Combining Our Resources<sup>a</sup>
2003 Extension Water Quality Conference
Ruidoso, New Mexico
Follow-Up Evaluation
George F. Smith

Background

“Combining Our Resources” was held October 19-22, 2003 in Ruidoso, New Mexico. The program included nine four-hour workshops, two poster sessions with a total of 64 posters, four half-day tours, and 72 presentations in four concurrent program sessions organized around the priority themes of (1) watersheds, (2) nutrient and waste management, (3) policies and partnerships, and (4) drinking water and new and emerging issues.

A total of 216 people from 16 states and Washington D.C. attended the conference. The participants represented 16 universities and eight federal and state agencies.

“Combining Our Resources” was the ninth biannual conference organized and conducted by the Southern Region Water Quality Planning Committee (SRWQPC). The SRWQPC was created by the Southern Extension directors in 1988 to provide leadership for regional water quality educational programming.

The objectives of the conference were to:

- Strengthen the capacity for Extension to develop and deliver successful water quality and natural resource programs.
- Enhance the cooperative working relationships within Extension at all levels, program areas and academic disciplines.
- Target current and potential water quality and environmental issues and provide a forum to exchange ideas.
- Provide an opportunity to share successful educational strategies and programs.
- Enhance working relationships between Extension and other agencies.

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Evaluation:

Participants evaluated the workshops, sessions and tours they attended using a written survey that was turned in at the end of the conference. A report of this evaluation was distributed in early 2004. Contact George F. Smith (phone: 865-974-7306; e-mail: gfsmith@utk.edu) if you would like a copy.

A follow-up survey was mailed to participants in July 2004 to learn how they have used information and materials from the conference. They were asked to evaluate the impacts of “Combining Our Resources” on their work; to comment on the value/benefits of the conference for themselves and their clientele; and to suggest possible improvements for future conferences. Fifty-eight surveys were returned. This paper summarizes the results.

Impacts

The evaluation included seven statements asking participants for their perceptions of the impacts of the conference on their knowledge of water quality and natural resource issues, and their abilities to plan and conduct water quality and natural resource education programs. A five level Likert-type scale was used to ask respondents their level of agreement with each statement. Result are a given in the following table.

<table>
<thead>
<tr>
<th>As a result of the 2003 Extension Water Quality Conference</th>
<th>% Who Agreed or Strongly Agreed</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My capacity to produce successful water quality and natural resource programs has been strengthened.</td>
<td>93.1</td>
<td>4.2</td>
</tr>
<tr>
<td>2. I have shared some of the successful educational strategies and programs with colleagues.</td>
<td>91.4</td>
<td>4.2</td>
</tr>
<tr>
<td>3. I feel that cooperative working relations within Extension at all levels, program areas, and academic disciplines have been enhanced.</td>
<td>86.2</td>
<td>4.3</td>
</tr>
<tr>
<td>4. I feel that working relations between Extension and other agencies have been enhanced.</td>
<td>68.9</td>
<td>3.9</td>
</tr>
<tr>
<td>5. My programs/activities have benefited from the information/materials/ideas I received.</td>
<td>93.1</td>
<td>4.3</td>
</tr>
<tr>
<td>6. I have increased consideration and/or use of economic costs/benefits related to water quality and natural resource issues in my programs/activities.</td>
<td>56.9</td>
<td>3.6</td>
</tr>
<tr>
<td>7. I have increased consideration of social science issues, including public policy issues, related to water quality and environmental programming in my programs/activities.</td>
<td>74.1</td>
<td>3.8</td>
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</table>

1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree/Disagree; 4 = Agree; 5 = Strongly Disagree
As the table shows, respondents in general agreed with these seven statements. In their opinions, the conference did enhance their knowledge of water quality and natural resource issues and their abilities to plan and conduct water quality and natural resource programs. These statements were derived from the conference objectives; indicating “Combining Our Resources” did successfully meet its objectives.

