NC STATE UNIVERSITY

NCSU Water Quality Group Department of Biological and Agricultural Engineering College of Agricultural and Life Sciences

> Campus Box 7637 Raleigh, North Carolina 27695-7637 919.515.3723 (phone)

919.515.7448 (fax)

## PROPOSAL

to:

### NORTH CAROLINA SEDIMENTATION CONTROL COMMISSION

And

# NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES – LAND QUALITY SECTION

for the project

# Sediments Newsletter

submitted by:

#### Principal Investigators:

Jean Spooner, Biological & Agricultural Engineering Dept. Rich McLaughlin, Soil Science Dept. Melanie Markusic McCaleb, Soil Science Dept. Dan Line, Biological & Agricultural Engineering Dept. Cathy Smith, Biological & Agricultural Engineering Dept.

NCSU Water Quality Group Soil and Water Environmental Technology Center (SWETC) Department of Biological and Agricultural Engineering North Carolina State University Box 7637 Raleigh, NC 27695-7637 (919) 515-3723

Project Period: July 1, 2009 – May 1, 2010

Employment and program opportunities are offered to all people regardless of race, color, national origin, gender, age or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

| Scope of Work – Production and Distribution of Sediments Newsletter |  |
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| Table of Contents   |  |
| Introduction  | Request funds to continue the publication and distribution of<br>the <i>Sediments</i> newsletter in order to provide information to the<br>regulated community and to facilitate communication among<br>local erosion and sediment control programs.   |
| Background  | The Sedimentation Control Commission is charged to educate<br>the regulated and design community, as well as the public, on<br>recommended methods, regulations, current events, and<br>instructional topics regarding erosion and sedimentation<br>control. The Sediments newsletter is one aspect of such<br>education and has been published quarterly since 1994.<br>Current print and listserv subscribers number approximately<br>5400 individuals.  |
| Scope of Work   |  |
| 1. Tasks provided   | <ul> <li>Publication and Distribution of Sediments<br/>Newsletter.</li> <li>A listserv of subscribers will be maintained</li> <li>A PDF will be provided to the Land Quality Section<br/>(LQS) web site:<br/>http://www.dlr.enr.state.nc.us/pages/sedimentationnew<br/>sletters.html.</li> <li>Until LQS uploads the PDF, the Sediments issues will<br/>be available from:<br/>http://ncsu.edu/waterquality</li> <li>Online subscribers will be notified by email when<br/>newsletters are posted on-line.</li> <li>Design Revisions of Sediments Newsletter. Revisions<br/>to Sediments Newsletters should be minimal. We will<br/>utilize the template used by NCSU in the FY08-09<br/>contract. If revisions are desired by LQS, we should<br/>be able to incorporate them. Design revisions will be<br/>made under the supervision and approval of Land<br/>Quality Section.</li> <li>Content of Sediments Newsletter. All articles and<br/>content will be edited by the NCSU staff and reviewed<br/>for approval by the Land Quality Section. Identified<br/>experts will assist in authoring technical articles.<br/>Authors will be recruited and identified in conjunction<br/>with LQS from NCSU, other universities, state and<br/>local agencies, non-profit associations, and the private<br/>sector. An NCSU staff member (and subject matter<br/>expert) will attend the annual meetings of the<br/>International Erosion Control Association and report</li> </ul> |

|                             | <ul> <li>on this conference in <i>Sediments</i>. Travel may also include other workshops or conferences that would also yield relevant newsletter articles. Topic ideas will be solicited from the SCC, Land Quality Section, and NCSU faculty. Subscribers will be able to offer their preferences and most critical needs by responding to brief surveys either online or by email. Each newsletter (except April/May'10) will also feature a summary of the actions taken by the NC Sedimentation Control Commission.</li> <li>Web availability of <i>Sediments</i> Newsletter. An online version of Sediments will be created. This online version will be hosted on the Land Quality Section webpage. All maintenance, updates, and corrections will be done by contractor. The PDF version of the newsletter will be complete with active links.</li> <li>Subscriber Communication and Recruitment. <i>Sediments</i> online will be templated and distributed through a List Service. <i>Sediments</i> will be actively promoted by email broadcasts to lists other than current subscribers.</li> </ul> |
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| 2. Time line for completion | Fiscal year 2009-2010<br>Four issues to be published during the fiscal year. Each of the<br>first three issues will be published approximately 4 weeks after<br>the quarterly meeting of the Sedimentation Control<br>Commission meeting scheduled for mid-August and<br>November 2009; and Feb. and May 2010. The fourth issue<br>must be published by the contract end date of May 1, 2010.<br>All charges must be incurred prior to the contract end date of<br>May 1, 2010.  |
| 3. Deliverables             | <ul> <li>Four six-page (minimum) issues on the above schedule per fiscal year</li> <li>Newsletter specifics: <ul> <li>Size: 8-1/2" x 11"</li> <li>Number of pages: 6</li> <li>Photos: 2-6</li> </ul> </li> <li>The newsletter is to be printed from disk output from desktop publishing system (Adobe InDesign for Windows, or an Adobe PDF file).</li> <li>Link to PDF version of newsletter sent to subscribers of <i>Sediments</i> electronic list</li> <li>PDF version of newsletter to be stored on Land Quality Section past issues archive</li> </ul>   |

