

5-1-1984

Interorganizational Relations And Decision Making Among Section 208 Water Quality Management Planning Agencies

H. R. Potter

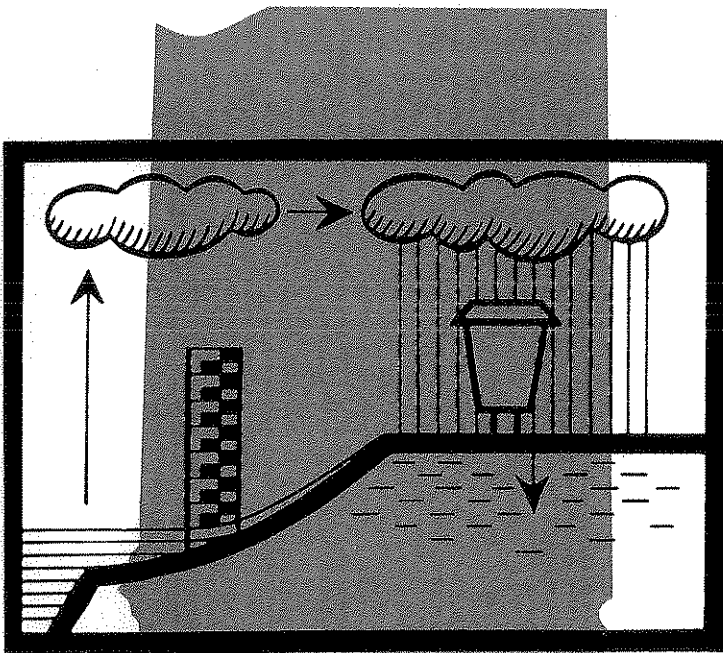
H. M. Schweer

Follow this and additional works at: <http://docs.lib.purdue.edu/watertech>

Potter, H. R. and Schweer, H. M., "Interorganizational Relations And Decision Making Among Section 208 Water Quality Management Planning Agencies" (1984). *IWRRC Technical Reports*. Paper 165.
<http://docs.lib.purdue.edu/watertech/165>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

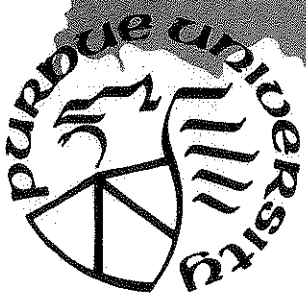
**INTERORGANIZATIONAL RELATIONS
AND DECISION MAKING AMONG
SECTION 208 WATER QUALITY
MANAGEMENT PLANNING AGENCIES**