The greatest level of agreement was with the statement, “My programs/activities have benefited from the information/materials/ideas I received” (mean score 4.3). Also, about 93 percent of the respondents agreed or strongly agreed with the statement “My capacity to produce successful water quality and natural resource programs has been strengthened” (mean = 4.2). Enhancing participants’ programs and strengthening their abilities to develop and deliver successful programs was a primary conference goal; these results indicate this goal was met.

Over 91 percent of the respondents agreed or strongly agreed that they “... have shared some of the successful educational strategies and programs with colleagues” (mean = 4.2). Through this ripple effect, individuals who did not attend the conference have benefited from it.

While still greater than 50 percent, the level of agreement was lowest for the statements about improved working relations with other agencies and increased consideration of costs and benefits in programs/activities. This suggests that greater attention should be paid to these objectives in future conferences.

**Information, Materials or Ideas Used:**

Forty-six (81%) of the respondents reported using information, materials or ideas from the conference in their programming. A broad variety of information, including ideas shared outside of formal conference sessions, was mentioned in reply to a question asking what materials were used. These results add support to the conclusion that the conference met the objectives of (1) strengthening the capacity for Extension to develop and deliver water quality and natural resource programs and (2) providing opportunities to share successful strategies and programs.

Reasons mentioned for not using materials from the conference included time constraints, lack of funding, satisfactory programs already in place, and changes in job responsibilities.

**Value/Benefits of the Conference:**

Respondents were asked how they would answer if a conference sponsors asked what has been the value or benefit of “Combining Our Resources” to them and their clientele. The most common responses could be categorized as (1) networking with people from other states working on similar issues, (2) sharing ideas, information and resources, and (3) enhancing participants’ knowledge, skills and abilities which will improve their educational programming. Follow-up surveys from past conferences identified similar benefits.
Suggestions for Future Conferences:

Finally, participants were asked for their suggestions for topics and activities for the next conference, planned for 2005. A number of suggestions, ranging from general ideas like more livestock related topics or more water quantity information to more specific ideas like water conservation in the home landscape or how landfills affect groundwater, were made. Several suggested more hands-on activities, field trips, case studies, and more interactive presentations. Several respondents were complementary and suggested repeating the format in future conferences.

A detailed summary that includes all comments is attached. This information will be used to help plan future conferences and SRWQPC activities.
Combining Our Resources
Southern Region Extension Water Quality Conference
2004 Follow-Up Survey

Your State: Alabama - 4; Arkansas - 7; Florida - 3; Georgia - 5; Kentucky - 6; Louisiana - 2; Mississippi - 4; New Mexico - 4; North Carolina - 7; Oklahoma - 3; South Carolina - 1; Tennessee - 5; Texas - 7

Which one of the following best describes your current position? (CHECK ONLY ONE)

31. COUNTY/AREA EXTENSION AGENT  21. EXTENSION SPECIALIST  2. EXTENSION ADMINISTRATOR
___ FEDERAL AGENCY  ___ STATE AGENCY  ___ STUDENT
3. OTHER (Specify: Program Specialist/Project Manager; faculty; extension associate)

*****************************************************************************************************
Think back to the sessions you attended and the information and ideas you received at the Conference held last October in Ruidoso, New Mexico. Based on your experiences since the conference, please indicate your level of agreement with the following statements. Use the following scale: SD = STRONGLY DISAGREE; D = DISAGREE; N = NEITHER AGREE NOR DISAGREE; A = AGREE; SA = STRONGLY AGREE. (CIRCLE ONLY ONE RESPONSE FOR EACH ITEM).
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<table>
<thead>
<tr>
<th>As a result of participating in the 2003 Water Quality Conference:</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My capacity to produce successful water quality and natural resource programs has been strengthened</td>
<td>4</td>
<td>38</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I have shared some of the successful educational strategies and programs with colleagues.</td>
<td>1</td>
<td>4</td>
<td>33</td>
<td>20</td>
<td></td>
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<tr>
<td>3. I feel that cooperative working relations within Extension at all levels, program areas, and academic disciplines have been enhanced.</td>
<td>8</td>
<td>24</td>
<td>26</td>
<td></td>
<td></td>
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<tr>
<td>4. I feel that working relations between Extension and other agencies have been enhanced.</td>
<td>1</td>
<td>17</td>
<td>25</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>5. My programs/activities have benefited from the information/materials/ideas I received.</td>
<td>2</td>
<td>2</td>
<td>33</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>6. I have increased consideration and/or use of economic costs/benefits related to water quality and natural resource issues in my programs/activities.</td>
<td>6</td>
<td>19</td>
<td>26</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7. I have increased consideration of social science issues, including public policy issues, related to water quality and environmental programming in my programs/activities.</td>
<td>2</td>
<td>13</td>
<td>35</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>8. Have you used any of the information, materials or ideas from the conference in your programming efforts? (Circle correct response)</td>
<td>NO — 11</td>
<td>YES — 46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Follow-up Survey

