



**AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM**  
**§ 139-60**  
**FISCAL YEAR 2015 ANNUAL REPORT**  
**January 2016**

**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.

<b>Fiscal Year</b>	<b>Appropriated funding</b>
2012	\$1,000,000
2013	\$500,000
2014	\$1,000,000 <ul style="list-style-type: none"> <li>• \$500,000 available statewide</li> <li>• \$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.</li> </ul>
2015	\$1,477,500

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 FY2015, the commission conducted a regional application process for agricultural water supply ponds and agricultural pond repair/retrofits. In addition, the commission allocated \$662,169 to 76 soil and water conservation districts who requested funding for AgWRAP practices. In total, 134 AgWRAP applications were contracted in FY2015.

This report includes a summary of actions taken to achieve the goals the commission adopted for the program in the FY2015 Detailed Implementation Plan. The report includes the following appendices to provide more information about the program:

- A. Total number and value of FY2015 contracts by county
- B. Map of FY2015 AgWRAP Contracted BMPs
- C. FY2015 Detailed Implementation Plan
- D. BMP effects table
- E. FY2015 Spot Check Report
- F. Funding and Compliance Process
- G. BMP Photos

## **Fiscal Year 2015 Annual Goals**

### **I. Conduct a competitive regional application process for new pond construction and pond repair/retrofits: 55% of available BMP funding.**

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

In FY2015, the commission funded ponds in each region of the state:

- A total of 14 contracts were approved in the western region in FY2015.
  - Agricultural water supply/reuse ponds: 7 contracts
  - Agricultural pond repair/retrofits: 7 contracts
- A total of 5 contracts were approved in the central region in FY2015:
  - Agricultural water supply/reuse ponds: 3 contracts
  - Agricultural pond repair/retrofits: 2 contracts
- A total of 15 contracts were approved in the eastern region in FY2015:
  - Agricultural water supply/reuse ponds: 5 contracts
  - Agricultural pond repair/retrofits: 10 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 FY2015, the commission approved applications for all agricultural sectors that applied and met the requirements of the AgWRAP program. The sectors that were funded in FY2015 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 76 districts that requested a FY2015 AgWRAP allocation on September 17, 2014.

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

The FY2015 AgWRAP allocation provided funds to districts in all geographic areas of the state. Please refer to Appendix A for information about PY2015 AgWRAP contracts by county.

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

FY2015 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. Revise job approval category requirements to ensure technical competency.*

In FY2015, the commission continued to approve employee requests for the following job approval categories:

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

To date, 27 conservation partnership employees representing 20 districts have obtained job approval authority for one or more of the categories above.

- b. Provide training for district employees to earn job approval.*

In FY2015, the division focused on AgWRAP related trainings during the Conservation Employee Training in Greenville in August 2014. Applicable trainings sessions included:

- An intensive, two-day pond design training
- Basic survey training using levels
- Pond sediment removal
- AgWRAP conservation planning

- c. 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](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 by working directly with district employees when reviewing potential new pond sites, pond repairs and sediment removal plans. 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.

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

As described in III.b., the division focused many of the training sessions offered during the Conservation Employee Training in FY2015 on building district capacity to plan and implement AgWRAP BMPs. Details on the applicable trainings can be found below.

- Pond design training: This two-day training session covered both embankment pond and excavated pond designs, as well as requirements for a farm-pond-dam design including surveys, soils and spillway design. There was also an overview of NRCS WinPond Software. Participants had the opportunity to size spillway systems, estimate earthfill/excavation volumes, review construction plans, construction checks and as-built survey requirements. 13.5 hours of Certified Conservation Planner credits were offered for participation in this training which was sponsored by the Environmental Enhancement Grant Program, funded by the 2000 Smithfield Foods Agreement with the NC Attorney General and the NC Foundation for Soil and Water Conservation.
- Basic survey training using levels: This training focused on surveying with an engineer's level or a laser levels. Topics included: field book format and use, setting a level, peg checks, surveying a profile, cross-section, closed loop/traverse and a small grid survey, reducing notes and checking closure (accuracy).
- Pond sediment removal: This hands-on demonstration of the recommended method to estimate/measure the sediment to be removed from a farm. Participants measured the depth of sediment, reviewed estimating side slopes, set up a grid survey of the pool area, and calculated the sediment to be removed.
- AgWRAP conservation planning: This training provided participants with interactive activities regarding conservation planning policies and how they relate to eligible AgWRAP best management practices. Topics included conservation planning policies, programmatic changes to preliminary site assessments, identifying resource concerns, writing a good narrative and the fundamentals of conservation planning.

