Steve Troxler
Commissioner

North Carolina Department of Agriculture
and Consumer Services
Division of Soil and Water Conservation

Patricia K. Harris
Director

Memorandum

TO: Environmental Review Commission

FROM: Patricia K. Harris, Director

Date: January 9, 2017

RE: 2016 Annual Report on the Agricultural Water Resources Assistance Program

This memo transmits the 2016 Annual Report on the Agricultural Water Resources Assistance Program as required by General Statute 139-60. The statute requires the Soil and Water Conservation Commission to provide annual reports to the Environmental Review Commission.

If you have any questions or need additional information, please contact me at (919) 715-6097 or by email at pat.harris@ncagr.gov.

Enclosure

cc: Commissioner Steve Troxler
David Smith
Dr. Richard Reich
Joy Hicks
David Williams
Julie Henshaw

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

AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM
§ 139-60
FISCAL YEAR 2016 ANNUAL REPORT
January 2017

Background

The North Carolina Agricultural Water Resources Assistance Program was authorized through Session Law 2011-145, and became effective on July 1, 2011. This program, referred to as AgWRAP, was established to assist farmers and landowners in doing any one or more of the following:

- Identify opportunities to increase water use efficiency, availability and storage;
- Implement best management practices (BMPs) to conserve and protect water resources;
- Increase water use efficiency;
- Increase water storage and availability for agricultural purposes.

Public benefit of this program is achieved by the following:

- Reducing competition for water resources by public users
- Improving the efficient use of water while enabling the industry to produce food, fiber and other agricultural products
- Preparing the agricultural industry to weather future droughts
- Generating and protecting local jobs in agriculture and agribusiness

AgWRAP is administered by the North Carolina Soil and Water Conservation Commission and implemented through local soil and water conservation districts. The commission meets with stakeholders to gather input on AgWRAP's development and administration through the AgWRAP Review Committee. AgWRAP has received state appropriations as shown in the table below.

Fiscal Year	Appropriated funding
2012	$1,000,000
2013	$500,000
2014	$1,000,000 • $500,000 available statewide • $500,000 limited to counties affected by the Tennessee Valley Authority (TVA) settlement: Avery, Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Swain, Transylvania, Watauga and Yancey counties.
2015	$1,477,500
2016	$977,500

Up to 15% of these funds can be used by the Division of Soil and Water Conservation and districts to provide technical and engineering assistance, and to administer the program.

Since the inception of AgWRAP in FY2012, the Soil and Water Conservation Commission has allocated best management practice funding through a combination approach of competitive applications for specific projects and directly to districts to approve applications locally. In FY2016, the commission conducted a regional application process for agricultural water supply/reuse ponds, agricultural pond repair/retrofits, and agricultural water collection and reuse systems. In addition, the commission

allocated $616,113 to 84 soil and water conservation districts who requested funding for AgWRAP practices. In total, 153 AgWRAP applications were contracted in FY2016.

This report includes a summary of actions taken to achieve the goals the commission adopted for the program in the FY2016 Detailed Implementation Plan. The report includes the following appendices to provide more information about the program:

A. Total number and value of FY2016 contracts by county
B. Map of FY2016 AgWRAP Contracted BMPs
C. FY2016 Detailed Implementation Plan
D. BMP effects table
E. FY2016 Spot Check Report
F. Funding and Compliance Process
G. BMP Photos

Fiscal Year 2016 Annual Goals

I. Conduct a competitive regional application process for selected AgWRAP BMPs: 55% of available BMP funding.

a. Fund projects in each of the division's regions: western, central and eastern.

In FY2016, the commission funded ponds in each region of the state:

- A total of 21 contracts were approved in the western region in FY2016.
  - Agricultural water supply/reuse ponds: 13 contracts
  - Agricultural pond repair/retrofits: 7 contracts
  - Agricultural water collection and reuse system: 1 contract
- A total of 16 contracts were approved in the central region in FY2016:
  - Agricultural water supply/reuse ponds: 6 contracts
  - Agricultural pond repair/retrofits: 9 contracts
  - Agricultural water collection and reuse system: 1 contract
- A total of 7 contracts were approved in the eastern region in FY2016:
  - Agricultural water supply/reuse ponds: 2 contracts
  - Agricultural pond repair/retrofits: 5 contracts

b. Distribute funding for AgWRAP BMPs among the following agricultural sectors identified in the Protecting Agriculture Water Resources in North Carolina Strategic Plan (February 2011): aquaculture, field crops, forestry, fruits and vegetables, green industry, livestock and poultry (and forages and drinking water for same).

In FY2016, the commission approved applications for all agricultural sectors that applied and met the requirements of the AgWRAP program. The sectors that were funded in FY2016 include field crops, fruits and vegetables, green industry, and livestock and poultry operations.

II. Allocate funds to soil and water conservation districts for all other BMPs

a. Award funds to all districts requesting an allocation.

The commission approved funding for the 84 districts that requested a FY2016 AgWRAP allocation on November 18, 2015.

b. Allocate funds to districts from all geographic areas of the state.

The FY2016 AgWRAP allocation provided funds to districts in all geographic areas of the state. Please refer to Appendix A for information about FY2016 AgWRAP contracts by county.

c. Encumber contracts for conservation practices in all agricultural sectors as described above.

FY2016 AgWRAP district contracts were encumbered for projects on field crops, fruits and vegetables, green industry, and livestock and poultry operations. Due to limitations with the cost share database, there is not a way to query whether any contracts were encumbered for forestry or aquaculture operations using district funds.

III. Implement Job Approval Authority Process for AgWRAP BMPs

a. Review job approval category requirements to ensure technical competency.

In FY2016, the commission continued to approve employee requests for the following job approval categories:

- Pond site assessment
- Sediment removal planning and certification
- Water needs assessments

Currently, 24 conservation partnership employees representing 19 districts have obtained job approval authority for one or more of the categories above.

b. Maintain the job approval database.

