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Perceptions Of Effective Public Participation In Water Resources Decision Making And Their Relationship To Levels Of Participation

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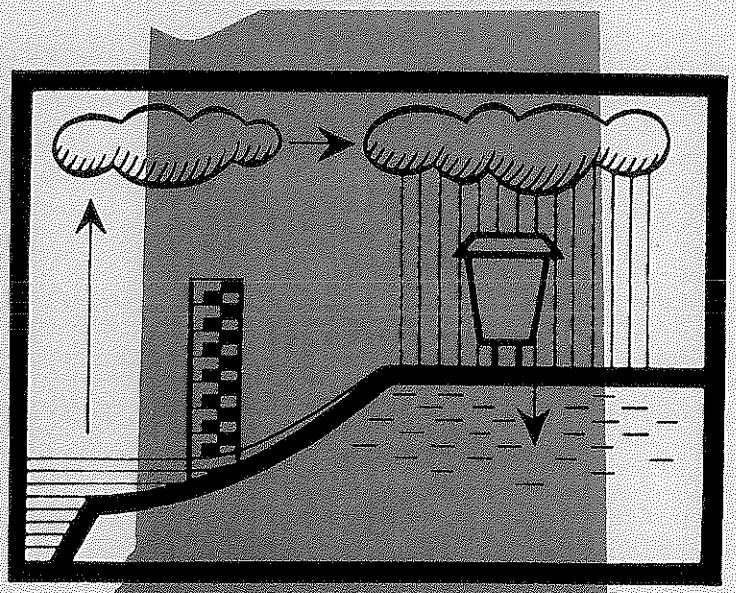

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PERCEPTIONS OF EFFECTIVE PUBLIC PARTICIPATION IN WATER RESOURCES DECISION MAKING AND THEIR RELATIONSHIP TO LEVELS OF PARTICIPATION

by

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ABSTRACT

This study focuses on how citizen participants perceive the effectiveness of their participation in natural resources decision making, comparing very, moderately and slightly active participants. Data are from personal interviews with 77 very and moderately active persons, and from mailed questionnaires to 106 moderately and slightly active participants from throughout Indiana. The operational measure of extent of participation used for data analysis was hours per week spent on environmental activities, which had a fairly strong relationship to other indicators of participation. These citizen participants generally ranked high on indicators of socioeconomic status, but the relationship between status and level of participation was not linear. A goal of a majority of respondents was to influence environmental decisions and legislation. Participants generally viewed their participation as effective, on a series of measures. Very active citizens were more effective than slightly active participants; they also used more participation techniques more often than the slightly active participants. Most effective techniques involved direct contact with decision makers, the press and others, and knowledge of issues. Public hearings, advisory boards, courts and lawyers, bumper stickers and buttons, and protest demonstrations were considered much less effective. Although they felt governmental agencies are changing, and becoming more responsive, they indicated agencies do many things to discourage citizen participation, as well as other activities that encourage participation. Very active participants tended to have more positive views of agencies, particularly of state and federal agencies. Most participants saw no financial benefits associated with participation, although many saw losses, often associated with the costs of participation.

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INTRODUCTION

Research Objectives

The primary purpose of this study is to describe how citizen participants perceive the effectiveness of their participation in natural resources decision making. To more adequately accomplish this objective, characteristics of participants, their objectives, their orientation to specific or general issues, and how they see agencies and citizens responding to citizen participation are also examined. The central concern is with people who have participated, to learn how they perceive the process of participation. The focus for comparison is across three levels of participation: (1) the very active participant for whom this is an extensive, on-going activity; (2) the moderately active, who participate on a fairly regular basis but not as extensively; and (3) the slightly active, who may attend a meeting now and then, or occasionally seek information about a proposed environmental project or program. Persons who have not participated are excluded from this study.

What definition of citizen participation is to be used here? Various researchers have meant different things by this or similar terms.

Defining Citizen Participation

Graves (1972:198) viewed citizen participation as a device to make a government responsible to the needs of all people, especially those who fail to become active in the formal governmental decision making process. On the other hand, Pateman (1970: 67) stated that citizen participation "consists basically in creating opportunities under suitable conditions for people to influence decisions affecting them." Katherine Warner (1971:2) used the terms public participation and citizen involvement to include the types of activities undertaken by the public to influence decisions made by governmental officials. Warren et al. (1974:107-113) distinguished between citizen action where people attempt to influence organizations to act on the needs and priorities as defined by the people themselves and citizen involvement which uses the established channels of input to the agency. Van Til and Van Til (1970:317) defined "client participation" as a form of citizen participation which focuses upon an involvement by non-elites in the administration of programs serving them, and "grassroots participation" as an alternative form of citizen participation, which focuses upon non-elite involvement in the politics of programs. Some social scientists have referred to ends while others have referred to means (Voth and Bonner, 1978:3; Goldblatt, 1968:35). These few definitions suggest the variation that ranges from providing passive opportunities to agencies taking a more activist role in informing, involving and interacting with citizens to citizens taking more initiative in seeking action and influencing decisions.

In this study, citizen participation refers to the involvement of any person or persons in purposeful activity directed at a governmental decision maker with the intention of influencing his decision or action. This definition is modeled after Langton (1978) and Milbrath (1963). Milbrath's definition of lobbying is significant in that it specifically refers to "...someone other than a citizen acting on his own behalf..." attempting to influence a decision (1963:8). This involvement could include anything from encouraging and lobbying for legislation, becoming involved in a citizen suit, to attending public meetings, with the three examples indicating the possibility for involvement with all three branches of government. It is understood that the objective is to influence plans and programs, being political in the sense that its intent is to involve citizens in the decision making process. The distinctions made by Warren et al., Van Til and Van Til and Langton (1978) are important for studying different types of participation. The purpose here, however, is to study people who participate with varying degrees of intensity. Therefore, it is desirable to have an inclusive definition of citizen participation, to allow a wide variety of activities to be included.

Rationale for this Study

Public participation has become an established part of water resources programs. The objectives, knowledge, time and other resources that various publics bring to it differ considerably among them.

Individual citizens and voluntary associations of environmentally concerned persons generally have quite limited resources for keeping current on issues and programs, and for expressing the views of their members. Environmental agencies have limited resources for public participation, since they traditionally have been oriented to technical solutions to problems. Their experience with public participation is largely limited to the last few years. A substantial gap exists between these agencies and these publics, with only imperfect knowledge about the kinds of mechanisms that may help bridge that gap. This study is intended to provide information to help bridge that gap.

Within the last few years, these agencies increasingly have had to recognize and deal with public participation in making and implementing decisions (Dodge, 1973; Hoggan, 1974; Ingram, 1972, U.S.E.P.A., 1975). While some forms of public participation have played a role in water resource decisions in the past, its current importance is exemplified by the 1972 amendments to the Federal Water Pollution Control Act (Public Law 92-500), which in section 101e says it "...shall be provided for, encouraged, and assisted by the (U.S.E.P.A.) Administrator and the States." Similarily, the Water Resources Council has emphasized the importance of involving the public in planning decisions and has specified procedures for this in its Principles and Standards for Planning Water and Related Land Resources (Federal Register, 1973). There are several reasons for this increased emphasis, e.g., generating public understanding and support of projects, developing plans that more adequately reflect needs and preferences, and giving potential opponents a means of having their concerns addressed (Bishop, 1970; K. Warner, 1971). In addition, as Berger (1973, i) states: "In the current climate of interest in the environmental consequences of such programs, the rise of public concern over what were once considered purely governmental actions not normally subject to question has emerged as a political fact of life with momentous significance."

The problem for agency personnel is how to provide for effective public participation, not only to comply with the law, but also to reduce the uncertainty of decisions, to reduce the social and economic costs of decisions, especially those which lack sufficient support for implementation, and to avoid or minimize delays between decisions and their implementation. For citizens, individually or through voluntary associations, the problem is how to have an affect on decisions that often profoundly affect their lives. The approach of this study is to ask citizens who have been involved extensively, moderately and slightly as participants in environmental decisions about their objectives for participation and what they perceive are effective and ineffective means of achieving these objectives.

The contributions of this study lie in (1) its approach of selecting subjects with varying levels of participation; (2) from a large enough area, a state, to provide a moderate number of very active persons with a variety of experiences; and (3) obtaining data on perceived effectiveness of citizen participation. As indicated in Chapter II, many studies are case studies of participation in a specific environmental issue in which there typically are few very active people. This plus the unique features of the case make generalizations limited. Another frequent type of study is of citizens who participate in advisory committees. This, however, is only one form of participation, and it may be quite selective.

There have been virtually no studies of the effectiveness of participation (Checkoway and Van Til, 1978). Effectiveness is thought of as the extent to which means (citizen participation) lead to the achievement of goals. In this study persons were asked to define their goals and indicate the extent to which they were achieved. Obviously, the goals of citizens may at times differ from the goals of the agencies they are interacting with. There is also the possibility of citizens using or "capturing" (Kaufman, 1960) agencies for their own purposes, or agencies co-opting (Selznick, 1949) citizens. There is another view of this from the perspective of political theory which sees citizen participation as an end in itself (Mogulof, 1970). These latter dimensions are legitimate aspects of effectiveness, however, they are beyond the scope of this study.

STUDIES OF CITIZEN PARTICIPATION IN NATURAL RESOURCES DECISION MAKING: A BRIEF REVIEW

There is a rather large literature on citizen participation in natural resources decision making. Undoubtedly this is in part due to the "public" and "policy" nature of the subject matter, which makes it a popular topic with both the general mass media and the interest group press as well as scholars concerned with decision making processes. Two key dimensions of this study, varying levels of participation and effectiveness, have received little attention empirically in the environmental literature.

A brief review of that literature indicates some of the conceptual issues in the systematic study of citizen participation. Studies concerning natural resources can generally be divided into four types: (1) case studies of specific issues or projects, (2) studies of citizens who participate, (3) reports on agency staff perspectives, and (4) discussions of procedures for citizen participation. Only a few studies are cited here, with the purpose being to give a general picture of the scope of findings, issues and concepts that have accumulated.

Case Studies

There are numerous case studies, for example, of proposed water resources projects, energy facility siting, national forest use, transportation and land use planning.

The Brandywine study is a classic in the relations of experts and citizens. It is a comprehensive plan for the use of land and water resources of the Upper East Branch of Brandywine Creek of Chester County, Pennsylvania. The idea for the plan was developed as a means of demonstrating approaches to open space preservation in an area just outside the urban fringe. Particularly relevant here were the residents' attitudes toward natural environmental preservation. "A large majority, 72% of Brandywine residents, made statements favoring preservation of the natural environment against the pressures of urban expansion. Yet concern for landowners' prerogatives was also important, with 47% mentioning such sentiments" (Institute for Environmental Studies, 1968:IIG-21).

Despite their concern for preserving their area, residents rejected the plan. Thompson's (1969) article "Brandywine Basin: Defeat of an Almost Perfect Plan," describes the process and the resentment that residents felt toward intellectuals and outsiders telling them what to do with their land. The "experts" indicate this in the project report itself: "The issues affecting these people and their attitudes can be described as intrusions, trespasses on the local landscape and autonomy, which not only caused or threatened unwelcome change but also implied the threat of more and more change to come. The people of the watershed feel embattled, and they see no end to it"(Institute for Environmental Studies, 1968:N-A-4).

Bultena surveyed residents in the area of two proposed reservoirs in Iowa. With regard to citizen involvement he concluded that most "had no prior history of taking politically oriented actions in public issues, and only a small number had sought to influence decision making" on these projects (Bultena, 1975:52). Additionally, while they felt that participation was desirable, they thought there were few opportunities for it and the lower class was less optimistic than others about their political efficacy. Substantial numbers of people were poorly informed about the project even after public hearings. Interestingly, much of their opposition centered on the planning and public involvement procedures of the agency, rather than on the project itself.

Surveys of attitudes such as these provide the means to reach the broadest public, but they are not frequently used (Bultena, 1975; Heberlein, 1976). As the Brandywine study shows, it is quite possible to be mislead by such studies. We have learned from presidential election polls that the election outcome preferred by the majority may change over time. Similarly, program or planning decision preferences may change over time, or the technical issue as seen by the agency or experts may not be the determining factor in residents' minds.

Citizens Who Participate

Even though there was a great surge in public concern about the environment in the late 1960's

(Hornback, 1974), and an increase in membership in environmental organizations (McEvoy, 1972), in general participation in organizations (Hyman and Wright, 1971) and voting (Verba and Nie, 1972; Rusk, 1976) is not especially high. It is well established that those who do participate are not the same as those who don't (Rothman, 1974). The primary focus here is how those who do participate view their roles in natural resources policy decision making.