8.a. If NO to #8, what has prevented you from using these things?
   • Already using similar things. Large and successful water quality program implemented here in Little River County.
   • Have not had time yet.
   • Starting in July of this year we will begin water quality demonstration in St Francis County along the L’Anguille River. It is on an EPA watch list. I’ll be working with Extension Specialist and a rice/soybean product. We will have an “intensive” field day after two years.
   • Timing and funding. Currently gearing up for possible grant.
   • I was already beyond most of what I saw. A very little in the sessions was cutting edge, but other things were mundane. If the “training” is to be basic----advertise it as such.
   • Reassignment to new position.
   • I am the County Director for the Albuquerque Metro Area and do very little water programing. That affected the answers to the first seven questions as well. Overall, it was an excellent program. New Mexico should be in a different region.
   • Not many programs that address the same needs.
   • Change in assignment; change in role in water quality programming.

8.b. If YES to #8, please identify information, materials and/or ideas you have used; audiences with whom they were used; and, briefly, any impacts that have occurred as a result of their use.
   • (1)Livestock Watering, (2) Stream Bank and Delta Scale Model, (3) The Importance of Water Quality Education— All discussed with peers and producer clientele.
   • No-till and mini-till production practices to row crop producers. Our acreage of conventional till farming is going down each year.
   • Irrigation-Tailwater Recovery Field for producers–two farmers attending now have tailwater recovery systems on their farms.
   • Conducted similar “Water School” for Commissioners like Fla.
   • Methodologies for evaluation of policies; inter-agency cooperation/collaboration possibilities; comparability of events/activities/policies in other states; contacts elsewhere–to anyone who asks (commodity, agency, policy makers, social/civic, etc.).
   • Used info received during presentations with local livestock producers and NRCS.
   • AFO/CAFO materials.
   • Information from the phosphorus program has been delivered to poultry and swine producers in my county.
   • GPS class ideas when working with youth.
   • School programs.
   • Used ideas to obtain increased level of pertinent web-based information resources.
   • Have worked with youth Natural Resources programs and NRCS.
   • Ideas for volunteer monitoring programs; particularly, more involvement by volunteers in data analysis. Use of biomonitoring by volunteers at a more basic level. Information about setting up a rain garden demo. (Not yet implemented here, but trying.)
   • I have adopted some of the material (information) acquired at the conference for use in local programs such as our “Water School for Decision Makers” and stormwater education program.
   • Used ideas on stormwater in a couple grant applications.
   • Developed local workshop on working with lake groups.
   • I have used the Audubon golf course talk as a spring board for new water quality activities.
   • From Florida watershed have adopted a four-county watershed update and am looking at making it a water school for new government officials.
   • We considered the “Master Farmer” program but decided our situation was not conducive to such a program– good information nevertheless.
   • My project deals specifically with manure management and marketing of value added material. I gained a
Follow-up Survey

lot of information from the individual who presented on the poultry litter market development and related project website from Oklahoma.

