Watershed Groups in Ohio: Resources, Activities, and Accomplishments

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Introduction

Since the early 1990s, there has been a shift in the field of environmental planning and management towards more participatory, integrated, and collaborative approaches. These newer management approaches focus most strongly on citizen participation, collaborative partnerships between citizens and government, adaptive management, and management over ecological boundaries. Ecosystem management is the name most commonly used to refer to this broad set of management strategies (Cortner and Moote 1999).

Many researchers have studied watershed groups as examples of ecosystem management in practice. Watershed groups have been defined as "assemblies of stakeholders who periodically convene to discuss or negotiate the management of streams, rivers, or watersheds" (Leach and Pelkey 2001), where stakeholders are people or organizations with some stake or interest in the watershed.[1]

The basic mission of most watershed groups is to protect, improve, and/or restore the ecological health of their local or regional watershed(s). Therefore, most groups are concerned with issues related to water quality, non-point source pollution, land-use, and stormwater management. Although watershed groups have a common interest in protecting water and watershed quality, they may address this interest in a variety of ways, such as educating the community about watersheds and water issues; engaging in restoration projects or land conservation activities; influencing local land-use policies; or writing watershed management plans. Most groups engage in a combination of these and other related activities (Yaffee, et al 1996).

One way that watershed groups exemplify ecosystem management is their focus on the watershed as a management area. A watershed is defined by ecological rather than political boundaries and may span many political jurisdictions, including cities, townships, counties, states, and even nations. Watershed groups often encourage and facilitate collaboration among a multitude of public and private entities that own or manage land within the ecosystem: federal or state agencies, local government, businesses, non-profit land trusts, and private landowners.

Government has become increasingly interested in watershed groups as a way to implement non-point source (nps) pollution control programs on the local level. Non-point source water pollution comes from sources that cannot readily be identified and/or regulated (e.g. motor oil spilled on the street, run-off from agricultural fields, leaky septic systems). Since industrial pollution has come under regulation through the NDPES permitting system, nps pollution has turned into one of the most serious pollution problem for the country's surface waters.

State agencies often depend on local governments, non-profits, or other local or regional organizations to actually implement nps pollution control programs. In many states, watershed

[1]A watershed (or drainage basin) is the area of land that drains into a body of water.

groups have taken on the role of "local implementers" by engaging in planning activities, restoration, community education, and public awareness. Often (but not always), these watershed groups exist through grants distributed by federal, state, or local government agencies responsible for nps pollution control. In Ohio, for example, the Ohio EPA and Ohio DNR distribute grants to coordinators of watershed groups, in exchange for the group's "services" of watershed planning, public education, research, and community development (Schott and Koontz 2002).

Watershed groups have proliferated across the country and have become key players in nps pollution control policies. However, we still know very little about the ecological, social, and political outcomes of watershed groups. This research explores some of the outcomes of watershed groups and their political roles. The study of outcomes gives a picture of the overall role of watershed groups in the political structure, by describing how watershed groups interact with different government agencies and levels of government. Moreover, this study explores the relationship between key organizational variables of watershed groups and their outcomes. Understanding this relationship may help watershed groups tailor their organizations to best achieve certain political objectives.

Although several organizational characteristics are considered, special emphasis is placed on group financial resources and participation. "Financial resources" includes both the total amount of resources and the source(s) of resources, while "participation" includes various measures of participation by private citizens, private organizations, and public (government) organizations. It is expected that both financial resources and participation have effects on the outcomes of watershed groups. Other characteristics, such as human resources and group experience, are also part of the analysis.

This research addresses several specific research questions:
1) What is the distribution of private participation versus public (government) participation in Ohio's watershed groups? How does the percent of private or government participation affect outcomes?
2) Which private and public organizations most commonly participate in Ohio's watershed groups?
3) What is the level of financial resources for watershed groups in Ohio, and how does this level affect outcomes?
4) Which are the most common funding sources for watershed groups in Ohio? What percentage of total funding is provided by each of these?
5) What is the level of human resources in watershed groups in Ohio, and how does this level affect outcomes?
6) What are some of the main activities (political and otherwise) of watershed groups in Ohio? At which political roles do watershed groups believe themselves to be most effective? What are some of the most common accomplishments (political and otherwise) of watershed groups in Ohio?

Research Methods

This research proceeded in two stages. The first stage was a set of eleven interviews that produced qualitative data and informed the development of a mail survey. The second stage was the distribution of a mail survey to the known population of watershed groups in Ohio.

Stage 1: Interviews to inform survey development

A study of eleven watershed groups in Ohio was conducted using interviews, either in-person or over the phone. Groups were selected for maximum variation on two organizational variables (participation and source of finances) that have been previously shown to have a significant effect on a group's choice of political activities (Moore and Koontz 2003, Walker 1983). Variation was desirable because of the need to develop a survey that would be appropriate across the population of watershed groups in Ohio. Most groups (10 of 11) were selected from the list of respondents to an earlier survey by Moore and Koontz (2003), although one group was selected from a list of interviewees for a study by Schott and Koontz (2002).

The individual most familiar with each group and its activities was interviewed. Of the eleven interviewees, six were paid coordinators of their group, three were volunteer coordinators, and two were volunteer board members. The organizational variables explored in the most depth during the interviews were participation and financial resources. The political and other activities of the group were also discussed. The interviews provided a broad understanding of the structure and activities of a range of watershed groups in Ohio. Information derived from the interviews formed the basis for response categories on the survey.

Stage 2: Mail survey to all identified groups in Ohio

A mail survey was sent to the known population of watershed groups in Ohio. This population was identified by combining several different lists, the most thorough of which is the Ohio Watershed Network developed by Ohio State University (OSU) Extension and available online (Ohio Watershed Network 2004). The other sources of watershed group names and contact information include the list of respondents to the Moore and Koontz survey (2003) and internet resources such as the National Watershed Network (CTIC 2000), the US-EPA Catalog of Watershed Groups (US-EPA 2003), the River Network's Watershed Conservation Directory (River Network 2004), and the Ohio Environmental Council's Central Ohio Watershed and Northeast Ohio Watershed lists (OEC 2004). All of these lists were compiled and refined to form a master list of 197 watershed groups. The definition of "watershed group" was purposefully left very broad. Any group that dealt primarily with water, watershed, or land conservation issues was included (for example, land conservancies and wetlands groups were left in the sample).

The revised survey instrument was administered to the 197 watershed groups using a standard social science methodology (Dillman 2000). Of 178 good addresses, 92 were returned and at least partially filled out, for a response rate of 51.7%. Respondents were people familiar with the group and its activities, or "key informants". They included 39 paid staff or watershed group

coordinators, 31 volunteers (six of whom specified that they were board members or trustees), and 12 government agency representatives.

The survey questions referred to activities and characteristics of the group during a one-year period (approximately April 2003-April 2004). Therefore, the data provide a snapshot picture of the groups. Groups that were not active during the past year were encouraged to respond, however, by referring to the last year in which the group was active. Only groups whose "last active year" was 2002 or later were included in the analyses.

