

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

GROUNDWATER POLICY EDUCATION PROJECT: NORTH CAROLINA

Leon E. Danielson North Carolina State University

In a recent paper, Otto Doering notes that an expanded and "more service oriented" role of government has citizens "acting more and more like clients and less and less like participants" (Doering p.1) in most of the public policy issues faced by society today. As a result of greater involvement of government, citizens have fewer opportunities to be involved in selecting key issues that will be the focus of local policy debate or in discussing alternatives and consequences of policies that might resolve these issues. In addition, a source of frustration for those of us working in the field of public policy education is that many citizens may prefer it that way because they either lack the time, interest or expertise to become involved. Successful grass-roots policymaking is not easy and places heavy responsibilities upon both citizens and policy educators to make it work.

The North Carolina pilot effort for the Groundwater Policy Education Project addressed this issue by giving citizens the power, the responsibility and the motivation to make their own decisions. This included identification of priority issues to be given attention, identification of alternative policies and their consequences, and the making of final policy choices. Several motivating factors and philosophies guided the pilot program effort.

First, the project was an experiment to test the value of coalition building, making it easier to "let go" of the program and to put decision-making power in the hands of all participants. Second, I strongly support the view expressed by Judy Rogers at the 1990 National Public Policy Education Conference. She said that policy decisions today are made in a more diverse, turbulent and complex world and suggested that effective leaders are no longer called upon simply to plan, organize and control the agendas of groups they are leading (Rogers). Instead, effective leaders today must be team players, with skills in areas such as facilitation, motivation, communication, collaboration and mediation and, in addition, must wish to empower others rather than to showcase their own abilities. Third, it is becoming clear that successful public policy education programs must focus upon both process and content. In today's high-tech world,

policymakers are awash in technical data that requires educators to spend considerable time to find and make available timely and understandable information, and to provide any other "content" information about the issues and policy alternatives that are needed. Yet, without attention to process skills—such as methods for forming coalitions and getting people to participate; techniques for communicating among coalition members and with the public; networking; and collaboration—progress toward resolution of the issues will be difficult.

Situation

Groundwater is an important resource for the state of North Carolina because of abundant groundwater supplies in the Coastal Plain and because of the rural character of the state. It is estimated that 3.2 million of the 5.9 million North Carolinians (55 percent) rely on groundwater for their water supply. In rural areas, where private wells predominate, dependence on groundwater approaches 100 percent. Gaston County is located in southwestern North Carolina, west of Mecklenburg County and the city of Charlotte. The 1990 population of Gaston County was 175,093; it contains thirteen municipalities; its largest city is Gastonia, with a 1990 population of 55,480.

Coalitions

The North Carolina Pilot Project involved two coalition-building efforts, one at the state level and another at the county level. These were conducted because of needs expressed in surveys, the desire to develop working relationships with state-level local government associations, and because of ongoing North Carolina State University-Gaston County cooperative activities that provided a unique pilot at the local level.

The state-level coalition included the North Carolina Cooperative Extension Service, the North Carolina Association of County Commissioners and the North Carolina League of Municipalities. Coalition members were chosen because of their statewide perspectives; their ties to local governmental entities; and their knowledge of state agency resources, responsibilities and capabilities. Coalition-building with these state-level organizations was done in hopes that activities could be planned with a top-down perspective to achieve intergovernmental goals related to use of information, communication and education.

The county-level coalition is comprised of extension and Gaston County's highly active Quality of Natural Resources Commission (QNRC). In 1988 the Board of County Commissioners established the QNRC to: 1) examine the state of natural resources in Gaston County; 2) review environmental concerns; and 3) develop a consensus on

recommendations. The fifty-one-member QNRC includes elected and appointed local government officials and representatives of industry and business, public agencies, environmental action groups, and the general public from all parts of the county.

The QNRC membership formed four committees to more effectively handle issues regarding specific resources: 1) Groundwater, 2) Surface Water, 3) Air Quality, and 4) Education/Policy. Representatives from air, ground and surface water committees were assigned to the Education/Policy Committee to insure coordination of the public policy education effort.

