presented an update on the progress of the NCDP workgroup at the November 2012 EMC meeting. The presentation informed the Commission about the state's federal water pollution control act obligations related to nutrients under the FY12 and FY13 Section 106 Workplans and its proposed path forward. Additionally, staff provided a timeline for submitting the proposed plan to US EPA staff for review by June 30, 2013.

The DWQ hosted three public meetings on development of the NCDP in early December 2012. The meetings were held at various locations across the state to encourage stakeholder participation. Each meeting provided background information and allowed for questions and comments.DWQ also accepted written comments from December 4, 2012 through February 4, 2013.

Written public comments were submitted by 20 individuals and 15 organizations. All comments can be reviewed on the DWQ website: http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria. A summary of the comments organized by subject area is provided in Appendix B of the NCDP. Comments covered many topics including the following:

- Nineteen (19) of the individuals sent a postcard urging action to limit nutrients in discharges
- Public review of the draft plan before taking to the EMC
- Establishment of a criteria development advisory group (although suggestions varied from a larger stakeholder process to an expert technical advisory group)
- Site specific approach for establishing criteria (comments for and against)
- Establishment of criteria for streams and rivers (comments for and against)
- Establishment of criteria for response variables in conjunction with nitrogen and phosphorus
- Establishment of criteria for response variables only
- Establishment of numeric criteria for nitrogen & phosphorus
- Inclusion of cost benefit analysis as part of the criteria development process
- Suggestions for specific locations/watersheds to focus on for criteria development

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Appendix B. Summary of Public Comments Received Between December 4, 2012 and February 4, 2013

Comments received from:

Individuals:

1. 19 postcards
2. Tim Spruill, Hydrologist, USGS-Retired

Organizations:

1. Albemarle-Pamlico National Estuary Partnership (APNEP)
2. Cardno ENTRIX
3. Catawba Riverkeeper
4. City of Charlotte
5. City of Salisbury
6. Division of Marine Fisheries
7. Division of Soil and Water Conservation (DSWC)
8. Mecklenburg County
9. Neuse River Compliance Association (NRCA)
10. North Carolina American Water Works Association – Water Environment Association (NCAWWA)
11. North Carolina Farm Bureau Federation, Inc. (Farm Bureau)
12. North Carolina League of Municipalities (NCLM)
13. North Carolina Water Quality Association (NCWQA)
14. UNC Wilmington Center for Marine Sciences (2)
15. Waterkeepers Alliance/Waterkeepers Carolina

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Comments in specific support for limiting discharges of nutrients

19 postcards

Comments in support of reviewing the draft plan prior to taking to WQC/EMC

AWWA
City of Charlotte
DSWC
Mecklenburg County
NCLM
NCWQA
NRCA
Waterkeepers Alliance/Waterkeepers Carolina

Comments in support of an advisory group/active stakeholder process

APNEP
Cardno ENTRIX
DSWC
Farm Bureau
Tim Spruill (expert technical advisory group proposed, not necessarily stakeholders)

Comments regarding implementation of original NCIP

Waterkeepers Alliance/Waterkeepers Carolina – The Waterkeepers expressed concern that NC has unreasonably delayed development of numeric nutrient criteria for the past eight years. State that NC has not met its obligations contained in the June 2004 agreement and has requested timeline extensions twice, first in October 2005, and again in November, 2009.

NCDWQ draft revisions to water quality standards (January 2010) contain inadequate progress toward reaching the goals for non-flowing waters laid out in the NCIP. Makes note that EPA issued statements that the chlorophyll *a* standards are mostly unchanged from the values in place before the NCIP, and that no supporting data to justify such values was provided to them.

Citing NCDENR and the EMC duty to "design water quality standards that are adequate to protect human health, to prevent injury to plant and animal life….. and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources." (Ref. N.C.G.S. §§ 143-211(c), 143-214.1, N.C.G.S. § 143B-282(a) (2)(b)) Commenter articulates that after eight years of planning, assessment and scientific evaluation, North Carolina still has not developed numeric criteria adequate to protect the designated uses of the state's waters and is still relying on the chlorophyll *a* criterion developed in the 1970s Waterkeepers Alliance/Waterkeepers Carolina notes NCDENR acknowledgement (2009) that the chlorophyll *a* criterion was inadequate as evidenced by the continued eutrophication of the state's waters. Despite the state's unreasonable delay in reaching the goals stated in its NCIP, EPA has continued to give North Carolina more time to come up with adequate numeric nutrient criteria,

justified by adequate data. Further, the commenter speaks to the EMC's duty to adopt nutrient criteria pursuant to Section 303(c) of the CWA. 33 U.S.C. §1313(c)(2)(A) and 40 C.F.R. § 131.2 and to its duty to base the nutrient criteria on sound scientific rationale." 40 C.F.R. § 131.11(a)(1). Because NCDWQ has been evaluating its criteria for eight years and it is not disputed by EPA or NCDWQ that the existing criteria is inadequate to protect the designated uses of North Carolina's waters, if the EMC does not propose a reasonable plan designed to quickly establish appropriate numeric criteria based on sound science, the EPA also has a duty to step in and promulgate nutrient criteria for North Carolina to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a); 33 U.S.C. § 1313(c)(4).

Waterkeepers Alliance/Waterkeepers Carolina further states that North Carolina's waters are experiencing increased nutrient pollution and associated degradation of drinking water, fisheries and recreational resources exacerbated by North Carolina's undue delay in adopting and enforcing appropriate nutrient criteria necessary to protect designated uses for the state's waterbodies. Comments note that EPA and numerous organizations have advocated that North Carolina adopt numeric nitrogen and phosphorus standards and states that North Carolina is the only southeast state that refuses to move toward adoption of numeric criteria. The Waterkeepers Alliance states a concern with the statewide chlorophyll *a* criterion, and states the EPA opinion that it is in need of revision and is now weaker than the standards in most other states. They stress that in requesting an extension of the deadlines for development of nutrient criteria from EPA in 2009, NCDWQ acknowledged that its chlorophyll *a chlorophyll a*criterion needed to be revised and that "additional proactive nutrient control measures are warranted based on the latest advances in the science of nutrient management and the continued eutrophication of waters."

Comments on strengths of existing programs

Farm Bureau – Comments question whether the case has been made that NC needs to adopt an extensive new set of nutrient criteria. Stressing that NC has an excellent record of addressing nutrient issues through nutrient strategy development and, in many cases, subsequent rule adoption. The NC NCDP should not be designed to "reinvent the wheel." The plan should foremost address and stress the first goal stated on the NCDP website, "The plan will: [h]ighlight and enhance NC's current approaches to nutrient management."

The Farm Bureau requests that DWQ extensively describe the current approach and its implementation in order for better recognition of efforts underway. An extensive review of the current approach is needed for DWQ to justify efforts to "enhance" the State's current approaches. Proof of the need for "enhancements" should be provided.

The website states that the plan will "[p]rovide for exploration of built-in protection and prevention." Before "exploring" such, the State should consider the many mechanisms already in place. NC already has nutrient strategies for a large part of the State, nutrient regulations for

much of the State, and also has the nutrient sensitive waters classification capability when waters are determined to be nutrient sensitive.

The Farm Bureau encourages that the plan should focus on other programs already in place (water supply watershed regulations, state and federal stormwater regulations, sedimentation and erosion control regulations), indicating that they provide built-in protection and prevention and reduce nutrient contributions to waters, even if nutrient delivery reduction is not the primary purpose of these programs or regulations.

NCLM – The League recognizes that while DWQ undertakes the necessary research to fill data gaps in the current plan, the NCDP must demonstrate a commitment to further nutrient controls now. Current activities to control nutrient impairments of lakes and estuaries – an area DWQ has determined is sufficiently addressed through its long-standing chlorophyll *achlorophyll a* approach – will no doubt continue throughout the time needed to complete NCDP research projects. The NCDP can identify such planned activities to show the state's continued commitment to addressing nutrient impairment.

NCWQA – (Referring to the March 2011, US EPA document: "Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions") North Carolina can point to existing programs for all eight of EPA's recommended elements for a state nutrient management framework. Although there are opportunities to enhance these elements, NCWQA recommends that the NCDP emphasize the effective leveraging, coordination, and refinement of existing programs, and adopt major new elements only as necessary to address any major regulatory gaps.

Comments expressing concern about impact in areas with existing nutrient management strategies/controls

Farm Bureau – The Farm Bureau encouraged extensive review of the economic impact on farmers and other citizens related to any proposed changes and discouraged any DWQ changes to the criteria that could affect rules and programs already in place.

NRCA – The NRCA endorses the Division's position that any revisions to the nutrient criteria will not impact water bodies that have implemented a TMDL stating that the Neuse Management Strategy has been in place for 10 years and any revisions should be implemented through the TMDL process.

Comments regarding developing criteria for flowing waters

Do not support developing criteria for flowing waters>>

AWWA - Development of a separate category for flowing waters is not needed – AWWA states that control of nutrient impairment should be focused on non-flowing waters indicating that development of flowing water biological indicators, such as periphyton, would impact the schedule as the usefulness of this biological parameter for controlling nutrient impairment is

not proven. AWWA also stated concern that NC has never utilized periphyton as a biological indicator and has few resources and expertise for the efforts needed to develop such criteria. AWWA indicated that as nutrient issues are presented in non-flowing waters, control strategies, and protection measures can be extended as far upstream in flowing waters as necessary to mitigate any responding condition.

Support developing criteria for flowing waters>>

Catawba Riverkeeper – Consider monitoring of TN and TP (causal variables), rather than simply the response variables (chlorophyll *a*), in the rivers and streams that deliver N and P to the lakes, where they tend to create problems.

Tim Spruill - Not all streams and reservoirs respond biologically to over-fertilization with nutrients. Consequently, streams that are not detected using biological monitoring techniques (i.e., response variables such as chlorophyll *a*) can transport excessive amounts of nitrogen and phosphorus to downstream bodies of water, including estuaries and sounds, the ultimate receivers of all pollution in the basin draining to the ocean from each river basin.

Recommendation - Numeric chemical standards should be established for all streams to protect the ultimate receiver of all nutrient loading, the estuary:

1. to prevent catchments which do not locally exhibit effects of eutrophication from contributing excessive quantities of nutrients to the receiving estuary through uncontrolled point and nonpoint source discharges to the State's waters.
2. to prevent unfair (to those watersheds and stakeholders who are not discharging excessive amounts—i.e. the mass/unit area that is proportional to the relative amount from upstream areas of the watershed delivered to the receiving estuary) portion of the cost of preventing eutrophication to the State's waters.

Comments regarding the list of parameters under consideration

Catawba Riverkeeper – Consider Nitrogen and Phosphorus in their entireties. Citing literature concerns expressed with bioavailability, form of N and P, and transport. They stressed that without considering the total N and P, there will likely still be eutrophication problems even when testing of only the dissolved phase revealed relatively little N and P in transport. Encouraged monitoring of TN and TP (causal variables), rather than simply the response variables (chlorophyll *a*), in the rivers and streams that deliver N and P to the lakes, where they tend to create problems.

Farm Bureau – Indicated that the DWQ website states that the plan will "[i]nclude review of a variety of possible criteria including response variables like benthic macroinvertebrates, periphyton, continuous dissolved oxygen, total organic carbon, algal densities and causal variables like nitrogen and phosphorus. They state that the possibility of any proposed numeric nutrient standards is a concern. Requested information on potential other variables under consideration and requested potential parameters to include chlorophyll *achlorophyll a*.

DSWC - The Division of Soil and Water encourages the continued use of chlorophyll *achlorophyll a* as a response variable where appropriate and applicable. The chlorophyll *achlorophyll a* criterion in standards should only be adjusted when science justifies new number(s), and when it is cost effective and achievable to implement.

Comments regarding designated uses

City of Charlotte – Indicated that designated uses of a water body should be prioritized. Stating that designated uses can sometimes be in conflict with regards to nutrients where higher nutrients may increase the biomass and sustain a healthy ecosystem (aquatic life usage) while at the same time the conditions may not be appealing for primary recreational usage (swimming).

NCWQA – Stated that any new response criteria should have a demonstrated cause and effect relationship with designated use attainment. The existing NCIP indicates that North Carolina will explore the utility of alternative response criteria such periphyton measures in streams. NCWQA supports the investigation of alternative response variables, but with the strong encouragement that such variables only be adopted as criteria if they can be defensibly linked to impacts on aquatic life, recreation, drinking water, or other designated uses. Such linkages should go beyond mere statistical correlations to include mechanistic, cause-and effect relations which are demonstrated by scientific investigation. This is not to advocate that all scientific uncertainty in criteria-use linkages can or must be eliminated.

For example, North Carolina's existing NCIP indicates that the state will explore various algal measures in streams such as periphytic *chlorophyll a*, percent coverage, and diatom indices of biotic integrity (IBI). Diatom IBIs are an example of an indicator that may or may not have direct meaning for designated use attainment. In contrast, high accumulations of nuisance or toxic algal taxa may directly impact high trophic levels or other uses.

North Carolina should consider refinement of designated uses in concert with criteria development. In order to achieve the most defensible links between criteria and designated uses, it may be necessary to refine designated use categories. This could take the form of a tiered aquatic life use (TALU) framework that acknowledges variation in the biological potential of different water bodies. Several states (e.g., MN, ME, NJ) have developed TALUs which provide higher levels of protection for higher quality or value streams. Similarly, USEPA led the Chesapeake Bay states in a process to refine the designated uses of Bay waters into ecologically-based categories (migratory & spawning waters, shallow water, open water, deep water, etc.). We encourage DWQ to consider and implement similar TALU and spatial concepts to further tailor use designations in conjunction with criteria development.

Comments with approach suggestions

APNEP – (Comments were Specific to Albemarle-Pamlico estuarine system.) Suggested that a dedicated independent contractor manage the development and consideration of numeric nutrient criteria approaches specifically related to North Carolina's estuarine waters. To

develop protective criteria for these estuarine waters, approaches should include (1) reference condition approaches, (2) stressor-response relationships, (3) and water quality simulation models. If sufficient data exists, APNEP suggests that an ideal scenario might entail developing numeric criteria using each methodology, then comparing the results and adopting criteria accordingly.

APNEP suggests work might be undertaken in concert with the APNEP Science and Technical Advisory Committee, with scientific input from state and federal agency representatives and researchers in relevant fields. APNEP offered to administer the contract, or otherwise provide support should it be administered elsewhere. APNEP noted that criteria may be more easily accepted by EPA, the state and responsible parties if an outside contractor is employed.

NCWQA – (Timeline) Requested that the NCDP include a realistic, staged schedule that makes near-term progress while providing ample time for research, refinement of the State's existing programs and development of cost-effective policies and regulations for a longer-term implementation. They suggest that underestimation of the time required to identify and adopt scientifically defensible criteria has been a major reason for repeated revisions to nutrient plans in other states.

Tim Spruill – (Scientific Advisory Group) For North Carolina to make progress in protecting water quality from over-fertilization and resulting eutrophication, Mr Spruill advises that the State should seriously seek and consider new opinions, both inside and outside the state, from a variety of individuals and academic institutions who possess knowledge on establishment of water quality standards and criteria.