The Division of Soil and Water Conservation maintains a database including the categories described above. A list of employees with job approval authority is available at: http://www.ncagr.gov/SWC/professional_development/JAA.html

IV. Conduct training for districts

a. Continue to train districts on the program.

The division continued to provide training and support to district employees when reviewing AgWRAP applications, contracts and requests for payments. The division also worked with the AgWRAP Review Committee to clarify BMP policies and develop additional tools for site evaluation and planning practices, as well as forms to aid in the certification of installation of individual practices.

b. Provide technical training for the required skills to plan and implement approved AgWRAP BMPs.

The division provided training and assistance by working directly with district employees when reviewing potential new pond sites, pond repairs sediment removal plans and water collection and reuse systems. The division also hosted and/or supported NRCS in providing specific training on conservation planning, fencing, floodplain management, stream crossings and watering facilities. While some of these practices may not be directly implemented through AgWRAP, they are facilitative practices that may be necessary to support the overall conservation plan for an agriculture operation.

c. Maintain the AgWRAP website

The division continues to maintain the AgWRAP information online for easy access for districts, cooperators and partners. AgWRAP program information including BMP policies can be accessed at: http://www.ncagr.gov/SWC/costshareprograms/AgWRAP/index.html. Practice planning and design tools, including the Water Needs Assessment Tool for NC, are available at: http://www.ncagr.gov/SWC/tech/onlinedesigntools.html.

Appendix A: Total Number and Value of FY2016 Contracts by County

County	Contract Number	Best Management Practice	Amount
Yancey	00-2016-801	Well	$1,380
Yancey	00-2016-802	Well	$3,620
Yancey	00-2016-803	Agricultural Water Supply/Reuse Pond	$20,000
Alamance	01-2016-801	Agricultural Pond Sediment Removal	$5,000
Alexander	02-2016-802	Well	$9,275
Alleghany	03-2016-801	Well	$5,000
Anson	04-2016-501	Well	$4,993
Ashe	05-2016-801	Well	$1,759
Ashe	05-2016-802	Well	$9,423
Avery	06-2016-801	Well	$5,000
Bertie	08-2016-801	Well	$8,153
Bladen	09-2016-801	Well	$11,880
Buncombe	11-2016-801	Streamside Pickup	$2,549
Buncombe	11-2016-802	Agricultural Water Supply/Reuse Pond	$23,999
Buncombe	11-2016-803	Agriculture Pond Repair/Retrofit	$2,500
Buncombe	11-2016-804	Agriculture Pond Repair/Retrofit	$2,933
Burke	12-2016-003	Well	$5,000
Burke	12-2016-801	Agricultural Water Supply/Reuse Pond	$20,000
Burke	12-2016-802	Agricultural Water Supply/Reuse Pond	$20,000
Cabarrus	13-2016-801	Well	$5,000
Caldwell	14-2016-005	Micro-Irrigation System	$5,000
Catawba	18-2016-801	Well	$6,676
Chatham	19-2016-802	Agriculture Pond Repair/Retrofit	$20,000
Chatham	19-2016-803	Well	$6,118
Cherokee	20-2016-801	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$529
Cherokee	20-2016-802	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$723
Cherokee	20-2016-803	Agriculture Pond Repair/Retrofit	$20,000
Cherokee	20-2016-804	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$1,248
Cherokee	20-2016-805	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$672
Cherokee	20-2016-806	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$1,250
Cherokee	20-2016-807	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$578
Chowan	21-2016-800	Agricultural Pond Sediment Removal	$5,000
Clay	22-2016-802	Micro-Irrigation System	$4,619
Clay	22-2016-803	Agriculture Pond Repair/Retrofit	$20,000
Clay	22-2016-804	Agricultural Water Supply/Reuse Pond	$20,000
Cleveland	23-2016-801	Agricultural Water Supply/Reuse Pond	$20,000
Cleveland	23-2016-802	Agricultural Water Supply/Reuse Pond	$20,000
Cleveland	23-2016-803	Agriculture Pond Repair/Retrofit	$20,000
Cleveland	23-2016-805	Agricultural Water Supply/Reuse Pond	$4,000
Cleveland	23-2016-806	Well	$7,099
Cleveland	23-2016-807	Agricultural Water Supply/Reuse Pond	$20,000
Cleveland	23-2016-808	Agricultural Water Supply/Reuse Pond	$20,000
Cleveland	23-2016-809	Agricultural Water Supply/Reuse Pond	$20,000
Columbus	24-2016-801	Well	$7,335
Columbus	24-2016-802	Well	$7,335
Columbus	24-2016-804	Well	$7,335
Columbus	24-2016-805	Well	$7,353
Craven	25-2016-801	Well	$5,000
Cumberland	26-2016-801	Well	$5,263