by

**Harry R. Potter
and
Harlan M. Schweer**

May 1984

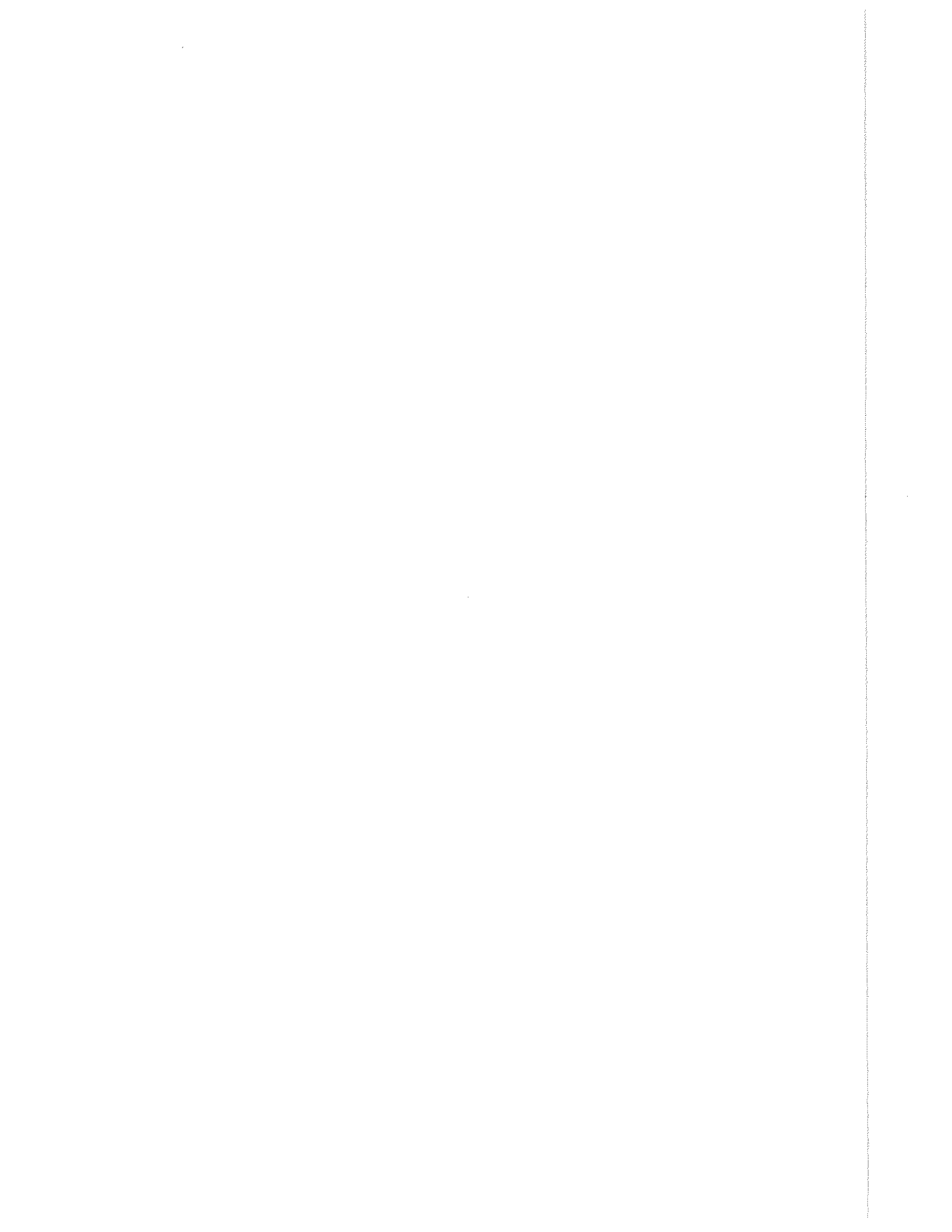


**PURDUE UNIVERSITY
WATER RESOURCES RESEARCH CENTER
WEST LAFAYETTE, INDIANA**



Fourth Partial completion report for Project No. C-00090-U
(Grant No. 14-34-0001-0498) entitled
"Problem Oriented Evaluation of Institutional Decision
Making and Improvement of Models Used in Regional
Urban Runoff Management: Application to Indiana"

Contents of this publication do not necessarily reflect the views and policies of the U.S. Department of the Interior, nor does mention of trade names or commercial products constitute their endorsement by the U.S. Government.



ACKNOWLEDGMENTS

A number of people have contributed to the successful completion of this project. Most important are the thirty-nine respondents who were generous enough to make time available to be interviewed, and in many cases adjust their schedules to meet our needs. One thing that impressed us was the high level of interest and enthusiasm for Section 208 planning and for this project. This was all the more surprising since by all accounts, 208 planning largely faded in 1980 with few (if any) concrete results. One sometimes had the feeling that it was out of frustration over the many hours spent and meetings attended for 208 with no real outcome that resulted in respondents wishing to talk about the planning process. In any case, we thank them for their cooperation and support.

Other project personnel including Professors John Bell and A. R. Rao provided helpful comments at various stages of this study. In particular Professor Jacques Delleur, Project Director, and Professor Mark Houck, Acting Director, not only kept the project organized and well-run, but were also instrumental in resolving any ambiguities or problems that arose. Professor Dan Wiersma, Director of the Water Resources Research Center at Purdue University until his retirement, provided administrative support and was a key linkage between the funding agency and the project.

Finally, our appreciation goes to Ms. Holly Norman for her efforts in getting this report typed. Not only was work completed very quickly, but she also displayed considerable skill in deciphering complex editing instructions and remained a pleasure to work with throughout.

ABSTRACT

This is a study of mandated interorganizational relations (IOR). This is in contrast to most IOR studies that have assumed voluntary relations among organizations. Specifically the focus is on organizations involved in a federally mandated water quality management planning program. Data are from interviews with 39 persons in 33 organizations in three loci: (a) a designated planning area, (b) a non-designated planning area and (c) persons in positions with state wide responsibilities. The greatest involvement was in the designated area, among state and federal organizations, and among agricultural and environmental voluntary organizations. There was little involvement by local government and industry. Multi-level organizations were more committed to public participation, were more likely to get additional program funding and to participate in joint programs than single level organizations. There was considerable variation in interorganizational relations. Information sharing was frequent, and was positively related to incompatibilities with other organizations. Resource sharing and joint programming were less frequent, and were positively related to each other. Commitment to public participation was positively related to the number of contacts with other organizations. The number of organization staff available to work on the program was a greater problem than staff expertise. Length of time necessary for program planning and implementation, continuity and sources of funds, and local support are three major factors that stand out as important to modify in federal-state-local relations in future water policy programs.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	i
ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
Chapter 1. Introduction	1
Statement of the Problem	1
Background	3
Theoretical Framework	5
Implementing 208 Areawide Water Quality Management Planning	7
Chapter 2. Methods	10
Chapter 3. Findings	13
Organizational Characteristics and Resources	13
Institutional Relations	26
Public Participation	36
Regional Planning	38
Chapter 4. Summary and Conclusions	40
Summary	40
Conclusions	44
REFERENCES	46
INTERVIEW SCHEDULE	48

LIST OF TABLES

Table	Title	Page
1.	Number of organizations and number of respondents by organization type and sector	14
2.	Organizational commitment to public participation by organization levels	16
3.	Extent of policy input from constituents by organization levels	16
4.	Mean annual budget in thousands by type of organization by source and mean of additional money for 208 planning	19
5.	Adequacy of annual budget and of funding for 208 participation by organizations' locus	20
6.	Adequacy of organizational staffing and of staffs' expertise during 208 by organizations' locus	22
7.	Correlations between staffing and funding indicators	22
8.	Frequency of interorganizational interaction by type of interaction	28
9.	Correlations between interorganizational variables	29
10.	Frequency of joint programming	29
11.	Distribution of importance of contacts, influence of named organizations, and effect of incompatibilities	32
12.	Organization influence rating by frequency of being named	33
13.	Organizational commitment to public participation and to regional planning by organizations' locus	33

INTERORGANIZATIONAL RELATIONS AND DECISION MAKING AMONG
SECTION 208 WATER QUALITY MANAGEMENT PLANNING AGENCIES

CHAPTER 1. INTRODUCTION

Statement of the Problem

It is almost a truism that natural resources boundaries, such as watershed boundaries, do not correspond with political boundaries. Consequently efforts to control pollution often involve several units of government as well as various industries and voluntary organizations. Institutional processes, or relations among organizations, therefore often become an important factor along with technological and economic factors in solutions to environmental problems.