(Literature Review/Suggested Criteria Concentrations) Mr. Spruill recommends that DWQ should consider information supportive of numeric nutrient standards and include opinions, evidence from published papers, and arguments by scientists supportive of this view. He concurs with studies on estuarine over-fertilization conducted in North Carolina and other areas of the U.S. that reduction of both nitrogen and phosphorus are necessary to prevent eutrophication incidents in freshwater and estuaries. He indicates that critical concentrations, above which concentrations are associated with summertime algal blooms, approximate between 0.05 and 0.1 mg/L as an upper limit for total phosphorus and approximately 7- 10 times those concentrations (0.35-1 mg/L) for total nitrogen. He requests that these concentrations should be considered for establishment of chemical nutrient standards in all lakes, reservoirs, estuaries and streams, and at least in the Piedmont and Coastal Plain regions, with more restrictive standards for the Blue Ridge. The upper part of these ranges might be most appropriate for stream standards, with the lower part more suitable for quiescent water bodies.

(Adoption of Criteria plus Control of Nutrient Loading) – Suggests that in addition to water quality standards, it may be reasonable, effective, and consistent within the context of the TMDL program, to consider nutrient controls in terms of watershed loading by using annual yields (tons per square mile per year). Based on runoff coefficients for selected land uses estimated by previous researchers, 1 tpsm of total nitrogen and 0.1 tpsm total phosphorus

would be reasonable annual average targets for yields to estuaries and lakes. These yields allow for some contamination by urban and agricultural practices, but would avoid extreme rates of nutrient loading (i.e., above 0.15 tpsm for total P and 1.4 tpsm for total N).

Recommendation- Include the possibility of using annual nutrient yields as a way to protect water quality of lakes and estuaries. Mr Spruill suggests that there is information on yields typical of various land uses that could be used to develop workable protective nutrient loading standards for streams draining into lakes, reservoirs, and estuaries.

Waterkeepers Alliance/Waterkeepers Carolina (Timelines/targeted areas/types of criteria) – The Waterkeepers recommend that the NCDP include specific actions/deadlines/interim milestones including time for data collection, data analysis, criteria proposal, and criteria adoption that prioritize promulgation of criteria in impacted waters where adequate scientific justification for criteria exists. They indicate that this information is available for NC's Coastal Plain and in other areas of the state. Request that numeric criteria address causal (nitrogen and phosphorus) and response variables for all waters that contribute nutrient loadings to NC waterways. Suggest that criteria should be informed by scientific understanding of the relationship between nutrient loadings and water quality impairment and that here scientific information is lacking, the plan should set forth specific actions for collecting necessary scientific information.

Comments with location specific study plan suggestions

APNEP – APNEP indicates that ambient monitoring provides poor coverage in the Albemarle-Pamlico estuary (no stations in Bogue, Back, Core, Croatan, Roanoke, or Currituck Sounds). They explain further that some ambient stations are found in the river mouths of the Neuse and Pamlico Rivers, but otherwise no ambient monitoring data exists for the vast expanse of Pamlico Sound. Albemarle Sound currently has the best monitoring coverage, with ambient stations at most river mouths and through the center of the sound. Noting significant, and important, ambient monitoring stations in inland waters, they request that the DWQ/EPA partner with APNEP to consider options through which consistent and statistically rigorous water quality information might be obtained for North Carolina's major sounds.

DMF - Due to the detrimental effect of eutrophication on coastal habitat and fish, DMF recommends that a focus of the plan include:

- The Cape Fear River. Noting that this coastal river basin is showing signs of eutrophication, which could negatively impact several federally listed and depleted anadromous fish species. Request/suggest that monitoring of cause and response variables in targeted areas is needed to determine source and effect of nutrient loading and effective control strategies(IMOVED this to a different section) More intense monitoring and assessment of the estuarine rivers, creeks and sounds where Submerged Aquatic Vegetation (SAV) is or has historically occurred. Bogue Sound was noted as a critically important fish habitat that should be protected. Existing research indicates that

current nutrient and sediment criteria are insufficient to maintain adequate water quality for this habitat.

- The lower Neuse River. Although nutrient management strategies are already in place, more monitoring and action may be needed.

NRCA – Noting that the current research on the health and improvement of the Neuse estuary is not being financially supported by the Division and that programs that once were supported by the Division (ModMon and FerryMon) no longer receive state funding, NRCA suggests that the strategy selected by the Division must provide for and support monitoring to verify the criteria are succeeding in the goal of reducing nutrients in the effected water bodies.

Comments with specific study plan/research/sampling suggestions

NCLM - To make the final nutrient criteria as scientifically sound as possible, the League recommends several NCDP research projects:

a. First, building off research presented at the nutrient forum, the NCDP should include a project to examine the effect of legacy groundwater contributions to a water body's nutrient load.
b. The plan should include projects to examine the appropriate variables (including inorganic and organic nitrogen), or nitrogen to- phosphorus ratio, to measure for each water body type. NCDP projects should examine these various effects of nutrient levels when deciding the appropriate parameter to use in a regulatory scheme.
c. Identification of water body types needing further monitoring to support valid criteria, noted a deficiency in data for streams and other flowing waters.

NCWQA – Request that any developed criteria should contain an examination of criteria frequency and duration (or averaging periods).Noting that the response of many water bodies to nutrient loading can vary a great deal based upon hydrologic, seasonal, and inter-annual variability, NCWQA recommends that criteria frequency and averaging periods should be set to avoid assessment being largely influenced by uncontrollable short-term peaks or unusual hydrologic years. NCWQA notes that his approach de-emphasizes outliers and unusual loading events (e.g., hurricanes) and emphasizes the long-term status of the water body.

UNCW – UNCW suggests that, when blooms are visible, monitoring should include, as standard protocol, surface film sampling to enable quantification of *Microcystis* blooms to assess the chlorophyll *a* biomass.

Comments seeking reductions from non-point source contributors

Catawba Riverkeeper – The Catawba Riverkeepers urged the plan to consider areas of agriculture and dry litter spreading. They note swine concentrated animal feeding operations

("CAFOs") and their waste ponds as plaguing waterways, especially during heavy rain events. They express concern that poultry CAFOs have increased due to lack of legislative oversight. Noting that with ~600 poultry houses in the Catawba basin, an increase in resources to inspect and monitor dry litter application and storage is warranted. They express that the primary concern with the impact of these CAFO operations on the environment is with regard to nutrient overloading, so targeted monitoring around (upstream and downstream of) areas densely populated with poultry CAFOs would target a likely key source. They suggest that increased investigations may identify responsible parties for over-application relative to the appropriate agronomic rate or application when rain is imminent. They express concern regarding the impact of the CAFOs in sub-basins draining to Lake Hickory, Lake Rhodhiss, and the South Fork River.

Sludge spreading must be considered. The Catawba Riverkeeper urged that sludge application processes be better monitored. Again noting that DENR lacks the resources to have someone monitoring and inspecting sludge spreading with any regularity. They also note that the impacts of N and P in applied sludge must be better understood relative to the surrounding waterways and overall environment. With such waterway monitoring for impacts upstream and downstream of sludge spreading sites, more appropriate agronomic rates and N and P limits can be established.

Fertilizer education**.** The Catawba Riverkeepers indicate that while the CWA addressed point source pollution very well, problems with non-point source pollution were poorly addressed and have grown in recent years. They suggest that regulations addressing "fertilizer blackouts", adopted in other states could be one part of the solution. They acknowledge that enforcement is likely to be an issue, so revised regulations combined with education programs are offered as the best solution.

DMF - Due to the detrimental effect of eutrophication on coastal habitat and fish, DMF recommends that a focus of the plan include:

Nutrient management strategies that provide for consideration of point and nonpoint pollutant sources from all land uses, as well as hydromodifications that could be contributing to nutrient response variables.

NCLM - The nutrient forum demonstrated the scientific uncertainty that still exists when designing effective nutrient management strategies. And closer to home, N.C. researchers continue to investigate the effectiveness of various strategies, particularly non-point source controls such as urban stormwater management techniques. Whether in the NCDP or beyond, the League recommends that DWQ devise research projects to measure the effectiveness of a wide variety of non-point source control techniques, tailoring the projects to each of the different water body types in the state. The non-point sources to consider should include, at a minimum, urban stormwater, crop and animal agriculture, septic, groundwater, and atmospheric contributors. This research would ideally result in management strategies that more effectively target nutrient inputs.

NRCA –Noting that members of the NRCA have invested over $300 million in facility improvements to reduce nitrogen delivered to the Neuse Estuary, they acknowledge no "net gain" has been realized in nitrogen load reductions delivered to the Neuse estuary. Extrapolation of these results indicates that benefits will be greater if greater focus is placed on non-point source reductions.

Comments in support of setting numeric nutrient criteria at protection level

Tim Spruill – Recognizing that if the nutrient or chlorophyll *a* standards are set to indicate degraded water quality, then unfortunately, the damage is already done by the time violations are detected. Mr Spruill recommends a proactive stance that includes adoption of enforceable nutrient and *chlorophyll a* standards set to levels that prevent degraded water quality and an implementation of preventative procedures and land-use practices before reaching degraded status. He states that unless a standard is enforceable by the State, there is little incentive from stakeholders to enact remedial procedures until the standard is reached, at which time it is too late for cost-effective remediation. Mr Spruill recommends that by establishing and adopting numeric chemical standards that are preventative and broadly applied (broadly across regions such as the Inner and Outer Coastal Plain, Piedmont, and Blue Ridge) water quality can be protected against future increases in nutrient concentrations and loads. He suggests that these preventative standards should be the critical "warning" link to initiating nutrient control practices in such watersheds before reaching concentration or load standards that indicate loss of use. Use of response variables alone, such as *chlorophyll a*, does not ensure that excessive loading and/or concentrations will be detected in all streams and water bodies.

Comments in support of site specific approach

AWWA
City of Charlotte
DSWC
Farm Bureau
NCLM
NCWQA
NRCA

Comments in support of consideration of criteria for response variables in conjunction with/in lieu of N&P (matrix type approach)

AWWA (support response variables only)
City of Charlotte
DSWC
Farm Bureau
NCLM
NCWQA
Waterkeepers Alliance/Waterkeepers Carolina

DRAFT

Comments in support of numeric nutrient criteria

APNEP
Catawba Riverkeeper
Tim Spruill
Waterkeepers Alliance/Waterkeepers Carolina

Comments in support of trend analysis for any potential proactive approaches

NCLM - As with the threshold rules proposal advanced by DWQ in 2010, League members continue to strenuously object to any regulatory approach which imposes permit limits and other nutrient control strategies upon the occurrence of exceedances of a numerical value that is not the water quality standard. The threshold approach and any other similar approaches remain flawed because they do not adequately reflect trends in water bodies. The League therefore recommends that the NCDP contain projects to explore methods that would accurately determine a particular water body was headed toward impairment.

NCWQA – NCWQA recommends that proactive/preventative strategies should retain flexible implementation mechanisms and not default to limit-of-technology treatment requirements. NCWQA further recommends that the revised NCDP retain and reemphasize the need for basin specific planning approaches and non-regulatory agreements among dischargers over stringent, one-size-fits-all treatment requirements for regulated sources. Additionally, proactive/preventative strategies should include the confirmation of increasing trends in response variables. The diagnosis of nutrient enrichment-and the need for preventative management-should be based not only on the magnitude of response variables, but also on trends. For example, if a water body historically exceeded *chlorophyll a* thresholds but showed no signs of degradation, it may not require as aggressive management as a water body with increasing trends. The planning response should include an investigation of why response variables are changing (nutrient loads, streamflow/climatic trends, natural cycles) before jumping to the imposition of aggressive nutrient control requirements.

Comments in support of cost-benefit analyses during criteria development

APNEP – Noting current NC regulations requiring development of a fiscal note, APNEP encourages that the analysis should attempt to quantify the economic benefits arising from numeric nutrient criteria. To that end, APNEP requests support for an examination of the ecosystem services provided by North Carolina's sounds and associated habitats, and the extent to which these services might be reduced by excessive nutrient inputs.

NCLM – NCLM recommends DENR incorporate cost-benefit analysis. The League recommends that the NCDP include projects aimed at setting the appropriate levels of any selected nutrient criteria, including incorporating a cost-benefit analysis into any decision-making. A cost-benefit analysis would also form a solid basis for NCDP projects that might examine different water

body classification categories, especially when needing to weigh competing designated uses of various water bodies.

NRCA – NRCA supports the inclusion of a cost benefit analysis in selecting the appropriate levels in the nutrient criteria. Noting that members of the NRCA have invested over $300 million in facility improvements to reduce nitrogen delivered to the Neuse Estuary, they acknowledge no "net gain" has been realized in nitrogen load reductions delivered to the Neuse estuary. Extrapolation of these results indicates that benefits will be greater if greater focus is placed on non-point source reductions.

Comments in support of integrating flexibility into criteria

City of Charlotte – Charlotte requests that DENR not use only numeric criteria; suggest that DENR include a narrative assessment of water body health including algal or aquatic species as indicator of impairment or lack thereof. When verifying the condition of a water body, algal samples and other aquatic species should be used to support the findings from numeric criteria. Some species prefer high nitrogen while others prefer high phosphorus. Algal and other aquatic samples should be used to help make the connection between parameters analyzed for water quality and the aquatic health of the water body. These samples should not be used as a basis for impairment but rather to support the conclusions developed from other criteria.

NCLM - The League supports a flexible approach to criteria development. The nutrient forum prompted several possibilities:

a. Develop a range in values for both causal and response variables, indicating where specific water body types should fall within those ranges;
b. Set criteria for each classification of waters, possibly using different methods to set this criteria depending on the pertinent characteristics of that water body type;
c. Follow Maine's example, setting criteria based on both causal and response variables but including an option in the criteria for site-specific nutrient values.

DRAFT

Comments regarding implementation after criteria have been developed (beyond the scope of the NCDP)

AWWA

Demonstrate use impairment – use "use assessment methodology," when describing how to make impairment designations for instances of nutrient criteria exceedances; require further study and confirmation of actual impacts to designated uses *before* declaring a water body as impaired for nutrients. Once nutrient criteria have been exceeded, but before an impairment determination is made, the DWQ should conduct thorough site-specific analysis into whether a water body's designated uses are impaired as well. Such an analysis would likely include measurements of the water body's biological characteristics to verify whether the nutrient inputs are actually harming the aquatic life of the particular water body.

Assign responsibility proportionate to the source of impairment - Upon detection and validation of a water body's trend toward impairment, the members suggest that DWQ consider non-regulatory approaches to work with proven nutrient contributors to that water body and the public. Communication of the trend with contributors and the public may assume a primary tactic in this approach. The communications should contain solid evidence of a trend toward degradation, accompanied by suggested control strategies and information on the consequences of violating a water quality standard.

Include measures to equitably hold accountable all contributors to the impairment - The principle of flexibility is a central tenet to effective nutrient management in the state's waters. Without flexibility to tailor management solutions to the specific needs of various water bodies, significant public and private resources may be spent in an inadequate pursuit of improving water quality. Likewise, without the flexibility to conduct further studies on whether a water body meets its designated uses upon detection of elevated nutrient levels, impairment determinations would not accurately reflect conditions in the water body.

Cost-benefit analysis should overlay all nutrient management strategy decisions - One basic tenet of these management strategies should hold that the cost of implementing a particular nutrient control must be in proportion to the expected reduction in nutrient loads to the water body. Implementation strategies should also explore innovations such as nutrient trading to stimulate effective reductions of nutrient loads at the most reasonable cost. Other opportunities could include the development of a nutrient credit system that would reward nutrient contributing entities for reducing nutrient discharges to a greater extent than required.

Nutrient Sensitive Waters (NSW) classification needs to be revised – NSW classification could very well be a method of proactively addressing increasing eutrophication in water bodies. Proactively using this definition of NSW would seem to accomplish what the NCDP is trying to achieve. However in its current state, the NSW classification only impacts NPDES discharges. Specifically, GS 143-215.1 (c1)-(c6) currently prescribes automatic 5.5 mg/l and 2 mg/l limits for TN and TP, respectively, for any waters designated as NSW by the EMC. The NSW classification

would need to be improved to include an entire toolbox of methods that could be used to administer an appropriate nutrient management plan based on identification of significant sources of nutrients and the cause and effect impacts to a waterbody.