Part of Warner's state of the art study included data from members of private organizations and citizens' groups, who might be expected to be relatively active in agency resource planning decisions. These respondents indicated their most frequent past role was an "interested observer" (46 percent), followed by "independent reviewer" (28 percent), and "participant in recommendations formulation" (28 percent). Desired future roles placed emphasis on more and earlier involvement by participating in objectives formulation and as task force members. Respondents also indicated a number of needed changes that they felt would increase the opportunity for effective participation such as mandatory legislation, early and frequent timing of participation and the adequacy of information available.

A pair of studies on the New England River Basins Commission reports on the process (Ertel, 1974) and impact (Ertel and Koch, 1976) of citizen advisory committees (CAC's). More CAC members saw the "public information role" as their most important function, compared to advice to staff, review of final plan and supporting final plan. The largest disagreement between CAC members and professionals from state and federal agencies was on this last function. CAC members rated "serving as a basis for support for final plans when they were presented" as least important, while the professionals saw this as their most important function. They conclude that the "...findings definitely validate the assumption that support of planning recommendations is enhanced by the conduct of a varied program that is designed to inform and involve the public, that makes an effort to elicit public comment, and that then incorporates that expression into its recommendations" (Ertel and Koch, 1976:70).

The question of the representativeness of those who participate in the planning process as citizens is both important and perplexing (Burch, 1976; Ertel, 1974; O'Riordan, 1976). As Ertel notes, representativeness may refer either to accountability or to demographic similarity with some larger population. The CAC members she studied were politically appointed. There was disagreement among the members themselves as to their representativeness. The agency professionals working with the three basin plans always saw the CAC's as less representative than the CAC members did (Ertel, 1974).

In a recent study of residents of the state of Washington, Beatty and Pierce (1976) examined how representative people were who engaged in a variety of "water resource political acts" ranging from signing a petition to attending a hearing or joining a CAC. In general, they found rather small differences between participants and non-participants in five of these acts in terms of demographic characteristics, socioeconomic status and water use.

In summary, citizens have often not been satisfied with the roles they've played, or the impacts they've had on decisions of agencies. In particular they do not want to be coopted into supporting a plan when it is completed simply by virtue of having some earlier contact with it.

Agency Staff Perspectives

In a large part of the literature, citizen participation is conceived as some variety of interaction with or response to an agency project or program. It can be construed more broadly, to include the part citizens may play in agenda setting, for example (Davies, 1974). Nevertheless, the way agency staff view citizen participation is an important part of the overall picture.

Wilson (1973) interviewed 70 field-level planners during 1970, in three federal water resources agencies, the U.S. Army Corps of Engineers, Bureau of Reclamation and Federal Water Quality Administration, to determine their attitudes toward the planning process. A slight majority, about four out of every seven, saw themselves as technical consultants, who focus on means rather than goals. "These planners maintain their right to make value judgments

by virtue of their position or expertise, or because of perceived incompetence of the public. They wish to involve outside interests on an informational level, but just to expedite or give legitimacy to their proposals" (Wilson, 1973:168).

The other group of planners had a broader view of planning, were more interested in the plan's achievements and consequences of alternative actions. They also accepted broader interests and community involvement into the planning process. With regard to public involvement as viewed overall by his respondents Wilson concluded: "It was clear that the planners do not hold very high opinions of the public's competence and ability to aid their plans... Public involvement was desired primarily as a means to expedite final acceptance of the planner's ideas, not to ensure the responsiveness of his plans. The public was to be coopted..." (1973:169-170).

Warner, as part of her state of the art study, received questionnaires back from 113 local, state and regional planners throughout the country. In general, the majority of respondents rated public involvement positively. Similarly to Wilson's findings from federal planners, "information produced" was rated lowest and "the effect on public officials' support" was rated highest (Warner, 1971:112). State water resources planning agencies were much less likely than other non-natural resource agencies to see much information produced through public involvement, and they also rated it low as a means of achieving public understanding and knowledge. Warner created a ranking of effectiveness of public involvement mechanisms. For all respondents, citizen advisory boards were first, informal contacts were second and public meetings were third. There was a modest tendency for agencies (all combined and water resources) to view public involvement as making conflicts more resolvable.

More recently, Dysart et al. (1977) obtained data from 133 key people in water resources decision making in eight Southeastern states. Respondents generally felt personally that public participation was, on the average, "often helpful/beneficial." However, they obtained only modestly positive scores on how beneficial it is for their agency. They concluded: "It seems that, as of 1974, all three of these federal agencies were using public participation principally because it is necessary for their image and to comply with legal requirements or regulations. Most of the people with whom contact was made would like to see more 'public participation.' But it was not really clear just what they thought it was or what they would like to see it involve" (1977:34).

These studies document the diversity of views toward citizen participation and its usefulness, as well as the ambiguity about what citizen participation includes when comparisons are made across agencies. Although a given agency may be relatively consistent in its policies on citizen participation, this diversity may be confusing to citizens, especially those who are familiar with the different agencies.

Procedures for Citizen Participation

The important dimension of the various proceduresfor citizen participation in the context of this paper is their scope. Many of the procedures define or assume citizen participation to be a narrow phenomenon. These procedures treat participation as a means by which an agency seeks or exchanges information or tries to obtain consensus on its program or a specific project plan (Davis, 1974; Heberlein, 1976; Clark and Stankey, 1976). Examples of these techniques are public hearings, newsletters, attitude surveys and nominal group consensus. These procedures may fail to produce acceptance or consensus, as seen in the Brandywine case or as Priscoli (1975a) reports for CAC's ability to resolve conflicts, however.

The broader perspective of citizen participation encompasses both a wider range of procedures and a more extensive role for citizens in societal decision making. Priscoli (1975b) lists twenty-five techniques which include referendums, votes and campaign issues as traditional political procedures. Glasser et al. (1975) lists 23 similar techniques, but adding citizen suits.

Although a great deal of the sociological literature on citizen participation in natural resources decision making has assumed the narrow scope, elsewhere the broader perspective is well established.

U.S.E.P.A.'s Don't Leave it all to the Experts: The Citizen's Role in Environmental Decision Making (1972) discusses lobbying for legislation on environmental issues and going to court which is significant in administrative agency recognition of citizen's use of the other two branches of government.

A quite different approach is the use of those broad based groups or commissions put together with the sanctity of government, with the objective of examining or proposing national goals and policy. Two recent examples are the Task Force on Land Use and Urban Growth, created by the Citizens' Advisory Committee on Environmental Quality, which produced The Use of Land: A Citizens' Policy Guide to Urban Growth (Reilly, 1973); and the Advisory Committee on National Growth Policy Processes to the National Commission on Supplies and Shortages that authored Forging America's Future: Strategies for National Growth and Development (1977). While the immediate effectiveness of such commissions and their reports may be in question, they may play a part in the not so well understood process of agenda setting (Davies, 1974).

Citizens' organizations are an important part of the procedure of participation. Their members serve on CAC's, maintain informal contacts, lobby for legislation and present prepared positions at public hearings. Many of these organizations attempt to educate the public with regard to environmental issues, for example the Conservation Foundation and its Publication Toward Clean Water: A Guide to Citizen Action (1976), and the League of Women Voters: How to Plan an Environmental Conference (n.d.). They meet Berry's (1977) definition of a public interest group, "one that seeks a collective good, the achievement of which will not selectively and materially benefit the membership or activists of the organization." Others will not meet these criteria through seeking to protect or promote property rights or hunting or fishing areas, for example. Some, such as the Chester County Freeholders Association, may have an effect on the outcome of a single project, like the Brandywine plan. Others, such as the Conservation Foundation and League of Women Voters are recognized as "powerful environmental quality organizations" (Miller, 1972). Their involvement frequently is oriented to broad policy issues rather than specific cases.

This limited review of studies of citizen participation is intended to show the diversity of approaches to the topic. There are numerous issues and approaches--territoriality of projects and of representation, standing, advocacy planning--that are not covered here for the sake of brevity.

THE RESEARCH METHOD

The objectives of this study required a combination of techniques at both the sampling and data collection stages. The reasons for this were (1) that prior research and personal observation indicated that there were relatively few citizens who were very active compared to a much larger number of slightly active persons, and (2) the lack of research on some variables in the study suggested that personal interviews with open-ended questions would be a preferred data collection technique, at least initially. The principal investigator estimated that there might be a maximum of 50 very active participants in Indiana, based on his personal observations and knowledge, using a general criterion of continued, regular, daily or almost daily involvement. The slightly actives were very large in number since participating in any one of a large number of activities even once would be sufficient to be included in this category. It was these two groups that were particularly important in determining the research method. The moderately active participants fell between them in numbers (orginally estimated to be perhaps 100 to 125 persons) and in frequency of participation.

The sampling plan was to collect data from all identifiable (i.e., the population of) very active and moderately active participants, and from a sample of slightly active participants. Data were collected first from the very and moderately actives, starting with persons known to the principal investigator from environmental meetings and hearings over several years. The snowball sampling technique was used to expand the list of very and moderately actives; that is, these very and moderately active respondents were asked to name other persons who were active in environmental issues. (At the data

collection stage very, moderately and slightly activeswere not precisely defined; the working definition used was simply that given in the preceding paragraph.) The goal was to interview all of those persons who appeared to be very active, and half of those who were moderately active. The remaining moderately actives and all of the sample of slightly actives were sent a mailed questionnaire.

The snowball sampling procedure produced a total of 92 names, 77 of whom were interviewed between January and August, 1977. Two or more respondents identified 14 people with whom it was not possible to schedule an interview because of their other time commitments and the limited funds for travel.

At that time it appeared that the number of very and moderately active persons may have been overestimated. The 92 names from the snowball sample had all been nominated by two or more interviewees. There were an additional 200 names, each of which had been nominated by only one person. Two decisions were made at this point. First, it was assumed that the 92 persons comprised the best estimate available of very and moderately actives from the snowball sampling technique; the specific operational measure of level of participation was still to be determined based on the data. Second, the list of 200 names would be added to the sampling frame of slightly active participants.

The sampling plan for the least active participants was to use a number of different lists, since there was no feasible way to obtain a complete listing of this population. A total of 19 lists were obtained from environmental impact statements, attendance lists at various public meetings, and newsletter lists. The organizations associated with one or more of these sources were the U.S. Forest Service, Soil Conservation Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Great Lakes Basin Commission, Purdue University Water Resources Research Center, Indiana Department of Natural Resources and Indiana State Board of Health. Three criteria were used to select a sample of these lists: they should be distributed by (1) region of the state, divided into six regions, (2) relevant agency, as listed above and (3) type of project or program. Seven lists were selected on this basis with the number of participants on them varying from 12 to 450. All lists were edited to remove persons identified as public officials and representatives of for-profit organizations. Representatives of not-for-profit organizations were included on the lists. There were 200 persons each of whom had been named once by interviewees who were added to the lists, plus the additional 14 persons who had been named by 2 or more interviewees. Altogether the lists contained a total of 989 names, with about half of those on one list. Since the objective was to obtain respondents distributed according to the 3 criteria stated above, it was decided to use a maximum of 40 names per list. If a list contained more than 40 names, names were randomly selected; if it contained fewer than 40 names all of them were included in the sample. The resulting sample contained a total of 247 names. If the objective had not been to obtain diversity by the 3 criteria, a simple random sample could have been selected from the original 19 lists. There were two apparent disadvantages to that procedure. First, the vast majority of respondents would have been from the few large lists, and those projects and programs from which the shorter lists came would have provided few respondents. With the sampling design used, the four lists with more than 40 names comprised 91 percent of <u>all</u> names, as shown in Table 1. In the sample of 247 cases, by selecting a maximum of 40 cases from these longer lists, they then made up only 65 percent of the sample. A second problem was that not all lists contained addresses. The design used reduced the number of lists, and thus reduced the number of geographic areas in which searches for addresses had to be made. In the nine cases where an address could not be found, it was possible to randomly replace them with other names from the same list.

The first mailing of questionnaires was on August 13, 1977, with follow-ups at 2 week intervals. The first follow-up was a postcard, and the second and third each contained a new letter and questionnaire. This produced a total of 106 usable questionnaires, that is, questionnaires that were at least partially completed. Twenty-one questionnaires were

Table 1. Number of cases of lists selected and number of cases in sample.

