1. SUPPORT FOR FOUR WORKSHOPS TO TRAIN DESIGN PROFESSIONALS

2. Principal Investigator: Kelly Porter, Environmental & Education Coordinator, WRRI, NC State University, 1512 Module 7, Varsity Research Bldg, Campus Box 7912, Raleigh, NC 27695-7912
   Kelly_Porter@ncsu.edu, 919-513-1152 (phone), 919-515-2839 (fax), County of Wake, Federal Tax ID # 56-6000756

3. Abstract:
   It is proposed that the Water Resources Research Institute of The University of North Carolina (WRRI) support the work of the NC Sedimentation Control Commission and the Department of Environment and Natural Resources (DENR) Division of Land Resources (DLR) Land Quality Section (LQS) staff by providing assistance in the continuation of workshops for design professionals. Up to four workshops will take place annually. Ideally, two will occur in the fall and two in the spring each year. Each workshop will cover a two-day period, and efforts will be made to have the workshops in different areas of North Carolina.

4. Introduction:
   North Carolina is a rapidly growing state where increased urban and road construction is expected to continue. This activity and the associated sediment and erosion problems are an important water quality issue. To minimize further impacts on water quality caused by accelerated erosion and sedimentation requires a strong, dedicated and well-trained cadre of individuals who can design and implement effective control practices.

   From the beginning of North Carolina's Sedimentation Control Program, educational efforts have been a key feature in the design and implementation of erosion and sedimentation control measures. Education is considered vital to the long-term effectiveness of the program since individuals engaged in all aspects of sediment control are not static but dynamic and new participants must be reached on a continuing basis.

   Previous educational efforts of the Sedimentation Control Commission have generally focused on:
   1. explanation of the law and program;
   2. orientation for local, state, and federal officials;
   3. continuation of education for persons engaged in land-disturbing activities to include:
      a. management of storm water
      b. preparation of erosion and sediment control plans
      c. techniques of design and construction of erosion and sediment control devices
   4. development of workshops and training programs and educational materials
   5. support for erosion and sediment control design and field manuals
   6. support a student intern to be trained in erosion and sediment control educational activities

5. Background
   For many years, WRRI has been supportive of strong sediment control efforts in North Carolina. Some of these efforts include:
   1. Supported the state's first workshop on sediment control prior to the enactment of the Sedimentation Pollution Control Act
2. Developed a workshop in urban storm water management and stream improvements
3. Produced for several years the publication titled "Urban Stormwater Manager" with a specific portion devoted to sediment control
4. Supported research projects related to sediment control including an assessment of the North Carolina Sedimentation Control Program
5. Contributed time and effort to the educational and technical committee deliberations of the Sedimentation Control Commission
6. Assisted the LQS staff in conducting a series of three one-week training sessions for inspectors, technicians, engineers, architects, and surveyors
7. Supported the LQS staff in conducting workshops to introduce the new Erosion and Sediment Control Design and Field Manual
8. Assisted the LQS staff in establishing a student intern program.
9. Developed a sediment newsletter for the Sedimentation Control Commission
10. Worked with LQS staff to conduct Erosion and Sediment Planning & Design workshops for many years.

6. Narrative:
It is proposed that the Water Resources Research Institute of The University of North Carolina (WRRI) support the work of the NC Sedimentation Control Commission and the NCDENR DLR LQS staff by providing assistance in the continuation of workshops for design professionals. Up to four workshops will take place annually. Ideally, two workshops will occur in the fall and two in the spring. Each workshop will cover a two-day period and take place in different locations in North Carolina. These workshops will consist of presentations by the various professionals on topics of interest and in-depth discussion of each subject area. A great deal of interaction will continue to be incorporated into the agenda to allow for better exchange of ideas and perspectives concerning design aspects of sediment and erosion control. These workshops should continue to provide an excellent opportunity for the LQS staff to interact with design professionals and receive feedback on issues that are of concern to all. This proposal is based on accommodations for:

- up to 80 workshop participants:
  - 70 paying registrants;
  - up to 10 (non-paying) slots for DENR staff members, including the Regional Offices and Sedimentation Control Commission members, to serve as speakers, organizers and workshop assistants; and for special speakers receiving honorariums;
  - up to 3 WRRI staff for on-site registration, equipment set-up and over-site; and,
  - exhibitors as workshop space permits.