Refine the use of the word "criteria" as it can sometimes be problematic - Many equate criteria to a standard. Clarification is needed to present criteria as an "Action Level" or target level that when exceeded over some frequency and duration requires additional actions. Actions are then put in place such as elevation of monitoring activity and/or land use evaluations to further refine the issue and causative factors that are the contributors of N&P to allow site specific plans to be formulated.

Public education is important to promote basin-wide nutrient control understanding, development, and implementation of control approaches – Public education and involvement is a key to success in implementing nutrient management programs. In this, point source controls should not be imposed in the absence of a basinwide planning methodology that addresses all major sources. Basin planning efforts should evaluate the cumulative impact of sources such as treatment plants, cropland, animal operations, stormwater, forests, septic tanks (groundwater sources of nutrients) and atmospheric deposition. It is important to keep the public informed as the NCDP considers the long-term impacts of sources that discharge directly to surface water and those that load nutrients to groundwater that subsequently enter surface waters.

Utilize statistically significant sampling methods and analysis prior to designating a water body as impaired – Non-flowing waters are impacted by detention time, seasonal changes in water density (stratification), stormwater flows, and water body use. A sufficient number of samples must be performed that address each of the natural impacts to a water body to provide a statistically significant conclusion that a water body is suffering from degradation due to nutrient loading or that the water body is impaired. The NCDP should develop guidelines and procedures to develop statistically significant sampling protocols.

City of Salisbury

Where impairment occurs in impounded stream segments rather than throughout a basin, in-lake protection and remediation methods will be evaluated as alternatives to basin-wide methods for addressing impairment.

When impairment occurs in an impoundment or in a portion of an impoundment, operation and management of the impoundment must be considered in the development of methods for water quality protection and enhancement. These methods can include, for example, headwater elevation management, impoundment retention time management, water release scheduling, aeration/oxygenation, dredging, sediment capping, and other methods.

NCLM

The League suggests that the state's "use assessment methodology," when describing how to make impairment designations for instances of nutrient criteria exceedances, require further

study and confirmation of actual impacts to designated uses before declaring a water body as impaired for nutrients. In the case of nutrient impairments, the dedication of resources to address the impairment is simply too great not to take additional measures to confirm the impairment.

In tandem with considering the broader range of water body characteristics for criteria development, the League recommends a similar reconsideration of the designated uses of each water body type. Under the CWA, designated uses are evaluated along with criteria, or standards, when determining the impairment status of a water body. Ecological and recreational designated uses may differ between water body classifications, and they can often be in conflict. The League recommends that DWQ design an NCDP project to support a reconsideration of designated uses, including the possibility that for some water systems, competing uses may need to be prioritized to achieve an optimal water quality result.

The League recommends that DWQ extend this principle of site-specific analysis beyond criteria development to making impairment determinations. Once nutrient criteria have been exceeded, but before an impairment determination is made, the League expects DWQ to conduct thorough site-specific analysis into whether a water body's designated uses are impaired as well. Such an analysis would likely include measurements of the water body's biological characteristics to verify whether the nutrient inputs are actually harming the aquatic life of the particular water body.

While the NCDP primarily addresses water body standards and classifications, the impacts of these regulations are mostly felt from implementation plans that result from exceedances of those standards and classifications. Therefore, in this area, League members firmly believe cost-benefit analysis should overlay all nutrient management strategy decisions. One basic tenet of these management strategies should hold that the cost of implementing a particular nutrient control must be in proportion to the expected reduction in nutrient loads to the water body. Implementation strategies should also explore innovations such as nutrient trading to stimulate effective reductions of nutrient loads at the most reasonable cost.

Upon detection and validation of a water body's trend toward impairment, the League suggests that DWQ consider non-regulatory approaches to work with proven nutrient contributors to that water body and the public. Communication of the trend with contributors and the public may assume a primary tactic in this approach. The communications should contain solid evidence of a trend toward degradation, accompanied by suggested control strategies and information on the consequences of violating a water quality standard.

NCWQA

Implementation approaches should include nutrient trading and offsets. North Carolina has been a national leader in nutrient trading, which has been shown to facilitate implementation and lower overall costs (Houtven and others, 2012). As North Carolina revises the NCDP, DWQ must retain and expand options for nutrient trading and offsets. Given the high costs of nutrient controls, it is important that localities receive credit for all effective nutrient reduction

practices that can be documented. Septic system hook-ups are an example of an effective nutrient reduction practice for which North Carolina currently lacks a clear mechanism for crediting, although other states (e.g., VA, MD) in the mid-Atlantic region do provide credits for this practice. It is recommended that the NCDP identify the need for a statewide review of nutrient reduction practices and how they can be credited so that we provide incentives (rather than disincentives) for ongoing cost-effective nutrient reductions.

Implementation mechanisms should include cost-benefit analyses. As discussed at the Nutrient Forum, nutrient controls practices vary over several orders of magnitude regarding the cost-per-pound of nutrients removed. Similarly, nutrient reduction practices vary a great deal regarding ancillary benefits (stream protection, wildlife habitat, flooding reduction, aesthetics) and detriments (energy use, waste production, greenhouse gas emissions, etc.). In order to achieve the greatest environmental benefit with limited resources, holistic cost benefit analyses should be a mandatory element of basin-specific implementation mechanisms.

NRCA

Adaptive management strategies are necessary in designing nutrient management programs that achieve nutrient reductions. Ten years of implementing the Neuse Management Strategy illustrated the need to allow point and non-point source trading to meet nutrient management goals. As discussed at the May, 2012 N.C. Forum on Nutrient Over-Enrichment there are many mechanisms that can be implemented at a very low cost as opposed to major improvements at wastewater treatment facilities. Many utilities would invest in other best management practices if allowed nutrient credit for those investments and greater nutrient reductions would be achieved at a lower cost.

The plan selected by DWQ must be sustainable in terms of overall impact to the environment. Nutrient reductions at wastewater treatment facilities are not only capital intensive but have a significant impact on greenhouse emissions (energy demands), increased biosolids productions, and additional chemical costs. Non-point source reduction practices can be accomplished with less environmental cost as noted in the Nutrient Forum.

DRAFT

North Carolina Soil & Water Conservation Commission May 15, 2013 Division Report

Pat Harris, Director
Division of Soil & Water Conservation

NORTH CAROLINA DIVISION OF SOIL & WATER CONSERVATION

THANK YOU!

Contributed to Southeast Soil Health Field Day, and sponsored drinks and snacks for tour

P of H GRANGE ®

Thank You to the Local Arrangements Planning Committee!!!

- Vicky Porter
- John Pickler
- Nathan Lowder
- Ralston James
- Dennis Testerman
- Gerald McSwain
- Amy Griffith

Perry Russell Henshaw
April 18, 2013
8 lbs. 13 oz.

North Carolina Nutrient Criteria Development Plan (NCDP)

The Environmental Management Commission and the Division of Water (DWQ) are in the process of taking the information gathered from the *Nutrient Forum* and other sources to develop a plan that lays out the steps to be taken to develop additional criteria for the control of nutrient over-enrichment. The EMC and DWQ are requesting public comment on the draft NC NCDP.

The NC NCDP provides an overview of nutrient criteria related activities within the state since 2001 and describes actions that the state will take to develop additional nutrient control criteria.

The document describes the process the division will be using to develop nutrient control criteria for the EMC's consideration. Extensive stakeholder involvement is included in this process.

http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria

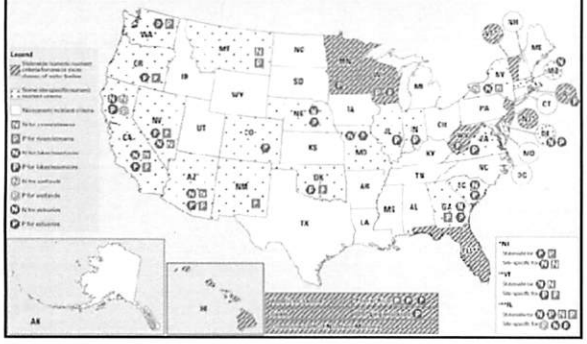
*** NUTRIENT CRITERIA DEVELOPMENT SCHEDULE ***

May 29 - 30, 2012 North Carolina Forum on Nutrient Over-Enrichment
December 4, 2012 - February 4, 2013 Public comment periods
- **December 4, 2012** Public input meeting in Raleigh, NC
- **December 12, 2012** Public input meeting in Huntersville, NC
- **December 17, 2012** Public input meeting in Wilmington, NC

April 17, 2013 Draft NC NCDP out for public review
May 9, 2013 Draft NC NCDP presentation to the EMC
May 24, 2013 Public comment period ends
June 30, 2013 NC NCDP due to the United States Environmental Protection Agency (US EPA) Region 4
July 11, 2013 Present to EMC for approval of the draft NC NCDP
Begin criteria development

http://portal.ncdenr.org/web/wq/ps/mtu/nutrientcriteria

Progress Toward Clean Water Act Adopted Numeric Nutrient Criteria



Clean Water Act Obligations (page 2)

- Monetary assistance through Section 106 funds
- State is obligated *to continue progress toward development of numeric nutrient water quality standards by*:
  - Revise NCDP (due 6/30/2013)
  - Develop and meet milestones for submitting plan
  - Coordinate with EPA on plan development and proposed nutrient criteria
  - Report performance milestone information on progress toward adoption of water quality standards for total nitrogen and total phosphorus for each water body type (e.g. lakes/reservoirs, rivers/streams and estuaries - due 12/31/2013)

Current North Carolina Nutrient Response Water Quality Standards

- Chlorophyll *a* — 40 ug/L –Class C; 15 ug/L -Trout classifications
- Dissolved Oxygen — 5.0 mg/L –Class C; 6.0 mg/L – Trout
- pH — 6.0-9.0
- Turbidity — 50 NTUs /25 NTUs

Table 1. Evaluation of North Carolina's Current Ability to Assess, Restore and Protect Surface Waters from Nutrient Impacts

Water Body Type	Capabilities of Current Water Quality Standards		
	Assess[1]	Restore[2]	Protect[3]
Reservoirs	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Mountain and Upper Piedmont water bodies may not be adequately protected by current criteria.[4]
Estuaries	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Adequate – Chlorophyll *a*, Dissolved Oxygen, pH	Ongoing efforts are in place through the current nutrient management strategies.[5]
Rivers & Streams	Inadequate	Where Chlorophyll *a*, Dissolved Oxygen & pH can be used	Where Chlorophyll *a*, Dissolved Oxygen & pH can be used
Drinking Water Supplies	Existing criteria may not reflect all responses to over-enrichment	Existing criteria may not reflect all responses to over-enrichment	Existing criteria may not reflect all responses to over-enrichment

Protecting Rivers & Streams

- Response Variables
  - Chlorophyll a
  - Phytoplankton community
  - Periphyton community
  - Diurnal DO range
  - Minimum DO
  - Diurnal pH range
- Causal Variables
  - Nitrogen
  - Phosphorus
  - Both

Protecting Waters Classified for Drinking Water Supply

- Response Variables
  - Total Organic Carbon
  - Algal Toxins
  - Taste and Odor Species
- Causal Variables
  - Nitrogen
  - Phosphorus
  - Both

Concerns

- Rushed process
- No public participation between plan development, WQC and EMC approval
- Lack of a standing external stakeholder group throughout process
- Is there a need to adopt a new set of rules?
- NC has diverse water bodies that respond to site specific approaches – will "one size fits all" approach through numeric nutrient criteria work?
- Are two staff adequate to review all of the data and available literature reviews, etc. to make sound recommendations?

ATTACHMENT 4C

NORTH CAROLINA
SOIL & WATER
CONSERVATION COMMISSION
Yours for Life

May 15, 2013

Vicky Porter, Chair
Bill Yarborough
Charles Hughes
Tommy Houser
John Langdon
Donald Heath
Craig Frazier

Mrs. Dianne Reid, Chief, Planning Section
NC Division of Water Quality
1617 Mail Service Center
Raleigh, NC 27699-1617

Dear Ms. Reid,

The Soil and Water Conservation Commission has for more than twenty five years demonstrated its commitment to addressing water quality concerns related to nutrient losses from agriculture and other nonpoint sources. The Commission and local soil and water conservation districts have supported hundreds of millions of dollars and nearly 55,000 contracts to enable agricultural and non-agricultural landowners to voluntarily implement practices to manage nutrients and sediment, and other pollutants. However, the Commission objects to the proposed North Carolina Nutrient Criteria Development Plan. The Commission's objection is based on the following:

1. **Insufficient science.** There is not sufficient scientific justification to support the decision to move forward with specific water quality criteria for nutrients. The plan assumes there is broad agreement that that there is a direct cause and response relationship that can be scientifically justified.
2. **Lack of opportunity for stakeholder involvement.** The Commission objects strongly that the plan does not include a broad stakeholder process to develop workable solutions to address the concerns related to nutrient inputs. These solutions may or may not involve specific numeric nutrient criteria.
3. **Full Time Employee Needs are severely underestimated.** The Commission believes that a workable plan to address the nutrient concerns requires far more than the 2 FTEs estimated in the proposed plan.

The Commission appreciates the working relationship it has had with the Environmental Management Commission over the years, and we seek to strengthen our partnership as we work together to address this and other mutual concerns.

Sincerely,

Vicky Porter

Vicky Porter, Chairwoman

North Carolina
Soil and Water
Conservation Commission

1614 Mail Service Center
Raleigh, NC 27699

(919) 733-2302

NORTH CAROLINA
SOIL & WATER
CONSERVATION COMMISSION
Yours for Life

Vicky Porter, Chair
Bill Yarborough
Charles Hughes
Tommy Houser
John Langdon
Donald Heath
Craig Frazier

cc: Commissioner of Agriculture Steve Troxler
DENR Secretary John Skvarla, III
Chuck Wakild, Division of Water Quality
Members of the Environmental Management Commission
Leadership of the NC General Assembly
Members of the NC Soil and Water Conservation Commission
Jennie Hauser, NC Dept. of Justice
Larry Wooten, NC Farm Bureau Federation
Anne Coan, NC Farm Bureau Federation
Erin L. Wynia, NC League of Municipalities
Dr. Richard Reich, NCDA&CS
Tina Hlabse, NCDA&CS
Pat Harris, NCDA&CS
David Williams, NCDA&CS
Melvin Womack, NRCS

North Carolina
Soil and Water
Conservation Commission

1614 Mail Service Center
Raleigh, NC 27699

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ITEM # 5

ASSOCIATION REPORT TO THE COMMISSION
May 15, 2013

Market Based Conservation Initiative –After over 2 years of planning and negotiations with the military, this exciting new program is off and running. The Phase I counties of Duplin, Sampson, Lenoir, Harnett, and Johnston have completed their first bid round and collectively have received approximately 300 bid offers. Initial selections for contract development will be made from these offers on May 29. Formal training for the Phase II counties of Beaufort, Pamlico, Craven, Carteret, Onslow, and Jones was completed March 13 in New Bern. Phase II counties are in the process of scheduling landowner workshops with their bid round scheduled for completion in late summer.

Legislative Agenda: The Association continues to work on its legislative agenda for 2013. House Bill 558 has been introduced by Representative Chris Whitmire (Transylvania, Polk, Henderson) which would make local soil and water conservation districts eligible for state income tax refunds on certain purchases. This bill has passed the Government Committee and was referred to the Finance Committee for further consideration. Work to increase CCAP funding by $1.8 million is being coordinated through Rep. Wilkins (Person, Granville Counties) and those possibilities are uncertain.