The survey questions elicited values for several organizational characteristics of watershed groups, including participation, financial resources, human resources, and group experience. Questions on participation and financial resources were designed to produce the most detailed information. Respondents provided information about group activities, accomplishments, and political roles. All of these measures are described more precisely in the results section.

Results

The compilation and refinement of different lists of watershed groups produced, as mentioned, a total of 178 different watershed groups in Ohio. Useable data were collected from 83 of these groups. Although respondents were not asked the detailed origins of their groups, Figure 1 shows when the groups were formed. Note that over 80% of the groups were formed in the 1990's or later, when concepts of ecosystem management began to take hold in the policy community.
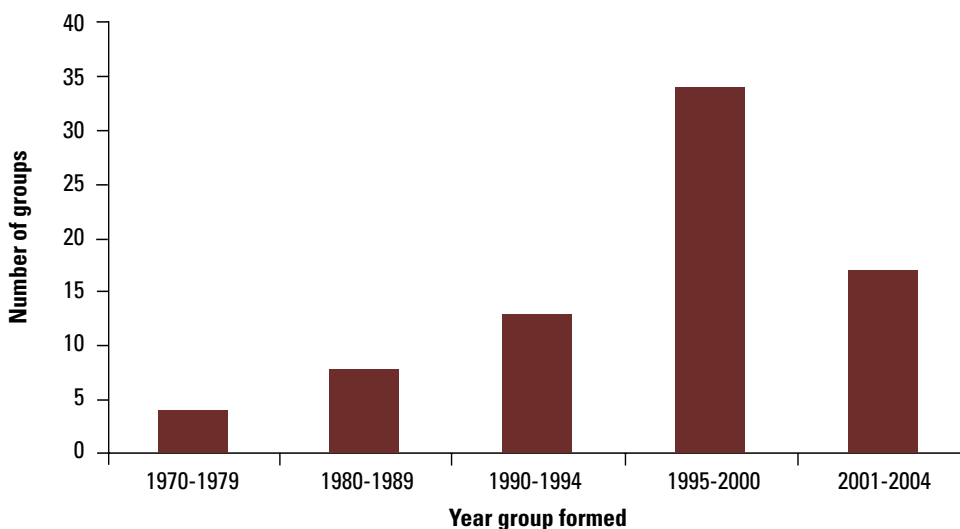

Figure 1: The year in which watershed groups were formed.

Participation

A large majority of groups in the sample (71 of 83) say they are "closely affiliated" with one or more government organizations. Although several different organizations were mentioned, 36 of the 71 (50.7%) groups cited their local County Soil and Water Conservation District (SWCD).

Beyond the "affiliate organization", this study provides detailed information about who participates in watershed groups. Survey respondents were asked to list the organizations, both public and private, that are most active in their group, along with the number of active participants from each. Active participants were defined as "people who attend meetings, participate in events, and/or coordinate with the group on a frequent basis (at least once per month)." Respondents identified each private organization as one of five categories (environmental non-profit, other non-profit, individual business, business or industry association, or university/college), and each public organization as one of six categories (federal agency, state agency, county agency or department, municipal agency or department, regional planning organization, or elected official). In a different question, respondents estimated the total number of private citizens who actively participate in the group. Together, the information about private citizens and organizational involvement provided a complete profile of the group in terms of its active membership.

Figure 2 shows the distribution of active participants in the "average" watershed group in Ohio. Note that private citizens comprise the largest portion (with an average of 15.1 citizens per group), followed by representatives of public (government) organizations (13.4 people per group) and representatives of private organizations (9.4 people per group).

Public organizations
35.4%
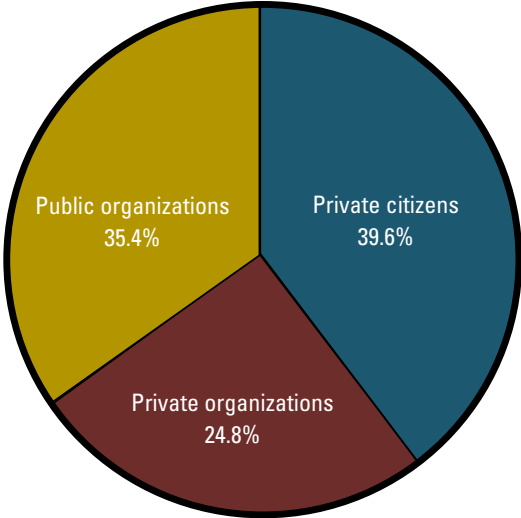
Private citizens
39.6%

Private organizations
24.8%

Figure 2: Distribution of active participants (average watershed group).

The data allow for a much finer grain look at the organizational participants of watershed groups. Figure 3 shows the number of active participants from each of four categories of private organizations and eight categories of public organizations (again, referring to the "average" watershed group). Note that the average number of private citizens per group (15.1) greatly exceeds the number of representatives from any one organizational type.
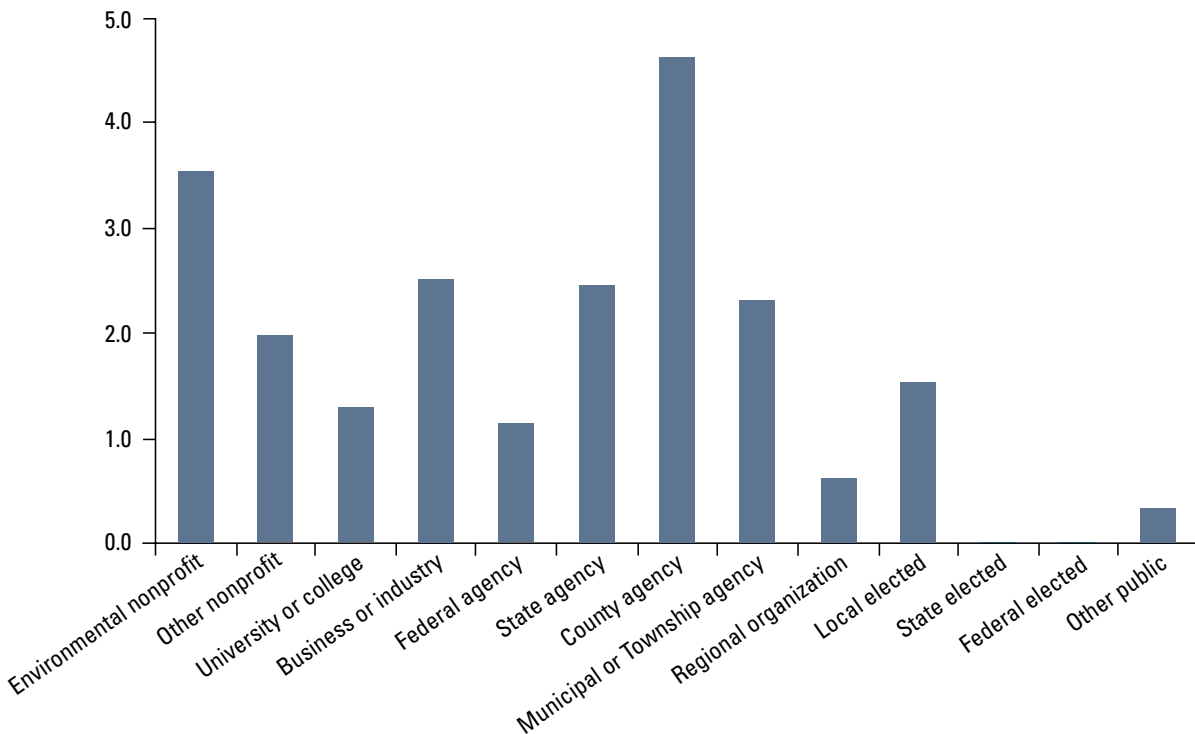

Figure 3: Distribution of organizational participants in the "average" watershed group (private citizens = 15.1).