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 described above, are available at: <http://www.ncagr.gov/SWC/tech/onlinedesigntools.html>.

Appendix A: Total Number and Value of FY2015 Contracts by County

<b>County</b>	<b>Contract Number</b>	<b>Best Management Practice</b>	<b>Amount</b>
ANSON	04-2015-201	Well	\$4,997
ASHE	05-2015-801	Well	\$6,673
AVERY	06-2015-801	Agriculture Pond Repair/Retrofit	\$20,000
BEAUFORT	07-2015-779	Well	\$5,654
BUNCOMBE	11-2015-801	Well	\$6,176
BUNCOMBE	11-2015-802	Well	\$4,430
BUNCOMBE	11-2015-803	Agricultural Water Supply/Reuse Pond	\$23,999
BURKE	12-2015-004	Well	\$5,000
CHATHAM	19-2015-803	Well	\$7,877
CHEROKEE	20-2015-801	Agricultural Water Supply/Reuse Pond	\$20,000
CHEROKEE	20-2015-802	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	\$1,250
CHEROKEE	20-2015-803	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	\$1,250
CHEROKEE	20-2015-804	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	\$1,250
CHEROKEE	20-2015-805	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	\$1,250
CHOWAN	21-2015-800	Agricultural Pond Sediment Removal	\$5,000
CLAY	22-2015-801	Micro-Irrigation System	\$4,998
CLAY	22-2015-802	Agricultural Water Supply/Reuse Pond	\$20,000
CLEVELAND	23-2015-801	Micro-Irrigation System	\$2,394
CLEVELAND	23-2015-801	Well	\$6,680
COLUMBUS	24-2015-801	Agriculture Pond Repair/Retrofit	\$15,000
CRAVEN	25-2015-802	Well	\$5,000
CUMBERLAND	26-2015-801	Well	\$6,388
DUPLIN	31-2015-801	Well	\$3,000
DUPLIN	31-2015-802	Well	\$3,000
DUPLIN	31-2015-803	Well	\$3,000
DUPLIN	31-2015-804	Well	\$3,000
DUPLIN	31-2015-805	Well	\$3,000
DUPLIN	31-2015-806	Well	\$3,000
DUPLIN	31-2015-807	Well	\$3,000
DUPLIN	31-2015-808	Well	\$3,000
DUPLIN	31-2015-809	Well	\$3,000
DURHAM	32-2015-801	Agricultural Water Supply/Reuse Pond	\$32,999
DURHAM	32-2015-802	Agricultural Pond Sediment Removal	\$10,000
FORSYTH	34-2015-801	Agricultural Water Supply/Reuse Pond	\$20,000
FORSYTH	34-2015-802	Agricultural Water Supply/Reuse Pond	\$20,000
FORSYTH	34-2015-803	Well	\$13,297
FRANKLIN	35-2015-800	Agricultural Pond Sediment Removal	\$781
FRANKLIN	35-2015-801	Agricultural Pond Sediment Removal	\$5,000
FRANKLIN	35-2015-802	Well	\$2,415