There are many factors that affect this process. Organizations have goals, and rules that affect their decisions. They also have constituencies, and varying degrees of autonomy from those constituents. The consequences of decisions also affects the decision making process. When a decision whether final or proposed, is viewed as lacking equity, relations between those making the decision and other organizations may become more adversarial. A frequent example of this occurs when the distribution of benefits is primarily to one group and the distribution of costs is primarily to another group. Additionally some issues such as "improving water quality" has broad implications, and may be thought of as just one issue in a larger on-going drama. The major implication of this is that the decision will not be made solely on "technical" grounds because broader social values are involved and the decision is "political" in the sense of choosing among values.

The purpose of this study is to examine how institutional processes may operate as constraints or restrictions on alternative solutions in water resources decision making. Institutional processes in water resources decision making arise on the one hand out of specialized bureaucratic structures designed to bring technical information and criteria to bear on issues, and on the other hand out of such basic governing principles as fairness and due process. Specialized bureaucratic structures have potential advantages in greater competence and uniformity of procedures in making decisions. These occur through using "established" standards and procedures such as benefit/cost ratios. Potential problems may arise however as the

bureaucratic organization strives to demonstrate success through pursuing its goals. While these goals or more often specific programs may be seen as beneficial to some, others may see them as undesirable. These differing views may be based on the relative distribution of benefits and costs, or on different values which some may believe were not adequately considered in reaching the decision.

While these two aspects of institutional processes (bureaucratic structures using technical information and principles of fairness and due process) may not always inherently conflict at a more abstract level, at the level of policy implementation often they at least place restrictions or constraints on what are acceptable solutions to problems. This results in the need for interaction among the specialized agencies and the units of general purpose government. For governmental organizations, as in this study, goals are at least partially set outside of the organization by legislative bodies. New programs may be related to the goals of several existing agencies. This is particularly likely in a program like 208 areawide water quality management (named after section 208 of the P.L. 92-500) where a federally mandated policy is implemented through state and local governments.

In this study institutional processes are examined through the interorganizational relations created by the 1972 "Clean Water Act." These organizations are referred to as 208 agencies. We examine their relations with other local organizations and with state and federal agencies. These various organizations each have goals, domains, budgets and constituencies which are a result of their institutional structure, and which affect the extent and nature of their interaction with the 208 agency. The objective here is to examine how institutional processes may place constraints on decision making by looking at organization resources, with an emphasis on regional planning and public participation in relation to the extent and importance of interorganizational relations.

While 208 plans and planning have been in limbo since 1980, the relevance of this study lies in the fact that the problems of non-point pollution continue to exist, and represent a significant part of water pollution. Further legislation is being considered to address the problem. It seems clear that many environmental issues, from acid rain as an international problem to pollution of a modest size watershed covering a few

towns and counties will continue to involve interorganizational arrangements as a means to working toward a solution.

Background

In response to increasing environmental concern over the previous decade, Congress passed the "Clean Water Act," Public Law 92-500, in 1972. This Act established that among other goals:

- "(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;...
- (5) it is the national policy that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State..." (U.S. Congress, 1972).

It is Section 208 of this law that provided for areawide waste treatment management. Its scope was intended to be broad enough to cover both point and non-point pollution. Point pollution can generally be dealt with by a single governmental agency since it has a specific source. Non-point pollution however, is likely to span several governmental jurisdictions, thus no one agency typically could effectively deal with it. The broad scope and mechanism of 208 planning is described concisely by Barton as:

"...a rational, comprehensive, integrated planning process enabling local areas to develop methods to control water pollution. Under the 208 process, areas were supposed to estimate growth and identify needs for municipal sewage treatment for a 20 year period; to inventory point pollution; to identify non-point pollution sources and develop regulations and land use measures (BMPs) to control them; to estimate the economic, social, and environmental impact of the plan; and to designate appropriate agencies to implement it. The plan was then to be submitted for approval to EPA, with implementation following plan approval" (1978: 17).

Several studies have pointed to various aspects of the problem of fragmentation of local authority as a source of difficulty in controlling pollution. See for example, Page and Weinstein (1982), Centaur Management Consultants, (1978) Dersch and Hood, (1975) and Kaynor and Howards, (1973).

However, there was optimism that 208 planning efforts might help cope with the existing fragmentation:

"...the structure of American Federalism simply does not permit such (large regional) arrangements to successfully cope with the problems of water quality...as a result, we feel the areawide arrangements such as those emerging under Section 208 should be the focus of research efforts. They not only have the potential to coordinate municipal, county and state initiatives, but are also more likely to allow in their structure for representation on the part of the variety of public and private interests which are concerned in this policy sphere. This is extremely important, since institutional arrangements must be such as to facilitate achieving supply/quality/land use interfaces at the local level." (Whipple, 1975).

There are several features of the law that are important for relations among organizations. Federal-state-local relations are clearly provided for in Section 208 of Public Law 92-500:

"SEC. 208. (a) For the purpose of encouraging and facilitating the development and implementation of areawide waste treatment management plans--

"(1) The administrator, within ninety days after the date of enactment of this Act and after consultation with appropriate Federal, State, and local authorities, shall by regulation publish guidelines for the identification of those areas which, as a result of urban-industrial concentrations or other factors, have substantial water quality control problems.