Watershed group leaders and government officials in Ohio may be interested in knowing which particular organizations are most commonly involved in Ohio's watershed groups, although this information may not be generalizable to other states. Figures 4, 5, and 6 show the private non-profits, government agencies, and types of elected officials that were most commonly listed by survey respondents.

One interesting finding from Figure 4 is that many watershed groups listed other watershed groups as active participants (this happened 33 times). This implies high levels of interaction among watershed groups in Ohio. Another striking thing from Figure 6 is the prevalence of County SWCDs as active participants (they were listed 68 times). It should be noted, however, that some groups listed SWCDs from several counties and these were counted separately. Other
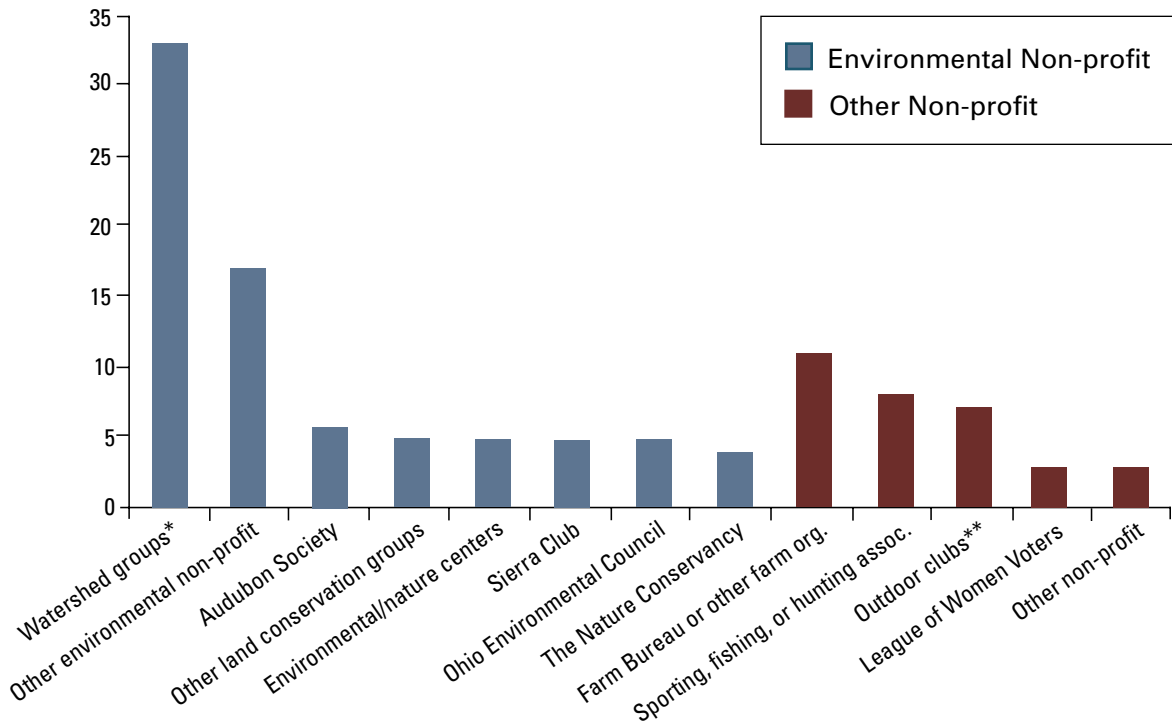
Figure 4: Private non-profits most commonly listed as activites participants, and the number of times they were listed.

* These were watershed groups on the master list. Many watershed groups listed other watershed groups as active members.
** Includes hiking, canoeing, and kayaking clubs.

government organizations that are highly active include the USDA- NRCS, Ohio DNR, Ohio EPA, OSU Extension, and county health departments. In general, participation in watershed groups seems to be highest at the state and county levels of government.

Group Type
The concept of an "average" watershed group, although useful as a summary measure, obscures important differences across groups. Participation in watershed groups varies widely and many groups have a predominance of either public or private representatives. The group type measure, developed by Moore and Koontz (2003) and adapted for this research, captures this variation.

To measure group type, respondents were asked to identify the active participants of their watershed group as either "representing mostly private interests", "mostly public (government) representatives", or "an about equal mix of private and public representatives". These were
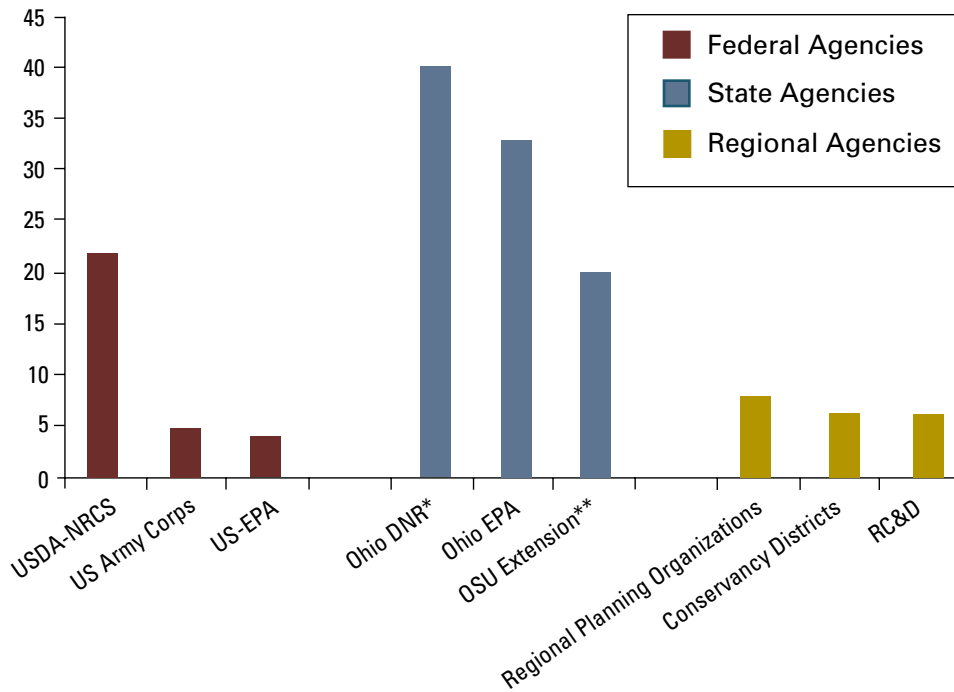
Figure 5: Federal, State, and Regional agencies most commonly listed as active participants.