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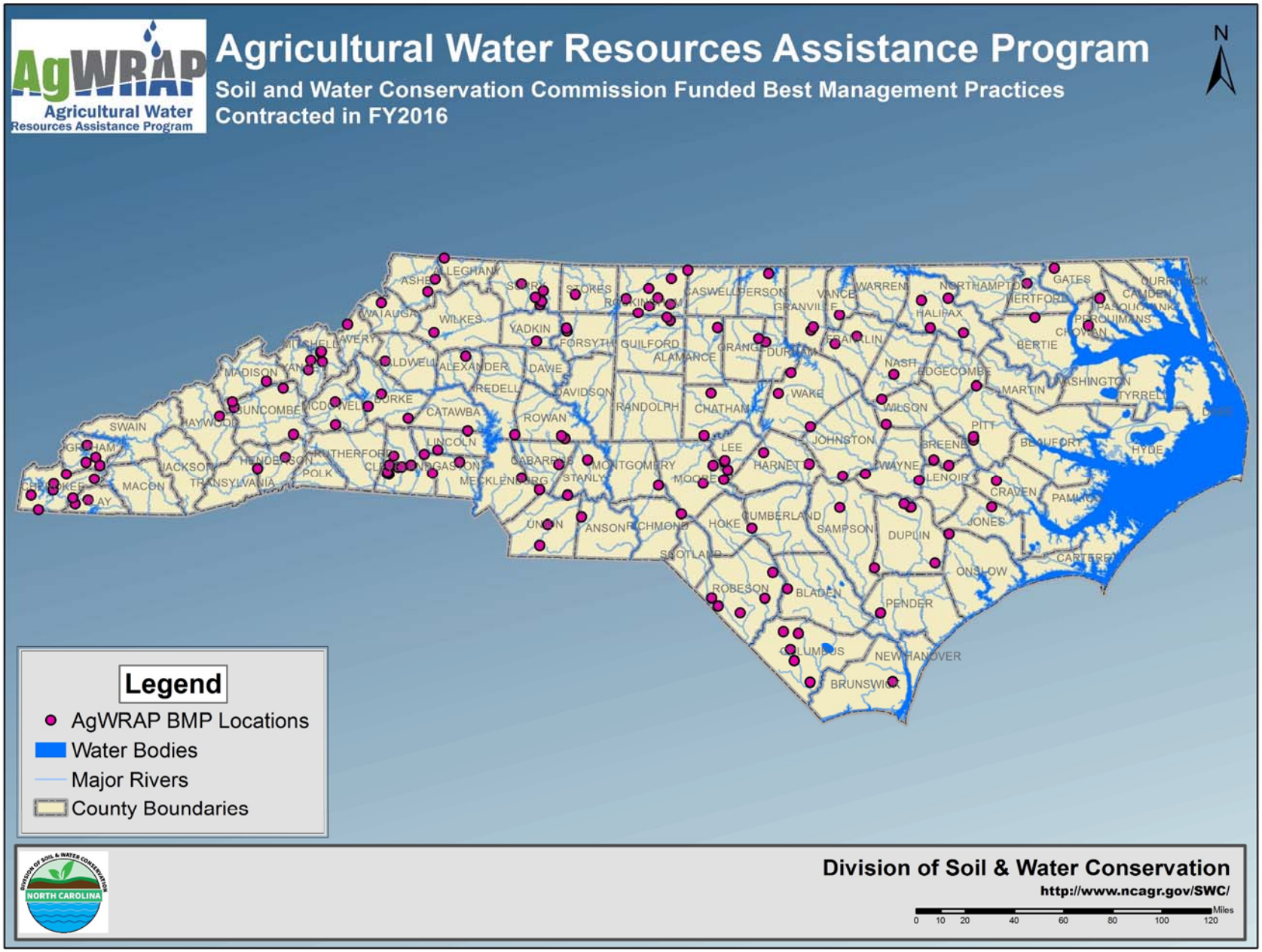
County	Contract Number	Best Management Practice	Amount
Duplin	31-2016-800	Well	$5,000
Duplin	31-2016-801	Well	$5,000
Duplin	31-2016-802	Well	$5,000
Duplin	31-2016-803	Well	$5,000
Duplin	31-2016-804	Well	$5,000
Duplin	31-2016-805	Agriculture Pond Repair/Retrofit	$20,000
Duplin	31-2016-806	Agriculture Pond Repair/Retrofit	$20,000
Durham	32-2016-801	Micro-Irrigation System	$6,089
Durham	32-2016-802	Agricultural Pond Sediment Removal	$3,682
Forsyth	34-2016-801	Well	$11,758
Forsyth	34-2016-802	Well	$12,832
Franklin	35-2016-800	Well	$5,754
Franklin	35-2016-801	Agricultural Water Supply/Reuse Pond	$20,000
Gaston	36-2016-804	Well	$7,187
Gaston	36-2016-805	Agricultural Water Supply/Reuse Pond	$23,999
Gaston	36-2016-806	Agricultural Water Supply/Reuse Pond	$24,000
Gates	37-2016-004	Agriculture Pond Repair/Retrofit	$5,000
Graham	38-2016-801	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$1,250
Graham	38-2016-802	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$1,250
Graham	38-2016-803	Micro-Irrigation System	$1,250
Graham	38-2016-804	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	$1,250
Granville	39-2016-101	Agricultural Pond Sediment Removal	$3,000
Granville	39-2016-102	Agricultural Pond Sediment Removal	$3,000
Greene	40-2016-801	Agriculture Pond Repair/Retrofit	$20,000
Guilford	41-2016-801	Well	$5,710
Guilford	41-2016-802	Well	$5,709
Halifax	42-2016-811	Well	$6,903
Halifax	42-2016-813	Agriculture Pond Repair/Retrofit	$20,000
Halifax	42-2016-814	Agricultural Water Supply/Reuse Pond	$20,000
Halifax	42-2016-816	Agriculture Pond Repair/Retrofit	$20,000
Harnett	43-2016-803	Well	$4,026
Harnett	43-2016-804	Well	$4,026
Haywood	44-2016-801	Agriculture Pond Repair/Retrofit	$12,157
Henderson	45-2016-801	Well	$5,000
Henderson	45-2016-802	Agriculture Pond Repair/Retrofit	$20,000
Hertford	46-2016-800	Agriculture Pond Repair/Retrofit	$5,000
Iredell	49-2016-801	Well	$9,000
Johnston	51-2016-803	Agriculture Pond Repair/Retrofit	$16,007
Jones	52-2016-801	Agricultural Pond Sediment Removal	$1,000
Jones	52-2016-801	Well	$4,000
Lee	53-2016-801	Agriculture Pond Repair/Retrofit	$20,000
Lee	53-2016-802	Agricultural Pond Sediment Removal	$3,000
Lee	53-2016-803	Well	$7,538
Lenoir	54-2016-801	Agricultural Water Supply/Reuse Pond	$23,999
Lincoln	55-2016-812	Well	$7,936
Madison	57-2016-801	Well	$5,000
McDowell	59-2016-801	Well	$2,295
McDowell	59-2016-803	Agricultural Pond Sediment Removal	$2,705
Mecklenburg	60-2015-007	Well	$570