List*	No. of cases on list	No. of cases in samples
1	12	12
2	90	40
3	25	25
4	23	23
5	162	40
6	13	13
7	450	40
8	200	40
9	14	14
Total	989	247

*Names of projects and programs from which lists come are not identified to help provide anonymity to respondents.

returned without being filled out. In some cases respondents were deceased, in others persons indicated they were not involved in environmental affairs or were not interested in participating in such a study, and in others no reason was given. Another 23 were not deliverable. However, that leaves 97 persons unaccounted for, who presumably received the questionnaire and chose not to respond. The response rate was not particularly high; around 50 percent of the presumably delivered questionnaires. A number of factors may have contributed to that. The lists from which the sample was selected were dated largely from 1974 to 1976, with one dated 1972. To the extent that persons' participation was limited to that one event that put their name on a list some time in the past, they may have felt that they were not now involved in environmental issues, and that the questionnaire was not relevant to them. The questionnaire was time consuming for a person who had been active even to a modest extent. A copy of the questionnaire is included at the end of this report.

FINDINGS

Level of Participation

People differ a great deal in the extent to which they participate in the environmental decision making process. This simple observation was the starting point for this study. Before going on to consider what variables may account for differences in level of participation, and how they affect perceptions of effectiveness, it is useful to consider how the respondents differed on several dimensions of participation. Two major dimensions were considered: time and organizations.

Two aspects of the time dimension were the amount of time devoted to environmental activities, measured in hours per week, and the number of years since the respondent first became involved with environmental activities. Hours per week spent on environmental issues varied from zero to 117. It is important to keep in mind how subjects were selected. Some were selected because they were known to be active on a regular and continuing basis, others were selected because they had attended a public meeting or their name was on a mailing list for an environmental publication. It seems reasonable to think that all, or almost all, of them have devoted at least some time to some environmental issue. However, attending a meeting, for example, may have been a unique, one time occurrence in their life, and therefore in their mind they may feel they were not currently spending any time on such issues. Table 2 shows the hours per week reported in fairly detailed categories. It shows that there is a substantial variation in hours per week devoted to environmental issues. More persons spent 40 hours or more per week than spent zero hours per week (which includes up to a half hour per week) on environmental issues. The majority spent more than four hours per week, which was about the most time that would be spent attending one evening meeting. Additionally, 62 respondents spent 10 or more hours per week, which generally could be considered more than one day of participation a week.

The Chapin social participation scale (Chapin, 1955) assigns points for organizational participation: 1 point for membership, 2 for attending meetings, 3 for financial contributions, 4 for committee membership, and 5 for being an officer. The most points a person could get for any one organization was 15. As Table 2 shows, there was considerable variation in Chapin scores, indicating that while some respondents belonged to no environmental organizations, or were only slightly active in one or two

Table 2. Level of participation (hours per week) by Chapin social participation score.

Chapin Score	Hours per week								
	0	1-2	3-4	5-9	10-19	20-29	30-39	40+	Total
0	11	8	1	0	0	0	0	1	21
1 - 10	3	9	1	5	3	1	0	0	22
11 - 20	0	1	3	7	4	4	0	2	21
21 - 30	0	3	4	6	2	0	0	5	20
31 - 40	0	2	3	6	3	2	2	6	24
41 - 50	0	2	5	3	3	1	1	4	19
51 - 60	0	0	1	2	3	3	0	3	12
60 or more	0	0	0	1	1	3	2	3	10
Total	14	25	18	30	19	14	5	24	149

Gamma = .52

organizations, others were very active in several organizations. Only current environmental organization activities were considered. These two indicators of participation were related, as shown by the Gamma coefficient of .52.

Both hours per week and Chapin score were considered separately and in combination as the possible indicator of level of participation throughout the remainder of this report. After examining the participation data, it was decided to use only hours per week as the indicator of level of participation. The reasons for this were that it was less ambiguous than the Chapin score alone considering the weights assigned within the Chapin scoring system; that having many organizational memberships may become costly and hence there may be a social class bias inherent in Chapin; and while organizational memberships themselves may provide important support to the environmental movement, for this study it was important to identify persons who themselves varied directly in their involvement in the environmental decision making process. There were at least two possible drawbacks to the hours per week indicator: (1) it was only an estimate by the respondents of the amount of time they spent, and (2) it could be related to employment in a job where part, or all of the time was spent on environmental issues. As shown below, however, the second drawback was not found to exist since participation being work related was found to be independent of hours per week.

Examining the participation data also produced the categories in terms of hours per week that would represent the very active (20 hours or more), moderately active (5 to 19 hours) and slightly active participants (0 and 1 to 4 hours per week). It became clear that there were no natural divisions to the data, thus any categories would be somewhat arbitrary. These category boundaries mean that the very active persons were participating on almost a daily basis, which corresponded to observations of many of these people at public meetings and through prior conversations with them. Moderately active people would be involved a number of times a week on the average to put in 5 to 20 hours. Slightly active people were thought of as putting in part of one day a week or up to 4 hours per week. The slightly active category was sub-divided into (1) those who reported no hours or up to a half hour per week and (2) those who said one through four hours per week, because there did appear to be some differences between these two groups. For example, the "no hours" group generally had zero as the Chapin score, which was different than the majority of those with 1 to 4 hours of participation, as shown in Table 2. However, various indications of participation by these "no hours" persons will be seen in the data in Table 2.

Two other indicators of participation were also examined. One was the number of environmental organizations to which respondents belonged. This

is shown in Table 3, and closely follows the pattern shown above in Table 2, with more active persons belonging to larger numbers of organizations. The other indicator of participation was duration of participation in years. This was part of a question asking for a history of a respondent's participation. This was not always answered very specifically, which accounts for the smaller number of cases in Table 4. There was essentially no relationship between years of involvement and level of participation. The majority of persons have been involved for several years, including those with "no hours." Clearly, these respondents were not newcomers to environmental issues. Also, being a relative newcomer did not appear to be an impediment to devoting long hours to environmental issues.

Table 3. Number of environmental organization memberships by level of participation.

Number of memberships	Hours per week 0	1-4	5-19	20+	Total
0	11	9	0	1	21
1	3	8	9	0	20
2	0	3	5	4	12
3	0	8	9	1	18
4	0	4	8	9	21
5	0	5	4	4	13
6	0	2	2	7	11
7	0	3	2	3	8
8	0	0	4	2	6
9 or more	0	1	5	12	18
Total	14	43	48	43	148

Table 4. Number of years involved in environmental issues by level of participation.

No. of years involved	Hours per week 0	1-4	5-19	20+	Total
0 - 2	1	1	2	2	6
3 - 5	1	4	6	9	20
6 - 10	1	2	10	9	22
11 - 15	0	7	5	4	16
16 - 25	2	1	6	5	14
26 or more	1	4	3	3	11
Total	6	19	32	32	89

Selected Social, Economic and Demographic Characteristics of Participants

Social, economic and demographic characteristics are not the central focus of this study. They do, however, provide a basic description of who the participants are, and in that sense are important to understanding the findings.

Citizen participants lived in rural areas, smaller towns and large cities as shown in Table 5. There was no strong pattern of relationship between where participants live and level of participation, although the "no hours" persons were more likely to live on a farm, and the very actives were more likely to live in the open country, outside of cities but not on a farm.

Table 5. Size of place of residence by level of participation.

Size of place	Hours per week 0	1-4	5-19	20+	Total
Farm	7	9	6	5	27
Open country, not on farm	3	6	10	18	37
City of less than 10,000	2	8	8	3	21
City of 10,000 to 49,999	1	5	15	9	30
City of 50,000 to 249,999	1	10	5	2	18
City of 250,000 or more	2	5	4	7	18
Total	16	43	48	44	151

No effort was made to obtain cases from places in proportion to the distribution of population in Indiana by size of place. Nevertheless, the comparison of where participants live with where the total Indiana population lived is interesting. About 12 percent of participants lived in cities of 250,000 or more compared to 14 percent of the state population according to the 1970 U.S. census; 12 percent lived in cities of 50,000 to 249,999 compared to 18 percent for the state; 20 percent of the participants lived in cities of 10,000 to 49,999 compared to 19 percent; 14 percent lived in towns of less than 10,000 compared to 10 percent who lived in towns of 2500 to 9999; and 42 percent of the participants lived in rural areas (open country or

on a farm) compared to 39 percent for the state.[1] This comparison indicates that these participants were not predominantly from large cities or small towns; they came from places of various size in approximate proportion to the distribution of the population in the state.

There were some differences across participation levels in the age and sex of participants. As shown in Table 6, about three-fourths of the slightly active participants were over age 40 (both the no hours and 1-4 hours sub-groups), while only about half of the moderately and very active participants were over 40. However, there were as many very actives under 40 as there were 50 years and over. It should be noted that few (10 percent) of all these environmentally active persons were under 30, almost twice as many were 60 and over. About 65 percent of the participants were men, however women tended to be more active than men. The difference was primarily in the slightly active participants, of whom 48 of 60 were men. Among moderately active participants 28 were men and 21 were women; and among very actives 24 were men and 20 were women. Among these participants, persons under 40 years of age and women were much more likely to be moderately or very active rather than slightly active.

The majority, 85 percent, of participants were married, with little variation across activity levels. The 12 single respondents were primarily either moderately or very active, with 5 in each category. Similarly there was little relationship between activity level and stage in family life cycle. Persons participated before children were born, with them in the home, and after they had grown and left home. However, there was some indication that the number of participants is greater when the oldest child passes 5 years of age.

There was considerable variation among the participants on a series of socioeconomic indicators, but the majority ranked rather high on education, income and occupational status. Seventy participants had some education beyond college; only nine had less than a high school education. As Table 7 shows, the moderately actives were the most educated, with almost 60 percent of them having 17 or more years of education. There was a striking contrast among the slightly actives, with the "no hours" participants having comparatively less education and the 1 to 4 hours participants concentrated at both extremes. The very actives generally have education beyond high school, but they were not the most educated of the participants generally.

Table 6. Age by level of participation.

Age	Hours per week 0	1-4	5-19	20+	Total
20 to 29	0	4	4	7	15
30 to 39	4	7	19	13	43
40 to 49	2	11	6	4	23
50 to 59	4	12	10	15	41
60 and over	6	7	10	5	28
Total	16	41	49	44	150

Table 7. Number of years of education by level of participation.

Years of education	Hours per week 0	1-4	5-19	20+	Total
12 or less	8	14	7	6	35
13 to 16	8	8	14	20	50
17 to 18	1	7	13	9	30
19 or more	0	15	16	9	40
Total	17	44	50	44	155

The median family income for all participants was nearly $21,000; however, at each activity level there were people from the lowest to the highest income categories, as shown in Table 8. About 20 percent had incomes below $12,000. There was a tendency for the slightly active participants to have the highest incomes; 61 percent of them (0 and 1 to 4 hours categories combined) had incomes of $21,000 and over compared to 40 and 43 percent of the moderately and very active participants, respectively. In contrast, 40 percent of the very actives had incomes of less than $15,000, compared to 27 percent of the moderately actives and 25 percent of the slightly actives.

[1] This is not a precise comparison, particularly for towns of less than 10,000 and open country. Additionally the percentages for the state should be based on persons over age 20 only, rather than the total population if precision were desired.

Table 8. Total family income* by level of participation.

Income	Hours per week 0	1-4	5-19	20+	Total
Less than $6000	1	1	4	3	9
$6000 to 11,999	2	6	4	6	18
$12,000 to 14,999	1	2	4	7	14
$15,000 to 17,999	1	1	7	2	11
$18,000 to 20,999	1	4	8	5	18
$21,000 to 23,999	1	6	6	3	16
$24,000 to 29,999	2	6	3	5	16
$30,000 and over	4	12	9	9	34
Total	13	38	45	40	136

*Total family income before taxes for 1976.

Participants generally had rather high status occupations. Sixty-eight percent scored 66 or higher on Duncan's "socioeconomic index," and 21 percent scored from 52 to 65 percent. These roughly approximate the census categories of professional, technical and kindred workers, and managerial, officials and proprietors.[2] There was little difference between the slightly and moderately active participants. The very actives tended to be lower in occupational status, with only about 50 percent of them scoring 66 or higher on Duncan's scale. Thus, in general, it is the slightly and moderately active participants who were highest on the socioeconomic indicators, with the very active participants being a little lower on each indicator.

About 64 percent of the participants were currently employed, with little variation across levels of participation. The majority of all respondents indicated that their participation in environmental policy issues was not related to their work, although that varied from 62 percent of the slightly actives to 69 percent of the moderately actives to 55 percent of the very actives. However, among those who were currently employed, slightly over half, 51 percent, indicated that their participation was related to their work (Table 9). The data on the relationship of participation to work should be interpreted with a little caution. There are a variety of possible relationships, and the distinctions between them were not always clear in the responses we obtained. This was particularly a problem for persons who were professionals, and whose participation could be a result of either their work or their education. For example, one respondent said, "Yes; this is a life science and this is in the natural world." However, in this case the response was coded as "no" since there was no direct relationship between the job and participation. There were other professionals whose job/knowledge did serve as a direct link to participation. Of course, there were others, such as farmers whose business might be directly affected by an environmental decision, that were coded as participation being work related.