"(2) The Governor of each State,...shall identify each area within the State which, as a result of urban-industrial concentrations or other factors, has substantial water quality control problems. Not later than one hundred and twenty days following such identification and after consultation with appropriate elected and other officials of local governments having jurisdiction in such areas, the Governor shall designate (A) the boundaries of each such area, and (B) a single representative organization, including elected officials from local governments or their designees, capable of developing effective areawide waste treatment management plans for such area...

"(4) If a Governor does not act,...local governments within an area may by agreement designate (A) the boundaries for such an areas, and (B) a single representative organization including elected officials from such local governments, or their designees, capable of developing an areawide waste treatment management plan for such area.

"(5) Existing regional agencies may be designated under paragraphs (2), (3), and (4) of this subsection.

"(6) The State shall act as a planning agency for all portions of such State which are not designated under paragraphs (2), (3), or (4) of this subsection.

"(7) Designations under this subsection shall be subject to the approval of the Administrator.

This section goes on to specify what must be included in the plan, which is basically to provide for management of point and non-point pollution.

There are several other important features of the law. (1) In administration of the law, a distinction is made between designated and non-designated planning areas. Designated planning areas are usually urban-industrial areas with severe water pollution problems, often from both point and non-point sources. Since many metropolitan areas already had councils-of-governments (COGs) or metropolitan planning agencies in existence, much of the administrative machinery that could be used for this new program was already in place. Responsibility for coordination and planning for the remaining non-designated areas, primarily rural areas with less severe or at least less identifiable pollution problems, fell to the state governments. (2) The Federal government was to supply 100 percent of the funding for initial areawide water quality planning although local or state agencies were expected to supply the funding for continued planning. (3) In addition, the EPA had large amounts of money available for sewage treatment construction grants and other water pollution control measures. (4) Another feature with implications for Indiana was that if the states would not accept the responsibility for non-designated area planning, the EPA would assume that responsibility for the state and in effect bypass state government in the planning process. (5) Finally, the planning process was to take approximately two years--what was to prove to be an overly optimistic time frame for a complex process involving social, political, economic, and technical factors.

Theoretical Framework

A recent theory of interorganizational relations (IOR), the political economy model (Benson, 1975), forms the general conceptual framework used in this study. The choice of this approach rather than exchange theory is discussed below. The central premise of this theory is that the context of IOR can be conceptualized as a political economy with resource acquisition as the central problem. The relevant organizations must compete for various resources, which can generally be categorized as money and authority. The emphasis is on the network of organizations and the resource flows that occur into and within the network. Thus, it is a genuinely IOR perspective rather than a modified micro-theory. While the individual organizations are still

the actors, they are not the focus of the analysis. In addition, the model explicitly deals with the issue of power--both within the network and between the network and its socio-political environment. This model may be said to largely incorporate key elements of resource dependency theory in a macro-social context.

The approach to the analysis of interorganizational decision making taken in this study draws on the works of Benson (1975), Van de Ven, et al. (1979), Esmar and Blaise (1966), Raelin (1980), and Warren, et al. (1974). It focuses on what Warren, et al. (1974) in their study of community decision organizations termed "critical events" which were decision events that mobilized the decision making network. In the present study, the formation of the water quality management plan for a planning area will be the "critical event" or issue that is the focal point of the interorganizational relations and this analysis.

The conceptual approach examines selected attributes of the single organization, including its age, size and types of resources available to it. These organization attributes are important in influencing the actions an organization takes. They describe past experience of the organization which involves both developing internal competence and external relations with other organizations, the resources the organization has to develop and operate programs, and the extent to which they are either able to make independent decisions based on technical and/or economic criteria or are vulnerable to outside influence.

These external or institutional relations are also important to the decision making process. The consequence is that some organizations have more influence than others. What is important as a research question is how different types of resources affect organizations' influence in decision making. However, such linkages are unlikely to be uniformly distributed among organizations. Linkages form the basis for clusters of interconnected organizations or coalitions which can share resources and more effectively work to achieve similar goals in the decision making process.

Exchange theory is an alternative approach, though it has some limitations for this research problem. It has long been the dominant perspective in IOR (c.f. Levine and White, 1961). It was derived from psychology with individuals as the units of analysis and with resource scarcity as the motive for interaction. Simply put, if A has something B

wants or needs, they may enter into an exchange relationship. When this model of interactions was applied to IOR, organizations were substituted for individuals as the unit of analysis. This approach was reasonably successful with studies of human service organizations.

There are however, several problems with exchange as a model of IOR. First, its analytic focus is on the focal organization or at most, on a dyadic relationship. As attention is turned to the analysis of the relations among groups or networks of organizations, more flexibility in defining the unit of analysis is required. Second, exchange theory is essentially a "micro-theory" and lacks linkages to the larger social and political environment in which the IOR occur. Third, one of the basic assumptions of exchange theory is that the relations between the units are voluntary. This is not appropriate for the study of WQM agencies since their relationships were mandated by Congress under P.L. 92-500. Finally, exchange theory per se does not deal with issues of power in IOR (Schmidt and Kochan, 1977), though this has been largely resolved by Cook (1977) and Aldrich (1972) in what are known as power dependency theory and resource dependency theory respectively.