Appendix A: Total Number and Value of FY2016 Contracts by County

County	Contract Number	Best Management Practice	Amount
Mecklenburg	60-2015-007	Well	$7,111
Mecklenburg	60-2016-003	Well	$570
Mecklenburg	60-2016-004	Agricultural Pond Sediment Removal	$10,001
Mitchell	61-2016-801	Well	$1,024
Mitchell	61-2016-802	Well	$3,976
Montgomery	62-2016-801	Ag Water Collection System	$18,000
Montgomery	62-2016-802	Micro-Irrigation System	$4,973
Moore	63-2016-801	Agricultural Water Supply/Reuse Pond	$20,000
Moore	63-2016-803	Agricultural Water Supply/Reuse Pond	$20,000
Moore	63-2016-804	Agricultural Pond Sediment Removal	$2,238
Moore	63-2016-805	Agricultural Pond Sediment Removal	$3,737
Nash	64-2016-801	Agriculture Pond Repair/Retrofit	$9,482
Onslow	67-2016-801	Well	$5,240
Orange	68-2016-801	Well	$3,500
Pender	71-2016-801	Well	$4,470
Pender	71-2016-802	Well	$2,897
Perquimans	72-2016-800	Conservation Irrigation Conversion	$9,788
Person	73-2016-801	Agricultural Pond Sediment Removal	$5,000
Pitt	74-2016-801	Well	$5,450
Pitt	74-2016-802	Well	$3,259
Robeson	78-2016-801	Well	$5,000
Robeson	78-2016-802	Well	$4,126
Robeson	78-2016-803	Well	$4,763
Robeson	78-2016-804	Well	$4,463
Robeson	78-2016-805	Well	$5,000
Rockingham	79-2016-801	Well	$9,474
Rockingham	79-2016-802	Agriculture Pond Repair/Retrofit	$27,500
Rockingham	79-2016-803	Agriculture Pond Repair/Retrofit	$27,500
Rockingham	79-2016-806	Agriculture Pond Repair/Retrofit	$27,498
Rockingham	79-2016-807	Well	$9,263
Rockingham	79-2016-808	Well	$10,763
Rowan	80-2016-004	Well	$9,303
Rowan	80-2016-005	Agricultural Water Supply/Reuse Pond	$20,000
Sampson	82-2016-801	Agricultural Water Supply/Reuse Pond	$20,000
Stanly	84-2016-801	Agricultural Pond Sediment Removal	$5,000
Stanly	84-2016-802	Agricultural Water Supply/Reuse Pond	$27,500
Stokes	85-2016-802	Well	$5,199
Surry	86-2016-008	Well	$9,083
Surry	86-2016-009	Well	$8,409
Surry	86-2016-011	Well	$12,700
Surry	86-2016-012	Well	$9,200
Surry	86-2016-013	Well	$10,958
Surry	86-2016-014	Well	$10,958
Union	90-2016-801	Well	$9,013
Union	90-2016-802	Well	$3,913
Vance	91-2016-801	Agricultural Pond Sediment Removal	$5,000
Wake	92-2016-800	Well	$3,235
Wake	92-2016-801	Agricultural Pond Sediment Removal	$13,336
Watauga	95-2016-801	Well	$2,615

Appendix A: Total Number and Value of FY2016 Contracts by County

County	Contract Number	Best Management Practice	Amount
Wayne	96-2016-801	Well	$6,435
Wayne	96-2016-802	Well	$5,303
Wilkes	97-2016-801	Ag Water Collection System	$10,884
Wilson	98-2016-801	Agricultural Pond Sediment Removal	$2,000
Wilson	98-2016-802	Well	$2,025
Yadkin	99-2016-009	Well	$5,697


AgWRAP
Agricultural Water
Resources Assistance Program
Agricultural Water Resources Assistance Program
Soil and Water Conservation Commission Funded Best Management Practices
Contracted in FY2016
N
Legend
AgWRAP BMP Locations
Water Bodies
Major Rivers
County Boundaries
Division of Soil & Water Conservation
http://www.ncagr.gov/SWC/
0 10 20 40 60 80 100 120
Miles

Fiscal Year 2016 Detailed Implementation Plan
September 2015

Background

The North Carolina Agricultural Water Resources Assistance Program was authorized through Session Law 2011-145, and became effective on July 1, 2011. This program, herein referred to as AgWRAP, was established to assist farmers and landowners in doing any one or more of the following:

- Identify opportunities to increase water use efficiency, availability and storage;
- Implement best management practices (BMPs) to conserve and protect water resources;
- Increase water use efficiency;
- Increase water storage and availability for agricultural purposes.

AgWRAP is administered by the North Carolina Soil and Water Conservation Commission and implemented through local soil and water conservation districts. The commission meets with stakeholders to gather input on AgWRAP's development and administration through the AgWRAP Review Committee. AgWRAP has received the following state appropriations:

- FY2012: $1,000,000
- FY2013: $500,000
- FY2014: $1,000,000; $500,000 available statewide, $500,000 limited to counties affected by the Tennessee Valley Authority (TVA) settlement: Avery, Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Swain, Transylvania, Watauga and Yancey counties.
- FY2015: $1,477,500
- FY2016: $977,500 *(draft state budget)*

Up to 15% of these funds can be used by the Division of Soil and Water Conservation and districts to provide technical and engineering assistance, and to administer the program.