Outstanding Conservation Farm Family Program –Area level judging has been completed and regional judging will be completed by May 21. This year there were no nominations from Areas 1, 4, 5, or 6. State level judging will take place on June 4th with field visits to farms in the mountain and piedmont regions. The celebration on the farm of the state winner will likely be in very late summer or early fall of 2013

SERPPAS – The Southeast Regional Partnership for Planning and Sustainability met at Camp Lejeune, April 23-24, 2013. SERPPAS is a collection of state environmental and natural resource officials from across six southeastern states who partner with the Department of Defense and other federal agencies to

promote better collaboration in making resource-use decisions. Their goal is to prevent encroachment around military lands, encourage compatible resource-use decisions, and improve coordination among regions, states, communities, and military services. The Association was an invited exhibitor at this conference, providing an opportunity to highlight the work of local soil and water conservation districts and the strength of North Carolina's conservation partnership.

Conservation Education Contests and Events – The State Envirothon was held April 19-20 at Cedarock Park near Burlington. Although the oral presentations scheduled for Friday afternoon had to be cancelled due to inclement weather, the remainder of the event went off without a hitch. Thanks are extended to the many, many volunteers and organizers for a job well done. The high school state winner was the High rock FFA Homeschool from Davidson County and the middle school winner was Organic Waste 4-H from Wilson County.

The state speech contest was held May 10 in Raleigh.

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

The NRCS Administrative Transformation

Budget & Financial Management

Procurement, Property, & Grants/Agreements

Human Resources

"Change that establishes a solid foundation for delivering administrative services to better focus on the mission of delivering conservation..."

Overview

In 2012, Secretary Vilsack launched the Blueprint for Stronger Service, directing USDA agencies to take steps to cut costs and modernize operations. One initiative under the Blueprint is the transformation of USDA's business and administrative operations. NRCS has committed to this initiative by taking proactive steps to improve, innovate and modernize services.

Standardizing for Efficiency.

NRCS collaborated with an independent contractor to assess our administrative business operations with the goal of creating a new model to shape the vision and future direction of NRCS Administrative services. To achieve this goal, we are standardizing how we provide services by establishing a single, consistent set of standards to guide the work and a common set of tools to support the work. These changes will improve the efficiency of our administrative business operations.

Unified National Structure.

Under the new model, NRCS will move from maintaining over 50 separate administrative units toward aligning our administrative professionals under a single national structure for each business area with teams that are focused on specific services to assist customers nationwide. Through this structure, our staff will be able to provide standardized, specialized and efficient services to our customers, employees, and partners that is universally consistent and accountable.

Maintain Staff Locations.

Staff currently working in our Human Resources, Budget and Financial Management, and Procurement, Property and Grants and Agreements areas will be able to work from their current duty locations, be an active part of the business and administrative services team, and serve our internal and external customers. NRCS will identify a limited number of locations to serve as the business centers for these functions in the future.

Timely Implementation.

NRCS is moving forward quickly and strategically on the administrative transformation. Over the coming months, changes will be phased in with the goal of having the new model in full operation by December 2014.

Improvement over Time.

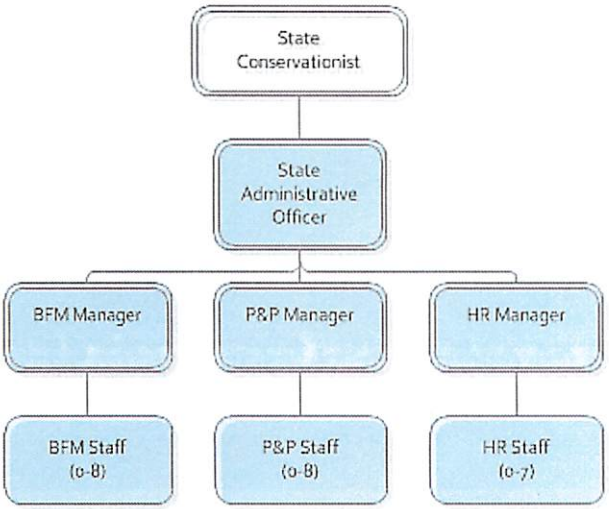
What does this mean for our partners, customers and employees? Initially, very modest changes will be seen. Though the staff members providing service to you may be different you will continue to receive administrative services you need during the transition. The long-term changes will be significant. Over time, we will provide notably more dependable, cost-effective, uniform, and accountable administrative services to our customers.

As we move forward, NRCS's commitment to internal and external customers is to maintain transparency throughout the administrative transformation, focus on the people, provide a solid plan for moving forward, phase in changes in a reasonable period, and maintain an open line of communication.

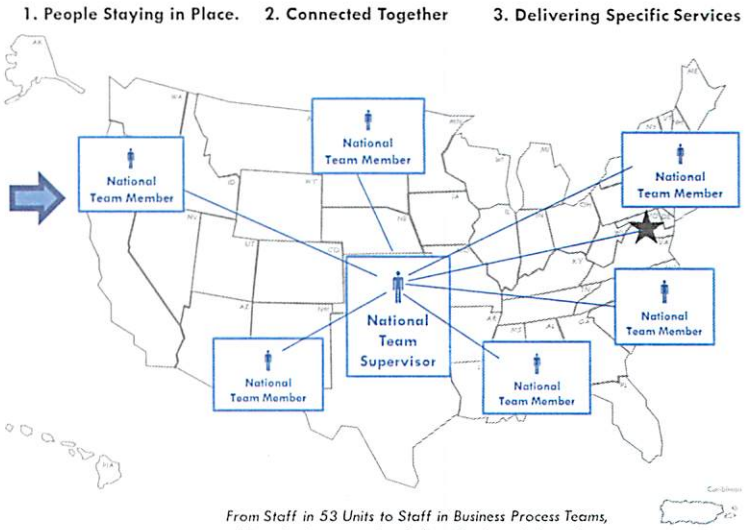
NRCS has the opportunity to change how we do business to better support our mission of conservation. Change can be hard, but with the support of our employees, partners and customers, we will shape a future to better serve our country's natural resource conservation needs.

The Future of NRCS Administrative Services
An Illustrative Example of What It Might Look Like in Practice

From 50+ Separate Operating Units... ***...To National Teams Providing Core Business Services***



Illustrative Example



From Staff in 53 Units to Staff in Business Process Teams,
Virtually Aggregated to Deliver Services Nationwide:
Same Location for Current Staff, Different Customers & Work Assignments

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For more information on the Blueprint for Stronger Services, visit the USDA on the Web at: http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=blueprint_for_stronger_service.html.

For more information on NRCS and USDA Farm Bill Conservation Programs, visit www.nrcs.usda.gov.

USDA is an equal opportunity provider and employer.

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

The NRCS Administrative Transformation:

Budget & Financial Management

Procurement, Property, & Grants/Agreements

Human Resources

"Change that establishes a solid foundation for delivering administrative services to better focus on the mission of delivering conservation..."

Talking Points

- In 2012, Secretary Vilsack launched the Blueprint for Stronger Service, directing USDA agencies to take steps to cut costs and modernize operations. One initiative under the Blueprint is the transformation of USDA's business and administrative operations. NRCS has committed to this initiative by taking proactive steps to improve, innovate and modernize services.

  - *"We've had to take a close look at the way we do business with less money, a smaller staff and more complex programs. Following a Department-wide review of operation, we created a Blueprint for Stronger services to make USDA work better and more efficiently for the American people."* Secretary Vilsack, February 2012

  - Three USDA Agencies (FSA, NRCS and RD) are testing different approaches to streamlining administrative operations – NRCS received approval from the USDA Secretary to move forward with making internal NRCS-wide changes to the primary administrative business areas.

- NRCS collaborated with an independent contractor to assess our administrative business operations with the goal of creating a new model to shape the vision and future direction of NRCS Administrative services. To achieve this goal, we are standardizing how we provide services by establishing a single, consistent set of standards to guide the work and a common set of tools to support the work. These changes will improve the efficiency of our administrative business operations. The need for change is clear:

  - Current Model is too costly to maintain
  - Audits show performance level needs to increase
  - Without a 'corporate' view it is hard to respond to stakeholders
  - Current administrative workforce is stretched too thin performing multiple duties

- Under the new model, NRCS will move from maintaining over 50 separate administrative units toward aligning our administrative professionals under a single national structure for each business area with teams that are focused on specific services to assist customers nationwide. . Through this structure, our staff will be able to provide standardized, specialized and efficient services to our customers, employees, and partners that is universally consistent and accountable.

  - Secretary's guidance and the independent assessment has shaped the direction forward. First, we will stabilize the current operation, standardize how administrative activities are done across NRCS, and structure our staff to deliver administrative services in a new way.

Presenters Side Notes:

- Staff currently working in our Human Resources, Budget and Financial Management, and Procurement, Property and Grants and Agreements areas will be able to work from their current duty locations, be an active part of the business and administrative services team, and serve our internal and external customers. NRCS will identify a limited number of locations to serve as the business centers for these functions in the future.

  - Our Administrative Staff will: be employees of NRCS, be able to remain in current work locations, have a position in the new model, retain grade and pay, be critical to the future success of NRCS.

- NRCS is moving forward quickly and strategically on the administrative transformation. Over the coming months, changes will be phased in with the goal of having the new model in full operation by December 2014.

  - All National Headquarters Staff will be affected under the transformation.
  - At the state level, there are variations in how our state work units are organized. State Conservationist and the Administrative Transformation Team will be looking at staff's duties and activities to determine what positions will transition into the new model. .

- What does this mean for our partners, customers, and employees? Initially, very modest change will be seen. Though the staff member providing serves may be different, you will continue to receive administrative services you need during the transition. The long-term changes will be great. Over time, we will provide notably more dependable, cost-effective, uniform, and accountable administrative services to our customers.

  - We will deliver services across geographic boundaries, follow common standards and use common tools, collaborate with peers, have manageable workloads, and invest the savings we achieve in our mission and in our people.

- As we move forward, NRCS's commitment to internal and external customers is to maintain transparency throughout the administrative transformation, focus on the people, provide a solid plan for moving forward, phase in changes in a reasonable period, and maintain an open line of communications.

  - NRCS has the opportunity to change how we do business to better support our mission of conservation. Change can be hard, but with the support of our employees, partners and customers, we will shape a future to better serve our countries natural resource conservation needs.

For more information in the Blueprint for Stronger Services, visit the USDA on the Web at http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=blueprint_for_stronger_service.html.

For more information on NRCS and USDA Farm Bill Conservation Programs, visit www.nrcs.usda.gov.

ATTACHMENT 7A

North Carolina Division of
SOIL & WATER CONSERVATION

DIVISION OF SOIL AND WATER CONSERVATION
North Carolina Department of Agriculture & Consumer Services
1614 Mail Service Center • Raleigh, NC 27699-1614
919.733.2302 • www.ncagr.gov/sw/

RECEIVED
MAY 1 2013
Soil & Water Conservation

RECOMMENDATION FOR APPOINTMENT OF SUPERVISOR

Complete and send 1 copy to the address above; keep a copy for your file

The supervisors of the McDowell Soil and Water Conservation District of McDowell County, North Carolina have recommended the individual listed below for APPOINTMENT as a district supervisor in accordance with N.C.G.S. 139-7 for ~~a term~~ of office commencing May 2013 and ending ~~12/14~~ 12/14 KAF to fill the expired or un-expired term of Beverly C. Foster

Name of nominee: Mario DeLuca
Address of nominee, City, State, Zip: 460 WILSON VALLEY DR. MARION, NC 28752
Email address of nominee: mario@doublemfarm.com
Home phone: 828 738 8188
Mobile phone: 828 442 7607
Business phone:
Occupation: FARMER
Age: 59
Education: MASTERS IN ANIMAL SCI · CLEMSON
Positions of leadership NOW held by nominee:
Former occupations or positions of leadership contributing to nominee's qualifications: AG. EXTENSION AGENT
Other pertinent information:

Is nominee willing to attend a training session within the first year after appointment? *Check for "Yes"* ✓
Has the nominee been contacted to determine their willingness to serve? *Check for "Yes"* ✓
Has the program and purpose of the soil and water conservation district been explained to the nominee? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in local district meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in Area meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in State meetings? *Check for "Yes"* ✓

Signatures

I hereby certify that the board of supervisors considered the Guiding Principles for Supervisor Nomination for Appointment shown on the reverse of this nomination form when selecting the above supervisor candidate for nomination.

x Neil Brackett for Chairman — 4/29/2013
SWCD Chair — Date
Printed name: Neil Brackett

This recommendation has been considered and approved by a majority of the members of the board of supervisors and entered in the official minutes of the board.

x Neil Brackett for Chairman — 4/29/2013
SWCD Chair — Date
Printed name: Neil Brackett

x Mario DeLuca — 4/16/2013
Individual recommended for appointment — Date
Printed name: MARIO DELUCA

ATTACHMENT 7A

I, Beverly Lonon Foster do formally resign my position as an elected board member of McDowell County Soil and Water Conservation District on this day May 1st 2013.

I have greatly enjoyed serving on the board with this dedicated group of conservationist, and honored to work with the teachers and students across North Carolina in spreading the conservation message through workshops, talks, posters, essay and public speaking contest. Sincerely,

Beverly L. Foster

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MAY 1 2013
Soil & Water Conservation

ATTACHMENT 7A

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MAY 1 2013
Soil & Water Conservation

North Carolina Division of
SOIL & WATER
CONSERVATION

DIVISION OF SOIL AND WATER CONSERVATION
North Carolina Department of Agriculture & Consumer Services
1614 Mail Service Center • Raleigh, NC 27699-1614
919.733.2302 • www.ncagr.gov/sw/

RECOMMENDATION FOR APPOINTMENT OF SUPERVISOR

Complete and send 1 copy to the address above; keep a copy for your file

The supervisors of the McDowell Soil and Water Conservation District of McDowell County, North Carolina have recommended the individual listed below for APPOINTMENT as a district supervisor in accordance with N.C.G.S. 139-7 for a term of office commencing May 2013 and ending ~~10-14~~ 12/14 KAF to fill the expired or un-expired term of C.A. Buckner.

Name of nominee: William Lonon
Address of nominee, City, State, Zip: 24 DOGWOOD LANE MARION, NC 28752
Email address of nominee: b.lonon@outlook.com
Home phone: 828-652-1063
Mobile phone: 828-527-8471
Business phone: 828-652-1063
Occupation: RETIRED
Age: 69
Education: BS MD
Positions of leadership NOW held by nominee: RETIRED
Former occupations or positions of leadership contributing to nominee's qualifications:
CAPT. USN-RET PREVIOUS SUPERVISOR - McDOWELL SWCD
Other pertinent information:
RETIRED TECHNICIAN, 2013, McDOWELL SWCD

Is nominee willing to attend a training session within the first year after appointment? *Check for "Yes"* ✓
Has the nominee been contacted to determine their willingness to serve? *Check for "Yes"* ✓
Has the program and purpose of the soil and water conservation district been explained to the nominee? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in local district meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in Area meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in State meetings? *Check for "Yes"* ✓

Signatures

I hereby certify that the board of supervisors considered the Guiding Principles for Supervisor Nomination for Appointment shown on the reverse of this nomination form when selecting the above supervisor candidate for nomination.

x Neil Brackett for Chairman — 4/29/13
SWCD Chair — Date
Printed name: Neil Brackett

This recommendation has been considered and approved by a majority of the members of the board of supervisors and entered in the official minutes of the board.

x Neil Brackett for Chairman — 4/29/13
SWCD Chair — Date
Printed name: Neil Brackett

x William D. Lonon — 4/16/13
Individual recommended for appointment — Date
Printed name: William D. Lonon

DSWC Form 110
http://www.ncagr.gov/sw/37.html

Version 11.17.11

ATTACHMENT 7A

April, 9 2013

I CA Buckner due to health reasons, respectfully request resign my position with the McDowell Soil & water Conservation District on this date.

