



**Texas State Soil and Water Conservation Board
Section 319(h) Nonpoint Source Program
FY 2007 Project 07-04**



NONPOINT SOURCE SUMMARY PAGE for the CWA, Section 319(h) Agricultural/Silvicultural Nonpoint Source Program						
Title of Project:	Management Repository of Agricultural and Silvicultural Environmental Data					
Project Goals/Objectives:	Development of a comprehensive, user-friendly database that will house data collected via CWA §319(h) Grant Program funds allocated to and through the Texas State Soil and Water Conservation Board.					
Project Tasks:	<ol style="list-style-type: none"> 1. Assessment of archived and current 319(h) NPS projects for determination of valid environmental data. 2. Conversion of all 319(h) NPS project files into a searchable, electronic format. 3. Organization of data into relevant categories, i.e. - edge of field, soils, BMP demonstration, water quality assessment, etc. 4. Development of a comprehensive, user friendly data base for modeling purposes. 5. Coordination of reporting. 					
Measures of Success:	Development of a comprehensive, user-friendly database.					
Project Type:	Implementation (X) ; Education (X); Watershed Planning (X); Assessment (X); Groundwater (X)					
Status of Water Body: 2004 Water Quality Inventory and 303(d) List	Segment ID:	Parameter:		Category:		
	STATEWIDE					
Project Location: (Statewide or County and Watershed Name)	STATEWIDE					
Key Project Activities:	Hire Staff (); Monitoring (); Regulatory Assistance (); Technical Assistance (X); Education (); Implementation (X); Demonstration (X); Planning (X); Other ()					
NPS Management Program Elements:	Indirect facilitation of all nine key elements.					
Project Costs:	Federal:	\$323,342	Non-Federal Match:	\$220,001	Total:	\$543,343
Project Management:	Raghavan Srinivasan, Ph.D.; Director, Spatial Sciences Laboratory- TAMU / Professor					
Project Period:	September 1, 2007 – September 30, 2011					

Part I – Applicant Information

Applicant							
Project Lead		Raghavan Srinivasan, Ph.D.					
Title		Director Spatial Sciences Laboratory TAMU / Professor					
Organization		Blackland Research & Extension Center; Thomas J. Gerik, Ph.D. Resident Director / Professor					
E-mail Address		r-srinivasan@tamu.edu					
Street Address		720 E. Blackland Road					
City	Temple	County	Bell	State	TX	Zip Code	76502-9622
Telephone Number	254-774-6000			Fax Number	254-774-6001		

Project Partners	
Names	Roles & Responsibilities
Texas State Soil and Water Conservation Board (TSSWCB)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects and TCEQ.
Texas AgriLife Blackland Research	Assessment and data compilation of all completed and current TSSWCB 319(h) projects where environmental data was collected and archived.

Part II – Project Information

Project Type								
Surface Water	<input checked="" type="checkbox"/>	Groundwater	<input checked="" type="checkbox"/>					
Does the project implement recommendations made in a Watershed Protection Plan or TMDL Report or Implementation Plan?					Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
If yes, identify the document. (Approved or Draft)								
If yes, identify the agency/group that developed and/or approved the document.						Year Developed	<input type="checkbox"/>	

Watershed Information				
Watershed Name(s)	Hydrologic Unit Code (8 Digit)	Segment ID	305 (b) Category	Size (Acres)
STATEWIDE				

Project Narrative

Problem/Need Statement

The Nation has become increasingly focused on the development of TMDLs within the last ten years. As a result, States have been feeling increased pressure to develop larger numbers of TMDLs on waterbodies. In fact, proposed revisions to the TMDL regulations were submitted in 1999, with a final rule issued July 13, 2000. However, faced with expressions of concern about the practicality of the program, a congress delayed implementing the new rule and ordered a study by the National Research Council. Some of the conclusions reached by the Council indicated that there did not appear to be a formalized process to capitalize on lessons learned, to transfer technology, or to share knowledge. The Council also concluded that unanalyzed data does not constitute information. Data must be interpreted for their meaning through the filter of analytical techniques, and the result of such data analysis is information that can support decision-making. Knowing what data are needed and turning those data into information constitutes a large part of the science behind a water quality management program. The techniques for transforming data into information include statistical inference methods, simulation modeling of complex systems and at times, simply the application of the best professional judgment of the analyst(s). It stands to reason that if more quality data is made available for transition into informational tools, those informational tools will provide better information. Better information leads to better decisions for the remediation of water quality.