Implementing 208 Areawide Water Quality Management Planning

As one might expect, implementation of the water quality planning stage was not without its problems (c.f., Barton, 1978; Centaur Management Consultants, 1978; McPherson, 1979). An initial problem was that EPA deadlines required states to begin the planning process even before the EPA had formulated the guidelines and requirements for the plans. States (perhaps understandably) delayed taking action, and EPA had to extend the deadline for the filing of water quality management (WQM) plans until 1978.

EPA apparently made the implicit assumption that the planning agencies were mature organizations with appropriate technical staff, or if new organizations, that they would obtain highly qualified staff who were familiar with techniques required for the plan formation. In fact, existing organizations rarely had the technical staff necessary for data gathering, and new organizations required a good deal of startup time.

There were several problems involved with the local focus of the planning process (Centaur Management Consultants, 1978). The procedures for local approval were unclear. It was not unusual for the local planning process to be dominated by one or two powerful governmental units or

agencies. This was especially problematic when, for example, planning was dominated by a county unit, but primary responsibility for implementation fell on a municipal unit. Second, although planning was to take place at the local level, the state was ultimately responsible for approving and submitting the final plan to EPA. In some cases, the state took the initiative for planning, but failed to seek local input into the plan. Finally, although the initial planning process was funded through EPA by the Federal government, EPA was not to fund the continuing planning and monitoring process that was supposed to occur during the implementation of the plan. This would have placed a heavy financial burden on local and state governments.

A problem that would have occurred at the implementation stage is that neither EPA nor the local WQM agencies had the authority to implement and enforce the plan. Rather, this was to be the responsibility of the state government. Given that some states (notably, Indiana) were less than enthusiastic about the entire water quality management planning process, the aggressive implementation and enforcement of the plans were less than certain. However, EPA plans called for full implementation of the plans within 5 years to meet the goal of "clean water by 1983".

One feature that seemed to be characteristic of the planning process (especially at the local level) was the desire to avoid controversy. The solution of choice was usually to plan to build improved sewage treatment facilities rather than grappling with the larger pollution problem which might require a more complicated solution (land use plans, etc.). In addition, although public involvement was mandated, environmental and consumer interest groups were usually under-represented. Public involvement often took the form of public education rather than public input.

Many problems in the planning stage can be traced to how the policy was implemented rather than to the policy itself. EPA apparently gave little consideration to the political and domain issues relating to state and local decision making though they did encourage broad local participation in planning. In fact, throughout the planning process, most of the emphasis was placed on technical solutions to pollution problems. In much the same way, local WQM agencies often sought state and local support for a plan as it neared completion rather than attempting to involve important individuals and organizations in the process at its early stages. There was very little

recognition of interorganizational dynamics and issues of domain, power, and autonomy that were important for organizations whether included in or excluded from the planning process.

A key feature of P. L. 92-500 for this research is areawide or regional planning and control of water pollution. This areawide focus includes mandated interorganizational relations among the various agencies and governmental units that, in some way, have some level of responsibility for water quality monitoring and management. Though perhaps to the architects of the law, mandated interorganizational relations (IOR) was only a means to achieve a comprehensive approach to water quality management, it occupies a very central role in the planning and implementation of the Section 208 process. While the primary focus of the legislation was creation and implementation of a water quality management plan, for this research, IOR or institutional relations is seen as the central mechanism for both the creation and implementation of the plan. Without effective IOR, it is unlikely that implementation of the plan could even have approached a level required for effectiveness.

CHAPTER 2. METHODS

The program objectives of Section 208 of P. L. 92-500 were to occur in both large urban areas and rural areas. Therefore, the criteria used to select study locations reflected this diversity. Two regions were selected. One was an 8-county area with a total population of 1,500,000 in 1980, a large, central urban population which extended out into the surrounding counties. This was a designated area for 208, meaning it had been classified as having relatively serious water quality problems. The Indiana Heartland Coordinating Commission (IHCC) was the 208 agency for the Heartland region. The second region also had 8 counties, but was considerably more rural, with extensive agricultural production. The total population was 250,000 in 1980 with twin cities of about 66,000 population but no other cities larger than 25,000. This was an non-designated area for which the Indiana State Board of Health had planning responsibility, although through various subcontracting arrangements the Region 4 Planning and Development Commission (PDR4) had responsibility for land use surveys, inventories, and projections.

Not only did the areas differ socially and economically, but the 208 agencies were also different. IHCC was an active regional planning agency which sought 208 planning responsibility, and had a direct funding link with the U.S. Environmental Protection Agency, an important difference in the terms of institutional linkages or factors. PDR4 was a relatively benign regional planning agency with economic development as a primary goal. It received partial 208 responsibility for its region through subcontracting arrangements with the Indiana State Board of Health (ISBH) when ISBH acquired overall responsibility for 208 planning for all non-designated areas in the state and with State Planning Services Agency.

The focus of the study is on the role that organizations played in 208 planning and they are the units of analysis. Our objective was to identify organizations that were involved in the 208 process and to obtain data on that involvement. Data were obtained from records and publications, and from interviews with appropriate persons within those organizations. Interviews averaging 1.75 hours were conducted, often with the head of an organization, or head of a unit within an organization. A snowball sampling technique with multiple entry points was used for this (Babbie, 1975; Coleman, 1959). This resulted in 39 interviews with people in 33 organizations.