Table 9. Participation related to work by level of participation, for employed participants only.

Work related participation	Hours per week 0	1-4	5-19	20+	Total
No	5	17	15	9	46
Yes	1	15	14	18	48
Total	6	32	29	27	94

Another way of looking at the link between participation and employment is in terms of who usually paid the expenses of participation. As Table 10 shows, expenses were usually paid by persons or their family, whether they were employed or not. Even though there were 48 persons whose participation was work related, only 20 indicated that their employer ususally paid their expenses. The other 28 appear to be self-employed (e.g., farmers or professionals) who paid their own expenses. The majority of those whose expenses were paid either by employers or other organizations were very active. However, among the very actives 25 (or 58 percent) paid their own expenses, but among the moderately and slightly actives the equivalent figure was 88 percent.

In their political views participants tended to be middle of the road to liberal, and generally leaned toward the Democratic party, however only a minority claimed any strong party affiliation. As Table 11 shows, the slightly actives were predominantly middle of the road or conservative, while

[2] See Delbert C. Miller, Handbook of Research Design and Social Measurement, 3rd ed., New York, David McKay Company, Inc., 1977.

Table 10. Who usually pays participation expenses by level of participation, by employment.

Who pays by employment	Hours per week 0	1-4	5-19	20+	Total
NOT EMPLOYED:					
Expenses paid by self or family	5	6	18	13	42
Not-for-profit organization	0	1	1	3	5
EMPLOYED:					
Expenses paid by self or family	5	27	27	12	71
Employer - a for-profit organization	1	3	0	4	8
Employer - a not-for-profit organization	0	2	2	8	12
Not-for-profit organization other than employer	0	1	1	3	5
Total	11	40	49	43	143

Table 11. Political views by level of participation.

Political views	Hours per week 0	1-4	5-19	20+	Total
Very liberal	0	1	3	5	9
Liberal	2	8	22	21	53
Middle-of-road	3	19	12	10	44
Conservative	8	10	8	6	32
Very conservative	1	1	0	0	2
Total	14	39	45	42	140

about half of the moderately and very actives were liberal and about a fourth were middle of the road in their political views. While this was a modestly strong trend, it should be noted that there were conservatives and liberals at each level of participation. In terms of political party affiliation, 37 persons said they were strong Democrats, 24 were not very strong Democrats, while 13 were strong Republicans and 9 were not very strong Republicans. The remainder, 66, said they were Independents with about half of them indicating they were Independents but closer to the Democratic party. There was little variation across levels of participation, except among Republicans who were mostly slightly active.

Objectives of Participation

The objectives people have are particularly important to understanding what takes place in the process of citizen participation. Common objectives make possible a unified effort to achieve a goal. The absence of common objectives results at least in the lack of such cooperative effort, or where those objectives are in conflict considerable effort may be expended to prevent opponents from achieving their objective while simultaneously trying to achieve your own. Additionally, in studies of organizations it is necessary to identify objectives, or goals, to determine effectiveness. There are several problems in studying objectives, even as important as they are. Persons may not have developed a clear and specific statement of their objectives. They may have general notions of what they are, but a person's objectives may not all be consistent with each other; some objectives may conflict with others. Additionally, they may change over time.

The approach used here was to ask about objectives in various ways. Respondents were asked at the beginning of the questionnaire how they first became involved in environmental matters. Responses to this open-ended question were categorized, and are shown in Table 12. Three categories stand out as particularly important: through organizations, through their work or job related activities, and in response to specific events ranging from Earth Day to specific projects, like a dam, that would affect them in some way. It seems relevant here that only one person indicated the news media in response to this question. This suggests that a more direct, personal contact may be more important to initiating involvement than secondary contact through the media.

Additional data on goals were obtained by asking these citizen participants directly "What have your goals been in environmental decision making in the last five years?" The five year period was specified so that all respondents would be answering for essentially the same time period, regardless of their age or years of environmental involvement. A substantial majority of responses to this open-end question were categorized as "to affect an

Table 12. How participants first became involved in environmental matters by level of participation.

How first involved	Hours per week 0	1-4	5-19	20+	Total
Not involved	2	0	0	0	2
Work or job related	2	6	3	9	20
Education, field of study	0	1	4	4	9
Family, relatives	0	0	3	4	7
Friends	0	2	1	3	6
Hobby, recreation	0	2	3	1	6
Organizations	1	12	15	10	38
Concern for environment	0	3	5	1	9
Specific events	5	9	9	4	27
Advisory committee	1	0	1	0	2
Other	1	2	1	4	8
Total	12	37	45	39*	133

*Column adds to 40 because one respondent indicated both "friends" and "other."

Table 13. Goals in environmental decisions by level of participation.

Goals	Hours per week 0	1-4	5-19	20+	*Total
No goals stated	3	2	0	1	6
Educate myself	1	2	5	1	9
Educate others, change their perception	1	7	13	10	31
To affect a project or legislation	9	32	35	34	110
Involve others, to motivate them	0	2	3	7	12
Make decision makers accountable, to make better decisions	0	2	4	1	7
Other	0	1	1	1	3

*Total number of times goal was named; more than one could be named by a respondent.

environmental project or legislation," as seen in Table 13. This was the most frequent response across all levels of participation. Admittedly this was a broad category. However, the specific projects or legislation persons wanted to affect are not an issue here. Respondents came from all over the state of Indiana, and so did the projects that concerned them. Combining "projects" and "legislation" in one category enlarges the number of persons in it; however, it is the nature of an open-end question that some referred to only one or the other, but that other respondents intertwined projects and legislation. That is, one way to affect projects is to affect legislation.

The second largest goals category was to "educate others, to change their perception of environmental issues." Even if these 31 answers are combined with the 9 for educating oneself, education is a goal for comparatively few active respondents. Educating others could be thought of in combination with "involve others, to motivate them," for a total of 43 respondents who were trying to bring others into the environmental fold. It also could be inferred that the reasons for educating and involving others was to obtain their support in affecting projects and legislation.

Independently from this question, in fact much earlier in the questionnaire, participants were asked if they had ever tried to influence an environmental decision being made by government. If they said"yes,"they were asked to give examples, not necessarily a complete list. Twenty said they had not tried to do so. Nine of these spent zero hours and six spent 1 to 4 hours per week on environmental matters. The majority said "yes," they had tried to influence decisions with 59 giving one example, 29 gave two examples, 17 gave three, and 14 gave four or more examples. There was little variation across levels of participation in the number of examples given.

A final and less direct aspect of objectives of participation was embodied in the question on how participants personally felt affected by environmental decisions. The rationale for this question was that it would say something about the reasons or motives for participating. Again, this was an open-end question with categories shown in Table 14, constructed from diverse answers. Some aspect of quality of life was mentioned by over 100 persons, with health being most frequent, followed by affect or feelings. Pollution, economic costs of environmental decisions and loss of the natural environment were all mentioned several times, but much less frequently. This suggests that for the majority of

Table 14. How participants personally feel affected by environmental decisions by level of participation

How affected	Hours per week 0	1-4	5-19	20+	*Total
Quality of life:					
Affect, feeling	0	7	6	7	20
Health related	1	10	10	10	31
Aesthetics	0	2	4	6	12
Other or general quality of life	1	15	15	19	50
Pollution	1	10	10	13	34
Less desirable future	1	4	6	6	17
Loss of natural environment	1	5	11	6	23
Recreation	0	8	6	2	16
Economic costs	2	9	7	8	26
Land use	0	2	6	1	9
Other	2	6	6	6	20

*Total number of times a response was given; more than one could be given.

participants it was not the physical and economic aspects of environmental decisions that were most important, but rather it was the impact they have on quality of life. It follows, then, that even though this may remain a somewhat nebulous concept it continues to deserve attention, at least from the perspective of these respondents.

Issue Specificity

Another way of looking at why citizens participate is to find out if they are concerned with only one very specific issue or have many or more general concerns. This is clearly related to the objectives for participating, as discussed above. Some people appear to only become involved when an issue directly affects them, such as a proposed reservoir inundating their property, whereas others participate in issues that have less immediate effects on them.

The first question in the questionnaire asked respondents to indicate the major environmental topics and activities they were currently involved with. The number of activities varied from zero to 14. Interestingly almost half of those who spent no hours each week on environmental issues named a few activities on which they were working as shown in Table 15. There was a modest tendency for number of activities to increase as hours per week spent on

Table 15. Number of activities by level of participation.

Number of Activities	Hours per week 0	1-4	5-19	20+	Total
0	8	3	0	0	11
1-2	6	17	18	9	50
3-4	1	9	13	14	37
5-6	0	11	10	9	30
7-8	0	3	1	6	10
9 or more	0	1	7	6	14
Total	15	44	49	44	152

environmental activities increased, suggesting that the more active persons have a broader range of environmental concerns.

Did highly active "environmentalists" think that only environmental problems were important? Respondents were asked to indicate which were the three most important problems facing the country using a list of 18 problems that have been frequently mentioned in other studies. Of the 18 we considered five, air pollution, energy crisis, planning and zoning of land, population, waste and water pollution, to be environmental problems. There are other aspects of these problems, but they all have environmental components and receive substantial attention in the environmental literature. In addition, to the 18 problems listed, persons could give "other" responses, which were categorized as either environmental or non-environmental. Only 16 of the 146 respondents picked no environmental problems, 53 picked one, 49 picked two, and 28 picked three as the most important problems facing the nation. Except for those who spent zero hours per week who picked none or one problem, there was very little difference by level of participation.

Lastly, with regard to issue specificity, persons were asked what their goals had been in environmental decision making. Their answers were classed as general or specific. Examples of general goals stated were "preserve, protect and enhance the environment," and "to influence policies and project funding of government agencies"; examples of specific goals were "establishment of the National Lakeshore," and "protect the water quality and watershed of Lake Monroe." The majority of respondents, 58 percent, did not state specific goals,

and only 23 percent stated three or more specific goals (Table 16). This pattern generally held for all those who spent one or more hours per week on environmental issues; 12 of the 14 who spent zero hours had no specific goals. In contrast, the majority did indicate general goals, as seen in Table 17. One or two general goals were most often named. There was little variation across level of participation, including those who spent zero hours per week.

Table 16. Number of specific goals by level of participation.

No. of specific goals	Hours per week				Total
	0	1-4	5-19	20+	
0	12	25	22	23	82
1	1	7	6	3	17
2	0	2	4	5	11
3	0	3	8	7	18
4 or more	1	4	6	3	14
Total	14	41	46	41	142

Table 17. Number of general goals by level of participation.

No. of general goals	Hours per week				Total
	0	1-4	5-19	20+	
0	7	12	11	8	38
1	5	15	17	15	52
2	0	9	9	8	26
3	1	2	6	2	11
4 or more	1	3	3	8	15
Total	14	41	46	41	142

Perceptions of Own and Other Citizens' Effectiveness

Effectiveness was considered first in the context of the number of goals achieved. Specific and general goals were combined since many respondents did not name both types of goals. If a respondent indicated that a goal was partially achieved, it was counted as achieved. Table 18 shows the total number of goals achieved. A total of 43 persons achieved no goals, 57 achieved one, either a general or specific goal, and so on. There was a slight tendency for the more active participants to have achieved a larger number of goals. These data say nothing about how many goals persons had in comparison to those achieved; this is provided in Table 19, in which the percentages were based on the total number of specific plus general goals achieved divided by the total number of specific plus general goals participants had. It appears that a large number of participants achieved the majority of their goals, since 64 persons achieved 76 to 100 percent of their goals and 16 achieved 51 to 75 percent of theirs.

Table 18. Number of general and specific goals achieved by level of participation.

No. of goals achieved	Hours per week				Total
	0	1-4	5-19	20+	
0	13	12	9	9	43
1	2	20	20	15	57
2	0	7	10	7	24
3	1	3	5	6	15
4	0	1	3	4	8
5	0	0	3	1	4
6	0	1	0	1	2
7	0	0	0	1	1
Total	16	44	50	44	154

Table 19. Percentage of general and specific goals that have been achieved by level of participation.

Percentage	Hours per week				Total
	0	1-4	5-19	20+	
0%	13	12	9	9	43
1-25%	0	5	1	0	6
26-50%	0	5	12	8	25
51-75%	1	2	6	7	16
76-100%	2	20	22	20	64
Total	16	44	50	44	154

Two things should be kept in mind in interpreting these data. First, the majority of the goals were general rather than specific, as shown in Tables 16 and 17. Second, if it was indicated that a goal was partially, or completely, achieved it was counted as achieved. This procedure tends to over-estimate the extent to which goals have been achieved. This was especially true for general goals. Given the large number and variety of goals named, it was not feasible to develop a more precise measure of goal achievement as part of this project. For example, a goal "to improve water quality" was classified as general. By the procedure used here, any improvement perceived by the respondent and described as at least partial achievement was

counted as improvement. It was perception of effect that was being sought. A more quantitative measure of degree of improvement in water quality, for example, would have been a very different problem and would have required an altogether different set of data.

