

Impacts of Loss of the USDA NIFA 406 Integrated Water Quality Program

Water quality and quantity issues are among the most urgent in the United States. Every citizen and business in the 3300 counties, towns, parishes and territories across the country, urban and rural, relies on a safe and adequate supply of water.

Section 406 created and supports the National Integrated Water Quality Program (NIWQP), which brings to bear on critical water resource issues the combined research, education and extension resources of the Land Grant University System. Over the last 10 years, 406 has established a national framework which is achieving unprecedented success through enhanced collaboration with internal and external partners, and the sharing of technology and resources across state and regional borders.

Loss or reallocation of 406 funding will dismantle the framework of this unique program and diminish the potential for development and delivery of research and research-based educational programs to students and citizens in the South and across the U.S.

Status

Research and Extension programs at Land Grant Institutions in the Southern Region have been awarded approximately \$30,000,000 in competitive funding directed toward water resource management through the NIFA Section 406 National Water Program. Currently, the 406 program is zeroed out in the next federal budget.

Key Impacts for the Southern Region:

1. Loss of regional, integrated, multi-disciplinary water quality programs at 21 land grant institutions (1862 and 1890) in the 13 states of EPA Regions 4 and 6 (Table 1).
2. Loss of future funding opportunities: Since 2000, Southern Region LGUs have been awarded 3 Regional Collaboration grants that have supported State Water Quality Coordinators with **\$15,435,321** (Table 1). An additional 34 competitive 406 grants have funded Southern Region research and extension faculty with **\$14,723,928** (Table 2).
3. An estimated 53 faculty and technical support positions which conduct research and/or deliver science-based outreach education will be impacted. Approximately 11 positions could be eliminated as a result of lost partial salary support.
4. Over \$10 million in supporting funding has been leveraged from private, state, or other federal sources to expand the impacts of SRWQP water resource management programs.
5. Collapse of newly emerging programs at partner institutions, most specifically 1890s, many of which were established with support from the Southern Region 406 program.
6. Default on commitments to program partners including business and industry, local communities, and state (DEQs and State Conservation) and federal agencies (NRCS and EPA; including loss of the recently established 406-funded Region IV Liaison position).

Table 1. Funding for Institutions Collaborating on the Section 406 Regional Coordination Project.

COLLABORATOR	2000-2004 BUDGET	2004-2008 BUDGET	2008-2012 BUDGET	2000-2012 TOTALS
<u>1862 Institutions</u>				
Auburn	\$ 292,388	\$ 310,800	\$ 265,000	\$ 868,188
Arkansas	\$ 232,263	\$ 310,800	\$ 225,000	\$ 768,063
Florida	\$ 259,388	\$ 310,409	\$ 225,000	\$ 794,797
Georgia	\$ 313,388	\$ 310,800	\$ 265,000	\$ 889,188
Kentucky	\$ 259,388	\$ 315,800	\$ 235,000	\$ 810,188
LSU	\$ 232,263	\$ 310,801	\$ 235,000	\$ 778,064
Mississippi State	\$ 259,388	\$ 309,700	\$ 225,000	\$ 794,088
New Mexico State	\$ 263,913	\$ 310,607	\$ 235,000	\$ 809,520
North Carolina State	\$ 336,388	\$ 470,800	\$ 652,000	\$ 1,459,188
Oklahoma State	\$ 294,388	\$ 310,800	\$ 215,000	\$ 820,188
Clemson	\$ 270,388	\$ 310,800	\$ 225,000	\$ 806,188
Tennessee	\$ 264,388	\$ 310,800	\$ 225,000	\$ 800,188
TAES	\$ 429,681	\$ 216,491	\$ 110,400	\$ 756,172
Texas	\$ 947,388	\$ 1,215,412	\$ 965,980	\$ 2,911,309
Subtotal	\$ 4,655,000	\$ 5,108,329	\$ 4,302,000	\$14,065,329
<u>1890 Institutions</u>				
Alabama A&M	\$ -	\$ 51,332	\$ 120,000	\$ 171,332
Alcorn State	\$ -	\$ 51,332	\$ 120,000	\$ 171,332
Arkansas Pine Bluff	\$ -	\$ 51,332	\$ 110,000	\$ 161,332
Florida A&M	\$ 25,000	\$ 112,000	\$ 160,000	\$ 297,000
Langston	\$ -	-	\$ 80,000	\$ 80,000
NC A&T	\$ -	\$ 51,332	\$ 100,000	\$ 151,332
Prairie View A&M	\$ -	\$ 51,332	\$ -	\$ 51,332
Southern University	\$ -	-	\$ 100,000	\$ 100,000
Tennessee State	\$ - -	\$ 51,332	\$ 135,000	\$ 186,332
Subtotal	\$ 25,000	\$ 419,992	\$ 925,000	\$ 1,369,992
TOTAL	\$ 4,680,000	\$ 5,528,321	\$ 5,227,000	\$15,435,321

Table 2. 406 Funded Projects for the Southern Region (2000-2011).