Appendix A: Total Number and Value of FY2015 Contracts by County

<b>County</b>	<b>Contract Number</b>	<b>Best Management Practice</b>	<b>Amount</b>
GASTON	36-2015-804	Well	\$9,371
GATES	37-2015-003	Agriculture Pond Repair/Retrofit	\$20,000
GATES	37-2015-004	Agriculture Pond Repair/Retrofit	\$5,000
GUILFORD	41-2015-801	Well	\$4,174
GUILFORD	41-2015-802	Well	\$4,187
GUILFORD	41-2015-803	Agricultural Water Supply/Reuse Pond	\$2,591
HALIFAX	42-2015-011	Agriculture Pond Repair/Retrofit	\$20,000
HALIFAX	42-2015-812	Agriculture Pond Repair/Retrofit	\$20,000
HALIFAX	42-2015-813	Agriculture Pond Repair/Retrofit	\$20,000
HALIFAX	42-2015-814	Agriculture Pond Repair/Retrofit	\$20,000
HALIFAX	42-2015-815	Agricultural Pond Sediment Removal	\$5,000
HAYWOOD	44-2015-801	Agriculture Pond Repair/Retrofit	\$20,000
HAYWOOD	44-2015-802	Agricultural Pond Sediment Removal	\$5,000
HAYWOOD	44-2015-803	Agriculture Pond Repair/Retrofit	\$24,000
HENDERSON	45-2015-801	Agriculture Pond Repair/Retrofit	\$20,000
HENDERSON	45-2015-802	Well	\$6,901
HERTFORD	46-2015-800	Agriculture Pond Repair/Retrofit	\$20,000
HOKE	47-2015-801	Well	\$2,484
HOKE	47-2015-802	Well	\$2,514
IREDELL	49-2015-801	Well	\$8,892
JOHNSTON	51-2015-801	Well	\$6,000
JOHNSTON	51-2015-802	Well	\$6,000
JOHNSTON	51-2015-804	Well	\$6,000
JONES	52-2015-801	Well	\$5,000
LINCOLN	55-2015-809	Agricultural Water Supply/Reuse Pond	\$12,285
LINCOLN	55-2015-810	Agricultural Water Supply/Reuse Pond	\$23,999
LINCOLN	55-2015-811	Well	\$7,845
MACON	56-2015-801	Agricultural Pond Sediment Removal	\$20,000
MADISON	57-2015-801	Agricultural Pond Sediment Removal	\$2,500
MADISON	57-2015-802	Well	\$2,500
MCDOWELL	59-2015-801	Well	\$5,000
MECKLENBURG	60-2015-005	Well	\$7,538
MECKLENBURG	60-2015-006	Well	\$7,538
MECKLENBURG	60-2015-007	Well	\$7,111
MITCHELL	61-2015-801	Well	\$5,000
MONTGOMERY	62-2015-001	Well	\$4,995
MOORE	63-2015-801	Agriculture Pond Repair/Retrofit	\$20,000
MOORE	63-2015-802	Agriculture Pond Repair/Retrofit	\$20,000
MOORE	63-2015-803	Agricultural Pond Sediment Removal	\$1,762
MOORE	63-2015-804	Agricultural Pond Sediment Removal	\$3,000
MOORE	63-2015-805	Agricultural Pond Sediment Removal	\$3,000
NASH	64-2015-801	Agricultural Pond Sediment Removal	\$5,000
NASH	64-2015-802	Agricultural Pond Sediment Removal	\$9,400

Appendix A: Total Number and Value of FY2015 Contracts by County

County	Contract Number	Best Management Practice	Amount
ONslow	67-2015-801	Agricultural Pond Sediment Removal	\$5,000
ORANGE	68-2015-801	Agricultural Pond Sediment Removal	\$33,000
ORANGE	68-2015-802	Agricultural Pond Sediment Removal	\$4,105
ORANGE	68-2015-803	Well	\$3,500
PENDER	71-2015-802	Agricultural Water Supply/Reuse Pond	\$20,964
PENDER	71-2015-802	Agriculture Pond Repair/Retrofit	\$3,036
PENDER	71-2015-803	Agricultural Pond Sediment Removal	\$6,000
PERSON	73-2015-023	Agricultural Pond Sediment Removal	\$5,000
PITT	74-2015-801	Agriculture Pond Repair/Retrofit	\$12,332
PITT	74-2015-802	Agricultural Water Supply/Reuse Pond	\$20,000
PITT	74-2015-803	Agricultural Water Supply/Reuse Pond	\$20,000
PITT	74-2015-804	Agriculture Pond Repair/Retrofit	\$7,668
RANDOLPH	76-2015-801	Well	\$5,175
RANDOLPH	76-2015-801	District BMP- Micro-Irrigation System for Greenhouse/High Tunnel	\$1,963
RANDOLPH	76-2015-802	Micro-Irrigation System	\$1,398
RICHMOND	77-2015-006	Well	\$5,168
ROBESON	78-2015-801	Well	\$3,526
ROBESON	78-2015-802	Well	\$5,000
ROBESON	78-2015-803	Well	\$3,976
ROBESON	78-2015-804	Well	\$3,976
ROBESON	78-2015-805	Well	\$4,223
ROBESON	78-2015-806	Well	\$2,700
ROCKINGHAM	79-2015-016	Well	\$9,740
ROWAN	80-2015-004	Well	\$6,133
ROWAN	80-2015-005	Well	\$6,118
RUTHERFORD	81-2015-600	Agricultural Water Supply/Reuse Pond	\$20,000
RUTHERFORD	81-2015-601	Well	\$4,974
SAMPSON	82-2015-801	Agricultural Water Supply/Reuse Pond	\$20,000
SAMPSON	82-2015-802	Agriculture Pond Repair/Retrofit	\$20,000
SAMPSON	82-2015-803	Agricultural Water Supply/Reuse Pond	\$20,000
SAMPSON	82-2015-805	Agricultural Water Supply/Reuse Pond	\$20,000
SAMPSON	82-2015-806	Well	\$3,960
STANLY	84-2015-801	Agricultural Pond Sediment Removal	\$5,000
STANLY	84-2015-802	Agricultural Water Supply/Reuse Pond	\$27,500
STOKES	85-2015-801	Well	\$4,116
SURRY	86-2015-901	Micro-Irrigation System	\$9,365
UNION	90-2015-802	Agricultural Pond Sediment Removal	\$5,000
UNION	90-2015-803	Well	\$8,513
WAKE	92-2015-801	Well	\$11,025
WAKE	92-2015-802	Agricultural Pond Sediment Removal	\$6,000
WAKE	92-2015-803	Well	\$6,800
WATAUGA	95-2015-801	Well	\$5,010