A second approach to effectiveness was to ask respondents if they could name examples of decisions in which citizens had been effective. The general expectation was that more active persons should be able to name more examples. This was at least partially supported in that the slightly active gave the fewest examples, but there was little difference between the moderately active (5 to 19 hours per week) and the very active (20 or more hours per week) participants. Only 18 persons said they could not give any examples, 8 said they thought citizens had been effective but gave no examples, 45 gave 1 example, 27 gave 2 examples, 18 gave 3, and 28 gave 4 or more examples.

These examples were also coded in terms of the geographic scope of the decision: local decisions affected a specific community or multi-county area; state-wide decisions affected or potentially affected the entire state; and federal decisions had to affect substantial parts of two or more states. Examples given by respondents coded as local included dams, reservoirs and recycling projects; state-wide examples included the Indiana phosphate ban and Wabash River barge canal; and federal examples included the supersonic transport and toxic substances control bill. Table 20 shows that the slightly and moderately active respondents were much more likely to give local examples than state or federal examples of decisions in which they had been effective. Very active participants gave about equal numbers of examples at the local, state and federal level. Looking at Table 20 from the perspective of who participated in which scope of decision making almost half of the local examples were given by moderately active participants; state examples were given relatively equally by all activity levels; and a little less than half of the federal examples were given by the very active participants. The emphasis here was on scope, not on the number of specific examples given. If a person gave 3 local examples that was scored as local in scope, the same as if only one local example had been given.

Table 20. Scope of decisions given as examples of citizens' being effective by level of participation*

Scope of decisions	Hours per week				Total
	0	1-4	5-19	20+	
Local: community, county or multi-county area	3	20	33	14	70
State-wide	0	15	19	14	48
Federal: multi-state	0	9	12	17	38
Total	3	44	64	45	156

*Respondents could give examples at more than one level; frequencies are the number of respondents who gave at least one example at each scope level.

A particularly interesting aspect of the scope of decision data was the difference in scope between the most active participants and others, even though there was little difference in number of examples given. Similarly there was little difference in percent of goals achieved. This suggests that the very active participants may be more involved in federal scope issues and that slightly and moderately active participants are more involved in local scope issues. Unfortunately these data do not allow a specific test of this hypothesis since respondents were not asked to give complete lists of issues and hours per week spent on each of them.

The third means of measuring effectiveness was to have respondents place themselves on a scale ranging from "very ineffective" (-10), to "on the average I've had no effect" (0), to "very effective" (+10). The majority of respondents rated themselves as effective, but predominantly only somewhat to moderately so, that is from +2 to +7 as shown in Table 21. More rated themselves as very ineffective than as very effective. The majority of those who rated themselves at the very ineffective end, minus 8 to minus 10, were slightly active. This was particularly characteristic of the "no hours" per week respondents. There was a modest difference between the moderately and very active participants in their self-ratings, with 44 percent of the moderately actives rating themselves as plus 5 or higher compared to 64 percent of the very active participants.

Table 21. Self-rating of effectiveness by level of participation.

Self-rating	Hours per week 0	1-4	5-19	20+	Total
Very ineffective					
-10 to -8	8	6	3	2	19
-7 to -5	2	0	2	0	4
-4 to -2	0	0	0	1	1
No effect					
-1 to +1	1	4	6	3	14
+2 to +4	4	18	17	10	49
+5 to +7	2	14	16	23	55
Very effective					
+8 to +10	0	1	6	5	12
Total	17	43	50	44	154

To obtain some indication of the adequacy of the self-rating measure, those responses were compared with the percentage of goals achieved measure, in Table 22. Comparable scores provided an indication of validity of the measures. The marginal distribution of each variable does not simplify the comparison. Nevertheless, the majority of those rating themselves as very ineffective also achieved no goals; those rated as no effect, minus 1 to plus 1, and those slightly positive, plus 2 to plus 4, were bimodally split; and those moderately to very effective showed successively higher percentages of goals achieved. This pattern provides at least some evidence for the validity of these measures of effectiveness.

Table 22. Self-rating of effectiveness by percentage of general and specific goals achieved.

Self-rating	% goals achieved 0	1-25	26-50	51-75	76-100	Total
Very ineffective						
-10 to -8	14	0	0	0	3	17
-7 to -5	1	0	1	0	1	3
-4 to -2	0	0	0	0	1	1
No effect						
-1 to +1	6	1	2	2	8	19
+2 to +4	17	2	7	4	21	51
+5 to +7	8	3	17	7	28	63
Very effective						
+8 to +10	0	1	1	3	8	13
Total	46	7	28	16	70	167

The data showed a generally consistent pattern of (a) all levels of participants being at least partially effective, across the various measures of effectiveness, and (b) a moderate relationship between effectiveness and level of participation, with the very active being the most effective, and the "no hours" participants the least effective.

Techniques Used to Influence Environmental Decisions and Perceptions of Their Effectiveness

There are many ways citizens try to influence decisions. Often these are last minute efforts like attending a public meeting at a point in the process when the decision has virtually been made. Other times they are organized well in advance, such as working for the nomination and election of persons who will support your position when the time for the decision comes. The active citizen participants in this study were asked what techniques they used and how effective they felt they were, using several approaches as with many of the other variables of the study.

After the first few questions about their own participation, they were asked: "If you reflect for a moment about these participation activities, which participation techniques have you found to be most effective for influencing decisions?" Answers to this open-end question were categorized and are presented in Table 23. Several different techniques were named here voluntarily by several people. Leading the list was "influencing legislation," which was mentioned by 53 persons. It may be assumed that this stands in contrast to influencing the administration of programs since contact with agencies was named less than a third as often.

The next two categories, direct contact and written contact with those involved in making decisions, might be combined. They appear separately in an effort to preserve the respondents' words, and in recognition that face-to-face encounters are not necessarily the same as the written word. Knowledge of the issues involved was also named quite frequently. Presumably they were saying that if a person were to be involved in direct contact where discussion and debate of the issues may occur, knowledge is essential to effectiveness.

In contrast to these most frequently named techniques were others less often named. "Attending meetings and hearings" was in the middle of the list, and below it was "participating in meetings and hearings." This is particularly significant in that

Table 23. Most effective techniques from open-end question by level of participation.

Technique	Hours per week 0	1-4	5-19	20+	Total
Influence legislation	2	13	18	20	53
Direct contact	3	10	18	20	51
Written contact	0	11	12	12	35
Knowledge of issues	0	11	9	15	35
Contact, use press	1	8	7	9	25
Participate in organizations, coalitions	0	8	6	7	21
Contact with agencies	0	4	5	8	17
Attend meetings and hearings	2	3	9	3	17
Style of presentation	1	1	7	7	16
Participate in meetings and hearings	0	6	3	5	14
Participate in educational programs	0	4	7	3	14
Repetition	0	3	4	6	13
Consult lawyers, courts	0	2	1	4	7
Participate on advisory boards	0	0	3	1	4
Other	2	18	14	18	52

meetings and hearings are the major technique many agencies use for obtaining public input. Even if attending and participating were combined they would be only fifth on the list. However, attendance without participation does not provide much substantive input to the decision making process. At the bottom of the list were "consulting with lawyers and using the courts," and "participating on advisory boards." Increased emphasis has been placed on both of these in the last few years, but for these participants they were not viewed as all that effective. Included in the list in Table 23 are two categories that are more about how to present the influential message. "Style of presentation" includes the manner of presenting your side of an issue, avoiding emotional outbursts, and making reasoned, knowledgeable arguments. Those who were categorized under "repetition" talked about the importance of repeating their position many times at many places, and not assuming that once, one place was enough. The differences in who mentioned which techniques across levels of participation were at best modest. A few techniques, namely, influence legislation, direct contact, style of presentation and repetition, were all mentioned more often by the more active persons.

A list of 17 techniques were presented to respondents later in the questionnaire, and they were asked to indicate how often they did each of them. The list was deliberately diverse, including such institutionalized procedures as voting, which can only be a few times a year, to participating in a protest demonstration, which is generally considered more controversial, but hypothetically could be done often. Table 24 shows how frequently participants reported they used each technique. The most frequently reported technique was talking to people from daily life; the fact that 5 participants said they never did this should be interpreted in the context of the question as meaning they never tried to influence an environmental decision that way. In contrast the least frequent technique was participating in a protest demonstration, which 91 said they had never done, and 42 said that they had rarely done.

Given the importance of influencing legislation and direct and written contact in the open-end question reported above, it was useful to look at the frequency of various forms of political participation here. Voting for specific officials or specific legislation was reported as being done once a year or less by 78 persons. A person who voted in every primary, general and special election could legitimately fit into the 2 to 5 times a year category, as 22 persons reported. To vote more often than that, as 43 persons reported, appeared to require a different interpretation of the question than intended. Speculatively, this might include voting within an organization to lobby for or against a proposed piece of legislation, for example. It may also be a form of response error, with respondents over-estimating the frequency of their voting. More frequent than voting was talking or writing to elected government or political party officials. Eight persons did this daily, 32 weekly and 39 monthly, which appears consistent with the importance placed on direct contact earlier. However,

Table 24. Frequency of use of listed techniques

Technique	Never	Rarely	Seldom	Occasionally	Monthly	Weekly	Daily	Total
Voting for specific officials or specific legislation	8	78	22	38	4	0	1	151
Talking to particular people from daily life--friends, neighbors, relatives, fellow workers, priest, etc.	5	3	8	8	21	52	55	152
Talking or writing to elected government or political party officials--representative, party leader, or a government agency	7	20	19	28	39	32	8	153
Talking or writing to particular specialists or experts not in government or political party	17	25	28	30	24	25	3	152
Consulting a lawyer--using legal or juristic means	44	47	21	20	9	6	5	152
Forming a group or organization	46	82	11	10	2	0	0	151
Working through a political party; i.e. for the election of a political candidate	49	61	14	20	5	1	1	151
Contributing money to a party or a candidate	38	71	24	15	4	0	0	152
Contacting the press or other mass media	31	18	33	29	30	11	0	152
Joining an organization, including renewals	19	36	40	42	14	1	0	152
Attending meetings of organizations	12	17	15	15	66	23	3	151
Attending public hearings	10	20	45	45	27	4	0	151
Attending public discussions, educational programs, or going on organized tours	13	21	34	47	30	5	1	151
Signing petitions either supporting or opposing policy	17	37	50	34	12	2	0	152
Talking or writing to nonelected administrative officials or agency technical personnel	18	22	36	29	29	16	3	153
Wearing an environmental button or putting an environmental sticker on car	50	37	15	13	3	3	31	152
Participating in a protest demonstration	91	42	9	9	0	0	0	151
Other. Specify:	7	9	6	4	2	0	3	31

Never: have never done; rarely: once a year or less; seldom: 2 to 5 times a year; occasionally: 6 to 11 times a year; monthly: 1 to 3 times a month; weekly: 1 to 4 times a week; daily: once or almost daily.

working through a political party or contributing money to a party or candidate was rarely or never done by nearly three-fourths of the respondents. This suggests that the political efforts of environmental activists tended to be focused on specific issues and legislation, not on party organization.

A few other comparisons of the data in Table 24 with the open-end responses reported in Table 23 are pertinent. Attending meetings of organizations and contacting the press or other mass media are reported as done relatively frequently on the listed techniques, which generally corresponds to their position in Table 23, although their order is reversed. Consulting a lawyer ranks low on both lists. From these data it appears there is a general correspondence between the frequency of use of a technique and its having been voluntarily indicated as effective.

In general, the more active participants used the various listed techniques more than the less

active participants. Two exceptions to this were voting and working through a political party, neither of which was done very often but when they were it was as apt to be less active people as compared to more active people who did them. These relationships are summarized in Table 25, using Gamma which is an ordinal measure of association.

Table 25. Relationships between frequency of use of listed techniques and level of participation.

Technique	Gamma
Voting for specific officials or specific legislation	.08
Talking to particular people from daily life--friends, neighbors, relatives, fellow workers, priest, etc.	.66
Talking or writing to elected government or political party officials--representative, party leader, or a government agency	.67
Talking or writing to particular specialists or experts not in government or political party	.53
Consulting a lawyer--using legal or juristic means	.53
Forming a group or organization	.50
Working through a political party; i.e. for the election of a political candidate	.13
Contributing money to a party or a candidate	.29
Contacting the press or other mass media	.57
Joining an organization, including renewals	.54
Attending meetings of organizations	.53
Attending public hearings	.48
Attending public discussions, educational programs, or going on organized tours	.48
Signing petitions either supporting or opposing policy	.32
Talking or writing to nonelected administrative officials or agency technical personnel	.61
Wearing an environmental button or putting an environmental sticker on car	.49
Participating in a protest demonstration	.44
Other. Specify:	

As an illustration, Table 26 shows one of the listed techniques, talking or writing to non-elected administrative officials or agency technical personnel by level of participation. The very active participants, those spending 20 hours or more per week on environmental activities, were in more frequent contact with agencies; the frequency of contact clearly decreases as hours per week decreases.