Registration fees
The base registration fee is $175 for the 2-day workshop. Day 1 of the workshop will be classroom style with speakers from DENR, etc. to present updated regulations, etc. Day 2 of the workshop will be held at the Lake Wheeler Research Station in Raleigh or the Mountain Horticultural Crops Research Station in Fletcher, where Rich McLaughlin will provide turbidity training and hands-on demonstrations.

Specifically, the responsibilities of the Institute under this project will include the following:
1. Assist with the planning and development (with the Land Quality Staff) of the program agenda to respond to the needs of design professionals
   a) WRRI will supply LQS with a checklist and time schedule of various types of information needed for workshop event planning.
   b) WRRI will communicate with LQS on a regular basis to discuss and clarify event planning and logistical issues of upcoming workshops.
2. Handle workshop details including:
   a) contact speakers outside of DENR, (i.e. professors, consultants). DENR will contact local program speakers and DENR speakers;
   b) select and contract meeting locations and dates;
   c) prepare and print program information;
   d) mail/email information;
   e) provide registration process for participants and exhibitors; (pre-registration process and on-site registration)
   f) manage exhibitor contracts;
   g) prepare participant materials and handouts;
   h) acknowledge receipt of registrations;
   i) maintain database of registrants per workshop;
   j) coordinate meeting logistics on-site
   k) handle all accounting aspects of the workshops including, associated cost of speakers, facilities, meals & breaks, audio-visual equipment, and other expenses; and
   l) prepare participant certificates.

7. **Deliverables, Methods, and Procedures:**
   WRRI will provide DENR with a final list of participants from each workshop and a summary of the evaluations for each workshop. WRRI will post presentations on the WRRI website after the workshop. The presentations will be available until the next set of workshop postings.

8. **Project Milestones:**

<table>
<thead>
<tr>
<th>Planning Description</th>
<th>Time up to Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRRI suggest dates for Workshops to LQS and look at facility availability for suggested dates</td>
<td>6 months</td>
</tr>
</tbody>
</table>
| 2. WRRI staff assists LQS staff with the following:  
  • Discuss workshop content and look over evaluation forms from previous workshops  
  • Create tentative workshop agenda  
  • Come up with potential speakers to contact | 4-5 months |
| 3. WRRI and LQS contact speakers | 4 months |
| 4. LQS and WRRI communicate:  
  • Workshop and speaker selection | 14 weeks |
| 5. Final Agenda ready for brochure and speakers confirmed | 12 weeks |
| 6. LQS and WRRI communicate to discuss details and updates | 10 weeks |
| 7. WRRI puts together workshop information | 9 weeks |
8. WRRI mails/emails workshop information, and post to the WRRI website 8 weeks from 1st event

9. LQS and WRRI discuss details and updates 4 weeks

10. Registration deadline dates 2 weeks

11. Exhibitor cut-off 2 weeks

12. DNR list of non-paying staff members and speakers due 2 weeks

13. Hand-out material due to WRRI 2 weeks

14. LQS and WRRI discuss results of workshop; look over evaluation forms; and post presentations to the website. After workshop

9. **Duration of Project**: July 1, 2010 – May 1, 2011

10. **Detailed Project Budget**:

