
**THE NORTH CAROLINA GENERAL ASSEMBLY
LEGISLATIVE STUDY COMMISSION ON
WATER AND WASTEWATER INFRASTRUCTURE**

***DESIGN OF A NORTH CAROLINA AGRICULTURE
WATER RESOURCES ASSISTANCE PROGRAM
(AgWRAP)***

November 1, 2010

North Carolina Department of Agriculture & Consumer Services
North Carolina Department of Environment and Natural Resources
Division of Soil and Water Conservation

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II. INTRODUCTION AND PROGRAM OBJECTIVES

Session Law 2010-149 (H1748) directs the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) and the Department of Environment and Natural Resources (DENR) to jointly design a cost-share program to:

- Provide technical and financial support to farmers and agricultural landowners who want to implement best management practices that conserve water,
- Increase the efficiency of private water use, and
- Increase the water storage capacity of agricultural lands.

In addition, NCDA&CS and NCDENR are directed to submit a report to the Legislative Study Commission on Water and Wastewater Infrastructure by November 1, 2010 regarding the design of the proposed cost-share program, as well as estimated program costs, proposed methodology and timeframe for program implementation, possible sources of funding and any legislative changes needed to implement the program.

III. STRATEGIC PLANNING PROCESS AND UPDATE

In the fall of 2009, the NC Foundation for Soil and Water Conservation secured a \$100,000 grant from the Altria Corporation to develop a strategic plan for protecting agricultural water resources in North Carolina. To accomplish this objective, a 14-member Agriculture Water Work Group was convened in January 2010. Members are:

1. Co-Chairman Steve Troxler, Commissioner of Agriculture, NCDA&CS
2. Co-Chairman Larry Wooten, President, NC Farm Bureau Federation
3. Dr. Bill H. Davis, Jr., President, NC Foundation of Soil & Water Conservation
4. Mr. James Ferguson, President, NC Association of Soil & Water Conservation Districts
5. Mr. J.B. Martin Jr., State Conservationist, Natural Resources Conservation Service
6. Ms. Pat Harris, Director, Division of Soil & Water Conservation, DENR
7. Dr. Robert Evans, Professor and Department Head, Department of Biological & Agricultural Engineering, NC State University
8. Dr. Louis Jackai, Professor and Chairman, Department of Natural Resources & Environmental Design, NC A&T State University
9. Mr. Jimmy Gentry, President, NC State Grange
10. Mr. Buddy Murrow, Second Vice President, NC Green Industry Council
11. Mr. Kraig Westerbeek, President, NC Irrigation Society
12. Ms. Deborah Johnson, CEO, NC Pork Council
13. Mr. Robert Ford, Executive Director, NC Poultry Federation
14. Mr. Bryan Blinson, Executive Director, NC Cattlemen's Association

Outside facilitator, the Eastern Leadership Group, LLC, has met monthly with the Agriculture Water Work Group and solicited input from over 100 agricultural commodity groups, private organizations and governmental agencies to help shape this comprehensive strategic plan and approach to agricultural water resources protection.

For the plan, 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 normally done with agricultural plant or animal commerce.

At this time “*The Strategic Plan for Protecting Agricultural Water Resources in North Carolina*” is draft and nearing completion. NCDA&CS and DENR staff intends to utilize this comprehensive plan as the basis for the Agriculture Water Resources Assistance Program (AgWRAP).

IV. PROGRAM DELIVERY

- **Soil and Water Conservation Districts (SWCD) will function as the primary delivery mechanism for AgWRAP.**

Established in 1937 and organized under the provisions of General Statute Chapter 139, a Soil and Water Conservation District “is a governmental subdivision of the state and public body corporate and politic.” SWCDs are responsible at the local level for coordinating and carrying out local natural resources conservation programs for the working lands of North Carolina. There are 96 SWCDs governed by 492 elected and appointed district supervisors, covering all 100 counties in North Carolina. Each SWCD has an established relationship with its local county government; state government through the Division of the Soil & Water Conservation - NC Department of Environment and Natural Resources; and federal government through the Natural Resources Conservation Service - US Department of Agriculture as formalized through Memoranda of Agreement and Operational Agreements.

Throughout G.S.139-8 *Powers of Districts and Supervisors*, it states SWCDs are authorized to carry out various duties for “the conservation, utilization and disposal of water, and the development of water resources.” SWCDs have been very successful in providing leadership and administering voluntary, incentive-driven, locally-led initiatives and programs such as the NC Agriculture Cost Share Program for Nonpoint Source Pollution Control (G.S. 143-215.74) and the Community Conservation Assistance Program (G.S. 143-215.74M).

Soil and Water Conservation Districts are the logical choice for local program delivery as there is an existing statewide infrastructure in place to deliver conservation programs, as well as existing technical and administrative expertise necessary for successful program delivery.