Table 26. Frequency of talking or writing to non-elected administrative officials or agency technical personnel by level of participation.

Frequency of talking or writing	Hours per week 0	1-4	5-19	20+	Total
Daily - once or almost once a day	0	0	0	3	3
Weekly - 1 to 4 times a week	0	1	3	12	16
Monthly - 1 to 3 times a month	0	6	11	12	29
Occasionally, 6 to 11 times a year	1	9	11	8	29
Seldom, 2 to 5 times a year	1	15	14	6	36
Rarely, once a year or less	7	6	7	2	22
Never, have never done	8	7	3	0	18
Total	17	44	49	43	153

The strongest relationships between level of participation and frequency of using techniques, in decreasing order, were with talking or writing elected government or political party officials, talking to particular people from daily life, talking or writing to non-elected administrative officials, contacting the press, joining an organization, talking or writing to specialists not in government, consulting a lawyer and attending meetings of organizations.

Several findings emerge from these data on effective techniques. Contacts through talking and writing were perceived to be especially effective for influencing decisions. Such contacts were made frequently. The more active a person was, the more contacts s/he makes. Even those techniques which were used less often, like consulting a lawyer or contacting the press, were done more often by the most active participants. The most active participants also used those techniques only moderately often that they had indicated on the open-end question only occasionally as being most effective. That is, even though the techniques were not voluntarily named as most effective, the most active

participants used them.

The last set of data on effective techniques was from two questions that asked respondents to choose the three most effective and three least effective techniques from the list. They were asked to rank the three most effective techniques in order to see if there were consensus on the most effective techniques. However, since many respondents find ranking somewhat difficult, they were only asked to name the three least effective techniques, in any order. These data are shown in Table 27. The most effective technique was talking or writing to elected government or political party officials. It was named as (first) most important almost twice as often as any other, and a little less than twice as often across the three most effective choices. Second place might be considered a tie between talking to people in daily life, which was second in (first) most effective, and contacting the press which was second on total most effective rankings. The least most effective techniques were wearing an environmental button or putting on environmental

Table 27. Ratings of listed techniques as most effective and least effective

Technique	Most effective				Least effective
	1st	2nd	3rd	Total	
Voting for specific officials or specific legislation	11	7	7	25	14
Talking to particular people from daily life--friends, neighbors, relatives, fellow workers, priest, etc.	21	13	9	43	13
Talking or writing to elected government or political party officials--representative, party leader, or a government agency	41	26	15	82	8
Talking or writing to particular specialists or experts not in government or political party	1	7	8	16	10
Consulting a lawyer--using legal or juristic means	5	4	8	17	22
Forming a group or organization	10	10	9	29	9
Working through a political party; i.e. for the election of a political candidate	2	7	5	14	13
Contributing money to a party or a candidate	3	3	4	10	27
Contacting the press or other mass media	10	18	20	48	4
Joining an organization, including renewals	5	6	9	20	9
Attending meetings of organizations	5	8	9	22	11
Attending public hearings	8	9	15	32	16
Attending public discussions, educational programs, or going on organized tours	5	2	6	13	16
Signing petitions either supporting or opposing policy	0	4	1	5	43
Talking or writing to nonelected administrative officials or agency technical personnel	8	12	7	27	18
Wearing an environmental button or putting an environmental sticker on car	0	0	0	0	75
Participating in a protest demonstration	0	1	2	3	65
Other. Specify:	5	1	2	8	0

sticker on a car, participating in a protest demonstration and signing petitions. These were also named the least often as most effective techniques. Although there was not a perfect inverse order between the two total rankings it was fairly high, with a Spearman's rank correlation of -.65.

Respondents were asked why they ranked a technique as most or least important. The advantages of direct personal contact were expressed in several ways by those who named talking or writing to elected or political party officials, for example: "It takes personal contact by groups to get the attention of elected officials;" "It gives a chance to work out differences or misunderstandings;" "Lets officials know if their plan is right, okay or wrong." While these and other comments indicate the importanceplaced on conveying a group's position to elected officials, they also indicate that such direct contacts often involve the two-way exchange of information, and the importance of supporting officials when you agree with them rather than just contacting them when you disagree. Comments were quite similar for all three of the least effective techniques (wearing an environmental button, protest demonstrations, and signing petitions), for example: "It makes you feel good, but doesn't really do anything;" "I don't believe legislators are influenced by such techniques;" "It didn't mean a thing when we used a petition." They simply were not seen as effective for influencing decisions.

There were few differences in rankings by level of participation, indicating substantial agreement about which techniques were important. The few differences were: "other" was used only by the less active respondents for both most and least important questions; contacting the press tended to be rated first or second most important by the most active, and third most important by the least active; and no zero hours person ranked signing petitions as least important.

These rankings of the effectiveness of specific techniques supported the other findings based on voluntary naming of most important techniques and on the frequency of their use. These rankings add to the earlier findings by showing that there was general consensus about the effectiveness of the techniques across levels of participation. There was agreement, in other words, among the most active who used the techniques most and the less active who usedthem less, about which techniques were most important.

Perceptions of Agencies' Responsiveness to Citizen Participation

Participants were asked a series of questions, mostly open-ended, about how they perceived agencies to respond to citizen participation based on their experience. "Agencies" here referred to both elected officials and administrative bodies at the local, state and federal levels.

In reply to a question on whether agencies were responsive to public input, participants' answers were quite mixed, as shown in Table 28, with the majority saying "yes and no;" "yes" and "no" were

Table 28. Are agencies responsive to public input by level of participation.

Are agencies responsive to public input	Hours per week 0	1-4	5-19	20+	Total
No	4	13	11	6	34
Yes and No	6	24	24	22	76
Yes	0	6	13	13	32
Total	10	43	48	41	142

indicated by fewer, but about equal, numbers. The tendency, however, was for the slightly active to be more likely to say no and the most active to be more likely to say yes. Participants were asked to give examples of ways agencies had been responsive. More frequently mentioned examples were revising projects, plans and programs, providing information to the public and generally providing for citizen input. As shown in Table 29, there was no systematic difference here across level of participation, except that "no hours" participants gave only one example.

In contrast to the mixed feelings on responsiveness, the majority of participants felt that agencies have changed in a positive direction recently in the way they interact with citizens. As shown in Table 30, the very active and moderately active participants especially felt that positive changes were occurring, with about 73 percent saying yes compared to about 24 percent saying no. The

Table 29. Ways agencies are responsive by level of participation.

Ways agencies responsive	Hours per week 0	1-4	5-19	20+	Total
Provide information to public	0	4	8	2	14
Hold public meetings and hearings	0	0	3	4	7
Provide for citizen participation	1	2	6	4	13
Responsive in revising rules and regulations	0	4	3	2	9
Revise projects plans and programs	0	8	7	6	21
Other	0	10	17	12	39

Table 30. Have agencies changed recently by level of participation.

Agencies changed	Hours per week 0	1-4	5-19	20+	Total
No	8	10	12	9	39
Yes and No	0	3	1	1	5
Yes	1	24	32	31	88
Total	9	37	45	41	132

slightly active participants were more evenly divided, with a smaller majority of "yes" answers. When asked for more detailed information about how agencies were changing, some respondents gave specific examples of providing more information and holding meetings and hearings (see Table 31). Some felt there were changes in attitudes taking place within some agencies that now encourage citizen participation. The largest single category of response was that agencies were complying with laws and regulations on citizen participation. While this category includes some who indicate that agencies may not always be happy with these new laws, the majority seemed to imply that this has improved opportunities for participation.

Respondents were asked two questions about which types of agencies were most responsive. The objective was to obtain information about characteristics of agencies, not information on any specific agencies. They were asked: "In your experience, which agencies are more responsive to citizen input--local,

Table 31. Ways agencies have changed in interacting with citizen participants by level of participation.

Ways agencies changed	Hours per week 0	1-4	5-19	20+	Total
Provide information to public	0	1	6	6	13
Hold public meetings and hearings	0	1	7	6	14
Encourage citizen participation	0	5	5	6	16
Respond to citizen input on plans and projects	0	1	3	0	4
Complying with laws and regulations on citizen participation	0	6	9	9	24
Other	0	11	16	14	41

state or federal?" As Table 32 shows, about half said local agencies were most responsive, followed by federal and then state agencies. Slightly active persons were much more likely to pick local agencies and moderately and very actives were about equally likely to pick local or federal agencies. These findings are similar to those in Table 20 for slightly and very active respondents, but there moderately actives were proportionately more likely to name local examples of decisions in which citizens were effective.

Table 32. Are local, state or federal agencies more responsive to citizen input by level of participation?

Agencies more responsive	Hours per week 0	1-4	5-19	20+	Total
All about the same	0	1	2	5	8
Local	11	30	20	16	77
State	2	2	10	6	20
Federal	2	8	16	17	43
Total	15	41	48	44	148

American governmental structure divides various functions between three branches of government. Citizens interact in a fairly routine way with elected bodies and technical/administrative agencies. Therefore, the respondents were asked which of these two types of governmental bodies was more responsive.

(Interaction with the judiciary is less routine, and its relationship to citizens is different than the other two branches.) On the whole, participants felt the elected branch was more responsive. This, perhaps, is not too surprising since unresponsive elected officials may be voted out of office. Additionally, the elected officials play the major policy making role. Technical/administrative officials have the responsibility of executing that policy, even when it may not be popular with some citizens. As Table 33 shows, there was essentially no difference in answers among levels of participation on this question.

Table 33. Are elected bodies or technical, administrative agencies more responsive to citizen input by level of participation.

Responsive agencies	Hours per week 0	1-4	5-19	20+	Total
Elected much more	3	13	9	12	37
Elected somewhat more	5	16	19	12	52
Undecided	4	8	8	6	26
Technical, administrative somewhat more	0	6	7	7	20
Technical, administrative much more	2	0	1	2	5
All about the same[a]	0	1	0	2	3
Total	14	44	44	41	143

[a]This was not a response category given respondents in this structured question; 3 wanted to use it rather than use undecided.

It should be pointed out that since respondents came from all over the state, having participated in a wide variety of environmental issues, the specific governmental units with which they have interacted varied greatly. While this was obvious for local governmental units, through examples they gave it is also true for state and federal agencies.

In two sequential questions, participants were asked if they could name procedures that agencies (both elected and administrative) follow that discourage and that encourage citizen participation. Ninety-six percent named discouraging procedures, and 80 percent named encouraging procedures. Categories were developed to summarize those responses, and the frequency with which each was mentioned is presented in Tables 34 and 35. Encouraging or discouraging public hearings and meetings was mentioned most in the respective questions. This included the presence or absence of adequate notice of the meeting, having sufficient time to prepare for it, and information on when and where it was to be held. Seeking public participation, i.e., through educational programs and advisory committees, was mentioned almost as often. This was followed by facilitating access to information. The second most frequently mentioned procedures that discourage participation were use of administrative and bureaucratic procedures, often governing when and how participation takes place, and lack of access to information.

Table 34. Agency procedures that encourage citizen participation by level of participation.

Procedures	Hours per week 0	1-4	5-19	20+	Total
Access to information	1	6	13	12	32
Receptive or cooperative (passive)	0	5	2	6	13
Positive attitude (active)	0	2	2	4	8
Encourage participation in public hearings	1	12	20	18	51
Explain laws and procedures	0	5	6	7	18
Seek citizen participation	0	12	19	16	47
Administrative procedures that encourage participation	0	1	0	3	4
Other	0	3	3	4	10

Level of participation had only a limited relationship to naming procedures that encourage and discourage participation. The moderately and very active participants named more procedures than the slightly actives; this was particularly true for encouraging procedures. However, given the difference in the total number of procedures named across participation levels, there was little difference in the proportion who named a specific procedure. For example, encouraging participation in public

hearings and seeking citizen participation were named first and second most often by participants at all activity levels.

Table 35. Agency procedures that discourage citizen participation by level of participation.