<table>
<thead>
<tr>
<th></th>
<th>2 Fall Workshop - Raleigh</th>
<th>2 Spring Workshop - Fletcher</th>
<th>Total Request</th>
<th>DENR Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries and Wages</strong></td>
<td>13,023</td>
<td>13,023</td>
<td>26,046</td>
<td>8,741</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td>2,816</td>
<td>2,816</td>
<td>5,632</td>
<td>1,890</td>
</tr>
<tr>
<td><strong>Workshop Facilities</strong></td>
<td>7,180</td>
<td>5,500</td>
<td>12,680</td>
<td>4,255</td>
</tr>
<tr>
<td><strong>Travel</strong></td>
<td>1,000</td>
<td>2,500</td>
<td>3,500</td>
<td>1,179</td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td>2,500</td>
<td>2,400</td>
<td>4,900</td>
<td>1,644</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>500</td>
<td>500</td>
<td>1,000</td>
<td>336</td>
</tr>
<tr>
<td><strong>Honorarium</strong></td>
<td>2,000</td>
<td>2,000</td>
<td>4,000</td>
<td>1,342</td>
</tr>
<tr>
<td><strong>Turbidity Portion</strong> (McLaughlin)</td>
<td>8,000</td>
<td>8,000</td>
<td>16,000</td>
<td>5,370</td>
</tr>
<tr>
<td><strong>Total Direct Cost</strong></td>
<td>37,019</td>
<td>36,739</td>
<td>73,758</td>
<td>24,758</td>
</tr>
<tr>
<td><strong>Registration Receipts (70 x 175/ workshop)</strong></td>
<td>24,500</td>
<td>24,500</td>
<td>49,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>12,519</td>
<td>12,239</td>
<td>24,758</td>
<td>24,758</td>
</tr>
<tr>
<td><strong>Indirect Cost (15% TDC)</strong></td>
<td></td>
<td></td>
<td>3,714</td>
<td>3,714</td>
</tr>
<tr>
<td><strong>TOTAL REQUEST</strong></td>
<td></td>
<td></td>
<td>28,472</td>
<td>28,472</td>
</tr>
</tbody>
</table>
Budget Explanation:

Salary:
- 1.5 months for Principal Investigator (PI) to plan, organize, contact speakers, collect handouts, and oversee workshop on site.
- 1 month for Program Coordinator to oversee registration; both pre-registration and on-site services, and follow-up for PDH (Professional Development Hours) credits.
- 3 months @ .5fte for Workshop Assistant to process registrations, reconcile lists, prepare name badges, prepare handouts, and assist with on-site services.

Benefits:
- University rate = 27% for permanent staff, 9.15% for part-time employee

Facilities:
- McKimmon Center with AV equipment: 1,190/day
- Breaks & lunch: 2,000/day
- Lake Wheeler Research Station: 200/day for each classroom (2)
- Fletcher has no room rental fee, only need faculty member available. May be alternative facility for day 1.

Travel for speakers and workshop staff

Supplies:
- $15/person for handouts, pads, pens, folders
- Cooler for chilled water at field sites

Honorarium for special speakers from out of state, 1 per workshop @ 1,000 each
- Turbidity portion (day 2) with Rich McLaughlin @ $4,000/workshop

11. Matching Funds: N/A

12. Indirect Costs: 15% Total Direct Cost

13. Payment Schedule:
   Invoices will be submitted quarterly with itemized detail of charges. Only expenses incurred during the inclusive dates of the contract will be invoiced.

14. Accounting:
   NC State University follows the A-21 circular, “Cost Principles for Educational Institutions.”

15. Project Outputs and/or Measurable Results: N/A

16. Ownership of Equipment Purchased under this contract: N/A

17. Credentials & Project Partners:
   Kelly Porter, PI, resume attached. Lynne Bridger, CRA is designated as the contract administrator.

18. Regulatory Constraints: N/A

19. Project Administrator:
   Matt Ronning
   Assoc. Vice Chancellor for Research
   NC State University, Box 7514
   2701 Sullivan Dr.
   Raleigh, NC 27695-7514
   Matt_Ronning@ncsu.edu
Kelly A. Porter

**Education**

**M.S. Forestry**, North Carolina State University, Raleigh, NC.

**B.S. Forestry**, State University of New York College of Environmental Science and Forestry (SUNY-CESF), Syracuse, NY.

**Professional Experience**

**Environmental Education and Communications Coordinator**, Water Resources Research Institute, Raleigh, NC (October 2003 – present)
Facilitate and organize content development of educational programs for environmental professionals; organize content and schedule for annual statewide water resources research conference; water resources informational liaison to university researchers, state and local government, and environmental professionals; oversee web development and content management of institute web site.


**Environmental Specialist**, NC Division of Soil and Water Conservation, Raleigh, NC (August 1999 – November 2000).


**Research Assistant/Graduate Student**, North Carolina State University, Raleigh, NC (August 1993 – August 1997).

**Research Intern** (term appointment), Union Camp Corporation, Franklin, VA (June – December 1996).

**Publications**


**Professional Affiliations**

**NCWRA**, North Carolina Water Resources Association