A problem with snowball sampling is determining when you have exhausted meaningful interviews. The criterion used for this decision is known as saturation sampling (Glaser and Strauss, 1967). Saturation is said to be achieved when additional interviews do not add new data. We also probed the boundaries of the set of organizations from which data were collected to determine if additional organizations should be included. This typically occurred when a respondent suggested we make a new contact. There were, then, additional preliminary contacts with potential respondents where it became apparent that the organization had no appreciable involvement, and so, were not interviewed. Another problem was that several respondents were involved with more than one organization, such as a voluntary organization or local governmental unit and a citizen's advisory board. Respondents were instructed to respond primarily in terms of one organization, with one exception, although information they had from their multiple roles was not ignored.

This poses a substantial conceptual problem. On the one hand the respondent is asked for information about an organization, its goals, its involvement in 208, its autonomy from higher levels of authority, its contacts with other organizations, etc. On the other hand, the choice of an individual, indeed the snowball method for choosing her or him, virtually assures that that person has had fairly frequent contact with other organizations and may be a member of other organizations in some capacity. While we act as if the respondent can clearly differentiate between his or her various roles in answering our questions and providing our data, it is an assumption that we do not test.

The unit of analysis for the majority of the results presented in this report is the focal organization. There were, however, several organizations which had multiple respondents. To obtain an organization score for these cases, the individual respondents' scores were summed and divided by the number of respondents for each variable. Thus, the organization score is an average (mean) of the respondents' scores.

A total of 39 respondents from 33 organizations were interviewed, and additional information was obtained on 264 interorganizational linkages. However, the number of cases reported in various tables varies slightly due to missing data including cases where the respondent did not answer the question. Typically, those occurred either through oversight, the question

did not apply to the respondent's organization, or because of the length of time between 208 planning activities and the interview, the respondent could not recall the information.

We distinguish between single and multi-level organizations based on our interest in local, state and national inter-relations. Thus, a city government or state government was categorized as a single level organization because it only existed on one level, even though internally it had a division of authority with departments and sub-departments. Multi-level organizations exist on more than one level, and may be governmental such as the Soil Conservation Service or voluntary like the Farm Bureau or Izaak Walton League with local, state and national units. This categorization does not address the degree of autonomy that exists between levels of an organization; authority may flow predominantly from the top down in some organizations and from the bottom up in others. Twenty-two people were in single level organizations, such as a local governmental unit, and 17 were in multi-level organizations such as a local or state unit of a national organization. Four were with the Indiana State Board of Health with responsibilities over different units and levels. There were three organizations within which more than one person was interviewed, including both of the regional 208 agencies.

CHAPTER 3. FINDINGS

Organizational Characteristics and Resources

There are a number of organizational attributes that are important to describing the organizations that were involved in 208 and understanding their interactions in the 208 planning process. These attributes affect the resources available to the organization, and its relationships with other organizations.

There was great diversity in the types of organizations we found involved in the 208 process. The thirty-three organizational units represent a wide variety of organizations and groups including local, regional, state, and federal agencies or governmental units, voluntary associations, and business organizations. The number of organizations and persons interviewed in them by organization type and sector is shown in Table 1. Organization type refers to two dimensions of an organization in terms of governmental, voluntary or for-profit; the other is scope of authority which applies only to governmental organizations. Thus governmental organizations are classified as city (or town), county, regional, state or federal. It is assumed scope of authority is not relevant to voluntary and for-profit organizations. The sector classification is based on the primary mission of the organization. An official of a unit of general purpose government, such as a mayor, is classified as government as is an official of a regulatory agency even if they regulate environmental issues. Persons and organizations concerned primarily with agricultural production are classified as agriculture even if they are governmental organizations. Slightly over half (21) of the interviews were conducted with officials or employees of governmental units or agencies while the remainder (18) were with members and employees of voluntary associations and business organizations. A total of sixteen interviews were obtained in Planning and Development Region 4 (PDR4), the non-designated area, twelve from Planning and Development Region 8 (or Heartland area), the designated area, and eleven from state level organizations, including state offices of federal organizations.

About half (17) of the organizations had more than one administrative level. Typically, they were governmental agencies and voluntary associations that had a local unit (e.g., county office) that was administratively responsible to a state office. The majority of the state organizations in

Table 1. Number of organizations and number of respondents by organization type and sector.*

Organization type	Sector				Total
	Agricultural	Environment	Government	Industrial/ commercial	
City	0	0	4 (4)	0	4 (4)
County	0	0	3 (3)	0	3 (3)
Region	0	0	2 (4)	0	2 (4)
State	1 (1)	0	1 (4)	0	2 (5)
Federal	4 (5)	0	0	0	4 (5)
Voluntary organizations	4 (4)	9 (9)	0	2 (2)	15 (15)
For-profit organizations	0	0	0	3 (3)	3 (3)
Total	9 (10)	9 (9)	10 (15)	5 (5)	33 (39)

*Number of organizations are not in parentheses; number of respondents are in parentheses.

this study were multi-level organizations, while the majority of the organizations from the two regions (PDR4 and Heartland) were single level.

Multi-level organizations have in place a means of communicating information from national to state to local units. This has the potential to facilitate building grass-roots support or opposition for a program. This may give such organizations an advantage over single level organizations when dealing with federally mandated programs. Multi-level organizations reported stronger commitment to public participation on two indicators in this study. As shown in Table 2, 14 of 16 multi-level organizations were very committed to public participation, which was twice the proportion of single level organizations (see Table 3). Multi-level organizations were more likely to report high and moderate levels of policy inputs from constituents than were single level organizations. This occurred even though the number of paid employees and adequacy of budget was very similar between multi- and single level organizations. In addition, multi-level organizations were about twice as likely to get additional funding for 208 planning. Seven multi-level organizations compared to 3 single level organizations received additional funding.