- Master Farmer; contact lists; North Carolina info.
- I work extensively in the area of drinking water quality. The presentation by Jim Hairston on water treatment scams as well as the presentation by the specialist from Texas who had the mobile water testing lab.
- How to select the right compost (Monica Ozores-Hampton) and statewide network of home composting demonstration sites (Wayne McLaurin). Used in Kentucky Master Gardener Program. Significantly raised level of enthusiasm for composting and recycling among program participants.
- Pesticide fate in the environment; University of Florida presented.
- Biosolids land application presentation materials; educational materials listing from AZ.
- Water sinks to master gardeners on use of rainwater as option in rain capture. Do not know if used.
- Bill Hunt’s info.
- Information from pre-conference workshop. Used with youth and educator audiences. Impact: Improved confidence in water testing.
- I saw several excellent methods for presenting power point slides.
- Developing/establishing a Youth Water Leadership Institute.
- Workshop led by Kim H. and Lisa M.
- As a result of attend the meeting in NM, I coordinated a water quality educational workshop program delivered at the National County Ag Agents (NACAA) annual conference in Orlando, FL, July 15, 2004. Topics were BMPs and Manure Management.
- Used plans for infiltration demonstration.
- Used info on biosolids and contacts from that session.
- Been too long—do not remember.
- Self-awareness.
- Not a specific one at this time.
- Composting of animal waste used with Master Gardeners, Livestock Producers and other individuals. County is now using compost on ballfields and parks.
- Materials relating to the Master Farmer concept were used to rejuvenate the effort.
- Began the discussion of establishing a water school in North Carolina based on the Florida model.
- More insight to working with ag audiences. Increased number of ag related programs, stress economic issues when relating environmental concerns.
- Conflict resolution.
- Applied research and tech assistance related to watershed management and stormwater/water quality — audiences used: local governments, engineers, non-profits, state and federal agencies => implementation of bmp and management tools.
- Stormwater management through biofiltration and retention areas.
- Organized a training/teaching orientation for 4-H leaders from across the state on environmental issues and water quality opportunities for 4-H programs. Utilized speakers from Division of Agriculture, Conservation, Water and UK speakers similar to inter-agency example at NM Conf.
- Information was shared with County Directors as to the importance, region-wide, for water quality. One program which involves many other agencies.
- The economic information about drought.
- Rainfall simulator.
- I have used CAFO information in dairy meetings, alternative water sources in beef and dairy meetings. I plan to use the LPES curriculum in upcoming CAFO meetings and one on one with producers. Phosphorus management in animal relations is knowledge from a session that I use with dairy producers.
Follow-up Survey

9. If you were asked by the sponsor who provided funds for the conference, what would you say has been the value/benefit of the conference to you and your clientele?

- Quality and adequate amounts of water are important to all citizens. Proper management is a priority. Our future depends on the conservation and priorities placed on water planning and usage.
- Heighten my overall knowledge of the broad areas of water quality other than crop production.
- Better understanding of cause/effect of stormwater runoff.
- “Learning” about various who, what, when, where and why scenarios.
- Increased importance of water quality and conservation.
- Increased awareness of water quality and conservation.
- Able to make more decisions on programs to help producers comply with regulations.
- I have a better understanding of water quality needs and problems in other parts of the country.
- Allowing agencies to network information, share ideas and programs. Allows agencies that will implement programs gain information as to what works where.
- Broaden my views/knowledge on water quality.
- Getting out of the state to see what is happening in other areas of the country gives me an appreciation of the broad issues in water quality.
- Exposure to new ideas.
- A great regional inservice training and use of information produced by others.
- That the workshops related youth programs has increased my knowledge to present new programs.
- Broadened awareness of water quality issues and programs happening in the South. Excellent source of networking ideas.
- Conferences like this enable us to begin new programs at a more advanced level, understanding the mistakes and successes of others who have done it before. Not having to begin new programs by re-inventing the wheel.
- Meeting and networking with other extension professionals from throughout the Southern Region and discovering what others are doing to address priority water-related issues.
- Fresh ideas, new relationships.
- New grant sources identified to tap into, new programs introduced to which an very interested in adopting, and some I have adopted.
- Communication with others working in similar areas. Also unique differences in states regarding water quality issues and solutions.
- The events that allowed for large group communication (eg. dinners, breaks, etc.) are always an added benefit– they allow individuals to ask more questions and gain even more knowledge about programs of interest especially following presentations.
- Limited–more of a golf tournament than a concentrated, dedicated professional conference with clear goals and objectives–organization was unclear–too much of a reunion–not a professional meeting.
- Very good ideas from other parts of the country.
- Networking with others on policies, programs.
- To find out about the success stories in different states. We don’t need to reinvent the wheel if another state has already made a program work.
- Ideas.
- Greater awareness of water quality issues and programs dealing with same AND networking.
- Networking; seeing what others are doing; real on the ground successful programs.
- Share educational resources and delivery methods. We are limited by time. Sharing information is extremely critical.
- Linking state and states on common issues.
- Latest ideas on water conservation.
- Overview of what other states are doing.
- Networking with other professionals, exchanging ideas/strategies for more effective programing.
Follow-up Survey