I have enjoyed my long term tenure with this board, and wish the board continue success.

Sincerely,

C.A. Buckner

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MAY 1 2013
Soil & Water Conservation

ATTACHMENT 7A

North Carolina Division of
SOIL & WATER
CONSERVATION

DIVISION OF SOIL AND WATER CONSERVATION
North Carolina Department of Agriculture & Consumer Services
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919.733.2302 • www.ncagr.gov/sw/

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MAY 1 2013
Soil & Water Conservation

RECOMMENDATION FOR APPOINTMENT OF SUPERVISOR

Complete and send 1 copy to the address above; keep a copy for your file

The supervisors of the ORANGE Soil and Water Conservation District of ORANGE County, North Carolina have recommended the individual listed below for APPOINTMENT as a district supervisor in accordance with N.C.G.S. 139-7 for a term of office commencing May 15, 2013 and ending DECEMBER 1, 2014 to fill the expired or un-expired term of LARRY W. ROGERS.

Name of nominee: Clay Parker
Address of nominee, City, State, Zip: 2211 Laws Store Rd., Hurdle Mills, NC 27541
Email address of nominee:
Home phone: 919.732.9485
Mobile phone: 919.451.0320
Business phone: Same as above
Occupation: Full Time, Self Employed Farmer (Tobacco, Grain, Beef Cow Operation)
Age: 51
Education: Associates Degree in Agriculture
Positions of leadership NOW held by nominee:
Former occupations or positions of leadership contributing to nominee's qualifications: Active on Church Boards/committees.
Other pertinent information: PAST Conservation Farm Family Winner; Local Advisory Board for Falls Lake & USDA-NRCS programs; PAST Bd. Member Grape Growers (NC)
Is nominee willing to attend a training session within the first year after appointment? *Check for "Yes"* ✓
Has the nominee been contacted to determine their willingness to serve? *Check for "Yes"* ✓
Has the program and purpose of the soil and water conservation district been explained to the nominee? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in local district meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in Area meetings? *Check for "Yes"* ✓
Is the nominee willing to attend and participate in State meetings? *Check for "Yes"* ✓

Signatures

I hereby certify that the board of supervisors considered the Guiding Principles for Supervisor Nomination for Appointment shown on the reverse of this nomination form when selecting the above supervisor candidate for nomination.

x W. Chris Hogan — 4-29-13
SWCD Chair — Date
Printed name: W. Chris Hogan

This recommendation has been considered and approved by a majority of the members of the board of supervisors and entered in the official minutes of the board.

x W. Chris Hogan — 4-29-13
SWCD Chair — Date
Printed name: W. Chris Hogan

x [signature] — 4-24-13
Individual recommended for appointment — Date
Printed name: Ronald Clay Parker

ATTACHMENT 7A

December 5, 2012

To: Chris Hogan
Chairman of Orange SWC Board

I am submitting my resignation as a Soil and Water Supervisor effective December 15. 2012.

Larry Rogers

Larry Rogers

ATTACHMENT 7B

NCACSP Supervisor Contracts
Soil and Water Conservation Commission

County	Contract Number	Supervisor Name	BMP	Contract Amount	Comments
Alexander	02-2013-004	David "Bill" Chapman	Livestock Exclusion System	$ 13,438	
Chatham	19-2013-805	J. Lynn Mann	Agricultural Pond	$ 15,000	AgWRAP
Orange	68-2013-005	Roger Tate	Waste Management System	$ 30,000	
Person	73-2013-008	Eugene C. Berryhill, Jr.	Grassed Waterways, Diversions	$ 7,887	
Sampson	82-2013-012	Henry E. Moore	Cropland Conversion-Grass	$ 3,376	

Total Number of Supervisor Contracts: 5
Total **$ 69,701**

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DSWC

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Soil & Water Conservation

NC -CSPs-1B
(11/2012)

ADDENDUM TO APPLICATION FOR ASSISTANCE
NORTH CAROLINA COMMISSION COST SHARE PROGRAMS

As a Soil and Water District Supervisor, for the Alexander Soil and Water Conservation District, I have applied for, or stand to benefit* from, a contract under a commission cost share program. I did not vote on the approval or denial of the application or attempt to influence the outcome of any action on the application. The proposed contract is for the installation of the following best management practices.

Program: ACSP

Best management practice: Livestock Exclusion System (Fence, Watering Tanks, Heavy Use Area, Municipal Water Tap)

Contract number: 02-2013-004 Contract amount: $ 13,438

Score on priority ranking sheet: 46

Cost Share Rate : 75% If different than 75%, please list % percent:
Reason:

Relative rank (e.g., ranked 8th out of 12 projects considered): 4th (tied) out of 23 eligible projects

Were any higher or equally ranked contracts denied? 1 equally ranked contract was denied

If yes, give an explanation as to why the supervisor's contract was approved over the other contracts:
Both contracts were for livestock exclusion systems. This contract involved a much larger stream with a great deal more soil loss per year (388 tons vs. 11.5 tons).

Supervisor name:
(David William Chapman - landowner)

Bill Chapman
(District Supervisor's signature)

4/23/13
Date

Approved by:

Mylan Payne
(District Chairperson's signature)

4-25-13
Date

The Soil & Water Commission has approved the subject application for a contract.

(SWCC Chairperson's signature)
(Pursuant G.S. 139-8(b)(2))

Date

*Beneficiaries include but are not limited to applicant, landowner, and/or business partners.

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DSWC

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APR 15 2013
Soil & Water Conservation

NC -CSPs-1B
(11/2012)

ADDENDUM TO APPLICATION FOR ASSISTANCE
NORTH CAROLINA COMMISSION COST SHARE PROGRAMS

As a Soil and Water District Supervisor, for the __Chatham_____Soil and Water Conservation District, I have applied for, or stand to benefit* from, a contract under a commission cost share program. I did not vote on the approval or denial of the application or attempt to influence the outcome of any action on the application. The proposed contract is for the installation of the following best management practices.

Program: AGRAP AGWRAP

Best management practice: Pond

Contract number: 19-2013-805 Contract amount: $15,000

Score on priority ranking sheet: State Ranked

Cost Share Rate : % If different than 75%, please list % percent:
Reason:

Relative rank (e.g., ranked 8th out of 12 projects considered):

Were any higher or equally ranked contracts denied? No

If yes, give an explanation as to why the supervisor's contract was approved over the other contracts:

Supervisor name: J. LYNN MANN

X J. Lynn Mann
(District Supervisor's signature)

4/11/2013
Date

Approved by:

John S. Gleason
(District Chairperson's signature)

4/11/13
Date

The Soil & Water Commission has approved the subject application for a contract.

(SWCC Chairperson's signature)
(Pursuant G.S. 139-8(b)(2))

Date

*Beneficiaries include but are not limited to applicant, landowner, and/or business partners.

NCDA&CS
DSWC

NC -CSPs-1B
(11/2012)

ADDENDUM TO APPLICATION FOR ASSISTANCE
NORTH CAROLINA COMMISSION COST SHARE PROGRAMS

As a Soil and Water District Supervisor, for the Orange Soil and Water Conservation District, I have applied for, or stand to benefit* from, a contract under a commission cost share program. I did not vote on the approval or denial of the application or attempt to influence the outcome of any action on the application. The proposed contract is for the installation of the following best management practices.

Program: NCACSP

Best management practice: Waste Management System (Drystack)

Contract number: 68-2013-005 Contract amount: $ 30,000

Score on priority ranking sheet: 545

Cost Share Rate : 75 % If different than 75%, please list % percent:
Reason:

Relative rank (e.g., ranked 8th out of 12 projects considered): Ranked 2nd of 4 applications requested, Ranked 1st out of applications with a commitment from applicant and with necessary design information required to develop contract.
Were any higher or equally ranked contracts denied? No

If yes, give an explanation as to why the supervisor's contract was approved over the other contracts:

Supervisor name:

(District Supervisor's signature) 4/8/13 Date

Approved by:

D. Chris Hogan (District Chairperson's signature) 4/8/13 Date

The Soil & Water Commission has approved the subject application for a contract.

(SWCC Chairperson's signature) Date
(Pursuant G.S. 139-8(b)(2))

*Beneficiaries include but are not limited to applicant, landowner, and/or business partners.

Contract # 73-2013-008

NCDA&CS
DSWC

NC -CSPs-1B
(11/2012)

ADDENDUM TO APPLICATION FOR ASSISTANCE
NORTH CAROLINA COMMISSION COST SHARE PROGRAMS

As a Soil and Water District Supervisor, for the Person Soil and Water Conservation District, I have applied for, or stand to benefit* from, a contract under a commission cost share program. I did not vote on the approval or denial of the application or attempt to influence the outcome of any action on the application. The proposed contract is for the installation of the following best management practices.

Program: ACSP

Best management practice: Grassed Waterways, Diversions

Contract number: 73-2013-008 Contract amount: $ 7,887.00

Score on priority ranking sheet: #1 - tie Score = 525

Cost Share Rate : 75% If different than 75%, please list % percent:
Reason:

Relative rank (e.g., ranked 8th out of 12 projects considered): Tie for #1

Were any higher or equally ranked contracts denied? No

If yes, give an explanation as to why the supervisor's contract was approved over the other contracts:

Supervisor name: Eugene C. Berryhill Jr.

Eugene C. Berryhill Jr. 4-18-13
(District Supervisor's signature) Date

Approved by:

B R Whitfield 4-19-13
(District Chairperson's signature) Date

The Soil & Water Commission has approved the subject application for a contract.

(SWCC Chairperson's signature) Date
(Pursuant G.S. 139-8(b)(2))

*Beneficiaries include but are not limited to applicant, landowner, and/or business partners.

4

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APR 24 2013
Soil & Water Conservation

NCDA&CS
DSWC

NC -CSPs-1B
(11/2012)

ADDENDUM TO APPLICATION FOR ASSISTANCE
NORTH CAROLINA COMMISSION COST SHARE PROGRAMS

As a Soil and Water District Supervisor, for the Sampson Soil and Water Conservation District, I have applied for, or stand to benefit* from, a contract under a commission cost share program. I did not vote on the approval or denial of the application or attempt to influence the outcome of any action on the application. The proposed contract is for the installation of the following best management practices.

Program: ACSP

Best management practice: Cropland Conversion - grass

Contract number: 82-2013-012 Contract amount: $ 3,376

Score on priority ranking sheet: 325

Cost Share Rate : 75% If different than 75%, please list % percent: N/A
Reason:

Relative rank (e.g., ranked 8th out of 12 projects considered): 1st out of 7 this batching period

Were any higher or equally ranked contracts denied? No - all were approved

If yes, give an explanation as to why the supervisor's contract was approved over the other contracts:

Supervisor name:
Bobcat Farms LLC
by: [signature]
(District Supervisor's signature) 3/22/13 Date

Approved by:
[signature]
(District Chairperson's signature) 3-26-13 Date

The Soil & Water Commission has approved the subject application for a contract.

(SWCC Chairperson's signature) Date
(Pursuant G.S. 139-8(b)(2))

*Beneficiaries include but are not limited to applicant, landowner, and/or business partners.

ATTACHMENT 7C

Technical Specialist Designation Recommendations

May 15th, 2013

1. The Soil and Water Conservation Commission has authority to designate water quality technical specialists based upon specific criteria and procedures (15A NCAC 06H .0101). This authority extends to individuals who have been assigned approval authority by USDA NRCS, NC Cooperative Extension, Department of Agriculture & Consumer Services and the Division. District staff is assigned the approval authority by the USDA NRCS. This process allows for each agency personnel to ensure an employee not only has completed the training requirements, but has also demonstrated proficiency prior to obtaining a technical specialist designation.

   Mr. Rick Bailey, NRCS District Conservationist in Surry and Yadkin Counties, has requested to be designated technical specialist for the Waste Utilization Planning/Nutrient Management category.

   Mr. Bailey has successfully completed the required training and their technical competency has been verified by their respective NRCS Area Office. Therefore I recommend this designation for approval.

Policy Regarding Use of Cost Share Program Funds as Match

Purpose

It is the goal of the Commission to take maximum advantage of opportunities to use state cost share program funds to leverage additional investment for conservation. Districts, the division and partners regularly seek grant funds to enable districts to more effectively address conservation objectives. Often these grants rely upon cost share program funds as match to meet the requirements of the granting organizations.

With so many partners applying for local, regional, and statewide grants to benefit district conservation activities, the potential exists for multiple partners to commit the same cost share funds or technical assistance time for match on multiple projects. This presents a concern for the Commission, since it is the Commission's and the conservation partnership's reputation of effectively implementing and tracking conservation on the ground that makes the partnership attractive to receive grants. It is important to recognize the need to coordinate use of state cost share funds as match to ensure that cost share funds are not double-counted as match in ways that will jeopardize the program or the conservation partners.

Statement of Policy

The Commission authorizes each district to commit up to 50% of its allocation of cost share financial assistance and technical assistance funds to match projects according to the discretion of the board of supervisors. Within 10 working days of the district being notified of a grant award, the district shall notify the Division of its intent to use cost share funds as match. This notification shall include:

1. The cost share program from which match funds are being committed (e.g., Ag Cost Share Technical Assistance, CCAP)
2. The amount of cost share funds committed for match and the program years affected
3. A description of the practice type(s) or activities
4. The name of the granting organization
5. The amount of the grant
6. An acknowledgement that future allocations are subject to availability of funds

The Commission also authorizes the division to commit up to 50% of cost share financial and technical assistance funds to match projects.

If either the district or the division needs to access greater than 50% of a district's annual allocation or if there is a conflict, the division and the district are authorized to negotiate as needed to reach a mutually satisfactory resolution. Districts shall also notify the division if the cost share funds previously committed for match are no longer needed for match.

The division shall track all projects and activities using state cost share program funds as match and report this information to the Commission annually.

Background Document
Use of Cost Share Program Funds as Match

Most grant making organizations require or encourage the grant recipient to share in the cost of implementing a grant project. The recipient's share of the project is called the recipient's "match" for the grant funds. Match funds can be in the form of a cash contribution (e.g., cost share financial assistance funds) or labor, supplies, equipment, etc. provided by the grant recipient to help implement the grant project (this kind of match is referred to as "in-kind" match). Even when match is not required by the grantor, it is often encouraged as a way to make the application more attractive for funding. The grant application generally must include a budget that specifies the matching funds the applicant is committing to provide in support of the project.

The Commission first implemented a policy requiring approval for use of cost share program funds as match in November 1992. The policy required all match requests to be first reviewed by the Agricultural Task Force for a recommendation for Commission approval. This policy was reaffirmed in March 1998, and a letter was distributed to all districts reminding them of the policy. In 2001, the policy was revised to remove the requirement that requests be reviewed by the Ag Task Force before it was considered by the Commission. The 2001 policy remains in effect, but this policy has not been consistently enforced.

The division and the Commission have for many years encouraged districts to apply for grant funds to supplement existing state, federal, and local funds to address their priority conservation needs. Many districts have a very successful track record of implementing grant-funded projects. Cost share program funds are often critical to supply the required match for these projects.