V. PROGRAM OVERSIGHT

- **The Soil and Water Conservation Commission (SWCC) and North Carolina Board of Agriculture will work cooperatively to provide program oversight.**
- **A Program Advisory Committee will provide input on program development and implementation.**

S.L. 2010-149 directs NCDA&CS and DENR to jointly design a cost-share program to provide technical and financial support to farmers and agricultural landowners who want to implement best management practices for water resource development and conservation. The Departments propose a 3-pronged approach involving a program Advisory Committee, the NC Board of Agriculture and the NC Soil and Water Conservation Commission. The AgWRAP Advisory Committee, comprised of the existing Agriculture Water Workgroup, will provide direct input into program development and implementation. Responsibilities of each party are briefly described below:

- Advisory Committee:
 - Develop an annual draft plan of work to establish program priorities.
 - Identify water resource needs and potential funding sources.
 - Identify and evaluate potential best management practices for program implementation.
 - Provide recommendations for improving program implementation to the NC Board of Agriculture and NC Soil and Water Conservation Commission.
- NC Board of Agriculture:
 - Jointly approve the annual plan of work.
 - Seek funding sources for program implementation.
 - Monitor program success through feedback from various agricultural sectors.
 - Work with the NC Soil and Water Conservation Commission and the Advisory Committee to address specific concerns.
- NC Soil and Water Conservation Commission:
 - Jointly approve the annual plan of work.
 - Implement the program through SWCDs.
 - Assimilate data and report program results.
 - Address specific concerns in conjunction with the NC Board of Agriculture and the Advisory Committee.

VI. TECHNICAL ASSISTANCE

- **Adequate technical assistance is essential for program success.**
- **AgWRAP must have flexibility to utilize technical assistance from a variety of sources.**

AgWRAP cannot be successful without adequate technical assistance. Technical assistance involves one-on-one assistance with landowners to evaluate resource needs, and to provide planning, design, construction oversight, and technical verification of the installed best management practice(s).

An overall technical assistance strategy must include additional resources for SWCDs, and other state and federal agencies. AgWRAP must also include a mechanism and funding for the use of private engineering firms and certified irrigation designers.

VII. POTENTIAL PROGRAM PRACTICES

- **Program practices shall have agricultural water resource development as the primary purpose.**

The following is a partial list of potential practices that should be considered for AgWRAP assistance:

1. Water use audits
2. Wells for livestock watering and crop irrigation
3. Farm pond construction
4. Farm pond renovation
5. Cisterns
6. Irrigation efficiency improvements
7. Livestock watering efficiency improvements
8. Water re-use practices including reclaimed water
9. Other practices as identified and recommended by the AgWRAP Advisory Committee

VIII. PROGRAM COST

- **\$10,000,000 per year**

For the 2008-09 drought response initiative, the Division surveyed districts to assess potential demand for cost share assistance for drought-related practices. Nearly 3,600 farmers submitted requests of approximately \$32 million for drought relief funds. Of this total amount, districts received nearly \$14 million in requests for pond construction and renovation, well construction and renovation, and irrigation efficiency improvement.

A more recent September 2010 survey projects potential demand for cost-sharing for water quantity practices. Through the survey, local SWCDs provided an estimate for the current number of potential applicants, funding needed for specific practices, and for local technical assistance. Results indicated a potential current demand of over \$37.4 million for AgWRAP cost-share for practice implementation. Technical assistance and operating costs are estimated to be approximately \$4.3 million annually for local SWCDs and the Division of Soil and Water Conservation. This estimate does not include additional costs for technical assistance to be provided by the private sector or other governmental agencies.

The existing drought response initiative, results of the Agricultural Water Workgroup's strategic plan, and the recent survey of SWCDs all provide indicators of potential resource needs and associated costs. Assuming a five year planning and implementation period, an estimated cost of \$10 million per year would be needed to effectively implement AgWRAP and meet the program objectives.

IX. PROPOSED IMPLEMENTATION TIMEFRAME

2010-11

- Finalize Plan for AgWRAP.
- Propose and promote legislation to establish the program.
- Develop grant funding proposals and submit to potential funding organizations.
- Convene AgWRAP Advisory Committee to develop proposed program policies and guidelines.

2011-12

- AgWRAP Advisory Committee continues program development activities.
- Develop outreach strategy and program training for SWCD staff/supervisors, other governmental agency staff and private sector technical specialists.
- Assist local districts to develop selection and contracting procedures.
- Allocate funds and begin producer contract development to implement approved best management practices.

2012-13 and beyond

- AgWRAP Advisory Committee meets quarterly to evaluate implementation and recommend changes.
- Continue to seek funding.
- Continue implementation.

X. SOURCES OF FUNDING

- **A variety of funding sources must be utilized to ensure program success.**

Federal, State, local and private sources of funding must all be pursued. The following potential funding sources have been identified.

- Golden Leaf Foundation
- NC Tobacco Trust Fund
- NC Agricultural Development & Farmland Preservation Trust Fund
- USDA-NRCS Agricultural Water Enhancement Program
- NC Foundation for Soil & Water Conservation
- NC Rural Economic Development Center - Family Farm Innovation Fund
- State Appropriations
- Others