Although the age of the organization varied from over 150 years to 8 years, over one-third of them had been formed since 1968. Thus, many of the organizations were relatively young--less than ten years old at the time of 208 planning. A slightly larger proportion of the youngest organizations were located in PDR4.

The size of the organization in terms of number of paid employees varied considerably, ranging from zero (voluntary organizations) to three organizations with over 100 employees (governmental agencies). Again, these were fairly evenly distributed, though smaller organizations (zero to seven employees) were predominant in PDR4, the locus with the smallest population. Our use of the term locus refers to the scope of authority or interest of an organization that is geographically (or locationally) based. For example, those organizations located in the designated area, whether governmental, voluntary, or for-profit, and having authority or interest generally limited to that area have their locus classified as designated area. The same principle applies to organizations in the non-designated area. It also extends to the locus of "state" where the authority or interest of the organizations is state wide.

Table 2. Organizational commitment to public participation by organization levels.

Levels	Very opposed	Slightly or moderately opposed	Neither	Slightly or moderately committed	Very committed	Total
Single	0	1	3	6	7	17
Multiple	0	0	0	2	14	16
Total	0	1	3	8	21	33

Note: t-test for difference between means is significant, ($p < .01$); Chi square is significant ($p < .01$) with categories collapsed to very committed and all others due to small expected frequencies.

Table 3. Extent of policy input from constituents by organization levels.

Levels	Extent of Policy Input					Total
	None	Little	Some	Moderate	High	
Single	0	2	7	1	7	17
Multiple	0	1	2	4	9	16
Total	0	3	9	5	16	33

Note: t-test for difference between means is significant, ($p < .05$); Chi square is not significant ($p < .10$) with categories collapsed to high and all others due to small expected frequencies.

As was expected, age of the organization was a moderately good predictor variable several resource variables. Age was highly correlated with an organization's number of paid positions across all organizations ($r=.43$, $p<.01$).¹ However, it varied considerably by organizational locus. It was strongest in PDR4 ($r=.66$, $p<.01$) but the correlation largely diminished in the Heartland area ($r=.03$, n.s.) and at the state level ($r=.04$, n.s.).

The size of organizations' total budgets during 208 also had a great deal of variation with a range of \$250 to \$8,500,000, although the median was about \$70,000. Voluntary organizations tended to have small budgets while larger budgets tended to belong to government agencies. Organization age was rather highly correlated with budget also ($r=.40$, $p<.01$). As with organization size, this correlation was strongest in PDR4 ($r=.65$, $p<.01$), while dropping considerably in the Heartland area and the state level ($r=.11$, n.s. and $r=.01$, n.s. respectively).

However, there was little correlation ($r=.07$, n.s.) between age of organization and the amount of additional money received specifically for 208 planning activities. However, it should be noted that only eleven of the organizations received additional 208 money. Consequently it appeared that there could be a difference in age between those that received additional money for 208 and those that did not. A t-test on the mean ages of the organizations receiving additional money versus those that did not showed no significant difference. Also there was virtually no relationship between the size of organizations' annual budget and the amount of additional money received whether we look at all organizations ($r=.03$; n.s.) or only those that received additional money ($r=.10$; n.s.).

Finally, there was not a significant correlation overall ($r=.10$, n.s.) between organization age and the effect that participation in the 208 process had on perceived public support for the organization. The correlations varied considerably among the organizations in the different loci. While Heartland organizations had a similar but negative correlation ($r=-.11$,

¹Although the sample of organizations in this study is not a probability sample, significance levels are reported (where appropriate) to provide an indication of the statistical strength of the relationship if it were a probability sample. This may help emphasize the need for caution in interpreting the data since they represent only a modest number of organizations.

n.s.), PDR4 organizations had a strong positive correlation ($r=.48$, $p<.04$), and state level organizations had strong negative correlation ($r=-.51$, $p<.12$). Statistical control for various indicators of contact with the public did little to alter the reported coefficients. There is no convincing evidence for a consistent relationship based on these data, which may be in part a methodological artifact of the data.

In terms of resources, our concern was not with the economics of 208 per se, but rather with types of resources as indicators of inter-relationships among organizations. Table 4 shows that all governmental organizations received federal funds, and almost all organizations received state and local funds though amounts varied greatly. Viewed from another perspective, regional and federal organizations are very dependent on federal funds which account for over 90 percent of their budget. Similarly, voluntary organizations are dependent on dues and for-profit organizations depend on "other" sources. Local governments, e.g., city and county, are least dependent on a single source of funds, followed by state government units. In contrast, local governments received no 208 money, which may be a factor in their general absence from participation in 208 planning. However, additional money for 208 was large in proportion to the budgets of regional, state and federal organizations, but small for voluntary and for-profit organizations. As stated above, there was little relationship between size of annual budget and amount of additional funds received. Amount of additional funds received for 208 was however strongly related to percent of the organization's budget spent on water quality management ($r=.52$; $p<.01$) and on 208 planning specifically ($r=.75$ $p<.01$). Clearly, the additional federal money was a major portion, although not all, of the funds spent on these programs.

One of the major problems encountered during 208 planning was that of having sufficient money to carry out planning activities. The respondents were asked how adequate their overall budget was during the 208 period. Although the responses ranged from "inadequate" (scored 1) to "very adequate" (scored 5) the majority of responses were between "fairly adequate" and "adequate" as shown in Table 5. Respondents in the designated (Heartland) region reported the greatest budget adequacy ($\bar{X}=3.7$), followed by PDR4 area respondents ($\bar{X}=3.3$) and state level respondents ($\bar{X}=2.7$). The two agencies with primary responsibility for 208 planning, the Indiana State Board of

Table 4. Mean annual budget in thousands by type of organization by source and mean of additional money for 208 planning.