Goals and Objectives

The intended outcomes common to both state and county pilot projects were to:

- 1. Increase understanding of the role federal, state and local agencies and officials have in protecting groundwater;
- Increase information flow between federal, state and local governments;
- 3. Provide experiences that increase the abilities of local officials to make sound groundwater policy decisions; and
- 4. Increase understanding of groundwater quality issues, including policy and management alternatives and their impacts.

Additional objectives for the county pilot included:

- 1. Providing a thorough understanding of the air, land and water resources and resource-use issues in the county;
- 2. Establishing priorities for local action such as setting policy goals, ranking areas of greatest concern in order to target policy efforts, and identifying associated information needs; and
- 3. Developing an understanding of local government jurisdiction, options and responsibilities for protecting the county's resources.

The audience for the pilot project included rural and urban citizens, local officials and state officials with heavy focus upon non-traditional extension clientele.

Implementation

State Coalition

The state coalition was used to choose among alternative groundwater activities that would foster increased communication and flow of information between state and local decision-making levels. Because the coalition was formed at the state-level, the initial task was to determine whether some state-level activity might be effective. what the nature of such an activity might be, whether a state-level conference was or was not needed, and whether regional conferences would be more effective. A meeting of the coalition was held in June, 1990, at which time a decision was made to hold a statewide groundwater conference focusing on local city and county officials, and state agency personnel. The conference was held in February, 1991, (the first ever in the state), and a second was held in March, 1992.

County Coalition

The Comprehensive Education Program and Policy Development tasks of the Gaston County QNRC Project began in December, 1990. Efforts were focused first on developing a plan for educating identified publics in the county about environmental issues and, second, on assisting QNRC members to reach a consensus on alternative environmental policy actions to be recommended to the Board of County Commissioners.

Education Program Development. A detailed description of steps and procedures for developing an educational program was drafted in December, 1990. The purpose of the listing was to define the step-by-step process and to identify committee responsibilities for moving the project forward. In defining roles for the various committees, a twelve-step procedure was developed to guide the coalition members toward their overall objective.

Each resource committee met separately during January and February, 1991, to define its education agenda. A nominal group technique was used to guide the group members through the process and to reach a consensus on goals, objectives, issues, audiences and program elements. At the first two meetings the program development process was carefully described and handouts were distributed showing how the various program elements (goals, objectives, issues, target audiences and action elements) could result in a final program. Emphasis was placed on reaching consensus on the issues to be addressed by the educational program. At the end of each work group session, the results from each committee were organized and rewritten and sent to the coalition members for their comments and additions.

The Education/Policy Committee was responsible for developing and coordinating the overall educational program encompassing groundwater, surface water, and air quality. Because of the ambitiousness of committee plans, a four-year timetable for completion was established. It is intended that the plan will be updated annually as activities are completed and new ones identified.

Policy Development. As noted, the charge to the QNRC by the Board of County Commissioners included development of a consensus on policy recommendations to be made to the Board. Using a

policy process similar to that of the education program, the resource committees met separately to work on issues, goals, objectives and policy alternatives. A seven-step process was outlined. However, there were important differences in the process applied by each committee, with the committees approaching each issue differently as circumstances warranted.

The initial step in the policy development process was to determine which groundwater, surface water and air quality issues were most pressing and needed to be addressed first. A lengthy list of potential local policy issues, developed by extension staff and reviewed by the QNRC Executive Committee, was distributed to the QNRC members. From this list each member was instructed to rank what he/she perceived to be the top three issues. This list was accompanied by a document that focused on each issue, identifying current regulatory actions of local, state and federal governments, and suggesting further local regulatory and nonregulatory opportunities for solving problems (policy options). The four top priority issues were:

- 1. Wastewater discharge into surface waters;
- 2. Watershed protection;
- 3. Air pollution, particularly the County's nonattainment status for ambient air quality standards for ozone; and
- 4. Groundwater pollution from operating and abandoned solid waste landfills.

Both in developing the comprehensive education program and in developing policy alternatives for local environmental issues, the implementation strategy we have relied on most heavily is intensive involvement of committee members to insure grass-roots development of the program. Throughout the policy development process, extension staff served as facilitators, not policy advocates. Local representatives made all the option choices.