AL: 2008-2011	\$521,222	Cumulative Effects of Drought and Urbanization on the Flint River Watershed	Tsegaye
2003-2006	\$550,000	Stakeholder Partnerships for Addressing Nutrient Dynamics in Southeastern Watersheds	Deutsch
2003-2005	\$152,000	Developing Community-Based Restoration Initiatives	Hairston
2000-2004	\$156,500	Alabama Farm*A*Syst Program for Small Farm Operators and Underserved Audiences	LaPrade
AR: 2003-2006	\$550,000	Development of an Integrated Water Quality-Water Management Program in the AR Delta	Chaubey
2002-2005	\$686,000	A Nutrient Management Decision Support System for the Eucha Basin	Matlock
2001-2005	\$261,500	Phosphorus Management for Sustainable Animal Agriculture in Ozark Watersheds	Hamilton
2000-2004	\$450,000	Environmental Training for the Arkansas Livestock Industry	Watkins
FL: 2005-2008	\$238,000	Improving Water Quality At The Watershed Level By Targeting High-Return Stakeholders	White
2003-2006	\$275,000	Wetland Enhancement Decision-making Tools and Training for Landowners and TSPs	Flinchum
2002-2005	\$645,000	Geo-Temporal Estimation and Visualization of Nitrogen in a Mixed-Use Watershed	Grunwald

2001-2005	\$532,000	Agricultural Runoff Impacts on Total Maximum Daily Loads and Water Quality	Lepo
GA: 2008-2011	\$575,000	A New Approach to Sediment TMDL Watersheds in the Southern Piedmont	Radcliffe
2004-2007	\$580,000	Understanding and Explaining the Relationships between Dissolved Oxygen, Water Quality and Stream Ecosystems in the Coastal Plain of Georgia	Vellidis
2003-2006	\$550,000	A Framework for Trading Phosphorus Credits in the Lake Allatoona Watershed	Radcliffe
KY: 2001-2004	\$306,000	Cattle Production Practices in Grazed Watersheds of the Humid Region	Workman
LA: 2002-2005	\$696,000	Utilizing MS River Diversions for Nutrient Management in a Louisiana Coastal Watershed	Day
MS: 2003-2006	\$596,000	Improved Irrigation Efficiency and Reduced Potential for Surface Water Contamination	Massey
NM: 2000-2002	\$ 20,000	Protejer el Rio	Runyan
NC: 2006-2009	\$570,000	An Integrative Investigation of the Sources and Effects of Groundwater Contamination for Local Communities and Homeowners in North Carolina	Vengosh
2003-2006	\$549,526	Watershed-based Molecular and Hydrologic Monitoring Techniques	White
2002-2005	\$287,500	Demonstrating Stream Restoration: Natural Channel Design, Stormwater Management and Exotic Species Control in a Rapidly Developing Watershed	Spooner
2001-2005	\$390,000	TMDL Modeling Techniques to Assess Bacterial Loading in Estuarine Environments	White
2002	\$737,500	Attenuation of Non-point Source Nitrogen Pollution in a Coastal Watershed	Piehler
OK: 2003-2006	\$250,000	Drinking Water Education for Under-served Communities	Smolen
2001-2005	\$267,000	Oklahoma Green Country Watershed Education Project	Smolen
TN: 2009-2012	\$652,000	Enhancing Water Quality in Oostanaula Watershed: Adoption and Efficacy of BMPs	Walker
2005-2009	\$320,000	Facilitation of 1890 Institutions' Water Resource Education, Extension and Research Efforts	Dennis
2003-2006	\$290,000	Development of CNMP Core Training Curriculum	Burns
TX: 2008-2012	\$5,250,000	The Southern Region Water Resources Project	McFarland
2008-2011	\$647,000	Watershed Conservation on Grazing Lands in Central Texas: Cowhouse Creek Case Study	Wilcox
2004-2008	\$5,324,820	The Southern Region Water Quality Coordination Project	McFarland
2004-2008	\$ 580,000	P Reduction from Land Receiving Dairy Manure on the North Bosque and Leon Rivers	Muir
2003-2006	\$ 275,000	Development of Online Nutrient Management Certification Course for TSPS for CAFOs	Feagley
2000-2004	\$4,680,000	Southern Region Watershed Resources Management	McFarland
2002-2005	\$185,000	Composting as a Carcass Disposal Alternative to Burial for Large Livestock Carcasses	Auvermann
2001-2004	\$384,000	Achieving TMDL Goals in Impaired Watersheds through Manure Export in Turfgrass Sod	Munster
Total	\$30,159,249		