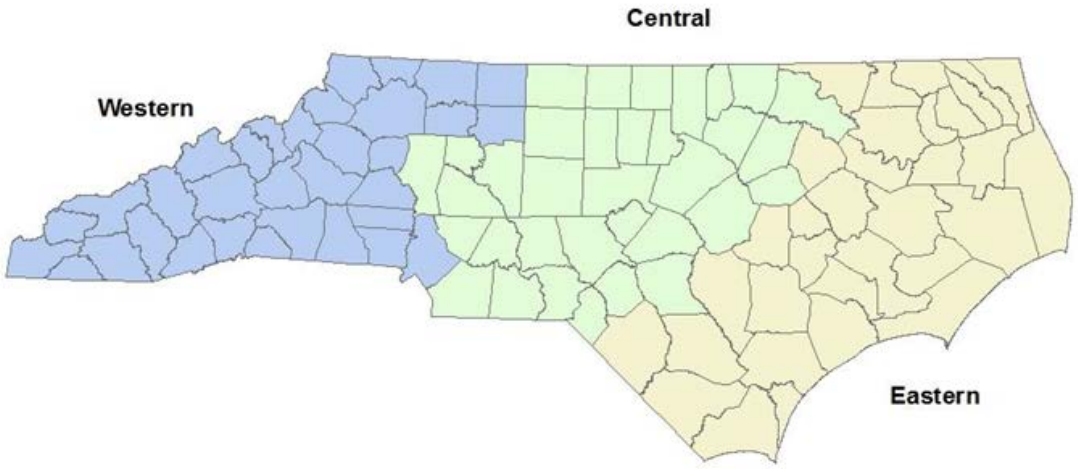
Fiscal Year 2016 Allocation Strategy

Due to the high cost of some of the program's eligible best management practices, and the limited funding for the program, the Commission will award two allocations for AgWRAP.

1. **Competitive regional application process for agricultural water supply/reuse ponds, agricultural pond repair/retrofits, and agricultural water collection and reuse systems: 55% of available BMP funding.**

The regions, as depicted in Figure 1, will be eligible to receive 1/3 of the amount of funds in the regional pool. Applications will be approved using the same ranking criteria for each region. Should a region not have sufficient applications to fund, the commission will allocate the remaining funds by approving applications in other regions, funding applications by highest score.

Figure 1: Regions for AgWRAP allocations



2. **District allocations for all AgWRAP best management practices: 45% of available BMP funding.**
    a. Allocations will be made to all districts requesting funds in their FY2016 Strategy Plan.
    b. Allocation parameters are as follows:

Parameter	Percent
Number of farms (total operations): Census of Agriculture	20%
Total acres of land in farms (includes the sum of all cropland, woodland pastured, permanent pasture (excluding cropland and woodland), plus farmstead/ponds/lvstk bldg): Census of Agriculture	20%
Market Value of Sales: Census of Agriculture	10%
Agricultural Water Use: NCDA&CS Agricultural Statistics Division, 3 year average of most recent NC Water Use Published Survey Data	20%
Population Density: State Demographics NC, Office of State Budget and Management, latest certified data available	30%

Conservation plan requirement

All approved AgWRAP applications must have a completed conservation plan prior to contract approval or the district requesting design assistance from division engineering staff. The commission is requiring this plan, which is the cooperator's record of decisions, to help districts evaluate water supply resource concerns including inadequate water for livestock, inefficient water use for irrigation and/or inefficient moisture management. Conservation plans will ensure that alternative practices are considered and that the recommended practices address the identified resource concerns to maintain AgWRAP BMPs through their contract life.

Program Guidelines

AgWRAP will be implemented using a pilot approach for this fifth year. Rule drafting is currently underway, and all commission cost share program rules will begin the adoption process this year.

The agricultural water definition, from Protecting Agriculture Water Resources in North Carolina Strategic Plan (February 2011) will be used to determine eligibility for AgWRAP.

> *Agricultural water is considered to be any water on farms, from surface or subsurface sources, that is used in the production, maintenance, protection or on-farm preparation or treatment of agriculture commodities or products as necessary to grow and/or prepare them for on-farm use or transfer into any form of trade as is normally done with agricultural plant or animal commerce.* This expressly includes any on-farm cleaning or processing to make the agricultural product ready for sale or other transfer to any consumer in a usable form. It does not include water used in the manufacture or extended processing of plants or animals or their products when the processor is not the grower or producer and/or is beyond the first handler of the farm product.

All eligible operations must have been in existence for more than one year, and expansions to existing operations are eligible for the program.

The percent cost share for all BMPs is 75%. Limited resource and beginning farmers and farmers enrolled in Enhanced Voluntary Agriculture Districts are eligible to receive 90% cost share. The contract maintenance period of the majority of practices is 10 years.

Soil and water conservation districts can adopt additional guidelines for the program as they implement AgWRAP locally.

Fiscal Year 2016 Annual Goals

I. Conduct a competitive regional allocation process for selected AgWRAP BMPs.
   a. Fund projects in each of the division's regions: western, central and eastern.
   b. Distribute funding for BMPs among the following agricultural sectors identified in the Protecting Agriculture Water Resources in North Carolina Strategic Plan (February 2011): aquaculture, field crops, forestry, fruit and vegetable, green industry, livestock and poultry (and forages and drinking water for same).

II. Allocate funds to soil and water conservation districts for all other BMPs
   a. Award funds to all districts requesting an allocation.
   b. Allocate funds to districts from all geographic areas of the state.
   c. Encumber contracts for conservation practices in all agricultural sectors as described above.

III. Continue to implement Job Approval Authority Process for AgWRAP BMPs
   a. Review job approval category requirements to ensure technical competency.
   b. Maintain the job approval database.

IV. Conduct training for districts
   a. Continue to train districts on the program.
   b. Provide technical training for the required skills to plan and implement approved AgWRAP BMPs.
   c. Maintain the AgWRAP website (http://www.ncagr.gov/swc/agwrap.htm) with all relevant information.

Best Management Practices

Additional practices may be adopted by the Soil and Water Conservation Commission and introduced during the program year.