Currently, deliberations for policy recommendations to County Commissioners have been completed for the first two issues. Indepth watershed protection recommendations were provided for the county's response to new state legislation. The QNRC studied and debated whether to take over the state's National Pollutant Discharge Elimination System (NPDES) permitting program but was unable to reach a decision. This issue may be addressed again later when additional information is available. Policy options to reduce air pollution in the county currently are under discussion.

Outcomes

The roles played by GPEP in the coalition effort emphasized: 1) generation of extensive technical information about the quality of

natural resources, existing federal, state and local policies, and policy alternatives (air, surface water, groundwater) and 2) promotion of process skills and principles, both in building coalitions and in planning and developing QNRC programs. This was especially important because of the number of people and interests represented on the QNRC, the complexities generated by focusing on issues beyond groundwater, and the recognition that QNRC programs would continue beyond the end of the pilot project.

The two coalition partners functioned as equals. To create local ownership of the program, much effort was expended to encourage individual QNRC member attendance and involvement in committee meetings, activities and decisions. All final decisions on goals, objectives, priorities, etc. were made by the QNRC and its committees. Extension served as facilitator for this model by helping with "process" and by providing information to assist QNRC members in their deliberations. In addition to creating local ownership of the program, this gave participants a feeling of empowerment because of their increased understanding of issues and alternative solutions; their playing an increasingly important role in helping County Commissioners make environmental decisions; and their successfully meeting their responsibilities outlined by the Board of County Commissioners.

As reported by coalition members, the pilot project produced increased knowledge, improvement in coalition-building skills, feelings of empowerment, increased willingness to listen to divergent points of view, and many other benefits too numerous to list here. Certainly, in the Gaston County pilot effort, it must be recognized that involvement of a large number of people and substantial resources beyond what GPEP alone could command had a major impact upon the success of the project. However, in areas having a definite policy dimension, such as improvements in the policymaking process, increased recognition of the value of coalition building, appreciation of broader perspectives and other related outcomes resulted from increased emphasis on the principles of public policy education. These can be attributed to the Groundwater Policy Education Project.

Although overall progress was slowed down because of the breadth of the project and the extensive efforts made to create local ownership of the program, a solid base has been established. Perhaps the prime measure of success is that QNRC members have developed the confidence, experience and skills to work almost completely through the public policy process on their own to analyze new issues and problems.

Lessons Learned

1. Public policy education as a methodology will be unfamiliar to most other coalition members. At the outset it is essential to de-

fine clearly what is meant by "public policy education," what it tries to accomplish and what steps must be taken to implement the principles involved. The process must be clearly defined in terms of steps to be taken and participants must be kept informed of where they are in the policy process. It is important to constantly reiterate the process.

- 2. Scope can be a problem. There is a need to define the nature of the "product" that participants are going to develop. How broad or specific should policy recommendations be? Decisions such as these must be made early in the policy process.
- 3. Facilitator skills, patience and energy must be substantial to interact with participants with much greater frequency and intensity than is required in cases in which local participants are not making all the decisions. Participants at first will have a very narrow perspective and will think they know all the answers. Part way through the public policy education process, as they acquire more expertise on the issue, they will view the issue from a much broader perspective but may be totally confused about what should be done. The job of the facilitator will be to keep group members on track, and keep them coming to the meetings so that eventually they will be able to focus more narrowly again but will be more informed about the issue, policy options and consequences.
- Using the public policy education process greatly slows down the process of decision making and requires that attention be given to methods for keeping participants interested and involved.
- 5. It is essential to have a leader possessing the skills and temperament to share responsibility, thus leading to empowerment of participants, rather than one who wants to call all the shots personally.
- 6. Coalitions are a viable approach to public policy education, especially when dealing with nontraditional issues and audiences. All stakeholders must be involved.
- 7. Process is of equal importance to content. Participants taught the process of public policy education eventually will be able to analyze issues on their own without heavy reliance upon a facilitator. Total focus upon content means the facilitator will always be needed.

REFERENCES

Doering, Otto. Today's Citizen Anger: Is There a Constructive Role for Public Policy Education? Lafayette IN: Purdue University, 1992.

Judy Lawrence Rogers. "Emerging Leadership Models: Implications for Public Policy Education." Increasing Understanding of Public Problems and Policies—1990, ed. W. Armbruster and T. Grace, pp. 23-33. Oak Brook IL: Farm Foundation, 1991.