Procedures	Hours per week 0	1-4	5-19	20+	Total
Lack of access to information	1	9	10	11	31
Lack receptivity or cooperation (passive)	0	7	7	5	19
Negative attitude (active)	0	5	2	9	16
Discourage participation in public hearings	3	15	27	22	67
Do not explain laws and procedures	0	1	1	2	4
Use technical jargon and criteria	1	2	3	5	11
Do not seek citizen participation	0	9	1	9	19
Administrative procedures that discourage participation	0	10	12	10	32
Other	4	15	21	14	54

In summarizing agency responsiveness, it appears that participants viewed agencies with mixed feelings, but that they view them as changing for the better. Also, local and elected bodies are more responsive. Public hearings and meetings came out as a particularly important means through which agencies both encouraged and discouraged participation. A generally consistent finding was that the very and moderately active participants had more comments on and examples to make about agency procedures than the slightly active participants. This difference was especially apparent with regard to positive indications of responsiveness. It may be that the more active persons have a greater opportunity to observe the positive changes. However, that does not seem to explain the finding that the slightly actives named almost twice as many procedures that discourage participation as encourage it.

Some Other Issues Concerning Citizen Participation

Do citizens really care about participating in environmental decisions? Are they able to do much toward solving problems? Do they only participate because of financial benefits? In this section two different types of reasons for participating are discussed (1) do citizens care and can they do anything, and (2) is their participation related to financial gain or loss?

"Citizens don't care unless directly impacted and involved." "Some care very much; most don't know about the decisions." As these answers indicate, when asked whether the average citizen cares, the modal response was that s/he cares very little, generally with little or no participation. This was the response of about half the respondents, shown in Table 36. Compared to the 90 who said citizens care very little, 35 said they care some and only 16 said they care a lot. The answer categories were

Table 36. Extent to which citizen's care about participating in environmental decisions by level of participation.

Average citizen care	Hours per week 0	1-4	5-19	20+	Total
Not care	0	1	2	3	6
Cares very little (little or no participation)	10	23	20	24	77
Cares very little (some participation)	1	2	5	5	13
Cares some (little or no participation)	2	7	11	6	26
Cares some (some participation)	0	3	3	3	9
Cares quite a lot (little or no participation)	1	4	4	2	11
Cares quite a lot (some participation)	0	1	3	1	5
Don't know	0	2	1	0	3
Total	14	43	49	44	150

developed from responses to an open-end question. Each category contains two dimensions: caring and participation. There is a consistent pattern that emerges from this: respondents generally expected little or no participation regardless of how much they thought citizens cared. The respondent's own

level of participation made essentially no difference in how s/he saw the "average citizen" in this regard.

This contrasts quite sharply with what respondents felt the role of the public should be. A series of questions were asked to measure this, which was referred to here as democratic value orientation.[3] These were general statements, not addressed to specific agencies or projects, that asked what the role of the public and agencies is in decision making. Only two of these statements are discussed here, since there was little difference in findings among the eight statements. As shown in Table 37, the majority of respondents agreed or strongly agreed with Question 21: "Responsibility for all public programs ultimately should rest with the public." In contrast, they disagreed or strongly disagreed with: "Administrators in government agencies are better qualified to decide what projects are needed than is the general public." There was no substantial variation in answers to these, or other questions in the series, across levels of participation.

Table 37. Attitudes towards the public's and agencies' role in decision making.

Attitudes towards role	Question 20	Question 21
Strongly agree	3	24
Agree	24	67
Undecided	16	22
Disagree	78	38
Strongly disagree	30	0
Total	151	151

Question 20: Administrators in government agencies are better qualified to decide what projects are needed than is the general public. Question 21: Responsibility for all public programs ultimately should rest with the public.

When asked who could solve environmental problems in their community, several differences across activity levels were found. No hours participants named few persons, groups or organizations. Local officials were named most often; about equally by slightly, moderately and very active participants. Environmental organizations were a close second, and were named predominantly by moderately and very active participants. These more active participants were also most likely to name persons, state officials and private corporations and businesses. Of the respondents who named specific persons as able to solve community problems, eight named other persons who were also respondents in this study.

One of the persistent questions about citizen participation concerns whether it is in the public interest or whether it benefits the private interests of the participants. There are many aspects of interests, including aesthetics and recreational preferences. Financial interests are referred to most often, and are the interests inquired about here. Respondents were asked whether they saw any possible financial benefits or losses for themselves or their family as a consequence of their participation in environmental issues. Almost all respondents at all levels of activity tended to say that they did not anticipate any financial benefits as a result of their participation (see Table 38). About 10 percent indicated possible financial benefits; these tended to be anticipated through the reduction of solid waste or the potential for solar heating which would reduce costs. A much larger number, 43 percent, did see possible financial losses resulting from participation. There was a slight tendency for more active participants to see losses more frequently (see Table 38). These losses

Table 38. Possible financial benefits and losses by level of participation.

	Hours per week				Total
Financial benefits	0	1-4	5-19	20+	
No	9	39	41	40	129
Yes	2	4	5	3	14
Don't know	0	1	0	0	1
Total	11	44	46	43	144
Financial losses					
No	11	28	24	18	81
Yes	0	15	24	24	63
Don't know	1	1	0	0	2
Total	12	44	48	42	146

[3] See Gordon Bultena, Community Values and Collective Action in Reservoir Development: Completion Report, Ames, Iowa State Water Resources Research Institute (ISWRRI-69) September, 1975.

were generally either a result of the costs of participation - travel expenses, time lost from work, baby sitter, etc. - or a recognition of the costs of cleaning up the environment - such as automobiles becoming more expensive. In general, respondents saw these costs as necessary and worthwhile. As one said: "One of my basic principles is that if we are going to have a decent environment in this country we have to pay for it, and I'm going to have to pay for it like everybody else. If you call that a financial loss, then, OK, that's a financial loss. I happen to think that the gains you make are more important than the financial losses."

It might be concluded from these data that participants must view themselves as different from most citizens. The majority saw the "average citizens" as caring little and participating less, while respondents were participating, and caring at least implicitly as indicated in answers to open-end questions; they were not asked directly how much they cared. Additionally, their participation occurred at a direct financial cost in many cases, without any anticipated financial gain. Any gains to be realized occurred through environmental issues such as public health, conserving resources, or through reduced governmental expenditures. The meaning of the respondents was quite consistently that these were benefits that would accrue to everyone, or at least large segments of the population, not just to them.

Summary and Conclusions

The purpose of this study was to describe how persons who have participated in the environmental decision making process view that process and their participation in it. A central part of the analysis is the comparison of persons across levels of participation, from slightly active to moderately to very active. Data were obtained from very and moderately active citizens throughout Indiana using a snow-ball sampling technique, and from slightly active persons using a number of lists as described in the research methods chapter. Both interviews and mailed questionnaires were used.

The extent to which respondents had been involved in environmental issues and organizations varied on several dimensions, including the number of years since they were first involved, the number of environmental organizations they belonged to, the extent of participation in them and the hours per week they devoted to environmental activities. Hours per week was used throughout the study as the indicator of level of participation. The demographic differences across levels of participation were modest. Persons at all levels of participation lived in places of varying size, from farms to large cities, but slightly actives were more likely to live on farms and very actives more likely to live in the open country - but not on farms. The majority of slightly actives were 40 years of age and over, while the very actives ranged widely in age. About 65 percent of the respondents were men, but women tended to be more active.

These respondents on the average rank relatively high on socioeconomic indicators. The majority had more than a high school education, and had incomes of $15,000 and higher. Neither of these indicators of socioeconomic status was directly related to level of participation, with the very active participants having less education than the moderately actives, and less income than the slightly actives, on the average.

A goal of a substantial majority of participants was to affect decisions on projects and/or legislation. This was named far more often than any other goal. The majority volunteered one or two examples of decisions they had attempted to influence, which further supports this as a major objective for participation. This varied little across levels of participation. Some aspect of educating, motivating or involving others was a goal of many participants. General goals, such as "preserve, protect and enhance the environment," were named more frequently than specific goals, like "establishment of the National Lakeshore."

In general participants viewed their involvement as fairly effective, based on a series of measures of effectiveness. Most had indicated only a few goals, so that accomplishing one or two goals, as over half said they felt they had done, meant that they had been relatively successful. When asked to give examples of decisions in which citizens had been effective, over 80 percent named one or more

examples. Participants were asked to rate themselves on their perception of their own effectiveness. A few thought they were quite ineffective, but the majority viewed themselves as slightly to moderately effective. The very active participants tended to have achieved more goals and to rate themselves as more effective than the slightly active participants. Overall, participants felt citizens were more effective in influencing decisions at the local level. This was true for the slightly and moderately actives particularly, while the very actives felt citizens were effective at the local, state and federal level.

The most effective ways to influence environmental decisions involve directly talking or writing to decision makers, influencing legislation, talking to people in daily life, possessing knowledge of the issues, and contacting the press, according to participants. These generally were the more frequently used forms of participation, also. Participating on advisory boards and consulting lawyers/using courts were seldom named spontaneously as most effective techniques. When they were asked to select the least effective techniques from a list of 17 techniques, wearing an environmental button or putting a bumper sticker on car and participating in protest demonstrations were named most frequently as least effective, followed by signing petitions. One of the most frequently used procedures, public hearings, received mixed ratings on its effectiveness.

Probably the most consistent pattern found in these data is that between frequency of using various techniques to influence environmental decisions and level of participation. Very active participants use many of the techniques, and they use them more often than the slightly active participants. It also appears that these activities are directed at influencing the outcomes on issues, and are not directed toward a particular political party.

Participants indicated that government organizations use various procedures that encourage and that discourage public involvement. Procedures that either encourage or that discourage participation in public hearings were mentioned most frequently in each category. The majority felt agencies are responsive, and that they have changed in how they interact with citizens. Moderately and very active participants were more positive in viewing agencies as being responsive and encouraging participation; they were also more likely to see state and federal agencies, and technical and administrative bodies as more responsive than slightly active respondents were.

Although these participants generally felt that the "average citizen" cares and participates very little in environmental decisions, they generally believe that the public should be responsible for such decisions. In terms of their own participation, very few saw any financial benefits that might result from their involvement. However, a little less than half saw various kinds of financial losses associated with their participation; this was moderately related to level of participation.

There are some conclusions that can be drawn from this study of active participants in environmental decisions. The data indicate that participants are active on several dimensions and that their participation is purposively directed toward influencing the outcome of decisions. At least three factors in the data support a conclusion that these are a dedicated set of people: (1) the amount of time that the moderately and very active participants spend working toward their objectives, (2) the majority pay their own expenses to a large extent, and (3) very few see any financial gains while many see possible losses resulting from their participation. This pattern of behavior is characteristic of the voluntary sector of American society, in contrast to the private, for-profit sector. This commitment is a significant factor in the strength of voluntary organizations.

There are two particularly striking contrasts between the slightly and very active participants. First, slightly actives saw themselves as less effective, and had a more limited view of citizen effectiveness than very actives had. Second, slightly actives predominantly saw citizens as being effective with local agencies and local agencies as being responsive to citizens, while very actives gave examples of citizens being effective at local, state and federal levels, and equally saw agencies

at all three levels being responsive. The greater involvement of the very active participants provides a base of knowledge and experience that the less active participants don't have with regard to state and federal government.

The very active participants had a more positive view of state and federal agencies, and of technical and administrative personnel in governmental agencies. Again, this may be a function of their greater involvement. However, there were some indications that slightly active participants have been discouraged either in the process or by the process of participating.

Overall, participants' views of government organizations' acceptance of citizen participation were mixed. They saw many ways in which participation was encouraged and discouraged. They saw agencies changing, particularly in providing more opportunities for information to flow back and forth between agencies and citizens. Local government was seen most favorably, particularly by the slightly actives, which may be due to its proximity. Perhaps because federal legislation has provided much of the basis for citizen participation in environmental decisions in recent years, federal agencies were seen as more responsive than state agencies. This legislation has sometimes meant that state agencies are left in a reacting rather than initiating position, that is, having to react to federal initiatives.

It needs to be clear that these data do not establish the direction of causal relationship between level of participation and perceived effectiveness. A different type of research design would be needed to determine if (a) increasing participation leads a person to perceive himself as being more effective, (b) perceiving oneself to be effective leads to greater participation and not being effective leads to less participation, or (c) there is interaction between the two.

What is clear is that citizens are not always dissatisfied, nor are they always satisfied, with their efforts at participating in environmental decision making. This seemingly simple statement has implications for two criticisms of citizen participation that are often raised in the context of the relationship of democratic theory and practice, namely that citizen participation never works (somehow it is a diversionary tactic at best) or that it works too well through the creation of a monolithic force.

At the more applied level of agencies and citizens that want to encourage citizen participation, the findings suggest a particular need for participation techniques that expand opportunities for slightly active persons. It should be recognized that such persons' involvement may come about directly or indirectly through organizations, or be encouraged by very active persons. Recognition of the structure of voluntary organizations, and participation in such organizations, is an important part of understanding the citizen participation process. Such organizations oftentimes provide a link between citizens and governmental agencies, a link which might be used to increase participation. Citizen participation need not be limited to members of such organizations as a result of this, but it may be enhanced by it.