(1) Agricultural water supply/reuse pond: Construct agricultural ponds for water supply for irrigation or livestock watering. Benefits may include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields. The minimum life expectancy is 10 years.

(2) Agricultural pond repair/retrofit: Repair or retrofit of existing agricultural pond systems. Benefits may include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields. The minimum life expectancy is 10 years.

(3) Agricultural pond sediment removal**:** Remove sediment from existing agricultural ponds to increase water storage capacity. Benefits may include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields. The minimum life expectancy is 1 year. Cooperators are ineligible to reapply for assistance for this practice for a period of 10 years; unless the sedimentation is occurring due to no fault of the cooperator.

(4) Agricultural water collection and reuse system: Construct an agricultural water management and/or collection system for water reuse or irrigation for agricultural operations. These systems may include any of the following: water storage tanks, pumps, water control structures, and/or water conveyances. Benefits may include reduced demand on the water supply by reuse and decrease withdrawal from existing water supplies. The minimum life expectancy is 10 years.

(5) Baseflow interceptor (streamside pickup): Improve springs and seeps alongside a stream, near the banks, but not in the channel by excavating, cleaning, capping to collect and/or store water for agricultural use. The minimum life expectancy is 10 years.

(6) Conservation Irrigation Conversion: Modify an existing overhead spray irrigation system to increase the efficiency and uniformity of irrigation water application. The minimum life expectancy is 10 years.

(7) Micro-irrigation System: Install an environmentally safe system for the conveyance and distribution of water, chemicals and fertilizer to agricultural fields for crop production. Replace and/or reduce other types of irrigation and fertilization with a micro-irrigation system for frequent application of small quantities of water on or below the soil surface: as drops, tiny streams or miniature spray through emitters or applicators placed along a water delivery line. This practice may be applied as part of a conservation management system to efficiently and uniformly apply irrigation water and maintain soil moisture for plant growth. The minimum life expectancy is 10 years.

(8) Well: Construct a drilled, driven or dug well to supply water from an underground source for irrigation, livestock and poultry, aquaculture, or on-farm processing. The minimum life expectancy is 10 years.

NC AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM
WATER QUANTITY IMPROVEMENT/PROTECTION PURPOSES OF APPROVED BMPs

BMP	Gallons of agricultural water storage increase	Gallons of agricultural water storage protected	Acres irrigated or number of animals watered	Life of BMP (yrs.)
Agricultural water supply/reuse pond	√	-	√	10
Agricultural pond repair/retrofit	√	√	√	10
Agricultural pond sediment removal	√	√	-	1
Conservation irrigation conversion	-	-	-	10
Micro-irrigation system		-	-	10
Well	-	-	√	10

NORTH CAROLINA AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM
SPOT CHECK REPORT SUMMARY FY2016

DISTRICTS	PARTICIPATING SUPERVISORS	VISITS	Total # CPOs	PERCENT VISITED	IN COMPLIANCE	OUT OF COMPLIANCE	MAINTENANCE NEEDED
ALAMANCE	4	2	8	25.0%	2	0	1
ALEXANDER	2	0	0	0.0%	0	0	0
ALLEGHANY	4	1	1	100.0%	1	0	0
ANSON (BROWN CREEK)	1	1	1	100.0%	1	0	0
ASHE (NEW RIVER)	2	1	3	33.3%	1	0	0
AVERY	2	1	1	100.0%	1	0	0
BEAUFORT	5	1	1	100.0%	1	0	0
BERTIE	1	1	1	100.0%	1	0	0
BLADEN	1	0	0	0.0%	0	0	0
BRUNSWICK	2	0	0	0.0%	0	0	0
BUNCOMBE	3	4	5	80.0%	4	0	1
BURKE	3	1	1	100.0%	1	0	0
CABARRUS	2	1	1	100.0%	1	0	0
CALDWELL	5	0	0	0.0%	0	0	0
CAMDEN (ALBEMARLE)	3	0	0	0.0%	0	0	0
CARTERET	2	0	0	0.0%	0	0	0
CASWELL	1	0	0	0.0%	0	0	0
CATAWBA	2	1	1	100.0%	1	0	0
CHATHAM	2	1	1	100.0%	1	0	0
CHEROKEE	2	2	16	12.5%	2	0	0
CHOWAN (ALBEMARLE)	3	1	1	100.0%	1	0	0
CLAY	3	1	4	25.0%	1	0	0
CLEVELAND	2	5	5	100.0%	4	1	0
COLUMBUS	2	1	1	100.0%	1	0	0
CRAVEN	1	0	0	0.0%	0	0	0
CUMBERLAND	3	0	0	0.0%	0	0	0
CURRITUCK (ALBEMARLE)	3	0	0	0.0%	0	0	0
DAVIDSON	1	1	1	100.0%	1	0	0
DAVIE	2	0	0	0.0%	0	0	0
DUPLIN	2	5	22	22.7%	5	0	0
DURHAM	1	2	3	66.7%	2	0	0
EDGECOMBE	1	1	1	100.0%	1	0	0
FORSYTH	2	0	0	0.0%	0	0	0
FRANKLIN	3	1	2	50.0%	1	0	0
GASTON	2	1	1	100.0%	1	0	0
GATES	4	1	1	100.0%	1	0	0
GRAHAM	1	1	1	100.0%	1	0	0
GRANVILLE	1	0	0	0.0%	0	0	0
GREENE	2	0	0	0.0%	0	0	0
GUILFORD	5	1	5	20.0%	1	0	0
HALIFAX (FISHING CREEK)	1	1	7	14.3%	1	0	1
HARNETT	4	1	2	50.0%	1	0	0
HAYWOOD	2	1	2	50.0%	1	0	1
HENDERSON	2	1	2	50.0%	1	0	0
HERTFORD	1	3	5	60.0%	3	0	1
HOKE	1	2	2	100.0%	2	0	0
HYDE	5	0	0	0.0%	0	0	0
IREDELL	2	1	1	100.0%	1	0	0
JACKSON	1	1	1	100.0%	1	0	0
JOHNSTON	3	1	3	33.3%	1	0	0
JONES	2	1	1	100.0%	1	0	0
LEE	4	0	0	0.0%	0	0	0