* Different divisions of ODNR were counted separately.
** OSU Extension was treated as both a state and county agency for analytical purposes, but here it is shown under the state agency category.

coded as private, public, and mixed groups, respectively. The distribution of group type in the sample is shown in Figure 7.

Group type can be checked against a more rigorous measure of "percent government", derived from the detailed data on active participants. In fact, respondents "classify" their groups correctly. Public groups have the highest percentage of active government members (with an average of 60.3%), followed by mixed groups (40.1%), and private groups (16.6%).

This points to group type as a viable and useful measure for the mix of public versus private participation. Not only is it accurate, but it is very easy to replicate and use in analysis. Moreover, it is much easier on the respondent to answer a single question than to specify all of the active members in their group.
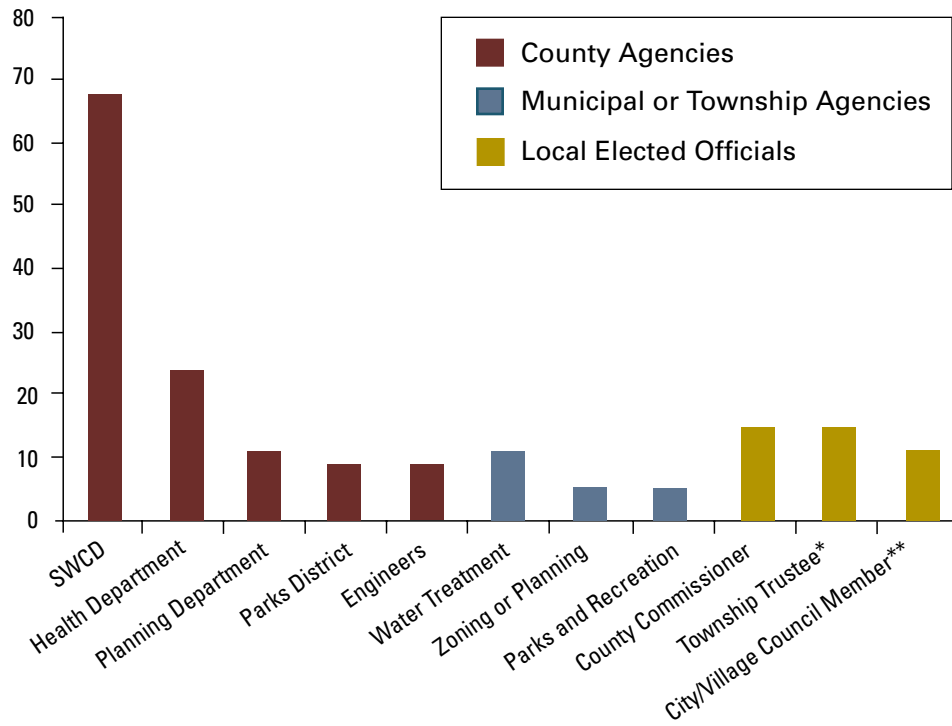
Figure 6: Local agencies and elected officials most commonly listed as active participants.

* Or other elected township official.
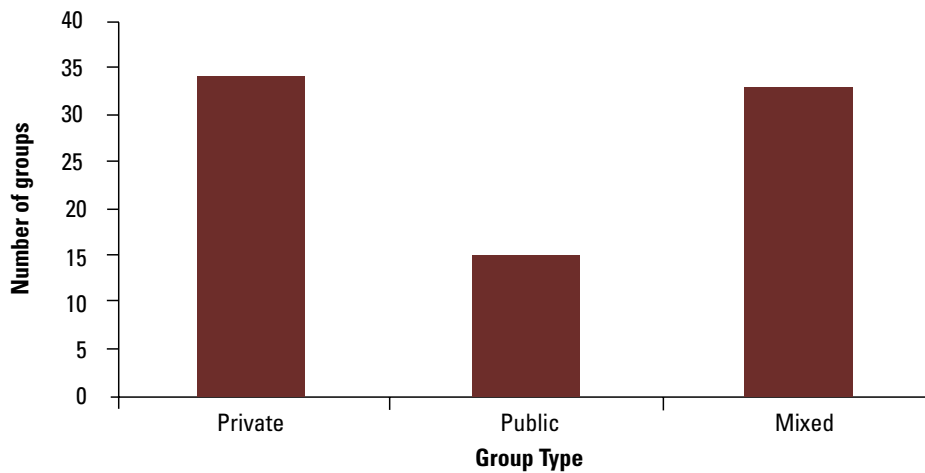** Or other elected city/village official.

Figure 7: The distribution of private, public, and mixed groups in the sample.

Financial Resources

Detailed information was also collected regarding financial resources of each watershed group. Respondents listed the four main sources of funding for the group over the past year (including grants). For each source, respondents estimated the amount of funds provided and any restrictions placed on how the money could be spent. Measures of "total money" in the analyses were calculated as the sum of these four main sources.

Figure 8 shows the distribution of total money (or "income") over the watershed groups, using ranges of dollars. Note that almost 40% of the groups receive less than $10,000 per year (27 out of the 73 groups for which there were available data).

Although not a key part of the analysis, it may be interesting for watershed group leaders and Ohio government officials to know the main sources of funding for watershed groups. Figure 9 shows the distribution of funding for watershed groups from three sources: state and federal government, local and regional government, and private sources.
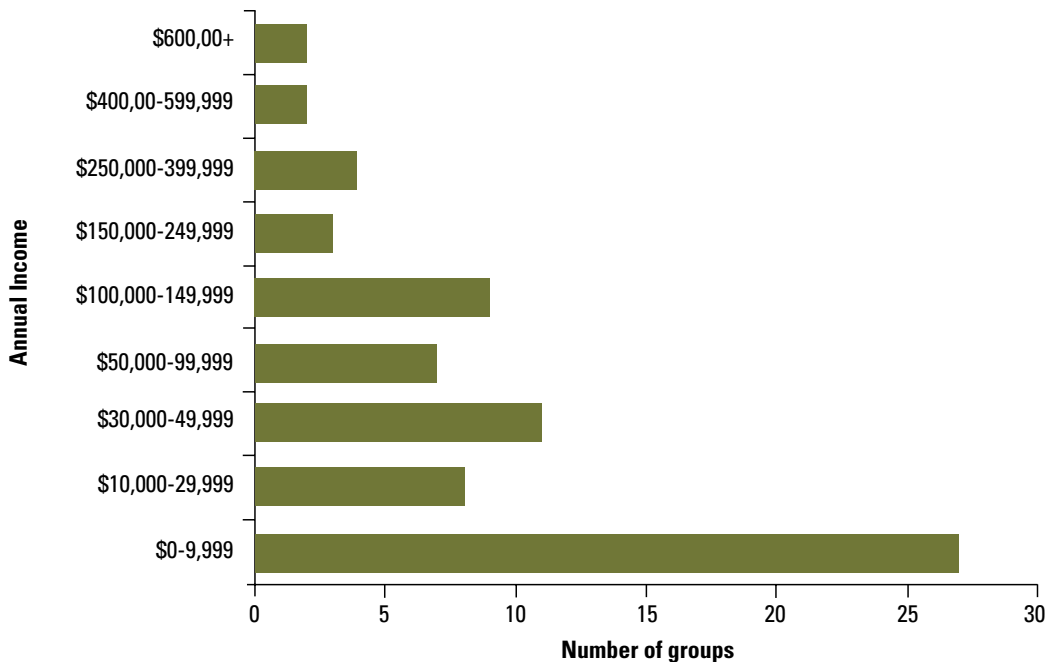
Figure 8: The annual income of watershed groups in the sample, including grants.

