

Natural Resources and Environment

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Natural Resources and Environment

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	30%	30%	30%	
111	Conservation and Efficient Use of Water	10%	10%	10%	
112	Watershed Protection and Management	15%	15%	15%	
133	Pollution Prevention and Mitigation	30%	30%	30%	
141	Air Resource Protection and Management	15%	15%	15%	
	Total	100%	100%	100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	45.0	2.0	18.0	0.0
Actual	45.0	2.0	18.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 946078	1890 Extension 60715	Hatch 241231	Evans-Allen 0
1862 Matching 1569856	1890 Matching 60715	1862 Matching 4010352	1890 Matching 0
1862 All Other 1509340	1890 All Other 26400	1862 All Other 1801506	1890 All Other 0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Research activities will be focused on understanding the processes and situations that create pollution problems from agricultural production (including animal operations, field activities, and processing) and other, primarily non-urban, situations. With that information in hand, improved management and technological solutions will be proposed and evaluated. Technology transfer will be accomplished through demonstrations, workshops, and publications by Cooperative Extension in concert with the researchers involved.

2. Brief description of the target audience

Agricultural producers, environmental and other governmental agencies (action and regulatory), news media, the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	8000	17000	220	550
2008	16470	27730	2560	1250

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0

2008: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	5	25	
2008	14	38	52

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Waste Management Certification Programs

Year	Target	Actual
2008	40	65

Output #2

Output Measure

Number of Research Projects Completed on Environmental/Natural Resource Issues

Year	Target	Actual
2008	5	39

Output #3

Output Measure

Number of non-degree credit environmental activities conducted

Year	Target	Actual
2008	710	510

V(G). State Defined Outcomes

O No.	Outcome Name
1	Number farms first utilizing precision application technologies
2	Number of farms implementing additional best management practices for animal waste management
3	Number of urban households/small farms with low-literacy individuals implementing and/or adopting best management practices to enhance water quality.
4	Number of Waste Management Certifications Gained or Maintained
5	Number of farms implementing improved nutrient management
6	Number of animal production facilities implementing improved air quality management

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

Competing Public priorities

Competing Programmatic Challenges

Brief Explanation

2008 was an "interesting" year for agriculture and the environment in North Carolina. Warmer than usual temperatures, combined with a severe drought in the first half of the year, stressed both animal and crop production systems and also stressed aquatic and terrestrial habitat for wildlife. Forest fires, wild fires, fish kills, and reservoir depletion, all took their toll on North Carolina's natural resources and environment. The second half of the year, while "normal" environmentally, saw higher input costs, tighter credit issues, and reduced governmental funding, all of which negatively affected producers, program deliverers, and the general public in a number of ways. In spite of these impacts, most of the outcomes chosen for this program were met or exceeded.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

After Only (post program)

Before-After (before and after program)

During (during program)

Time series (multiple points before and after program)

Comparisons between program participants (individuals,group,organizations) and non-participants

Evaluation Results

Key Items of Evaluation