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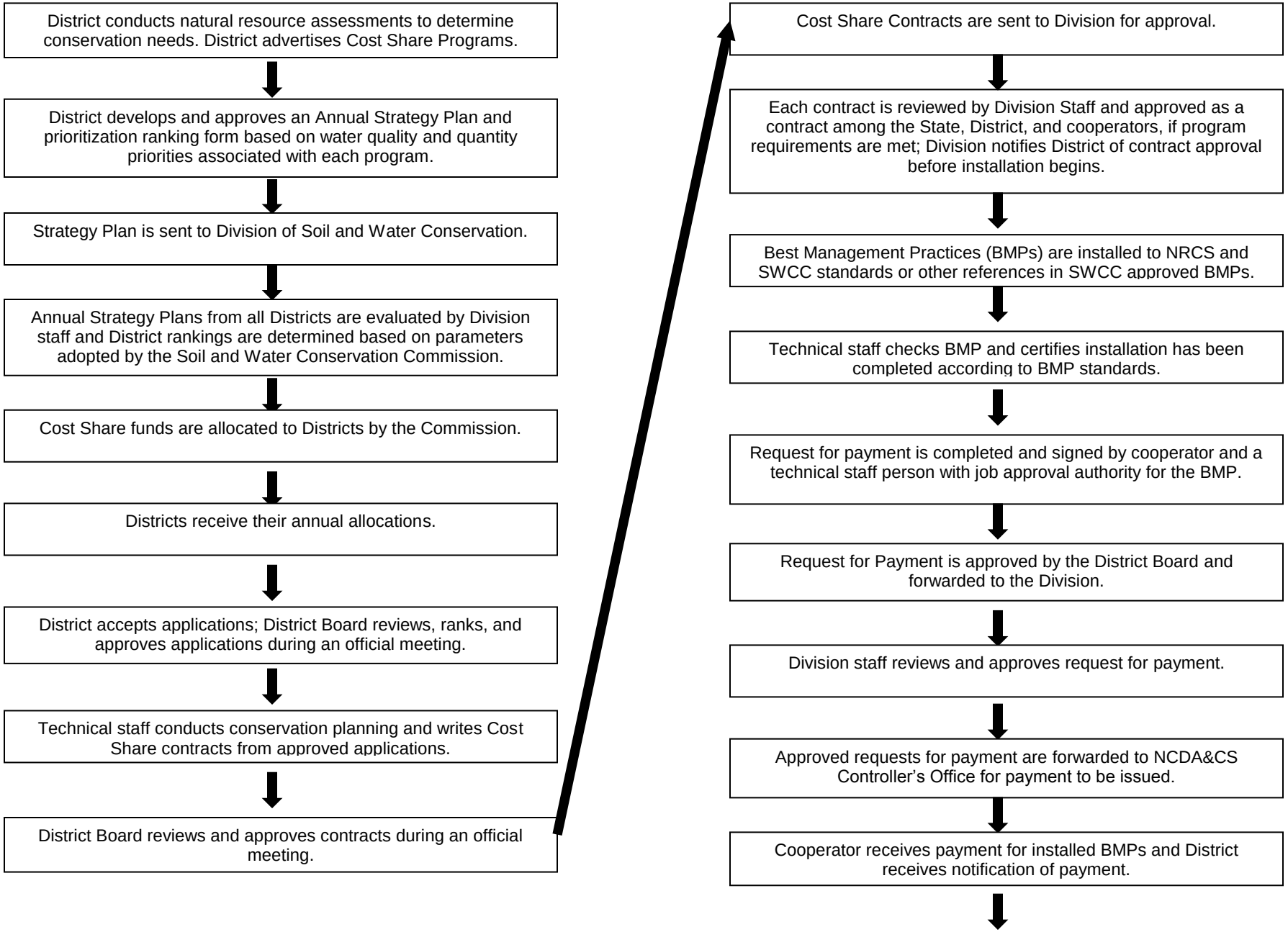
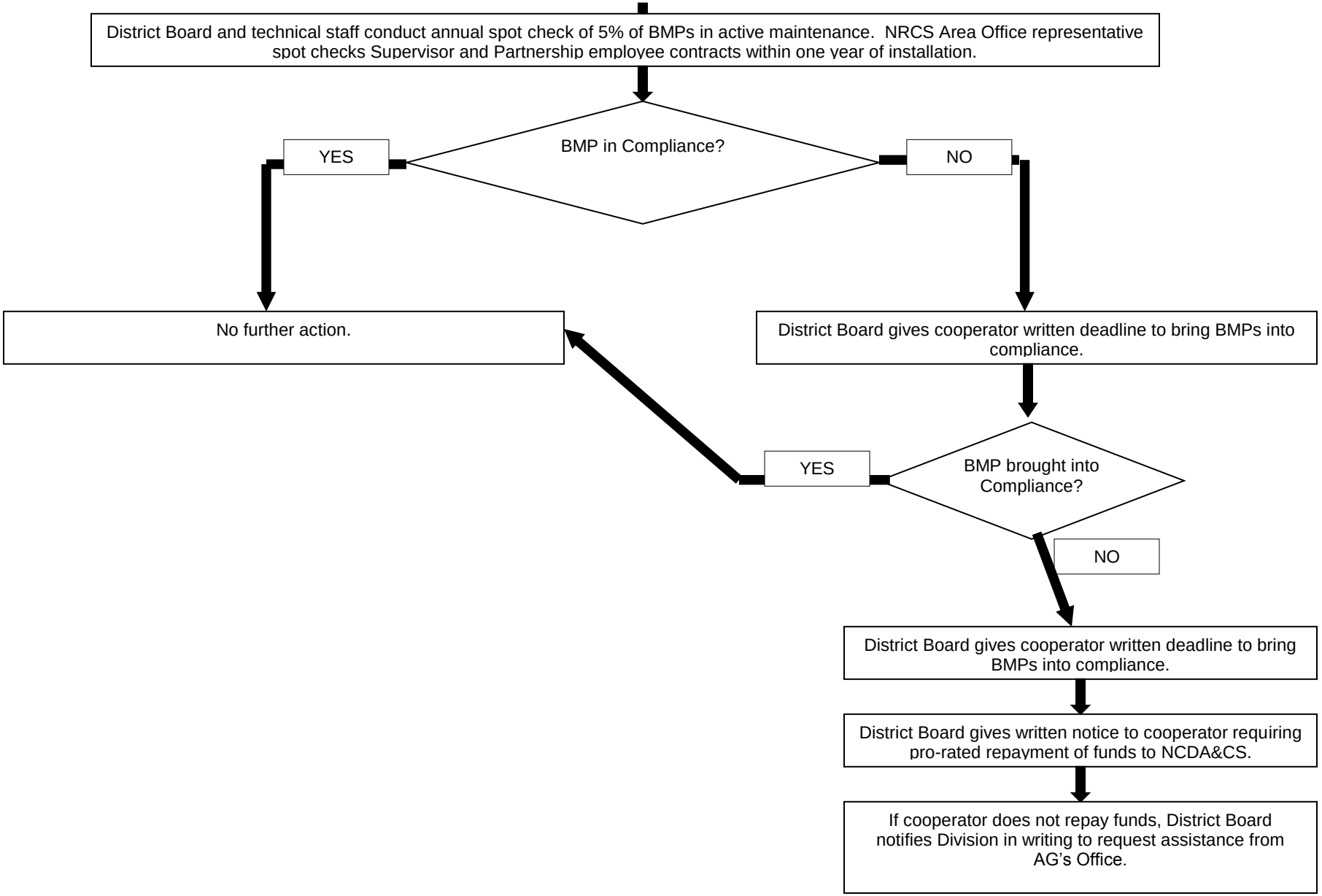
LENOIR	3	0	0	0.0%	0	0	0
LINCOLN	2	5	5	100.0%	5	0	0
MACON	1	0	0	0.0%	0	0	0
MADISON	2	1	3	33.3%	1	0	0
MARTIN	2	0	0	0.0%	0	0	0
MCDOWELL	1	1	1	100.0%	1	0	0
MECKLENBURG	3	1	1	100.0%	1	0	0
MITCHELL	3	2	3	66.7%	2	0	0
MONTGOMERY	1	0	0	0.0%	0	0	0
MOORE	2	5	5	100.0%	5	0	0
NASH	3	0	0	0.0%	0	0	0
NEW HANOVER	1	0	0	0.0%	0	0	0
NORTHAMPTON	1	0	0	0.0%	0	0	0
ONSLOW	3	0	0	0.0%	0	0	0
ORANGE	1	1	1	100.0%	1	0	0
PAMLICO	1	0	0	0.0%	0	0	0
PASQUOTANK (ALBEMARLE)	3	1	1	100.0%	1	0	0
PENDER	2	0	0	0.0%	0	0	0
PERQUIMANS (ALBEMARLE)	3	1	1	100.0%	1	0	0
PERSON	3	1	1	100.0%	1	0	0
PITT	3	1	1	100.0%	1	0	0
POLK	3	2	2	100.0%	2	0	0
RANDOLPH	2	2	2	100.0%	2	0	0
RICHMOND	3	0	0	0.0%	0	0	0
ROBESON	2	1	9	11.1%	1	0	0
ROCKINGHAM	3	1	1	100.0%	1	0	0
ROWAN	1	1	2	50.0%	1	0	0
RUTHERFORD	1	1	1	100.0%	1	0	0
SAMPSON	3	3	9	33.3%	3	0	0
SCOTLAND	1	0	0	0.0%	0	0	0
STANLY	3	1	1	100.0%	1	0	0
STOKES	5	1	2	50.0%	1	0	0
SURRY	4	1	5	20.0%	1	0	0
SWAIN	4	1	1	100.0%	1	0	0
TRANSYLVANIA	2	1	1	100.0%	1	0	0
TYRRELL	2	0	0	0.0%	0	0	0
UNION	1	1	2	50.0%	1	0	0
VANCE	2	0	0	0.0%	0	0	0
WAKE	5	1	2	50.0%	1	0	0
WARREN	1	1	1	100.0%	1	0	0