• Networking with other extension professionals.
• Meeting large number of people from around the southern region.
• YWLI; partnership programs.
• Networking.
• Networking, updated on current regional issues and trends.
• Better understanding of water quality issues, how to develop and deliver water quality programs and the importance of these programs if not developed for the future.
• Same (which was: been too long–do not remember).
• Info.
• Linkage to other programs, what works, what others are doing.
• Primarily the idea exchange that occurs at the conference.
• Identifying current and future programs and concerns involving water and natural resources. Gives agents heads up on what’s coming.
• A great source of information for local water quality programs.
• New water quality programming idea leading to on-the-ground educational programs.
• New interstate relationships that help us program more efficiently by sharing resources and expertise among states.
• Information on networking, working with a variety of audiences.
• Networking and sharing ideas across states helps limit duplication of efforts.
• Network with others to gleam additional methods for implementing water quality projects.
• Networking; examples of what others states are doing–case studies; collaborating with other states.
• Sharing of knowledge and experiences with coworkers from other states.
• To expand knowledge about water related issues from other states, region and national level. Truly an example described of the interconnection and dependency on water issues.
• The opportunity for several agencies in the region to share their water quality programs. Gain ideas and information for new programs.
• The ability of agents and specialists to discuss ideas and make contacts across the region.
• Increased knowledge of water quality issues and information to use in educational programs for clientele in McMinn County and the whole state. Able to see what others are doing in the Southern Region that could be used. (Learning from others, new ideas, networking.)

10. We are planning another conference for 2005. As you think about the programs that were presented at the conference and your own experiences since then, what suggestions would you make for topics and activities for 2005?

• How do landfills affect ground water.
• From my area of responsibility, agronomic crops, I would like to see more information in that area of study as it pertains to water quality.
• More hands-on type training.
• Include: water transportation and commerce
• recreation/tourism needs vs. consumption needs
• rural vs. urban–who gets how much and at what costs
• “fairness” of reg’s and policies–how to evaluate
• the “other side’s” view (the rest of the story) of ag’s water issues
• More livestock related topics.
• Good meeting - repeat format.
• Field trips.
• Include outdoor functions. Include quantity issues that integrate quantity with quality. More emphasis on how to shift to watershed-based efforts.
• Grant sources.
Follow-up Survey