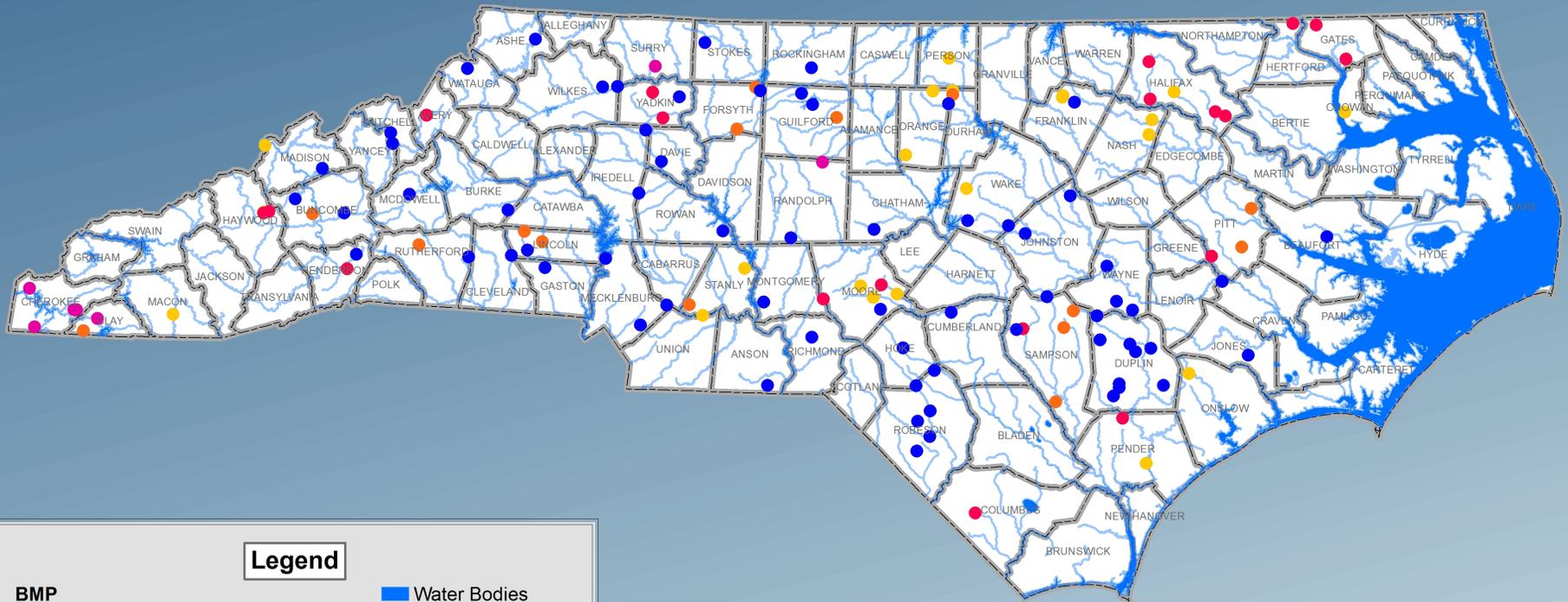
Appendix A: Total Number and Value of FY2015 Contracts by County