WASHINGTON	1	0	0	0.0%	0	0	0
WATAUGA	2	0	0	0.0%	0	0	0
WAYNE	3	0	0	0.0%	0	0	0
WILKES	5	1	2	50.0%	1	0	0
WILSON	5	1	1	100.0%	1	0	0
YADKIN	5	3	3	100.0%	3	0	0
YANCEY	1	1	3	33.3%	1	0	0
TOTALS	**235**	**98**	**188**	**52.1%**	**97**	**1**	**5**
					99.0%	**1.0%**	**5.1%**

Cost Share Programs

Funding and Compliance Process




District Board and technical staff conduct annual spot check of 5% of BMPs in active maintenance. NRCS Area Office representative spot checks Supervisor and Partnership employee contracts within one year of installation.
BMP in Compliance?
YES
NO
No further action.
District Board gives cooperator written deadline to bring BMPs into compliance.
YES
BMP brought into Compliance?
NO
District Board gives cooperator written deadline to bring BMPs into compliance.
District Board gives written notice to cooperator requiring pro-rated repayment of funds to NCDA&CS.
If cooperator does not repay funds, District Board notifies Division in writing to request assistance from AG's Office.

AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM
Pictures of selected practices

Irrigation well

Agricultural water supply/reuse pond

Agricultural pond sediment removal