The most striking part of Figure 9 is that state and federal government provide most of the funding for watershed groups in Ohio. A couple of qualifications should be added, however. First, this funding includes large grants from state and federal agencies, many of which are highly restricted. Many grants are earmarked for restoration projects, remediation, or purchase of land, in which case the watershed group itself may not have flexibility over how to spend the money once they receive it. Secondly, there are a large number of watershed groups for whom more than 80% of funding comes from private sources (22 groups, or 36% of the sample). Although private money is a staple for so many watershed groups, the total amount is much less compared to the large grants distributed by state and federal agencies.
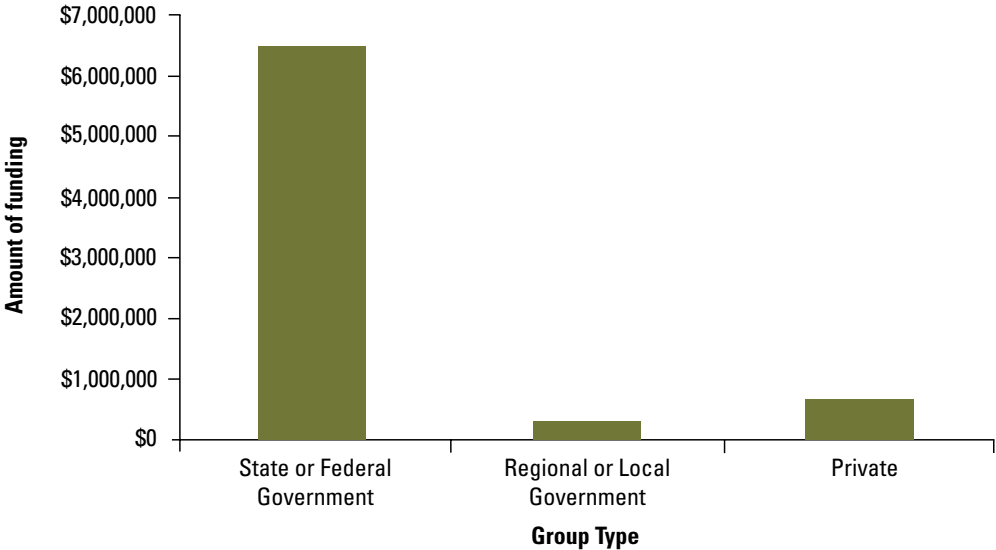
Figure 9: The distribution of funding over all watershed groups in the sample.

Figures 10 and 11 provide more detail on the funding sources for watershed groups in Ohio. Figure 10 lists the most common funding sources for watershed groups and the number of times each source was listed, for the 76 groups responding to this question. Figure 11 shows the percent of total funding (summed over all 76 watershed groups responding to this question) provided by each of the most common sources. Note that the most common funding sources may not be the ones that provide the most overall funding, and vice-versa.
The statistical analyses in this study used two main measures for financial resources: the total money received by the group in the past year (as summarized in Figure 8) and the percent of total money that came from private sources.
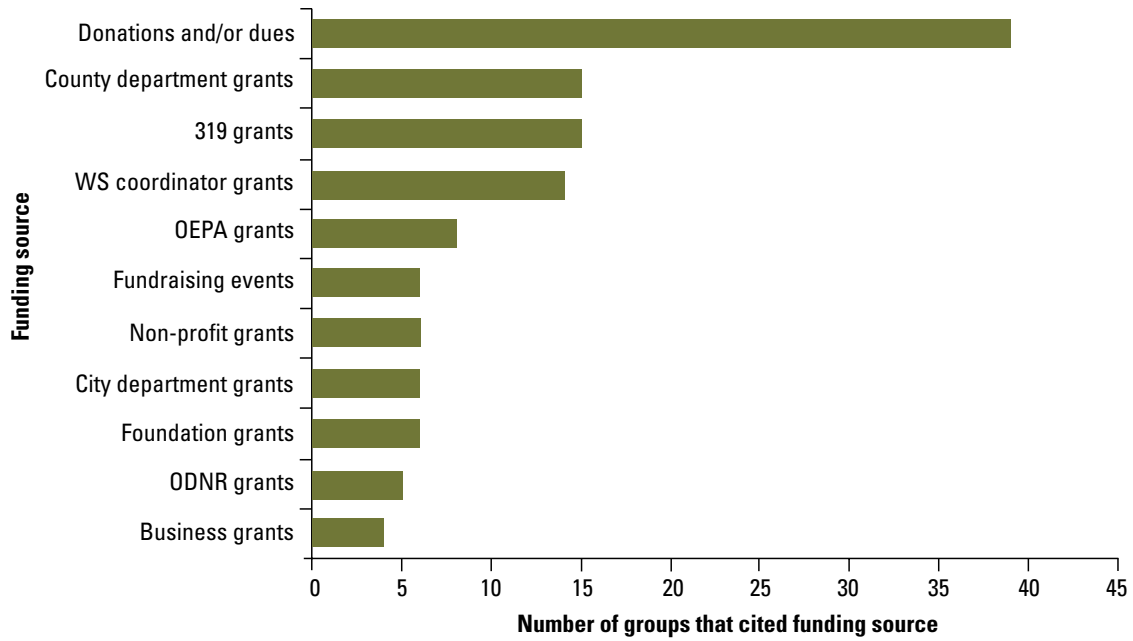
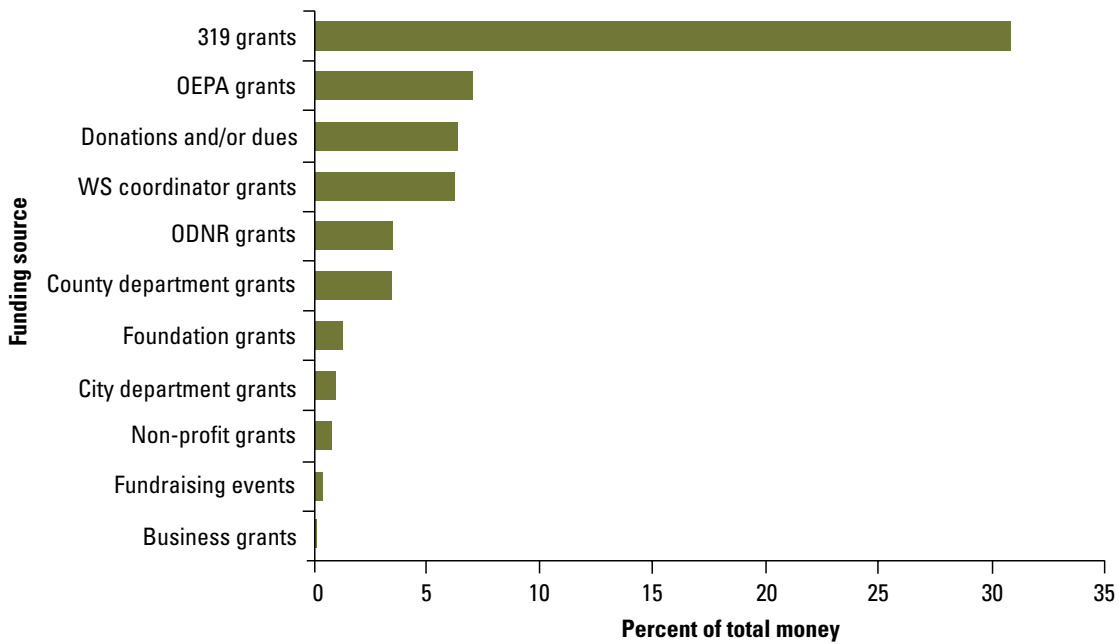Figure 10: The most common funding sources for watershed groups in the sample.