<b>County</b>	<b>Contract Number</b>	<b>Best Management Practice</b>	<b>Amount</b>
WAYNE	96-2015-801	Well	\$5,100
WAYNE	96-2015-802	Well	\$6,120
WAYNE	96-2015-803	Well	\$3,677
WILKES	97-2015-801	Well	\$4,151
WILKES	97-2015-802	Well	\$4,150
YADKIN	99-2015-005	Well	\$7,289
YADKIN	99-2015-801	Agriculture Pond Repair/Retrofit	\$20,000
YADKIN	99-2015-802	Agriculture Pond Repair/Retrofit	\$20,000
YANCEY	00-2015-801	Well	\$5,000



# Agricultural Water Resources Assistance Program BMPs

Soil and Water Conservation Commission Funded Best Management Practices  
Contracted from July 1, 2014 through June 30, 2015



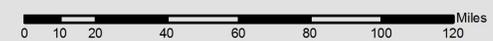
### Legend

- |  |  |
|--|--|
| <b>BMP</b>   | <span style="color: blue;">■</span> Water Bodies   |
| <span style="color: yellow;">●</span> Agricultural Pond Sediment Removal   | <span style="color: blue;">—</span> Major Rivers   |
| <span style="color: orange;">●</span> Agricultural Water Supply/Reuse Pond | <span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> County Boundaries |
| <span style="color: red;">●</span> Agriculture Pond Repair/Retrofit        |  |
| <span style="color: magenta;">●</span> Micro-Irrigation System             |  |
| <span style="color: blue;">●</span> Well                                   |  |

Points represent approximate BMP locations based on the latitude and longitude provided by the local soil and water conservation districts. This data represents 134 BMPs contracted in FY2015.



**Division of Soil & Water Conservation**  
<http://www.ncagr.gov/SWC/>



**THE NORTH CAROLINA AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM (AgWRAP)**  
**Fiscal Year 2015 Detailed Implementation Plan**  
**September 2014**

**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

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 2015 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 new pond construction and pond repair/retrofits: 55% of available BMP funding.**
  - a. The regions, as depicted in Figure 1, will be eligible to receive 1/3 of the amount of funds in the regional pool.
  - b. Applications will be approved using the same ranking criteria for each region.
  - c. 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: 45% of available BMP funding.**

- a. Allocations will be made to all districts requesting funds in their PY2015 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 fourth year. Rule drafting is currently underway.

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 2015 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. Implement Job Approval Authority Process for AgWRAP BMPs
  - a. Revise job approval category requirements to ensure technical competency.
  - b. Provide training for district employees to earn job approval.
  - c. 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, 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**

<b>BMP</b>	<b>Gallons of agricultural water storage increase</b>	<b>Gallons of agricultural water storage protected</b>	<b>Acres irrigated or number of animals watered</b>	<b>Life of BMP (yrs.)</b>
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