Also, the division frequently applies for grants on behalf of districts. Often these grants address projects on a watershed scale or even statewide. The division is currently administering twelve grants/cooperative agreements totaling $271,329,702 relying on $14,426,168 of cost share program funds as match over the life of the agreements. These grants range from benefitting 2-3 districts to benefitting 75 districts. These grants bring in outside financial resources to supplement existing state, federal, and local funds for implementing BMPs and for hiring staff at the local level. Match for these projects may be statewide. The division handles all the progress reporting and documentation of match for these projects, permitting the districts to focus on implementation.

For instance the Division has a $6 million agreement with NRCS to provide 42 supplemental staff based in local offices to carry out conservation work over a 5-year period ending August 2015. Non-federal match for this agreement involves $3 million of cost share BMP implementation statewide which has been already been documented as completed.

Another example is the High Rock Lake Watershed BMP implementation project. The Division is working through 13 SWCDs to implement a Clean Water Management Trust Fund grant

awarded to the Division to install BMPs in the High Rock Lake Watershed, which is impaired for chlorophyll-a and turbidity. The participating districts identified BMP needs under a previous USDA grant in which districts were provided funds to hold stakeholder meetings and develop implementation plans. The division has committed to use a portion of the cost share funds in those 13 districts to match the grant funds. If the district elects to pursue a separate grant project, without proper coordination, it might end up committing the same cost share funds that have already been committed.

It is generally not difficult for the division to avoid duplicating match commitments of districts as it administers regional or statewide projects, but that can only happen if the division is aware of each district's match obligations.

The Cost Share Committee evaluated the policy as part of its comprehensive review of all cost share program policies. The Committee's recommendation to revise the policy acknowledged the importance of tracking match to avoid potential conflicts involving double counting of match. It also noted that since the Commission only meets every other month, it is often difficult to obtain advance approval. The proposed solution was to ask the Commission to delegate this approval to the division to allow a more timely response to those wishing to use cost share funds as match.

The proposed policy is aimed at reducing the potential for double counting as match, allowing districts and partners to proceed with grant applications with confidence that the required match to support their application is indeed available.

Example notification:

Date: May 5, 2013

The Alamance Soil and Water Conservation District has received a $40,000 grant from the Clean Water Management Trust Fund for the purpose of installing stream protection system practices in the Haw River Watershed. The District has committed to use a portion of its funds allocated by the Commission as match for this project as shown in the table below.

Program	Type of Funds	Program Years	Purpose	Match Amount Committed
ACSP	Financial Assistance	2013, 2014	Install Stream Protection System BMPs	$30,000
ACSP	Technical Assistance	2013, 2014	Install Stream Protection System BMPs	$10,000
Total				**$40,000**

The District acknowledges that future allocations are subject to availability of funds.

ATTACHMENT 9A

Cleveland Soil and Water Conservation District
844 Wallace Grove Drive - Shelby, NC 28150-9213 - Phone 704-471-0235, Extension 3 - Fax 704-471-1230

April 22, 2013

Dear Commission Members,

The Cleveland County Soil and Water Conservation District has an ACSP contract that needs attention. Within the last year, the district has seen a transition between three different technicians and a new administrative assistant. In trying to regain our bearings, so to speak, we discovered this item that needs correcting.

Bill Thompson signed a contract on 6-28-2010, two days before the end of the 2010 program year. Previous technicians were new and told Mr. Thompson that he had three years, until the end of 2013, to install his bmps, and the installation date was entered incorrectly on his contract. Because the contract was a PY 2010 contract, the actual installation deadline was June 2012. Mr. Thompson received partial payment for several bmps and is currently in the process of finishing up his livestock exclusion and feeding area, which he has yet to receive payment for. As of April 17th 2013, all the fence posts for the livestock exclusion are in place. Mr. Thompson believed that he was on schedule and was set to finish his bmps on time by the end of 2013.

Because the 2010 funds reverted back to the State and are no longer available to pay for the livestock exclusion and feeding area, we would like to allocate funds from PY 2013 to pay for them. The total allocation would be the same amount allocated for the items in the original 2010 contract.

Sincerely,

Stephen Bishop
District Water Quality Technician

Randy McDaniel
Chairman of the Cleveland Co. Soil and Water Board

Cleveland Soil and Water Conservation District
844 Wallace Grove Drive - Shelby, NC 28150-9213 - Phone 704-471-0235, Extension 3 - Fax 704-471-1230

Dear Commission Members,

The Cleveland County Soil and Water Conservation District has a procedural mistake that we would like to address with the Commission.

Ryan Ware planted alfalfa on Sept. 20, 2012, for the 4-year sod based rotation. At the time, Mr. Ware was in the process of buying the land, which he had been renting. The previous technician wanted to wait to present the application and contract to the local board until after Mr. Ware bought the land. He told Mr. Ware to go ahead and plant though, citing the exemption in the CPO that it was a vegetative practice for under $3,500. The previous technician didn't realize that the exemption was meant for contracts that had already been approved by the local board and were waiting for division approval. Since the farmer acted in good faith, we would like to ask for post approval for his contract. Both his application and contract were approved by the local board during the April 2013 meeting.

Sincerely,

Stephen Bishop
District Water Quality Technician

Randy McDaniel
Chairman of the Cleveland Co. Soil and Water Board

ATTACHMENT 9C

Randolph County Soil & Water Conservation District

2222-A S. Fayetteville Street ◆ Asheboro, North Carolina 27205
Phone: (336) 318-6490 ◆ Fax: (336) 318-6494

March 5, 2013

Ms. Vicky Porter, Chairperson
NC Soil and Water Conservation Commission
1614 Mail Service Center
Raleigh NC 27699-1614

Dear Ms. Porter,

The Randolph SWCD currently has a contract with Mr. Lloyd Roberts (76-12-06-16) to do a livestock exclusion project on his farm. The contract total is $12,536 and includes a well, 1,000' of fencing, one watering station, 1,100' of pipeline, one stream crossing, a heavy use area and gutters on the barn. Since the approval of Mr. Roberts' contract, he has bought a new farm and put the farm under contract on the market in order to off-set the cost of the new farm. He has a buyer for the farm and the purchase is supposed to close on March 20th.

The new buyer is Ms. Mary Jenkins Farlow. Ms. Farlow will be leasing the farm to her son, Mr. Russell Farlow. Mr. Farlow recently constructed a greenhouse in which he grows produce to sell at local farmers markets. With the purchase of the adjoining Roberts' property, Mr. Farlow will also purchase and raise a small herd of Angus cows. Mr. Farlow will be signing an Affidavit for the Tax Department certifying that the land will remain in agriculture production in order to remain in the present-use valuation program. Since Mr. Farlow intends to continue to raise cows on the property he would like to have the contracted BMP's installed on the property and is willing to take over the responsibility of the contract.

Mr. Farlow is considered a 'new farmer'. In fact, 2013 will be the first year in which he files a Schedule F on his income taxes, and subsequently he does not yet have a sales tax exemption certificate from the Department of Revenue. Therefore, under the current eligibility guidelines he does not qualify for NCACSP funding since he cannot produce these documents. However, Mr. Farlow and Mr. Roberts would like to request that once the land purchase is finalized, Mr. Farlow be allowed to fulfill the contract originally entered in with Mr. Roberts. Both parties have been made aware of the Substitution of Parties Agreement and agreed to the terms therein.

We thank you for your consideration of this matter.

Sincerely,

Kelly Whitaker for Craig Frazier
Craig Frazier
Randolph SWCD Chairman

Kelly Whitaker
Kelly Whitaker, PE
Soil & Water Engineer

Yours for Life

Randolph Soil & Water Conservation District
2222-A S. Fayetteville Street
Asheboro, NC 27205
336-318-6490

RANDOLPH SOIL & WATER CONSERVATION DISTRICT

Conservation Plan

Owner:

Mary Farlow
1209 Byron Lane
Archdale, NC 27263

Operator:

Russell Farlow
2062 Ebenezer Church Rd.
Archdale, NC 27263

Tract 10671

Pastureland

382 Fence: Install fencing around water body to prevent access and degradation by livestock. NRCS will provide fencing specifications prior to construction. Maintain fence according to the applicable program guidelines for 20 years.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1000′	6	2013		
Total	1000′				

512 Pasture and Hay Planting: Establish or reestablish native grasses or introduced forage species to improve or maintain livestock nutrition and health, extend the length of the growing season, reduce soil erosion, and improve wildlife habitat. Lime and Fertilize according to soil test recommendations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	13.7 ac	10	2013		
Total	13.7 ac				

516 Pipeline: Install a pipeline to convey water from supply source to points of use.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1100′	6	2013		
Total	1100′				

561 Heavy Use Area Protection (HUA): A 20 ft x 20 ft gravel surfaced area used in conjunction with watering facilities. HUA's will be located at approximate locations depicted on the Conservation Plan Map with the watering facilities. The HUA should be excavated 6-8″. Then a nonwoven geotextile barrier should be placed on the excavated area. Backfill the HUA with 6-8″ of crusher run gravel on top of the geotextile.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	30 sy	6	2013		
Total	30 sy				

590 Nutrient Management: This practice describes the management of the amount, form, placement and timing of applications of nutrient fertilizer. Implement to supply plant nutrients in amounts dictated by soil test, or tissue analysis, or accepted recommendations based on realistic yield expectations or plant performance for an intended use; to minimize excessive nutrient application while meeting a plant's performance based requirement for a particular nutrient; and to minimize nutrient loss to surface and ground water. Implement in areas designated on conservation plan map.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	13.7 ac	10	2013		
Total	13.7 ac				

595 Pest Management: Manage infestations of weeds, insects and disease to reduce adverse effects on plant growth, crop production and material resources.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	13.7 ac	6	2013		
Total	13.7 ac				

614 Watering Facility: Maintain a trough or tank with heavy use area protection around it according to NRCS standard and specifications. The trough or tank will be used as a watering facility for livestock in order to protect vegetative cover through proper grazing.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 ea.	6	2013		
Total	1 ea.				

Hayland

511 Forage Harvest Management: Cutting and removal of forages from the field as hay, greenchop, of ensilage.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	2.9 ac	10	2013		
3	11.2 ac	10	2013		
Total	14.1 ac				

512 Pasture and Hay Planting: Establish or reestablish native grasses or introduced forage species to improve or maintain livestock nutrition and health, extend the length of the growing season, reduce soil erosion, and improve wildlife habitat. Lime and Fertilize according to soil test recommendations.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	2.9 ac	10	2013		
3	11.2 ac	10	2013		
Total	14.1 ac				

590 Nutrient Management: This practice describes the management of the amount, form, placement and timing of applications of nutrient fertilizer. Implement to supply plant nutrients in amounts dictated by soil test, or tissue analysis, or accepted recommendations based on realistic yield expectations or plant performance for an intended use; to minimize excessive nutrient application while meeting a plant's performance based requirement for a particular nutrient; and to minimize nutrient loss to surface and ground water. Implement in areas designated on conservation plan map.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	2.9 ac	10	2013		
3	11.2 ac	10	2013		
Total	14.1 ac				

595 Pest Management: Manage infestations of weeds, insects and disease to reduce adverse effects on plant growth, crop production and material resources.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	2.9 ac	10	2013		
3	11.2 ac	10	2013		
Total	14.1 ac				

CERTIFICATION OF PARTICIPANTS

Russell Farlow 4-9-13

Russell Farlow DATE

CERTIFICATION OF:

SOIL & WATER ENGINEER

4/2/13

KELLY WHITAKER DATE

CONSERVATION DISTRICT

4-10-13

RANDOLPH SWCD DATE

PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collections is 0578-0013. The time required to complete this information collection is estimated to average 45/0.75 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

PRIVACY ACT

The above statements are made in accordance with the Privacy Act of 1974 (5 U.S.C 522a). Furnishing this information is voluntary; however failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other state or federal law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

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Conservation Plan Map

Customer: Russell Farlow
Assisted By: Wes Hicks
Randolph SWCD

Date: April 2, 2013 - ncacsp-map.mxd - swkkw

THIS MAP WAS PREPARED BY RANDOLPH COUNTY, NC FOR THE COUNTY'S INTERNAL USE. RANDOLPH COUNTY, ITS AGENTS AND EMPLOYEES MAKE NO WARRANTY AS TO THE CORRECTNESS OR ACCURACY OF THE INFORMATION SET FORTH ON THIS MAP WHETHER EXPRESSED OR IMPLIED, IN FACT OR IN LAW, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MAP IS BASED ON STATE PLANE COORDINATE SYSTEM IN 1983 DATUM.

RANDOLPH SOIL & WATER CONSERVATION DISTRICT

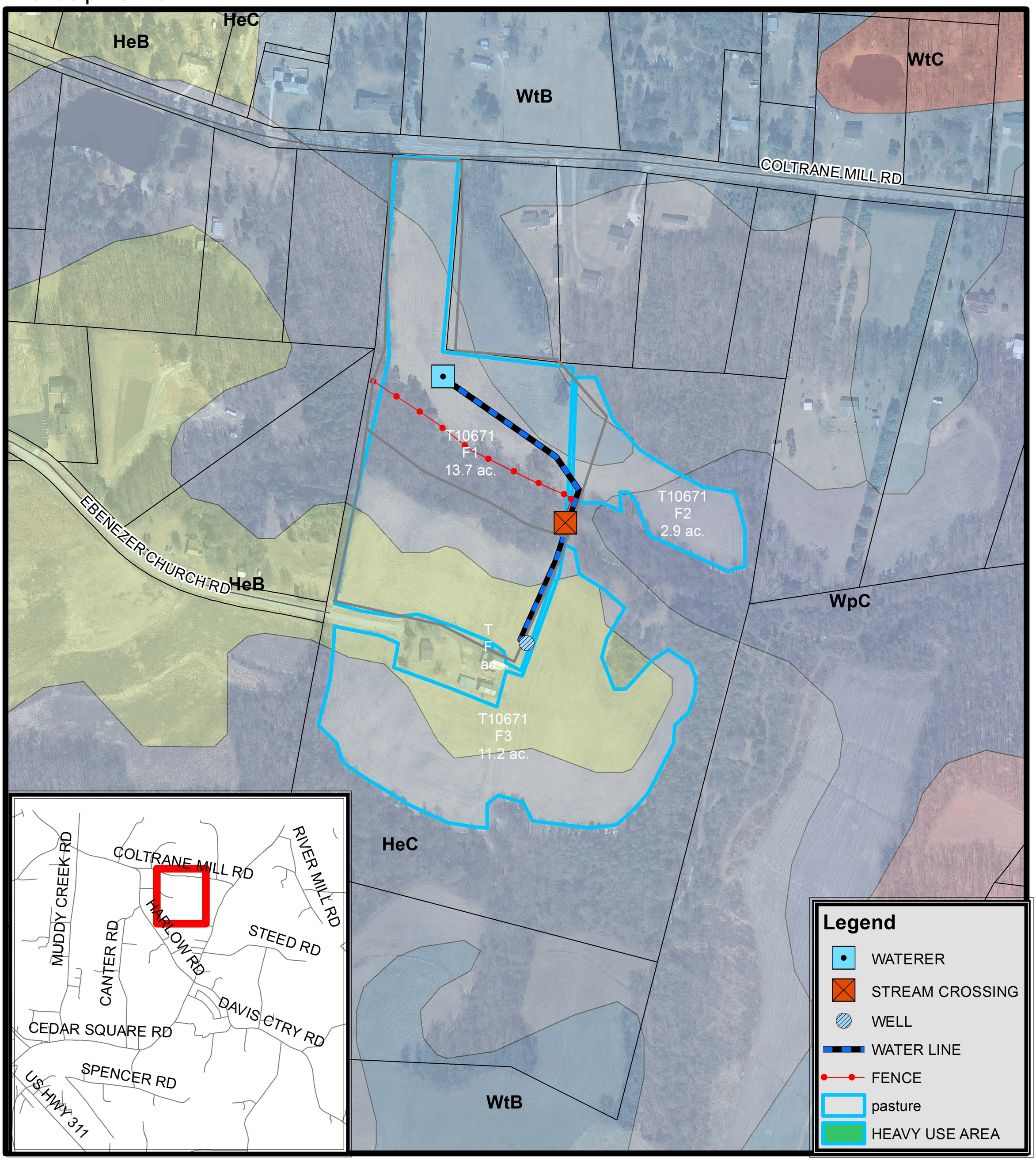
N W E S

1 inch = 400 feet

Conservation Plan Map

Customer: Russell Farlow
Assisted By: Wes Hicks
Randolph SWCD

Date: April 2, 2013 - ncacsp-map.mxd - swkkw



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RANDOLPH SOIL & WATER CONSERVATION DISTRICT

N W E S

1 inch = 400 feet

ATTACHMENT 10

Steve Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services

Division of Soil and Water Conservation

Patricia K. Harris
Director

March 28, 2013

Certified Mail Number 7006-2760-0001-9283-4423

Ms. Kari Michelle Ham
1625 Winding Oak Road
Kinston, NC 28504-9407

Ms. Ham,

I wanted to write to you to update you on the latest developments concerning our ongoing conversations regarding the conservation easement held by the State on your property in Lenoir County. Mr. Walter Blizzard was invited to appear before the Soil and Water Conservation Commission in November regarding the conservation easement concerns. I am under the impression that Mr. Blizzard had interest in doing so, but was unable to attend.