As the state agency responsible for the abatement of all nonpoint source pollution pertaining to agricultural and silvicultural operations, the Texas State Soil and Water Conservation Board (TSSWCB) has been authorized, since 1993, to let grants via Clean Water Act §319(h) Grant Fund allocations administered by the Environmental Protection Agency (EPA). These funds have generated an array of successful projects that have implemented, tested, and demonstrated numerous best management practices (BMPs), evaluated primary water quality issues and investigated secondary, or indirect, contributing factors of NPS pollution. As a result of these projects, a large cache of beneficial environmental data has been collected within the last fourteen years. This data would be well-served as supplemental information for use in watershed modeling pertaining to Watershed Protection Planning (WPP), Total Maximum Daily Loads (TMDL), and Implementation Planning (I-Plans).

Unfortunately, this data is formatted in a variety of spreadsheets and databases and housed in diverse settings and the State of Texas currently has no comprehensive user-friendly database capable of handling the variety of environmental data generated by these CWA §319(h) Grant Fund projects. If there was an easily accessible, comprehensive database available for public use, it would have the potential to enhance stakeholder information, modeling efforts, TMDL allocation decisions, and implementation strategies. It would also follow the thoughts of the National Research Council in that it would enhance the informational tools used in the decision-making process and result in cost effective remediation and better water quality for the State of Texas.

Project Narrative

General Project Description (Include Project Location Map)

- Assessment and data compilation of all completed and current TSSWCB 319(h) projects where environmental data was collected and archived.
- Creation of an electronic version (PDF) of all material found within the archived and current project files for ease of access to a share drive, intranet or internet.
- Organization of environmental data into a cohesive format and relevant categories, i.e. - edge of field, soils, BMP demonstration, water quality assessment, etc.
- Development of a comprehensive, user friendly data base for modeling purposes.
- Open and continued communication of project progress with participating project partners through coordinated meetings and scheduled reports.

Tasks, Objectives and Schedules						
Task 1:	Assessment of archived and current 319(h) NPS projects for determination of valid environmental data.					
Costs:	Federal:	\$54,149.95	State:	\$34,341.80	Total:	\$88,491.75
Objective:	Assessment and data compilation of all completed and current TSSWCB 319(h) projects where environmental data was collected and archived.					
Subtask 1.1:	Compile contact information for all previous and current project contractors.					
	Start Date:	Month 1		Completion Date:	Month 12	
Subtask 1.2:	Create a form letter authorizing transfer of archived data to designated BREC personnel.					
	Start Date:	Month 2		Completion Date:	Month 6	
Subtask 1.3:	Conduct a mass mail out to all previous and current TSSWCB 319(h) project contractors requesting relevant archived environmental data.					
	Start Date:	Month 2		Completion Date:	Month 12	
Subtask 1.4:	Obtain and organize environmental data by project and by grant year and house all data in an electronic format on an external hard drive.					
	Start Date:	Month 2		Completion Date:	Month 28	
Deliverables	<ul style="list-style-type: none"> • List of previous and current project contractor contact information • Form letter • All relevant environmental data organized by project and grant year. 					

Tasks, Objectives and Schedules						
Task 2:	Conversion of all 319(h) NPS project files into a searchable, electronic format.					
Costs:	Federal:	\$59,149.96	State:	\$34,341.80	Total:	\$93,491.76
Objective:	Create an electronic version (PDF) of all material found within the archived and current project files for ease of access to a share drive, intranet or internet.					
Subtask 2.1:	Scan all documents within the project files and convert to PDF format.					
	Start Date:	Month 5		Completion Date:	Month 28	
Subtask 2.2:	Format PDF documents for upload into the program share drive, agency intranet system or agency website.					
	Start Date:	Month 5		Completion Date:	Month 28	
Deliverables	<ul style="list-style-type: none"> • Project files in PDF format • Documents formatted for linkage to intra- or internet website 					

Tasks, Objectives and Schedules						
Task 3:	Organization of data into relevant categories.					
Costs:	Federal:	\$70,177.14	State:	\$49,548.80	Total:	\$119,725.94
Objective:	Organization of environmental data into a cohesive format and relevant categories, i.e. - edge of field, soils, BMP demonstration, water quality assessment, etc.					
Subtask 3.1:	Format data from individual project spreadsheets and databases into a combined, retrievable system.					
	Start Date:	Month 5		Completion Date:	Month 28	
Subtask 3.2:	Prepare and distribute data into specific categories for transition into the specified trial-test multimedia software.					
	Start Date:	Month 5		Completion Date:	Month 28	
Deliverables	<ul style="list-style-type: none"> • Environmental data files organized into categories within one retrievable system 					

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 4:	Development of a comprehensive, user friendly data base for modeling purposes.					
Costs:	Federal:	\$94,830.47	State:	\$65,653.80	Total:	\$160,484.27
Objective:	Develop a program for the attainment of an optimal match between the data input, manipulation, and ease of use for end-users.					
Subtask 4.1:	Development of a database program.					
	Start Date:	Month 18		Completion Date:	Month 48	
Subtask 4.2:	Evaluate and refine the program outcome for sequence support, built-in functions, common table expressions, lateral correlations, materialized query tables, and other portability enhancements to begin development of database.					
	Start Date:	Month 18		Completion Date:	Month 48	
Deliverables	<ul style="list-style-type: none"> • Development of database 					