Appendix E: FY2015 AgWRAP Spot Check Report

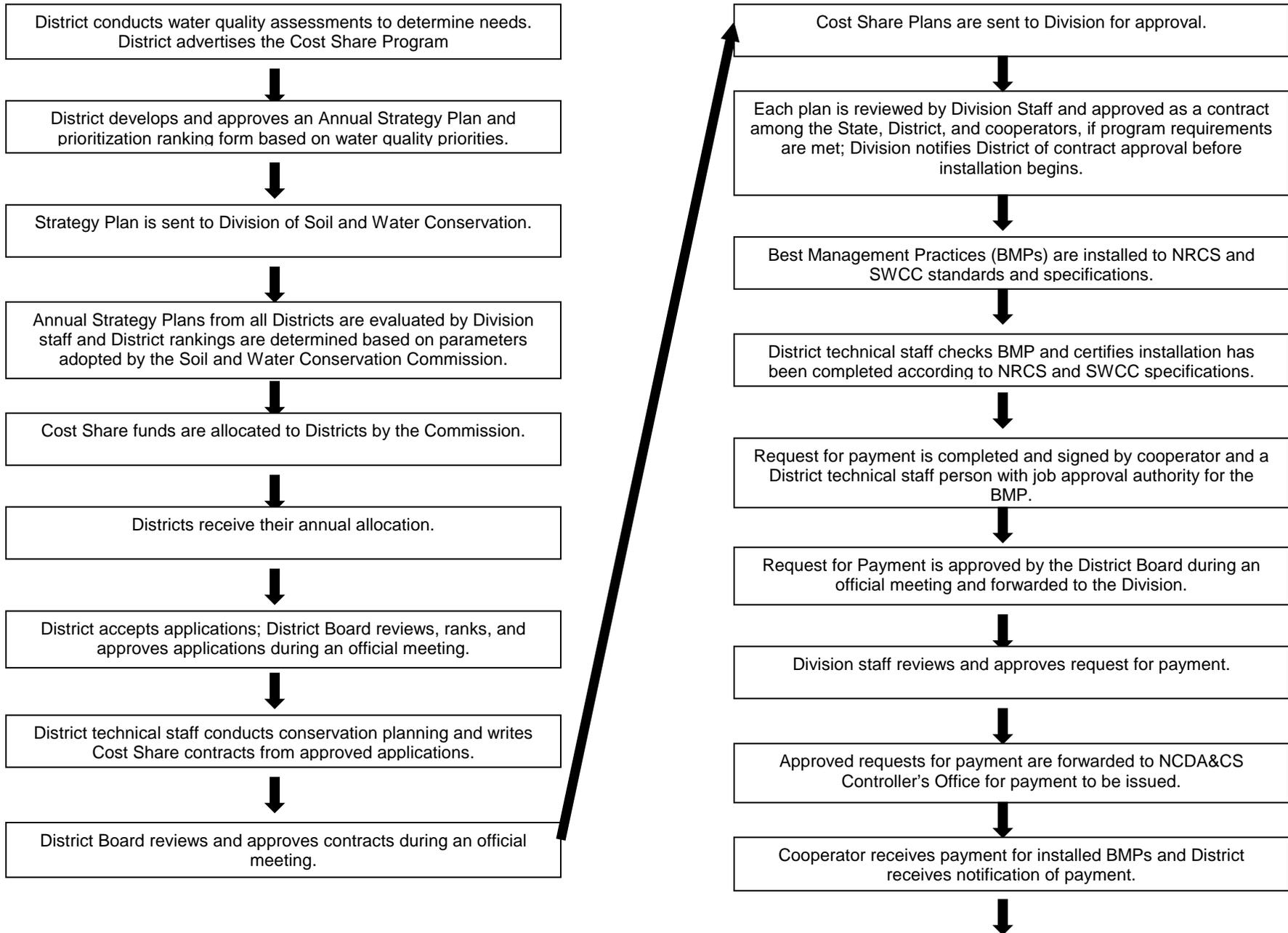
DISTRICTS	PARTICIPATING SUPERVISORS	VISITS	Total # CPOs	PERCENT VISITED	IN COMPLIANCE	OUT OF COMPLIANCE	MAINTENANCE NEEDED
ALAMANCE	4	2	2	100.0%	2	0	1
ALEXANDER	0	0	0	0.0%	0	0	0
ALLEGHANY	4	1	1	100.0%	1	0	0
ANSON (BROWN CREEK)	0	0	0	0.0%	0	0	0
ASHE (NEW RIVER)	4	2	2	100.0%	2	0	0
AVERY	1	1	1	100.0%	1	0	0
BEAUFORT	5	1	1	100.0%	1	0	0
BERTIE	0	0	0	0.0%	0	0	0
BLADEN	0	0	0	0.0%	0	0	0
BRUNSWICK	0	0	0	0.0%	0	0	0
BUNCOMBE	1	1	2	50.0%	1	0	0
BURKE	0	0	0	0.0%	0	0	0
CABARRUS	2	1	1	100.0%	1	0	0
CALDWELL	0	0	0	0.0%	0	0	0
CAMDEN (ALBEMARLE)	0	0	0	0.0%	0	0	0
CARTERET	0	0	0	0.0%	0	0	0
CASWELL	0	0	0	0.0%	0	0	0
CATAWBA	4	1	1	100.0%	1	0	0
CHATHAM	2	1	1	100.0%	1	0	0
CHEROKEE	0	0	0	0.0%	0	0	0
CHOWAN (ALBEMARLE)	0	0	0	0.0%	0	0	0
CLAY	4	1	1	100.0%	1	0	0
CLEVELAND	2	3	3	100.0%	3	0	1
COLUMBUS	1	1	1	100.0%	1	0	0
CRAVEN	0	0	0	0.0%	0	0	0
CUMBERLAND	0	0	0	0.0%	0	0	0
CURRITUCK (ALBEMARLE)	0	0	0	0.0%	0	0	0
DAVIDSON	2	1	1	100.0%	1	0	0
DAVIE	0	0	0	0.0%	0	0	0
DUPLIN	1	4	19	21.1%	4	0	0
DURHAM	3	1	2	50.0%	1	0	0
EDGECOMBE	2	1	1	100.0%	1	0	0
FORSYTH	0	0	0	0.0%	0	0	0
FRANKLIN	0	0	0	0.0%	0	0	0
GASTON	2	1	1	100.0%	1	0	0
GATES	4	1	1	100.0%	1	0	0
GRAHAM	2	1	1	100.0%	1	0	0
GRANVILLE	0	0	0	0.0%	0	0	0
GREENE	0	0	0	0.0%	0	0	0
GUILFORD	5	1	2	50.0%	1	0	0
HALIFAX (FISHING CREEK)	0	0	0	0.0%	0	0	0
HARNETT	5	1	2	50.0%	1	0	0
HAYWOOD	2	1	1	100.0%	1	0	0
HENDERSON	1	1	1	100.0%	1	0	0
HERTFORD	1	1	1	100.0%	1	0	0
HOKE	0	0	0	0.0%	0	0	0
HYDE	0	0	0	0.0%	0	0	0
IREDELL	0	0	0	0.0%	0	0	0
JACKSON	2	1	1	100.0%	1	0	0
JOHNSTON	3	3	3	100.0%	3	0	0
JONES	2	1	1	100.0%	1	0	1
LEE	0	0	0	0.0%	0	0	0