Figure 11: The percent of total money (summed over all watershed groups) provided by each funding source.

Human Resources

To estimate human resources, respondents were asked whether or not their group had any paid staff and/or volunteers, as well as the approximate number of hours per week worked by staff members and volunteers. The groups were about evenly split between staff and no staff: 45 groups have at least one staff member, whereas 36 groups do not have any staff members. The combined staff and volunteer hours (per week) are shown in Figure 12, using ranges of hours.

Although a significant portion of groups spend less than 10 hours per week on group activities (about 23%), there are also many groups who fall into the range of 41-60 hours per week (about 32%). Most of the latter category of groups had one full-time staff member and a small number of weekly volunteer hours.

It is expected that the number of hours spent on group activities per week, in addition to organizational characteristics like participation and financial resources, will have significant effects on the outcomes of watershed groups. These outcomes are discussed below. Also included are some of the key results from statistical analyses relating organizational characteristics to outcomes.
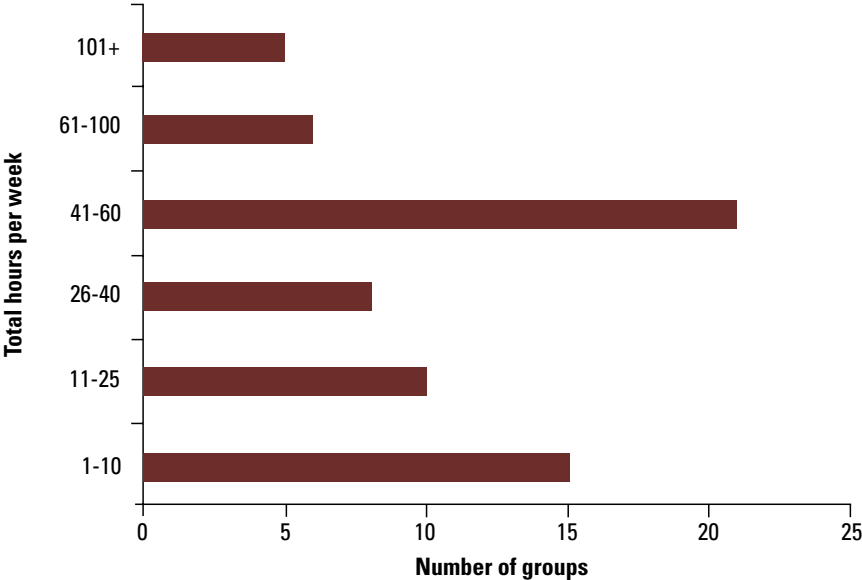

Figure 12: Total hours spent per week by staff and volunteers combined.

Activities

Activities were measured on the survey with a list of 34 different activities. Most (but not all) of these activities involved some kind of interaction with government. Respondents were asked whether or not, over the past year, their watershed group had engaged in each of these activities. They estimated the hours per week spent on each activity by choosing one of seven ranges. For seasonal activities (e.g. restoration projects), respondents were also asked to specify the number of "weeks per year".

Table 1 shows the fifteen most "popular" activities, along with the number of groups (out of 77) that indicated they engaged in each activity. Note that the three most commonly listed activities (education and outreach, publication of newsletters and/or brochures, and monitoring) typically do not involve interaction with government (unless they are a target audience). Most of the activities that do involve interaction with government indicate a collaborative, cooperative relationship between watershed groups and government (e.g. working on projects with government agencies, providing information to government, working on a management plan).

Table 1: The fifteen activities most commonly engaged in by watershed groups in the sample (sample size = 77).

Activity	Number of groups
Education and outreach	71
Publication of newsletters and/or brochures	62
Monitoring or environmental assessment	58
Projects with state or federal government agencies	57
Providing information or opinion pieces to the media	54
Providing information to local government agencies	53
Projects with local government agencies	53
Meeting with someone in a local agency to talk about policy issues	49
Writing/updating a watershed management plan	47
Letters or phone calls to someone in state or federal government	46
Meeting with a local elected or appointed official	45
Providing information to state or federal government	44
Letters or phone calls to someone in local government	43
Having a group representative serve on an advisory board	41
Restoration projects	40

This study improves upon previous research by not only identifying common watershed group activities, but also gathering information about the amount of time that groups spend on each activity. The activities listed in Table 1 are extensively used, but may not be time-intensive. On the other hand, there may be activities that are not used by a majority of watershed groups but consume a great deal of time. To explore this possibility, the average hours per month spent on each of the 34 activities was calculated for each watershed group.[2] The most time-intensive activities, averaged over all the groups that engaged in the activity, are shown in Table 2.

Table 2: The most time-intensive activities (sample size = 74).

Activity	Hours per month
Restoration projects	53.0
Writing/updating a watershed management plan	43.9
Research	39.3
Enrolling people in government-sponsored programs	37.6
Education and outreach	35.0
Monitoring or assessment	34.1
Land conservation	32.9
Projects with someone from a local government agency	30.6
Providing information to state or federal government	29.5
Projects with someone from a state or federal agency	28.9
Meeting with a local elected or appointed official	28.2
Projects with a local elected or appointed official	26.3
Cooperating with OEPA on the TMDL	25.0
Projects with a state or federal elected or appointed official	23.9

The activities that appear on both lists (i.e. that are both extensively used and time-intensive) include: writing or updating a watershed management plan, education and outreach, restoration, monitoring, working on projects with government agencies or local elected officials, providing information to state or federal government, and meeting with a local elected official. These activities tend to be either neutral in relation to government or involve a collaborative, cooperative relationship with government. They support the idea that watershed groups facilitate collaboration among government agencies (Korfmacher 1998).