Also since our last communication, personnel from the Department have met with Senator Jackson and Representative Lewis concerning this issue, and have come to the conclusion that it would be appropriate to offer some time on the agenda of the next meeting of the Soil and Water Conservation Commission for you and your grandfather to be heard.

As such, I would like to offer to you and your grandfather the opportunity to discuss this issue before the Commission, as allowed by the North Carolina Administrative Code. In order for the Commission members to be prepared to hear this matter, please respond to this letter, indicating in as much detail as possible, your proposed resolution to this issue, so that this item can be added to the Commission's agenda and the Commission members can have an opportunity to consider your proposal prior to the meeting.

The next scheduled Commission meeting is May 15, 2013 starting 8:00 a.m. in Cabarrus Room A of the Hampton Inn Concord/Kannapolis, 612 Dickens Place NE, Concord, NC 28025. Please respond in writing by May 1, 2013 with the above requested information so that your item can be included on the agenda.

MAILING ADDRESS
Division of Soil and Water Conservation
1614 Mail Service Center
Raleigh, NC 27699-1614

Telephone: 919-733-2302
Fax Number: 919-733-3559

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LOCATION
Archdale Building
512 N. Salisbury Street, Suite 504
Raleigh, NC 27604

If you need additional information, please contact me at the information below. I sincerely hope that this matter can be resolved to the satisfaction of everyone involved, and I look forward to continuing to work with you in conservation efforts for North Carolina.

Sincerely,

Patricia K. Harris

Patricia K. Harris, Director

Cc: Senator Brent Jackson
Representative David Lewis
Mrs. Jennie Hauser, Special Deputy Attorney General
Lenoir Soil and Water Conservation District
USDA – Farm Service Agency
Mr. PC Barwick, Attorney at Law
Mr. Walter Blizzard

ATTACHMENT 10

April 9, 2013

North Carolina Department of Agriculture
and Consumer Services
Division of Soil and Water Conservation
1614 Mail Service Center
Raleigh, NC 27699-1614

Re: Kari Michelle Ham (Racobaldo)
1625 Winding Oak Road
Kinston, NC 28504-9407

To Whom It May Concern:

In 2003, my wife and I purchased a small farm adjacent to our property where we live. We purchased this land with the hopes that our grandchildren would one day want a part of it to live on. Our children already lived next to us. In 2005, we entered into a lease agreement with the USDA and the state of North Carolina CREP program to grow pine trees on this land. We never talked to anyone except representatives of USDA (no one from the state of North Carolina) and we were told that at any time we wanted to release a portion of the property that we could simply pay back the amount we had received for that portion plus 25%.

In 2010, our oldest grandchild, Kari, a schoolteacher, came to us and told us she planned to marry and wanted to live on our land. I contacted the Lenoir County office of USDA and made a request for a release of the lot in question. The USDA representative computed the amount, gave it to me and I paid it as evidenced by the copy of the receipt which is attached hereto as Exhibit A. Kari bought a used single-wide, installed a septic tank and had the other work necessary to occupancy of the lot and single-wide performed. Kari had no title examination performed at that time since she had received the lot as a gift from me and her grandmother.

After living in the single-wide for a year and a half, Kari became pregnant and she and husband decided to purchase a double wide. The seller of the double wide retained an attorney in Goldsboro to examine the title to the lot prior to placing it on the lot. Neither Kari, her husband, my wife or I were advised that there were any problems with the title. In fact, the seller of the double wide removed the single wide and placed the double wide on the lot and prepared it for occupancy.

In the meantime, Kari applied for a permanent loan at State Employees Credit Union at its Kinston Office. When SECU sent the loan package to the Kinston law firm selected to close the permanent loan, it was discovered that the state of North Carolina had a lien on the lot and had not

released it. We have requested a release but it has not been granted as of this date. Instead, we have been offered as opportunity to discuss this matter on May 15, 2013 at your next scheduled meeting.

In further explanation, the documents clearly indicate that there are 16.4 8 acres in the tract in which this lot is located. The state of North Carolina documents call for 14.73 acres only. Furthermore, if you do require further payment, we will agree to dedicate a permanent easement 80 feet in width running parallel with the "blueline" ditch which would include approximately two (2) acres.

Sincerely,

Walter M. Blizzard

Exhibit "A"

ASCS-592
(07-01-91)
USDA-ASCS

RECEIPT
(To be delivered to payer)

RECEIPT No. 542580

No. _____
(FARM, LOAN, ETC.)

Received of WALTER BLIZZARD

For the Purpose of

$ 793.10
(AMOUNT)

REFUND ON TERMINATION OF 1.0 ACRE ON CRP CONTRACT # 251.

NC
(STATE)

LENOIR
(COUNTY)

CASH | | CHECK | ✓ | DRAFT | | MONEY ORDER | |

Lisa King
(SIGNATURE)

ASC County Committee

3/24/10
(DATE)

All checks and drafts are subject to collection *(See notice on reverse)*.

ATTACHMENT 10

Steve Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services

Division of Soil and Water Conservation

Patricia K. Harris
Director

Blizzard/Ham Easement Noncompliance Recommendations

The Division of Soil and Water Conservation staff has been working with Mr. Blizzard and his family to resolve the noncompliance issue on the CREP easement since September 2012 to no avail. Below is our response to his letter to the Division dated April 9, 2013:

1. Mr. Blizzard states that he entered into a lease agreement. The agreement he entered into with the State was a conservation easement. The CREP conservation easement that Mr. Blizzard and his wife signed August 14, 2006 was recorded at the Lenoir County Register of Deeds on September 5, 2006.

2. Mr. Blizzard claims that he never spoke with anyone from the State of NC which may be correct However, as CREP is a locally led program, the Soil and Water Conservation District staff and NRCS District Conservationists only call upon the State CREP field staff as needed. DSWC legal correspondence shows that Mr. Blizzard and his wife received a detailed outline of what was needed for signature to complete the easement acquisition. It was explicit in several areas that this was in fact an easement and a Deed of Conservation Easement would be recorded by the State. DSWC paralegal also provided contact information in case he had any questions or needed additional information, both prior to signing the easement and once funds were dispersed. Mr. Blizzard never inquired about the easement.

3. Mr. Blizzard did indeed refund payment to FSA for the partial termination of CRP Contract #251. However, any termination or partial termination of the FSA contract does not affect the conservation easement held by the State of NC. Per Michael Gurwitz, Staff Attorney with Farms, Food Assistance, International and Rural Division; USDA Office of the General Counsel:

   "FSA supports long-term resource conservation under CREP projects which sometimes entail easements administered by local CREP partners; however, USDA is not a party to the Deed of Conservation Easement between the Blizzards and the State of North Carolina, and so USDA can neither enforce the terms of the easement nor otherwise intervene in a dispute between the State and the Blizzards."

MAILING ADDRESS
Division of Soil and Water Conservation
1614 Mail Service Center
Raleigh, NC 27699-1614

Telephone: 919-733-2302
Fax Number: 919-733-3559

LOCATION
Archdale Building
512 N. Salisbury Street, Suite 504
Raleigh, NC 27604

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4. Mr. Blizzard is correct that Mrs. Ham did indeed have a single wide mobile home on the property. Building inspection permits verify the mobile home was placed there approximately January 2011. Attachment A is timeline of events leading up to the Division being notified of the issue. Please note, the Lenoir Soil and Water Conservation District did conduct stewardship monitoring on this site June 2010, before any major activity occurred.

5. The gift deed to Mrs. Ham was recorded March 2010 that included the following statement:

   "Title to the property hereinabove described is subject to the following exceptions: This conveyance is subject to all valid and enforceable easements, rights of way, and restrictions of record, if any, and the pro-rata portion of the current year property taxes."

6. The CREP easement clearly states that that the grantor shall notify the Division *in writing the name and street address of any party to whom the Easement Area or any part of the property is to be transferred at or prior to the time said transfer is made.* Mr. Blizzard failed to notify the Division until almost 2 ½ years after the transfer to Ms. Ham.

7. Mr. Blizzard confirmed that an attorney was hired by the mobile home dealership to place a Deed of Trust on the property and a title search was conducted. If this is the case, the attorney should have discovered the conservation easement as it is properly recorded at the Lenoir County Register of Deeds.

8. Mr. Blizzard states that as a permanent loan was being sought that the State Employee's Credit Union representative found that the State of NC had a lien on the property. I would suspect he is referencing the conservation easement.

9. The Division did not receive the request to release the conservation easement until September 4, 2012. Mr. Blizzard requested it be released by September 6, 2012 so Mrs. Ham could close on her loan.

10. Mr. Blizzard provided a survey to the Division dated 12-5-12 by Atlantic Surveying, PA. The actual survey data was originally certified in 2003 by another surveyor and the Atlantic Surveying, PA survey stated that it should not be considered a certified document. The Division does not dispute that the total acreage of the parent parcel is 16.48 acres +/-. DSWC Registered Surveyor conducted an analysis of the easement area and this survey. Please refer to Attachment B. Below is a summary of his findings based on the survey information provided, as the DSWC Registered Surveyor did not field verify.

In Summary:	14.73 acres	CREP Conservation Easement Area
	1.4 acres	In existing street, street right of way, between top of ditch bank and centerline of the ditch.
	0.3 acres	Offset of CREP area from surrounding property lines.
	16.4 acres	Total

11. Mr. Blizzard has offered in exchange for the release of the easement a permanent easement of 80 foot width that would run parallel with the main blue line ditch. The Division would not recommend accepting this as an option for the following reasons:

    a. As describe above much of the area being offered is in part already permanently protected by the Neuse Buffer Rules – the first 50' from top of stream bank is approximately 1.2 acres. Therefore the state would only benefit from a permanent easement on approximately 0.8 acres.

    b. The intent of the State incentive portion of CREP, the easement, is to provide long term water quality protection. Future grant applications and program support may be threatened if the water quality benefits as specified by the conditions on the program are compromised by this precedent.

    c. Releasing the easement would set a dangerous precedent and potentially undermine the ability of other conservation and preservation programs to enforce the terms of their easements. (e.g. Farmland Preservation Program, Military Initiatives, CWMTF, EEP, etc.)

    d. The precedent for releasing the easement could have significant unintended consequences such as:

        1. The potential for the repayments to be sent back to the original source of the grant funds (CWMTF) and not put back into the program.

        2. The CREP Agreement with UDSA requires a 20% state match. Should a significant number of easements be released, there is a concern that we may fall short of the match obligation.

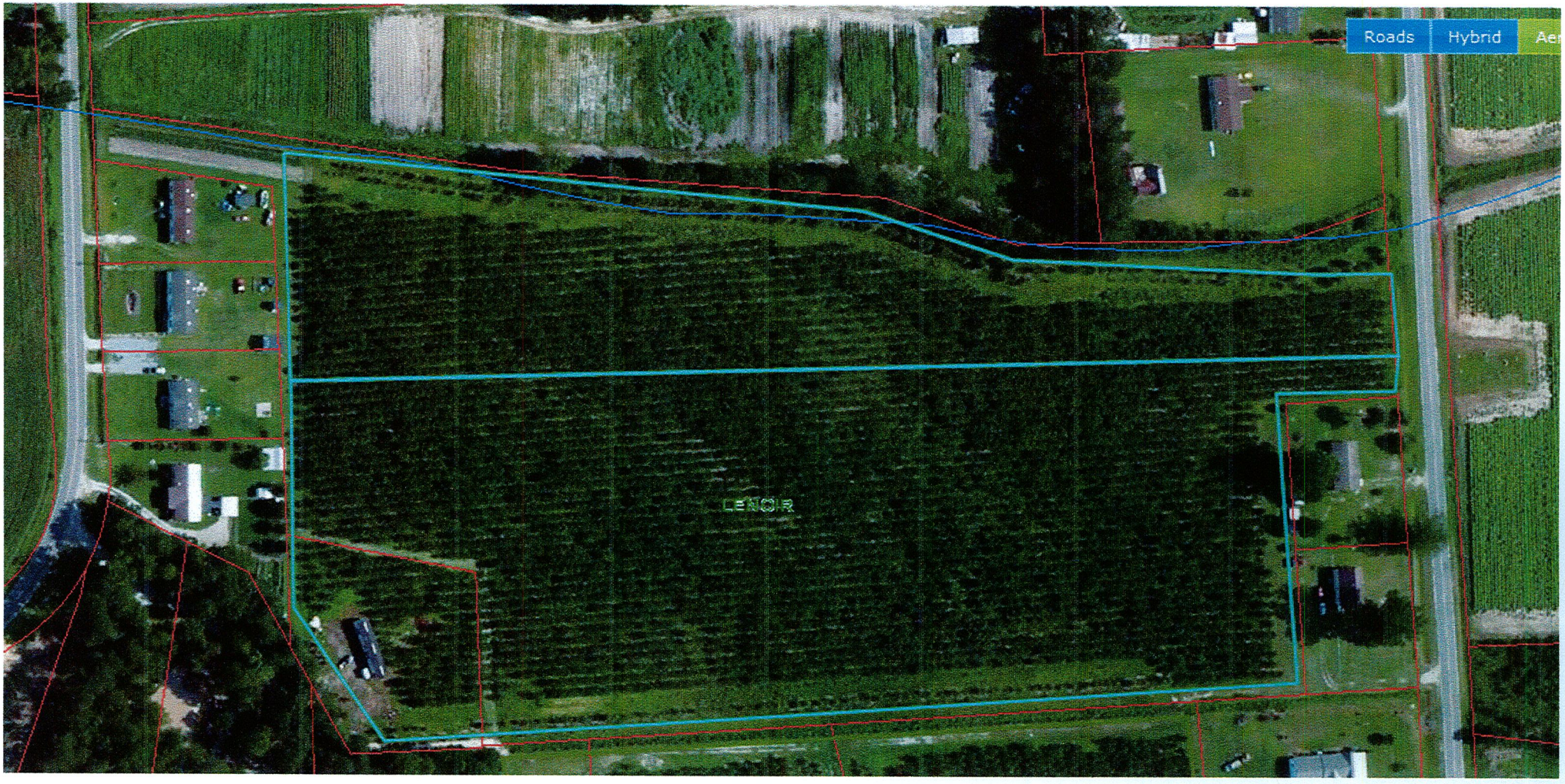
        3. Funds in the stewardship endowment may also be required to be adjusted and paid back to the original source of the grant funding if the acreage is no longer under a conservation easement.

    e. The ability to release an easement would also make it difficult to market a program promoting long term water quality benefits. There are other voluntary options for landowners that do not want to participate in an easement program. However CREP is *Enhanced CRP* – *you get paid more to do more*.