Appendix E: FY2015 AgWRAP Spot Check Report

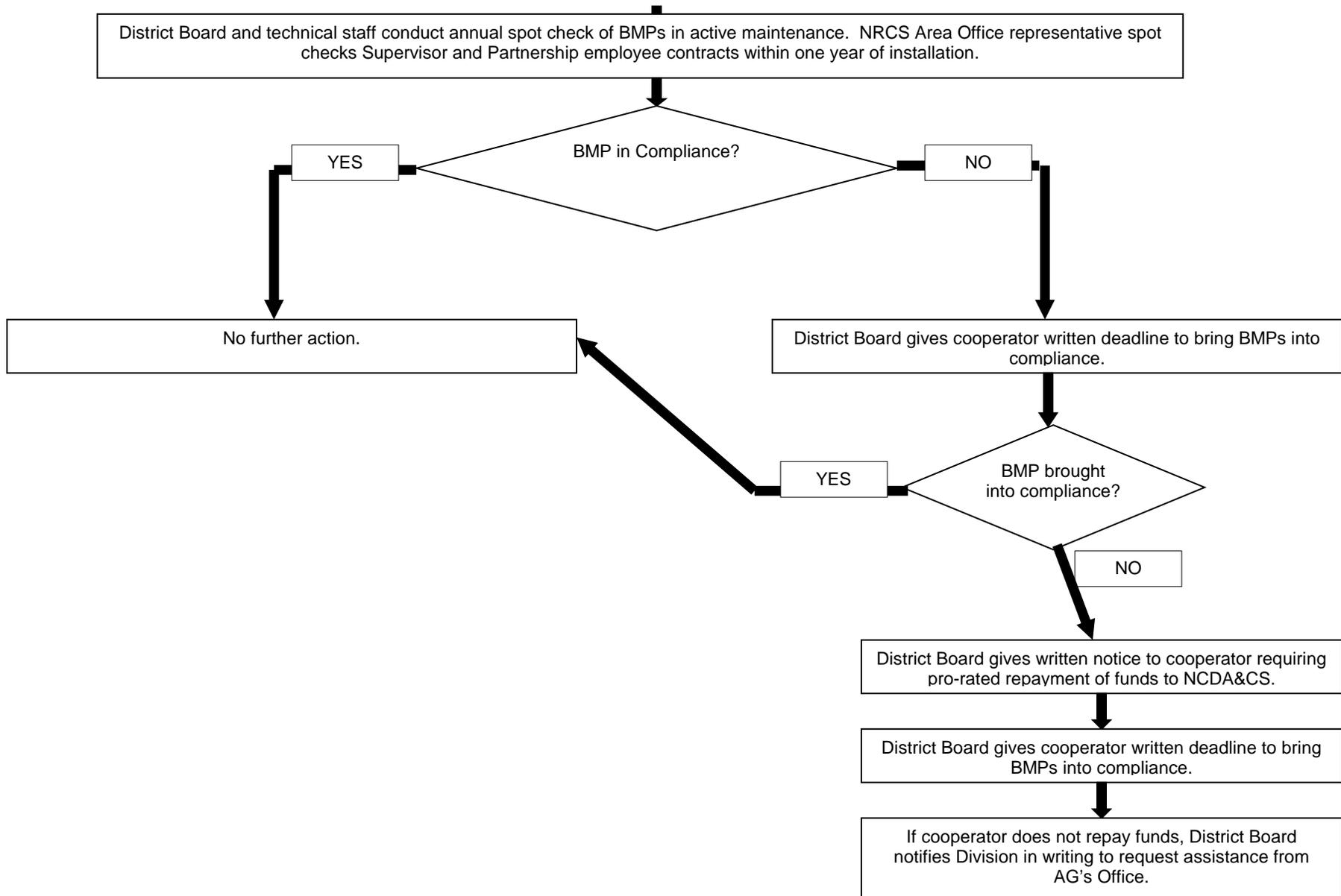
DISTRICTS	PARTICIPATING SUPERVISORS	VISITS	Total # CPOs	PERCENT VISITED	IN COMPLIANCE	OUT OF COMPLIANCE	MAINTENANCE NEEDED
LENOIR	2	2	2	100.0%	2	0	0
LINCOLN	2	6	7	85.7%	6	0	0
MACON	1	0	0	0.0%	0	0	0
MADISON	1	1	1	100.0%	1	0	0
MARTIN	0	0	0	0.0%	0	0	0
MCDOWELL	0	0	0	0.0%	0	0	0
MECKLENBURG	0	0	0	0.0%	0	0	0
MITCHELL	3	1	1	100.0%	1	0	0
MONTGOMERY	0	0	0	0.0%	0	0	0
MOORE	2	3	3	100.0%	3	0	0
NASH	4	1	2	50.0%	1	0	0
NEW HANOVER	0	0	0	0.0%	0	0	0
NORTHAMPTON	0	0	0	0.0%	0	0	0
ONslow	0	0	0	0.0%	0	0	0
ORANGE	0	0	0	0.0%	0	0	0
PAMLICO	0	0	0	0.0%	0	0	0
PASQUOTANK (ALBEMARLE)	4	1	1	100.0%	1	0	0
PENDER	0	0	0	0.0%	0	0	0
PERQUIMANS (ALBEMARLE)	3	2	2	100.0%	2	0	0
PERSON	0	0	0	0.0%	0	0	0
PITT	2	1	1	100.0%	1	0	0
POLK	2	1	1	100.0%	1	0	0
RANDOLPH	0	0	0	0.0%	0	0	0
RICHMOND	0	0	0	0.0%	0	0	0
ROBESON	2	1	2	50.0%	1	0	0
ROCKINGHAM	2	1	1	100.0%	1	0	0
ROWAN	1	1	1	100.0%	1	0	0
RUTHERFORD	0	0	0	0.0%	0	0	0