Moreover, the popularity of "writing or updating a watershed management plan" indicates that watershed groups in Ohio do play some role in non-point source pollution control programs.

[2] The mean of the chosen range of hours per week was multiplied by the number of weeks per year. If the "weeks per year" was not filled in, 52 was used.

Writing and implementing a management plan for the watershed is one of the key strategies for controlling nps pollution. Because of their superior access to local knowledge and community interests, the formulation of these plans is often devolved to local and regional groups. The plan development function is often accompanied by education and outreach activities, restoration projects, and monitoring, which also scored high on both lists. Also, emphasis on planning may reflect the relatively young age of these groups (most are less than 10 years old) and OEPA's requirement of an "endorsed" watershed plan to get access toSection 319 grants.

Accomplishments

Group accomplishments were measured using an open-ended question. Respondents were asked to "describe the most important accomplishments of your watershed group in the past 2 years". The responses were then coded into ten categories, similar to those used by Koontz and Johnson (2004). Figure 13 shows the ten accomplishment categories and the number of groups that listed each.

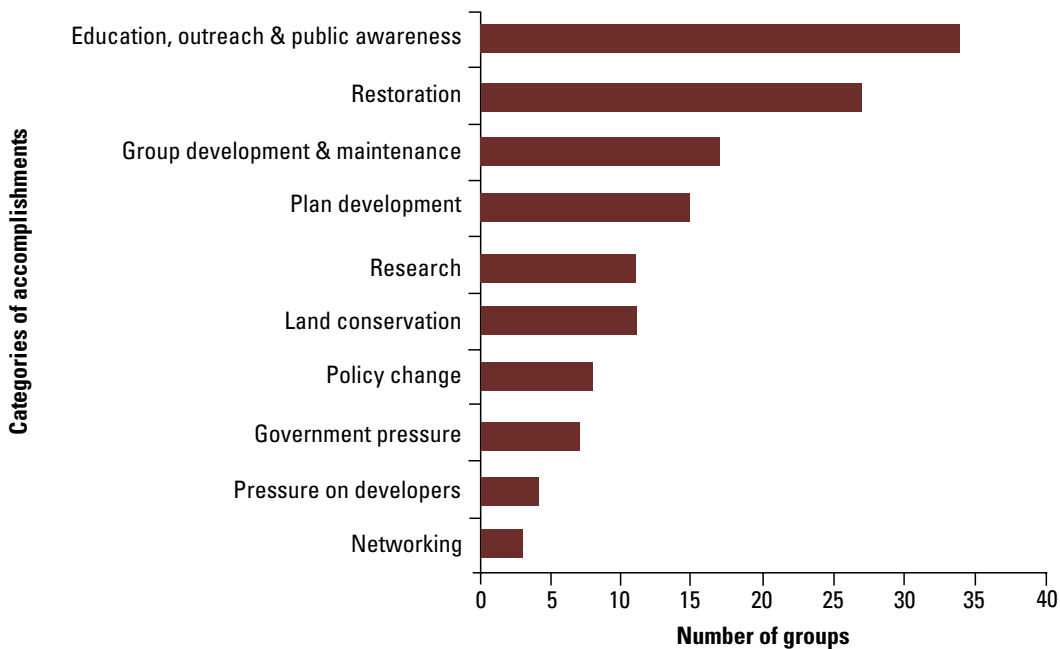Figure 13: The number of groups that listed each of ten accomplishment categories (sample size = 65, many groups listed more than one accomplishment).

Education and outreach, restoration activities, and plan development scored very high on this measure, confirming the previous activities measure. Group development and maintenance activities- such as fund-raising, clarifying group goals, and working towards membership

targets- also scored very high. Perhaps this is because of the young age of most groups in the sample (see Figure 1) or problems of insecure funding.

It is also interesting that accomplishments related to policy change, pressuring developers, or pressuring government scored relatively low. This implies that, unlike many environmental interest groups, most watershed groups in Ohio are not directly applying pressure to government or corporations.

Statistical analyses were used to explore the relationship between organizational characteristics and the likelihood that a watershed group will list a certain type of accomplishment. The most relevant result from these analyses related to "plan development". Public or mixed groups were significantly more likely than private groups to list plan development as an accomplishment. Also, groups with a staff member were significantly more likely to list plan development than groups without one. These findings imply that significant government participation and/or a staff member may be prerequisites for successful plan development. An alternative explanation is that groups receiving government funding for staff may be required to develop a plan as part of the grant requirements.

Perceived Political Effectiveness

Perceived political effectiveness was measured by a series of eleven different "political roles" that are commonly engaged in by watershed groups in Ohio, derived from the literature and interview data (see Table 3).

Table 3: Eleven political roles included on the survey.

Political Roles
Working on projects with government agencies
Educating government officials
Acting as a clearinghouse for information exchange and networking
Integrating citizen concerns into policy recommendations
Implementing or working through existing government programs
Advising government agencies
Helping develop or nurture other community groups
Speaking out on policy issues during public forums
Applying pressure to government officials through visits, phone calls, or letters
Mobilizing environmental activism in the community (petitions, letter writing, etc.)
Publicly criticizing or praising actions of government officials

For each political role that a group engages in, respondents were asked to evaluate the effectiveness of this role in achieving the group's goals, using a 5 point scale (0=not at all effective, 1= somewhat effective, 2=effective, 3=very effective, and 4=extremely effective). Figure 14 shows the average effectiveness for each of the eleven political roles.

All of the reported means fall between 1 (somewhat effective) and 3 (very effective). It is interesting to note that political roles involving collaboration with government (e.g.- working jointly on projects, advising government) tend to be rated higher than do roles that involve advocacy or pressuring government (e.g.- mobilizing activism, criticizing or praising government officials). Also, a larger number of groups engage in collaborative roles than in advocacy roles. This finding is consistent with previous research, which describes watershed groups as having a predominantly collaborative relationship with government (Wondelleck and Yaffee 2000). It also coincides with the two previous measures of political outcomes.
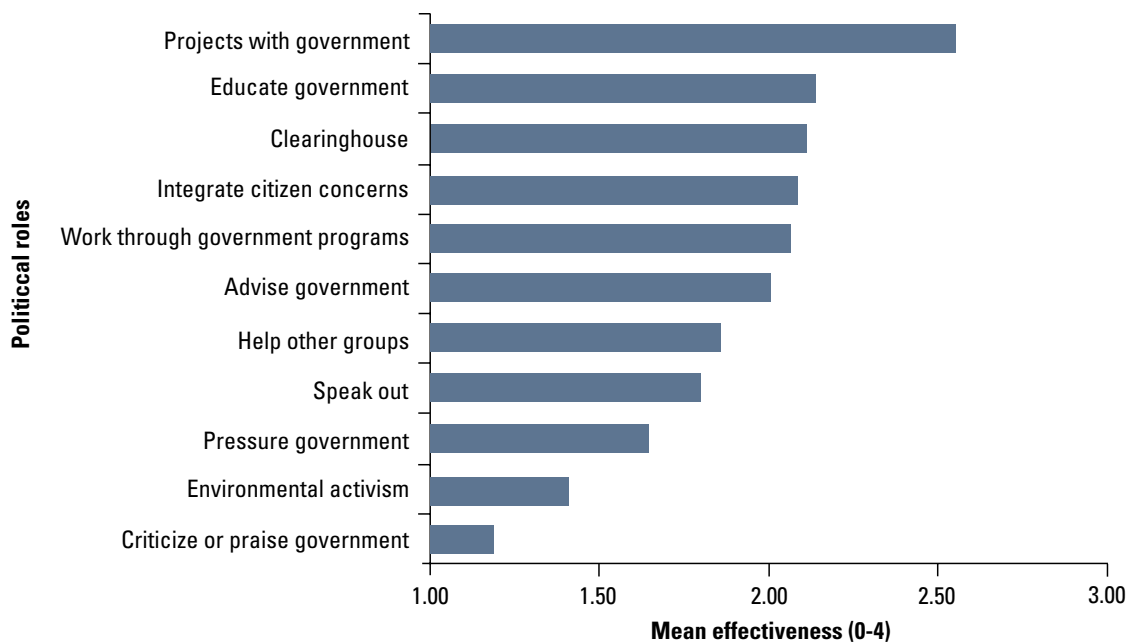
Figure 14: Average effectiveness of eleven watershed group "political roles" (sample size = 72).