Tasks, Objectives and Schedules						
Task 5:	Project Administration					
Costs:	Federal:	\$45,034.48	Non-Federal:	\$36,114	Total:	\$81,149.28
Objective:	To effectively administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.					
Subtask 5.1:	Texas AgriLife Blackland Research will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15 th of January, April, July and October. QPRs shall be distributed to all project partners.					
	Start Date:	Month 1		Completion Date:	Month 48	
Subtask 5.2:	Texas AgriLife Blackland Research will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.					
	Start Date:	Month 1		Completion Date:	Month 48	
Subtask 5.3:	Texas AgriLife Blackland Research Extension Center will participate in meetings as appropriate in order to efficiently and effectively achieve project goals, coordinate monitoring efforts and summarize activities and achievements made throughout the course of this project.					
	Start Date:	Month 1		Completion Date:	Month 48	
Subtask 5.4:	Texas AgriLife Blackland Research will submit a final report summarizing the accomplished tasks, database program design evaluations, and recommendations for the “best fit” of the environmental data and data use capabilities.					
	Start Date:	Month 12		Completion Date:	Month 48	
Deliverables	<ul style="list-style-type: none"> • Quarterly progress reports in electronic format • Reimbursement Forms and necessary documentation in hard copy format • Final Report 					

Measures of Success
Development of a comprehensive, user-friendly database.

2005 Texas Nonpoint Source Management Program Document Reference
Goals &/or Milestone(s)
GOALS: <ul style="list-style-type: none"> • Assessment (indirect) • Implementation(indirect)
MILESTONES: <ul style="list-style-type: none"> • Data review • Modeling • Action plan development • BMP implementation

Part III – Financial Information

Budget Summary			
Federal 319(h)	\$ 323,342	% of total project	60%
Non-Federal Match	\$ 220,001	% of total project (at least 40%)	40%
Total \$ Cost	\$ 543,343	Total project %	100%
Category	Federal	Non-Federal Match	Total
Personnel	\$213,568	\$76,521	\$290,089
Fringe Benefits	\$59,142	\$15,744	\$74,886
Subtotal Personnel & Fringe	<u>\$272,710</u>	<u>\$92,265</u>	<u>\$364,975</u>
Travel	\$3,000	0	\$3,000
Equipment	0	0	0
Supplies	\$5,457	0	\$5,457
Contractual	0	0	0
Construction	0	0	0
Other	0	0	0
Subtotal	<u>\$8,457</u>	<u>0</u>	<u>\$8,457</u>
Total Direct Costs	\$281,167	\$92,265	\$373,432
Indirect Costs (15%)	\$42,175	\$127,736	\$169,911
Total Project Costs	\$323,342	\$220,001	\$543,343

The §319(h) Nonpoint Source Program has a 60/40% match requirement. Your entity will be reimbursed 60% from federal funds and must contribute a minimum of 40% of the costs to conduct your project. The 40% match must be from non-federal sources and should be described in your budget detail. Indirect costs are limited to 15%. The project budget generally covers a three year period.

Budget Justification (Federal)		
Category	Total Amount	Justification
Personnel & Fringe Benefits	\$272,710	R. Srinivasan, Ph.D. will provide supervision and guidance to the project. Database Programmer will provide assistance with development, evaluation and design of database. Post Doc will provide assistance with development of database. TBN will provide research and retrieval of data and assistance with development of database. Fringe benefit calculations are 16.1% fringe plus \$459/mo health
Travel	\$3,000	Travel expenditures include quarterly meetings with project participants and data retrieval over the 3 years of the project. Local/state travel is paid at 44.5 ¢ per miles.
Equipment	\$0	
Supplies	\$5,457	General supplies are requested for jump drive, printing cartridges, paper, file folders, mailing, etc. Also requested are laptop, software, scanner, external hard drive, external keyboard and mouse for staff working directly on the project.
Contractual	\$0	
Construction	\$0	
Other	\$0	
Indirect	\$42,175	Indirect charges are calculated at 15% set by the TSSWCB EPA CWA §319(h) grant.
Budget Justification (Non-Federal)		
Category	Total Amount	Justification
Personnel & Fringe Benefits	\$92,265	T. Gerik, Ph.D. will provide technical support and input to the project. Systems Analyst will provide support electronic software and hardware. Fringe benefit calculations are 16.1% fringe plus \$459/mo health
Travel	\$0	
Equipment	\$0	
Supplies	\$0	
Contractual	\$0	
Construction	\$0	
Other	\$0	
Indirect	\$127,736	Indirect charges are calculated at 45.5%