SAMPSON	2	1	9	11.1%	1	0	0
SCOTLAND	0	0	0	0.0%	0	0	0
STANLY	0	0	0	0.0%	0	0	0
STOKES	4	1	2	50.0%	1	0	0
SURRY	4	1	2	50.0%	1	0	0
SWAIN	3	1	1	100.0%	1	0	0
TRANSYLVANIA	1	1	1	100.0%	1	0	0
TYRRELL	0	0	0	0.0%	0	0	0
UNION	2	1	2	50.0%	1	0	0
VANCE	0	0	0	0.0%	0	0	0
WAKE	4	2	2	100.0%	2	0	0
WARREN	1	1	1	100.0%	1	0	0
WASHINGTON	0	0	0	0.0%	0	0	0
WATAUGA	0	0	0	0.0%	0	0	0
WAYNE	2	1	2	50.0%	1	0	0
WILKES	5	1	2	50.0%	1	0	0
WILSON	5	1	1	100.0%	1	0	0
YADKIN	2	2	2	100.0%	2	0	0
YANCEY	1	1	1	100.0%	1	0	0
TOTALS	<b>138</b>	<b>73</b>	<b>108</b>	<b>67.6%</b>	<b>73</b>	<b>0</b>	<b>3</b>
					<b>100.0%</b>	<b>0.0%</b>	<b>4.1%</b>

Appendix F: Funding and Compliance Process

**Cost Share Program**  
Funding and Compliance Process



Appendix F: Funding and Compliance Process



**AGRICULTURAL WATER RESOURCES ASSISTANCE PROGRAM**  
**Pictures of selected practices**



Irrigation well



Agricultural water supply/reuse pond



Agricultural pond sediment removal