A statistical analysis was used to examine the relationship between a watershed group's organizational characteristics and its average "perceived political effectiveness" over the top nine political roles. These nine were chosen because at least 60% of the total groups reported engaging in them. Two main findings arose from this analysis.

First, mixed groups had a significantly higher level of perceived political effectiveness than either public or private groups. This finding was confirmed by two different statistical tests. It implies that a mix of government and private participation may be the most effective participatory scheme for watershed groups. Although the reason for this is not revealed by this study, it may relate to the different and complementary resources that government and the private sector can bring to the table.

Secondly, the "total hours spent by staff and/or volunteers" was positively related to perceived political effectiveness over the nine roles. This means that groups who are able to garner more hours (whether staff or volunteer) should see a boost in their perceived political effectiveness, as measured by these roles.

Surprisingly, the total income of the group was not related to perceived political effectiveness. There was no significant increase in political effectiveness associated with total income, which may be comforting to the 40% of groups in the sample who receive less than $10,000 per year.

Conclusions

One of the reasons watershed groups have become such a popular object of research is their unique mix of membership, including citizens, private groups, and government agencies at all levels of government. The participation data shown here support the idea that watershed groups facilitate partnerships across many different types of organizations. Moreover, the large percentage of citizen participants, on average, indicates that citizens are actively involved in watershed planning. This research does not delve into the particular roles of different participants, or the intra-organizational interactions. However, it gives an overall picture of who participates in Ohio's watershed groups.

The financial data indicate that most groups have a very low level of financial resources, with 40% of the groups receiving less than $10,000 per year. The larger budgets of some groups are due in part to federal or state grants, many of which place restrictions on how the money can be spent. Moreover, although federal and state grants comprise the large majority of total funding over all groups, this money is distributed to a relatively small number of the total groups.

The activities measures indicate that certain activities are very common among watershed groups, in particular: restoration projects, monitoring, watershed planning, projects with government agencies, and information exchange with government agencies. Some of these activities are neutral and a-political, not involving any interaction with government. Others indicate a collaborative and cooperative relationship with government. Political activities designed to pressure government or change policy are less commonly used. The "perceived political effectiveness" measure supports this finding. More watershed groups engage in

political roles that involve a collaborative relationship with government, compared to an antagonistic relationship to government. Moreover, the "collaborative" political roles are perceived to be more effective.

Statistical analyses revealed several trends. First, successful plan development may be facilitated by some level of government participation and/or the existence of a staff member. Second, mixed groups perceive themselves to be more politically effective than either public or private groups. And finally, the total hours invested by staff and volunteers may have a significant positive effect on perceived effectiveness. Total income, on the other hand, was found not to have an effect.

One issue that should be addressed when applying this research is the diversity of groups in this sample. There were several groups in the sample for which the title "watershed group" might not be accurate. These included two sorts of groups: 1) land conservation groups- mostly membership-based citizen groups who purchase and/or restore land; and 2) advisory councils- groups of citizens selected to advise a particular government agency about a particular resource. Other groups that perhaps stretch the definition of "watershed group" too far included some small groups of concerned citizens with fewer than five members, and one recreational canoeing and kayaking club. Finally, several watershed groups run through government agencies (especially county Soil and Water Conservation Districts) turned out to be solely grant-driven. When the grant runs out, these "groups" cease to exist.

Should these diverse groups really be classified together as "watershed groups"? This is a difficult question. On one hand, classifications should be tight and mutually exclusive; on the other hand, exclusion may lead to an incomplete or skewed view of the characteristics and activities of important organizations. In this research, a conscious decision was made to be as inclusive as possible. It is left to future researchers to make their own decisions about which groups to include; however, the information provided here should help scholars collect the right information to make that decision. Most importantly, researchers need to be clear and consistent about which groups are included or excluded, and why.

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About the ECARP (Environmental Communication, Analysis, and Research for Policy) Working Group

Located within the School of Natural Resources, the ECARP (Environmental Communication, Analysis, and Research for Policy) Working Group is a vibrant and multi-disciplinary research, development, and consultation center staffed by a core group of affiliated faculty members and graduate research associates representing the social, management, and natural sciences. In addition to a core of faculty leaders, ECARP serves as a clearing-house, tailored to particular projects, by gathering research and support personnel from across the campus and nation as needed.

The ECARP has five fundamental objectives:

1. To apply technical knowledge and analytical methods to key environmental and natural resource questions identified by clients such as Federal, State, and local management agencies and private entities.

2. To advance the state of knowledge and disseminate findings for concepts and methods concerned with environmental and natural resource issues.

3. To conduct innovative and valuable research that helps frame thinking and debate about environmental and natural resource issues.

4. To recruit top-quality graduate students to the School of Natural Resources and provide students with opportunities to work with faculty on projects within the ECARP Working Group.

5. To serve as a focus for student and faculty research by applying for and securing research funding from Federal, State, University, non-governmental, and other sources.

Some examples of the types of research and client-based projects the ECARP might undertake include the research and development of:

- policy analysis tools to gauge the effects of policy instruments on target populations and the environment

- stakeholder collaboration and citizen participation processes in natural resources policy

- structured environmental decision making approaches

- cutting edge research in the natural sciences to inform environmental policy choices

- comprehensive environmental risk communication approaches

- innovative environmental education and interpretive efforts

- courses to be offered in the School of Natural Resources for students as well as the community of environmental professionals

For More Information

More information is available at the ECARP website: http://ecarp.osu.edu

As part of its effort to develop and disseminate knowledge, ECARP publishes analytical reports related to environmental and natural resource issues. These reports are available through the ECARP website.