| 4. Milestones                              | <ul> <li>Topics for technical articles to be suggested by NCSU to LQS for approval and input six weeks prior to print time</li> <li>SCC meeting is attended to take notes 4 weeks prior to print time</li> <li>Draft newsletter in desktop published format sent to Land Quality Section staff for review</li> <li>Be available for periodic questions and answers via phone or email</li> <li>Each completed newsletter should be submitted to DLR-Land Quality Section for approval. The newsletters must be approved before final printing.</li> <li>Quarterly invoices due for all actual expenses claimed</li> <li>Final report due with last invoice to summarize the project</li> </ul> |
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| 5. Environmental/Regulatory<br>Constraints | N/A  |
| 6. Contract time period                    | <ul> <li>The project must be completed between the projected contract dates of July 1, 2009 and May 1, 2010.</li> <li>Each newsletter should be completed approximately 4 weeks after the quarterly SCC meeting, except the fourth issue which must be completed by the contract end date (May 1, 2010).</li> </ul>  |
| Payment Schedule                           | Bill payment upon submission as approved by contract<br>administrator. Invoices will be submitted quarterly with<br>itemized detail of actual charges for salary and expenses. Only<br>expenses incurred during the inclusive dates of the contract<br>will be invoiced.   |
| Ownership of Equipment                     | N/A  |
| Project Budget                             | Salary and Fringe.       \$21,000         Travel.       \$4,000         Total Direct.       \$25,000         Indirect Cost.       \$3,750         Total.       \$28,750  |
|  | <b>Budget Details</b><br>Salary and Fringe: Spooner (11%), McLaughlin (1% cost-<br>share), Markusic (20%), Line (3%), Kurth (3%) and Smith<br>(5%), including 25% benefits.<br>Travel: Interviewing costs, conference cost<br>Indirect Cost: 15% of Total Direct Cost (NCDENR)   |
| Principal Investigator Contacts            | Jean Spooner, Extension Specialist, BAE Dept., NCSU 919-515-8240   |
| DENR Contract Administrator                | Gray Hauser, Land Quality Section<br>919-733-4574  |

## Key Personnel

**Jean Spooner, Professor,** Director, Soil & Water Environmental Technology Center (SWETC), NCSU Water Quality Group, Professor, Water Quality Extension Specialist, Department of Biological and Agricultural Engineering, NC State University. Dr. Spooner is a Soil Scientist and Applied Statistician who has worked with the NCSU Water Quality Group since 1984. She performs statistical analyses to evaluate changes in water quality associated with nonpoint source (NPS) pollution controls, and provides technical assistance to NPS projects on water quality and land treatment monitoring designs and data analysis. Dr. Spooner holds a Ph.D. in Soil Science (minor in Statistics) from North Carolina State University, a M.S. in Soil Science (minor in Statistics) from North Carolina State University, a M.S. in Applied Statistics from Utah State University, and a B.S. in Agronomy from Cornell University.

**Catherine Smith**, Extension Assistant, Department of Biological and Agricultural Engineering, North Carolina State University. She has expertise in web development, desktop publishing, editing, database management, and conference and workshop/tour coordination. Ms. Smith holds a BA in Communication from N.C. State University.

**Richard A. McLaughlin**, Ph.D. grew up in Maryland and received his B.S. in Forest Management at Virginia Tech in 1979. He continued his education at Purdue University, studying the fate of nitrogen in the environment. After receiving his Ph.D. in 1985, he spent several years doing postdoctoral research on pesticide fate in the environment, both at Purdue and North Carolina State University. Dr. McLaughlin then worked for a major crop protection company for five years in both environmental fate and analytical chemistry areas. He has is currently a Professor and Extension Specialist in the Soil Science Department. Current projects include the use of polyacrylamide to reduce turbidity and erosion, optimizing sediment control practices, and integrating land management principles and LID.

**Daniel E. Line**, Water Quality Extension Specialist, Department of Biological and Agricultural Engineering, North Carolina State University. Mr. Line is an Agricultural Engineer with expertise in water quality modeling, cropland erosion and sedimentation research, conservation practices, watershed assessment, geographic information systems (GIS), and water quality monitoring. Mr. Line is a P.E. and holds M.S. and B.S. degrees in Agricultural Engineering from The Pennsylvania State University.

**Melanie McCaleb**, Extension Associate and Certified Professional in Erosion and Sediment Control (CPESC), Department Soil Science, received her Masters degree in Soil Science in 2007. She has extensive experience in determining BMP effectiveness and construction site monitoring. Her MS degree involved studying sediment basin design effects on sediment retention efficiency.