• Ask poster presenters, especially, to be more concise. Use big print and fewer words! They should be challenged to present the gist of their project or research with a few clear graphs, diagrams and/or photos. Our time with the posters, as readers, is limited!
• The 2003 conference was excellent. The format focused on local, regional, and state’s water quality programs. Presentations for 2005 will hopefully do the same.
• More case studies of successful projects.
• Tours should be afternoon of Day 2.
• Quit trying to make every state fit a national mold! Emphasize differences and ways we adapt in each state.
• I also particularly enjoyed the workshops on the first day. Although I only attended one, I would have liked to attend more. Is it possible to space those a bit more, particularly the ones focusing on similar areas to allow more participation?
• Lose the golf–have a theme–have real sessions–connect better with other environmental agencies–there was more benefit from interactions with my counterparts from other states outside any session. It’s almost like this group is operating in a vacuum, more interested in staying than in accomplishing or leading.
• More tours; last year was a good site.
• Think about a youth program track—programs that can be incorporated into 4-H Youth Development programs (not youth coming to program necessarily). If you work with youth on water quality they should adapt their mind set faster and earlier than adults.
• Put an economic twist on what it costs to optimize water quality in a proactive light versus what it costs to clean up water that has become contaminated either with sediment nutrients, bacteria, etc.
• Conflict management and negotiation, i.e., professional methods for dealing with difficult situations.
• TMDL – how to calculate; what to do when it goes wrong.
• Additional projects ongoing in areas of nation.
• Include more arid areas.
• Promote the use of interactive sessions, not just “sit and get.” Ask presenters to be innovative in the delivery of information.
• I suggest inviting some well-known speakers. Also issue a call for papers–let you screen out the weak ones and keep the good ones.
• Location ----- it was great and accessible.
• We must change the way presenters interact–or don’t–with their audience. Too much stand and deliver.
• More interactive presentations.
• Water conservation–home landscape, public areas, ag. Come back to Ruidoso!
• How about a panel discussion from end-users–what do they want, barriers, like/not like.
• I am involved in water quantity issues even more than quality. Consider expanding into this area?
• Loved the poster displays – if we could have some handout on summaries or topics from posters.
• Keep up the good work! Field trips are always beneficial.
• Watershed management - holistic (maybe a workshop?)
• Addressing social science issues for improving watershed/stormwater management – strategies for overcoming common barriers to change.
• Economics of water quality protection.
• A “Topic” session on “understand ecosystems” education programs.
• Up to date situational topics to set the stage.
• Examples as to how programs are working (share experiences).
• Learn about the unique offerings (opportunities) of the host state.
• The conference was well planned. Everyone learns by hands-on and tours. Those were very good. If possible evaluate more hands-on activities.
• More on livestock material related to water quality and using management practices on the farm to help
improve water quality on the farm as well as down stream.

11. We are planning a regional impact report and would like to include examples of successes resulting from use of information from the conference in it. If you have a project or program to nominate, please describe it and give us your contact information.

- Due to questions asked during my presentation in Ruidoso, I submitted for grant funds to conduct a grazing study on yearling cattle. The study consist of cattle on pond water and public water and find out the performance difference. ((Brian White, UT Extension, P.O. Box 159, Lexington, TN 38351 — Dwhite@utk.edu)

- Hopefully in 2007 we will have some success stories.

- Good luck!

- Learning that 10% of the wells tested in Texas were positive for coliforms was a real eye opener. (Dr. Susan Watkins—Arkansas) I have used this knowledge all over the country as I speak to poultry producers and companies about drinking water quality and how to optimize water sanitation test cost effectively. I have potentially impacted over 2000 poultry growers with my presentations in over nine states.

- Irrigation well survey for irrigation of lawn. Checking for depth and water quality. (P.O. Box 1100, Georgetown, S.C. 29442-1100)

- I was asked to provide a 4-hour version of my workshop in Ruidoso for county directors in Florida on April 26. Tim Campbell - tcamp@uky.edu

- A collaborative Water Education Program began from the network between individuals at the conference.

- Tracy Farmer, Center for the Environment, 233 Mining and Mineral Resources Bldg., Lexington, KY 40506-0107

- See attached program provided at the NACAA Annual Meeting. (my e-mail: bobhoch@ifas.ufl.edu)

- Engaging youth and community organizations has been very successful tool for outreach to minority communities. See attachment. (No attachment in envelope.)

- As a follow up to the conference, a meeting was held among MS, LA and Arkansas to plan a regional Master Farmer effort.

- Storm Drain Marketing and Ed Program; Watershed Summit

- Mimi Stoker, 820 Main Street, Many, LA 71449

- Nutrient Management training—A three day workshop presented by our team to Southern States Coop Managers and salespersons. A unique inter-agency instruction team and an unusual audience of agribusiness. On site training on university farm.