Attachment A - Events leading up to Blizzard/Ham Noncompliance

September 5, 2006	CREP 30 easement closed with a total of 14.73 acres (deed book/page 1478/468) Applicable CRP Contracts: CRP #252 Walter Blizzard 4.8 acres CRP #251 Walter Blizzard 9.9 acres
June 18, 2008	Lenoir SWCD Staff conducted Stewardship Monitoring of easement. No concerns noted.
March 5, 2010	Plat recorded for the 1 acre subdivision. Survey completed by Gairy Canady, PLS. However CREP conservation easement was not reflected on the plat.
March 11, 2010	W. Blizzard executed a Gift Deed of 1 acre of easement area to granddaughter (deed book page 1598/123). Deed included the following language: "*Title to the property hereinabove described is subject to the following exceptions:* *This conveyance is subject to all valid and enforceable easements, rights of way, and restrictions of record, if any, and the pro-rata portion of the current year property taxes.*"
March 24, 2010	W. Blizzard refunded FSA in the amount $793.10 for termination of 1 acre on CRP Contract #251.
June 16, 2010	Lenoir SWCD staff conducted Stewardship Monitoring of easement. No concerns noted.
July 13, 2010	Septic Tank Permit issued by Lenoir County Environmental Health Department.
November 11, 2010	Septic Permit installed per by Lenoir County Environmental Health.
January 10, 2011	Mobile Home Set-up permit issued – Single Wide Mobile Home
July 19, 2012	Mobile Home Set-up permit issued – Double Wide Mobile Home. Contractor: First Choice Homes Inc. 800 E New Bern Road, Kinston.
July 30, 2012	Deed of Trust Recorded – Beneficiary: First Choice Homes, Inc. Trustee: David M Rouse, Attny. PO Box 1816 Goldsboro, NC 27533
August 31, 2012	W. Blizzard visited the Lenoir Soil and Water District Office wanting the easement released.
September 4, 2012	Donnarie Hales, CREP Manager, spoke with W. Blizzard for first time.

Blizzard/Ham CREP Easement



Key:

Light Blue Line – CREP Easement Boundary
Red Line – County Parcel Datalayer
Dark Blue Line – Blue Line Stream Datalayer

SUBCHAPTER 59F – CONSERVATION RESERVE ENHANCEMENY ENHANCEMENT PROGRAM (CREP) – STATE PORTION OF THE PROGRAM

SECTION .0100 - CONSERVATION RESERVE ENHANCEMENT PROGRAM (CREP) -- STATE PORTION OF THE PROGRAM

02 NCAC 59F .0101 OBJECTIVES

(a) The North Carolina Conservation Reserve Enhancement Program (CREP) is a state/federal/local partnership that combines existing federal Conservation Reserve Program (CRP) funding and state funding from various sources, including the Agriculture Cost Share Program (ACSP), to take environmentally sensitive land out of crop production. For purposes of this Rule the generic term "CREP" references either the federal portion or the combined federal and state portions of the program. The combined federal and state portion of CREP is referred to as NC-CREP. Under CREP, landowners may voluntarily enroll eligible land in 10-year, 15-year, 30-year or permanent agreements or contracts. The Commission operates the state portion of NC CREP program as the lead agency for the State of North Carolina (State), and may from time to time delegate activities to the Division.

(b) The program objectives for the Commission, which are the same as those of the multi-agency CREP team, are the following: to reduce agricultural non-point source pollution; to enroll eligible land in 10-year, 15-year, 30-year or permanent easements or leases; to encourage voluntary sign-ups for the program; and to enhance ecological aspects and wildlife habitat of areas near watercourses.

(c) The Division, or its agent, shall seek eligible applicants for enrollment into the program in accordance with the United States Department of Agriculture's 2-CRP Manual. Landowner payments shall be made in accordance with state and federal requirements, and shall be subject to the availability of funds.

(d) The applicable standards, rules, regulations, and practices of the Natural Resource Conservation Service (NRCS) NRCS Field Office Technical Guide, the United States Department of Agriculture's 2-CRP Manual, the Division of Forest Resources, 15A NCAC 09C .0400 and the Ecosystem Enhancement Program, G.S. 143-214.8 are incorporated herein by reference, and such incorporation includes subsequent amendments and editions of the referenced material. Likewise, the provisions of the United States Department of Agriculture's 2-CRP Manual are incorporated herein by reference, and such incorporation includes subsequent amendments and editions of the referenced material. Copies of all of these materials are available at the offices of the Division, and the cost of any copies shall not exceed ten cents ($.10) per page.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Amended Eff. December 1, 2006; July 1, 2004;
Transferred from 15A NCAC 06G .0101 Eff. May 1, 2012.

02 NCAC 59F .0102 ELIGIBILITY

(a) Persons may offer to enroll acreage to CREP at any time within the enrollment period or any extension thereof. Acreage enrolled into the CREP is referred to as "CREP Enrollments." Acreage enrolled into NC-CREP is referred to as NC-CREP Enrollments. In order to be enrolled into the CREP, all of the following shall be met:

(1) the producer eligibility requirements within the United States Department of Agriculture's 2-CRP Manual;
(2) the cropland and marginal pasture land requirements within the United States Department of Agriculture's 2-CRP Manual;
(3) Acreage offered is eligible under the United States Department of Agriculture's 2-CRP Manual and applicable NRCS standards, and is suitable for the intended practice; and
(4) Producer accepts the maximum payment rate based on the payment formula described in Rule .0105 of this Section.

(b) The Commission may refuse enrollment where water quality benefits do not justify the payments, or where the acquisition is impractical or nuisance conditions exist on the land.

(c) The following acreage is ineligible to be enrolled in CREP:

(1) federally-owned land unless the applicant has a prior written lease for the time frame in which the land is under the Conservation Reserve Program (CRP);
(2) land on which a federal agency restricts the use in a mortgage or an easement;
(3) acreage permanently under water, including acreage currently enrolled in CRP;

(4) land currently enrolled in other federal programs and still under lifespan requirements;
(5) land already enrolled in CRP; or
(6) acreage withdrawn, terminated or otherwise released from the CRP after enrollment and before the contract expiration date.

(d) For the NC-CREP, landowners may enroll into one of the enrollment options included in the United States Department of Agriculture's 2-CRP Manual. 30-year contract or easement;

(e) Existing forested buffers may be enrolled under NC-CREP according to the limitations in the United States Department of Agriculture's 2-CRP Manual.

(f) An unmanageable field remnant may qualify for enrollment subject to the conditions in the United States Department of Agriculture's 2-CRP Manual.

(g) Landowners may switch from a 30-year contract/easement to one of the permanent easement options or may enroll additional land under the payment schedule existing at the time of the change in enrollment.

(h) Eligibility for the CREP shall be determined by the local District, Farm Service Agency (FSA), NRCS and the Division. An eligible applicant may enter into the federal agreements (10-years to 15-years), as well as the State agreements (30-year or permanent). Persons and land qualifying for the federal portion of CREP may also be qualified for enrollment under NC-CREP. Any landowner enrolling 10 acres or greater per tract, regardless of the length of enrollment, must enter into a 30-year or permanent State agreement.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Amended Eff. December 1, 2006; July 1, 2004;
Transferred from 15A NCAC 06G .0102 Eff. May 1, 2012.

02 NCAC 59F .0103 CONSERVATION PLAN

(a) A conservation plan is required for all CREP Enrollments. The conservation plan is a record of the applicant's decisions and supporting information for the treatment of a unit of land or water as a result of the planning process that meets the NRCS Field Office Technical Guide quality criteria for each natural resource and that addresses economic and social considerations. The plan shall describe the schedule of operations and activities required to solve identified natural resource concerns. Conservation plans shall be prepared according to all applicable federal, state and local environmental laws, executive orders, and rules. The conservation plan shall be consistent with any conservation easement protecting the enrollment area. This applies regardless of eligibility for cost-share funds. Participants shall also agree to establish and maintain approved practices according to the conservation plan of operations and forest management plans, for the duration of the agreement. Practices included in the conservation plan must cost-effectively achieve a reduction in soil erosion and nutrient transport. All forestry management practices must be completed according to a forestry management plan approved by a registered forester. The Division and the Commission may review conservation plans at any time while CREP agreements are effective.

(b) All CREP Enrollments must provide interception of water from the crop or pasture land into the enrollment area. All CREP Enrollments must maintain a contiguous buffer with the water course. Enrollments of wetland restoration areas shall be accepted only if enrollments shall be in trees, in those areas where trees would be the natural cover. The riparian forested buffer or wetland practice may include an outer buffer layer of native grasses between cropped areas and the trees, as specified in the practice criteria.

Hydrologic restoration to the greatest extent practicable shall occur on all NC-CREP Enrollments. Hydrologic restoration to the greatest extent practicable means to improve/increase hydrology and to retain water to the maximum extent as long as there are no adverse impacts to non-enrolled lands. This may be accomplished through the following means: creating sheet flow; reducing concentrated flow areas; blocking or filling artificial drainage; or using water control structures in conjunction with buffers. All shall meet or exceed appropriate NRCS standards. Water infiltration and retention shall be maximized on non-hydric soils by creating sheet flow and by reducing concentrated flow areas. Plans shall provide for improved wildlife habitat. The establishment of CREP practices shall be:

(1) consistent with conservation compliance provisions;
(2) at the participant's own expense;
(3) included in the approved conservation plan;
(4) approved by the local District; and
(5) subject to FSA and Division approval where applicable.

(c) 30-year contracts/easements and permanent easements for which the participant chooses the timber harvest option shall require a minimal impact zone adjacent to the qualifying waterbody. A Minimal Impact Zone is a zone measured from the top of the stream bank for which tree removal is restricted to removal of dead trees and practices necessary to prevent pest or disease infestation or to maintain health of individual trees. Timber management and harvesting may be allowed in the remaining portion of the CREP enrollment as outlined in the contract/easement.
(d) A modification to an approved conservation plan must be in the best interest of CREP, and consistent with any conservation easement protecting the enrollment area. Such plans shall be revised as needed. Circumstances necessitating a revision include but are not limited to:

(1) adding or revising a CREP practice;
(2) substituting CREP practices;
(3) scheduling reapplication of a CREP practice;
(4) reflecting change in ownership; or
(5) implementing other non-cost shared conservation measures, if producer agrees to install according to the approved conservation plan on CREP land already seeded to an acceptable cover.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Amended Eff. December 1, 2006; July 1, 2004;
Transferred from 15A NCAC 06G .0103 Eff. May 1, 2012.

02 NCAC 59F .0104 APPROVING STATE AGREEMENTS

(a) Final approval for all NC-CREP agreements shall be the responsibility of the Division. Thirty-year and permanent agreements require recording of a conservation easement or conservation lease in the appropriate county registry. The intent is to provide that the NC-CREP Enrollment Area shall be protected for the life of the signed agreement. The Division shall provide a mechanism to acquire and record easements and leases for NC-CREP. The Division shall provide a survey where needed to develop legal description of the easement area. Conservation easements and leases entered into shall be consistent with the requirements of the Department of Administration and with 01 NCAC 06B .0210.
(b) For approval under NC-CREP, the Division must receive:

(1) the State CREP form signed by the local District and the applicant;
(2) a copy of landowner's deed(s) to the land to be enrolled;
(3) a completed conservation easement(s) or lease(s);
(4) latitude and longitude coordinates locating the easement or lease site; and
(5) descriptions (maps, surveys, directions to site, etc.) identifying the easement or lease site.

(c) Under a CREP 30-year or permanent conservation easement or lease, the title of the land still resides with the landowner. The landowner may use the land under the conservation easement or lease in a manner that does not violate the conditions and terms of the easement or lease. The conservation easement or lease does not restrict the owner from selling or devising the land, however the easement or lease shall run with the land and remain an encumbrance thereon. The State must be allowed access to monitor the NC-CREP conservation easement or lease area.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Amended Eff. December 1, 2006; July 1, 2004;
Transferred from 15A NCAC 06G .0104 Eff. May 1, 2012.

02 NCAC 59F .0105 PAYMENT

(a) The NC-CREP combines federal and state funding to achieve the goals of the program. For that reason, the eligible person may receive two separate payments (i.e. federal and state) to meet expectations set by the applicable contracts.
(b) The State payment shall be dependent on the length of the contract signed. The State payment shall consist of a one-time bonus payment for executed contracts for 30-year and permanent enrollments that require a conservation easement or lease. The State shall also pay a portion of cost-sharable practices implemented within the guidelines of the ACSP subject to availability of funds to the District. Any agricultural cost share payments shall be consistent with all Commission requirements, including those in 02 NCAC 59D .0101-.0108.

(c) For enrollments involving the ACSP, all cost-share practices are subject to terms and policies as set forth in the ACSP rules and best management practices manual. State cost-share percentages, listed below, shall be dependent on the length of enrollment. All payments involving ACSP funds shall require approval of the local District Board of Supervisors, and are subject to the availability of funds to the District.

10 year	25 percent
15 year	30 percent
30 year	40 percent
permanent agreement	50 percent

(d) The maximum one-time bonus payment under NC-CREP that an eligible person can receive shall be limited by the maximum payment allowed under the federal payment. The payment for enrollment of land in 30-year or permanent conservation easements or leases shall be made once the conservation easement or lease is executed by the State and a technical representative has determined that the participant is actively engaged in the applicable practices.
(e) The formula for payment of the one-time State bonus shall be as established in the 2-CRP Manual, subject to the availability of funds.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Amended Eff. December 1, 2006; July 1, 2004;
Transferred from 15A NCAC 06G .0105 Eff. May 1, 2012.

02 NCAC 59F .0106 DISPUTE RESOLUTION

(a) If noncompliance with any CREP agreement is determined, the landowner must return the enrolled area to the condition that meets the guidelines of the CREP upon receiving written notification to do so. The notice, from the appropriate CREP agency, will contain:

(1) a detailed description of the enrolled area;
(2) a description of the area in noncompliance;
(3) recommended measures for repair of the practice; and
(4) a time frame for repair.

Any expense incurred due to the noncompliance of a practice will be the responsibility of the landowner. Landowners are not responsible for repayment of cost-share due to a failure of a practice through no fault of their own.
(b) From the date of the notice of noncompliance, the landowner will be given 30 days to reply in writing to the Division with a plan for repairing the easement area. The Division will work with the landowner to ensure that the plan of repair meets the CREP objectives. Once a plan is approved in writing by the Division, the landowner has 90 days from the date of said approval to complete restoration of the easement area. For vegetative practices, applicants are given one calendar year to re-establish the vegetation. An extension may be granted by the Division if it is determined that compliance cannot be met due to circumstances beyond the landowner's control.
(c) In the event that an easement has been found to be noncompliant and the landowner does not agree to repair or re-implement the cost shared practice, the landowner and the Division may jointly request the Commission to mediate the case as set forth in the NC-CREP contract between the parties. To invoke this method, both parties must stipulate that said mediation is binding.

History Note: *Authority G.S. 106-840; 106-850(a); 139-4;*
Temporary Adoption Eff. October 1, 2000;
Eff. August 1, 2002;
Transferred from 15A NCAC 06G .0106 Eff. May 1, 2012.