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APPENDIX A
QUESTIONNAIRE

THE EFFECTIVENESS OF PUBLIC PARTICIPATION

1. A. Would you begin by naming or briefly describing the major environmental topics or activities you are currently working on? (Please use back of page if necessary.)_____

_____

B. Would you go back and describe your major past activities, including how and when you first became an active citizen participant? That is, what first got you interested in environmental matters? (If your only participation is recent and is described above in 1.A., please go on to question 1.C.)

_____

_____

C. Have you ever attempted to influence an environmental decision being made by government? (A governmental agency includes either elected officials or administrative agencies which can be at the local, state or federal level.)

_____No
_____Yes: Would you give an example(s) of the decision or issue? (Do NOT give names of persons.)

_____

_____

2. To what extent do citizens really care about participating in enviromental decisions?_____

_____

3. If you reflect for a moment about these participation activities, which participation techniques have you found to be the most effective for influencing decisions?_____

_____

4. How do you find out about environmental issues which result in your active participation?_____

_____

5. In the space below would you please name the environmental organizations to which you belong? Then answer the following questions about each of these organizations: How often do you attend meetings? Do you pay dues or contribute money? Are you on any committees? Are you an officer? Have you ever been an officer?

Name of organization	How often do you attend? (once a week, 3 times a yr., etc.)	Pay dues or contribute to? (Check only if YES.)	Are you on committees? (Check only if YES.)	Are you, or were you an officer? (Check only if YES.) Are	Were

Here are some statements made about organized groups. Please indicate, in light of your past experience in groups, how you feel. We realize that individual groups differ, we just want your opinions about groups in general.

6. Forming a group generally offers an effective way of tackling a local problem. Do you strongly agree, agree, are undecided, disagree, or strongly disagree with this statement. (Please place a check mark ✓ in front of the category which summarizes how you feel on the average.)

_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

7. Most community groups are not very democratic in the way they are run.

_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

8. Leaders of most organized groups have a way of using group members for their own selfish purposes.
   _____1. Strongly agree
   _____2. Agree
   _____3. Undecided
   _____4. Disagree
   _____5. Strongly disagree

If our categories do not seem to fit your response, please try to check the category that best fits and then write in any additional information beside the question.

---

9. One problem with organized groups is that usually a few members have most of the say about what the organization does.
   _____1. Strongly agree
   _____2. Agree
   _____3. Undecided
   _____4. Disagree
   _____5. Strongly disagree

10. Organized groups usually have very little influence in local affairs.
   _____1. Strongly agree
   _____2. Agree
   _____3. Undecided
   _____4. Disagree
   _____5. Strongly disagree

11. For the most part, community groups reflect the views of their individual members.
   _____1. Strongly agree
   _____2. Agree
   _____3. Undecided
   _____4. Disagree
   _____5. Strongly disagree

12. What do you think are the three most important problems facing the country today? Would you place a "1" in front of the most important; a "2" in front of the second most important; and a "3" in front of the third most important?
   _____a. Air pollution
   _____b. Control of lawlessness and crime
   _____c. Dissatisfaction with government
   _____d. Energy crisis
   _____e. Generation gap
   _____f. High cost of living/inflation
   _____g. Improvement or elimination of poor housing: rebuilding of cities
   _____h. Improvement and maintenance of roads and streets
   _____j. Improvement of public education
   _____k. Improvement of transportation, traffic movement and parking
   _____m. International problems
   _____n. Moral decline/lack of religion
   _____o. Planning and zoning of land: preservation (or improvement) of parks and other natural areas: beautification
   _____p. Population
   _____r. Race relations
   _____s. Unemployment and poverty
   _____t. Waste (garbage, litter, and landfills)
   _____u. Water pollution
   _____w. Other problems. They are _____.

13. Whenever you influence an environmental decision, any of several techniques might be effective. The list below consists of several techniques that are used by other citizen participants. Some of these you may have already mentioned. Some you may have inadvertently omitted. Others you may not have used. Would you indicate how many times a year, on the average, you do each of these things (on the average over the last four years)? Please fill in the blank with the number that stands for the following categories:

0 Never, have never done
1 Rarely, once a year or less
2 Seldom, two to five times a year
3 Occasionally, six to eleven times a year
4 Monthly, one to three times a month
5 Weekly, one to four times a week
6 Daily, once or almost once a day

How Often Technique

a. _____ Voting for specific officials or specific legislation

b. _____ Talking to particular people from daily life--friends, neighbors, relatives, fellow workers, priest, etc.

c. _____ Talking or writing to elected government or political party officials--representative, party leader, or a government agency

d. _____ Talking or writing to particular specialists or experts not in government or political party

e. _____ Consulting a lawyer--using legal or juristic means

f. _____ Forming a group or organization

g. _____ Working through a political party; i.e. for the election of a political candidate

h. _____ Contributing money to a party or a candidate

j. _____ Contacting the press or other mass media

k. _____ Joining an organization, including renewals

m. _____ Attending meetings of organizations

n. _____ Attending public hearings

o. _____ Attending public discussions, educational programs, or going on organized tours

p. _____ Signing petitions either supporting or opposing policy

r. _____ Talking or writing to nonelected administrative officials or agency technical personnel

s. _____ Wearing an environmental button or putting an environmental sticker on car

t. _____ Participating in a protest demonstration

u. _____ Other. Specify:_____.

14. People have different ideas about how effective these techniques in Question 13 are. Which <u>three</u> of these techniques have YOU found to be the most effective? That is, which techniques are generally more effective, or are most effective in situations where they are applicable? Could you rank these as first, second and third? (Indicate this response with the corresponding LETTERS from the previous question.) Would you briefly indicate why you think each of these is particularly effective?

Most effective_____ Why?_____

Second most effective _____ Why?_____

Third most effective _____ Why?_____

15. Which three of the techniques in Question 13 do YOU believe are the least effective? Why do you believe this to be the case?

Technique_____ Why?_____

Technique_____ Why?_____

Technique_____ Why?_____

16. On the average, about how many hours per week do you spend on environmental matters?_____

-- Would you please indicate how you feel about these general statements concerning the role of public participation in government programs?

17. Democracy, to work, requires the active participation of every citizen. Do you strongly agree, agree, are undecided, disagree, or strongly disagree?
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

18. Our government employs experts who make decisions for the good of the public.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

19. The public should keep itself informed about the use of public monies.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

20. Administrators in government agencies are better qualified to decide on what projects are needed than is the general public.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

21. Responsibility for all public programs ultimately should rest with the public.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

22. Residents in this area should not expect to participate in the decision making activities of federal agencies.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

23. A citizen's obligation to participate in decision making by government agencies largely ends once he has voted.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

24. Residents near proposed water resources projects (rivers, streams, lakes) are better qualified to make decisions with regard to projects in their area than is an agency in Washington.
_____1. Strongly agree
_____2. Agree
_____3. Undecided
_____4. Disagree
_____5. Strongly disagree

25. At times you may have felt very effective in environmental decision making and at other times you may have felt very ineffective. However, overall, how effective do you feel that you have been on a scale from -10 to +10? (Circle the one number that expresses your effectiveness.)

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Very Ineffective — On the Average I've Had No Effect — Very Effective

26. What have your own goals been in environmental decision making in the last five years? (Give examples.)
_____

_____

27. Do you feel that you have achieved your goals? What specific goals do you think were achieved, at least in part, as a result of your participation?_____
_____
_____

28. Could you name any decisions in which you believe citizens have been effective?
_____No
_____Yes: Please name the decision and describe how citizens have been effective.
_____
_____

29. Are there things that citizens do that make their participation less effective than it might be?
_____No
_____Yes: Could you name some of these?_____
_____

30. Are there some procedures that some agencies follow that <u>discourage</u> citizen participation? (A government agency includes elected officials and administrative agencies.)
_____No
_____Yes: What are they?_____
_____

31. In your experience are there some procedures that some agencies follow that <u>encourage</u> citizen participation?
_____No
_____Yes: What are they?_____
_____

32. Do you believe that agencies are responsive to public input?
_____No
_____Yes: Could you give some examples of this responsiveness?_____
_____

33. Do you feel that agencies have changed recently in the way that they interact with citizen participants?
_____No
_____Yes: How have they changed?_____
_____

34. In your experience, which agencies are more responsive to citizen input--local, state, or federal?
_____1. Local
_____2. State
_____3. Federal

35. Which agencies are more responsive to citizen participation--elected governmental bodies or technical, administrative agencies?
_____1. Elected--Much more
_____2. Elected--Somewhat more
_____3. Undecided
_____4. Technical, administrative--Somewhat more
_____5. Technical, administrative--Much more

36. How do you feel about coalitions--that is groups or organizations who agree to cooperate or work together to influence enviromental decisions? In other words, what are their advantages and their disadvantages?

Advantages:_____

_____

Disadvantages:_____

_____

37. Would you name any coalitions that you have been involved in?_____

_____

_____

38. In what ways do you personally feel affected by environmental decisions?_____

_____

_____

39. As a consequence of your environmental participation, do you see any possible financial benefits for yourself and your family?
_____No, none
_____Yes: Please indicate what they are._____

_____

40. Also, as a consequence of your environmental participation, do you see any possible financial losses for yourself and your family?
_____No, none
_____Yes: Please indicate what they are._____

_____

41. What do you think are the most important environmental problems facing <u>your community</u> today? (Say the three most important.)

a. _____

_____

b. _____

_____

c. _____

_____

42. What individual, individuals, group, or groups do you consider most able to solve these problems?

_____

_____

43. How many years have you lived in this county? _____

44. In how many other places outside of this county have you lived for <u>at least one year</u>? (Include military.)_____

45. Where do you live at the present time?
_____1. City of 250,000 or more
_____2. City of 50,000 to 249,999
_____3. City/town of 10,000 to 49,999
_____4. City/town of less than 10,000
_____5. Open country, not a farm
_____6. On a farm

46. How old were you on your last birthday? _____

47. What is your marital status? Are you
_____1. Single
_____2. Married
_____3. Separated
_____4. Divorced
_____5. Widowed
_____6. Other: please specify:_____

48. Do you have any children living at home?
_____No
_____Yes: What are their ages? ____, ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

49. How many years of education have you completed? _____

50. What is (or was, if you are retired) your main occupation called? That is, what is the name of your job, not where you work?_____

51. Are you presently (check as many as apply)
_____1. Employed
_____2. Unemployed
_____3. Retired
_____4. Student
_____5. Homemaker
_____6. Other: please specify:_____

52. One of the problems in citizen participation is the cost to the participant. Check the one category which represents who usually pays the expenses for your participation? Are they usually paid:
_____1. By you or your family
_____2. As part of your job, for a for-profit organization
_____3. As part of your job, for a non-profit organization
_____4. By a for-profit organization, other than your employer
_____5. By a non-profit organization, other than your employer

53. Is your participation related to your work?
_____No
_____Yes: In what way is it related?_____
_____

54. Would you please check the category below which best represents your total family income in 1976 before taxes? (This should include wages and salaries, net income from business or farm pensions, dividends, interest, rent and any other money income received by all those people in the household who are related to you. If you are uncertain, what would be your best guess?)
_____1. Under $3,000
_____2. $3,000 to $5,999
_____3. $6,000 to $8,999
_____4. $9,000 to $11,999
_____5. $12,000 to $14,999
_____6. $15,000 to $17,999
_____7. $18,000 to $20,999
_____8. $21,000 to $23,999
_____9. $24,000 to $29,999
____10. $30,000 and over

55. In politics would you say that you are
_____1. Very liberal
_____2. Liberal
_____3. Middle of the road
_____4. Conservative
_____5. Very conservative

56. In politics, as of today, do you consider yourself a

_____1. Republican ⟶ 57. (If you are Republican) would you consider yourself as
_____2. Democrat ⟶ _____1. A strong Republican
_____3. Independent ⟶ _____2. Not very strong

(If you are Democratic) would you consider yourself as
_____3. A strong Democrat
_____4. Not very strong

(If you are Independent) would you consider yourself as
_____5. Closer to the Republican party
_____6. Closer to the Democratic party
_____7. Closer to neither
_____8. Non-political

58. Are you

_____1. Female
_____2. Male

59. What is your racial or ethnic identity?

_____1. Black
_____2. Mexican American
_____3. Oriental
_____4. White
_____5. Other: please specify:_____

60. Is there anything else you feel is important as a citizen participant that should be included in this study? Or do you have any comments about this study?_____

_____

_____

_____

_____

Thank you very much for your time and assistance!