Organization type	Source of Annual Budget*						Additional money for 208*
	Federal	State	Local	User fees	Dues	Other	
City	\$463.6	\$345.6	\$1659.6	\$485.0	\$0.0	\$0.0	\$0.0
County	179.9	166.7	550.1	0.0	0.0	0.0	0.0
Region	320.1	0.0	21.9	0.0	0.0	0.0	664.5
State	104.0	121.0	0.0	0.0	0.0	0.0	1300.0
Federal	3014.0	5.0	6.0	0.0	0.0	0.0	1100.0
Voluntary organization	0.0	0.1	0.7	0.0	32.3	0.1	1.7
For-profit	0.0	4.3	23.3	0.0	0.0	2239.0	1.0

*Source of annual budget includes all 33 organizations; additional money for 208 includes only those 11 organizations that received additional money.

Table 5. Adequacy of annual budget and of funding for 208 participation by organizations' locus.*

Adequacy	Annual Budget			Funding for 208		
	Non-designated area	Designated area	State	Non-designated area	Designated area	State
Inadequate	2	1	1	1	0	1
Not very adequate	1	0	1	1	0	2
Fairly adequate	5	2	5	1	3	2
Adequate	3	5	1	5	2	1
Very adequate	4	2	0	3	1	1
Total	15	10	8	11	6	7

*There were only 24 cases in this sub-table due to 9 missing cases. These were due to respondents indicating they did not have any funds specifically allocated to 208 planning.

Health (ISBH) and Indiana Heartland Coordinating Commission (IHCC) reported mean budget adequacy of 3.6 and 4.0 respectively.

There are however, some important differences in the adequacy of money specifically allocated to 208 planning. Non-designated area, (PDR4) respondents reported the highest budget adequacy followed by designated area (Heartland) organizations and state level respondents. There was a clear tendency for organizations in the area where the most 208 work was done to report that 208 funding was least adequate. In contrast, an interesting comparison is between the two organizations with coordination responsibilities for 208 planning. The ISBH respondents reported a much lower 208 budget adequacy ($\bar{X}=2.0$) than did the IHCC respondents ($\bar{X}=4.0$). This lack of adequate program funding, according to the ISBH respondents, is one of the major reasons why they did not carry out a more vigorous planning program. In fact, both agencies received approximately the same amount of money (\$1,300,000)--one to implement planning and related programs for one region, the other to implement planning in the 70 percent of the state that was classified as non-designated.

Closely related to these economic factors are technical factors such as the adequacy of staff and their expertise. The responses to the question on the adequacy of staffing were virtually identical to those for adequacy of overall budget, that is, the majority reported staffing to be "fairly adequate" to "adequate" (see Table 6). However, as with the adequacy of 208 budget, the ISBH respondents reported much lower staffing adequacy ($\bar{X}=2.0$) than did the IHCC respondents ($\bar{X}=4.0$). This was one of the major problems for the ISBH and led to the subcontracting of soil erosion assessment studies to the State Soil and Water Conservation Committee, coordination of public participation to Regional Planning and Development Agencies, etc. According to one of the respondents, 208 planning was such a large program nationally, that there simply weren't enough qualified water planners to meet the demand.

Staff expertise was generally rated as "adequate" or "very adequate" by the entire set of organization (see Table 6). IHCC and ISBH respondents rated expertise as "adequate." This is perhaps to be expected since these two organizations, because of their centrality to the planning process, had the greatest demands made on their staff.

There was little relationship between ratings of adequacy of level of staffing and how adequately staff's expertise fit an organization's role in

Table 6. Adequacy of organizational staffing and of staffs' expertise during 208 by organizations' locus.

Adequacy	Adequacy of staff			Staff expertise		
	Non-designated area	Designated area	State	Non-designated area	Designated area	State
Inadequate	0	0	0	0	0	0
Not very adequate	0	0	2	0	1	0
Fairly adequate	8	2	4	3	3	1
Adequate	3	4	2	4	0	4
Very adequate	4	1	0	7	4	2
Total	15	7	8	14	8	7

Table 7. Correlations between staffing and funding indicators.

Indicators	2	3	4	5	6
1. Adequacy of staff	.13	.32*	.10	.19	.32*
2. Staff expertise		.25	.13	.08	.12
3. Adequacy of annual budget			.76***	.14	.03
4. Adequacy of funding for 208				.15	.06
5. Size of annual budget					.89***
6. Number of paid employees					

* p<.05
 *** p<.001

the 208 planning process. The correlation was only .13, as shown in Table 7. Both adequacy of staffing and expertise had modest correlations with rating of adequacy of annual budget, but their relationship to adequacy of funding for 208 specifically or size of annual budget in dollars was relatively small. The number of paid employees is modestly related to adequacy of staff but not particularly related to staff expertise.

These data suggest two things about staffing. First, respondents distinguished between adequacy of number of staff and expertise. Table 6 shows that 47 percent rated staffing as adequate or better, and 72 percent rated expertise as adequate or better. The strong correlations between ratings of adequacy of annual budget and 208 budget and between size of annual budget and number of paid employees further suggests that this was a deliberate differentiation and not just a chance occurrence. Second, it suggests that number of staff available was a more important problem than level of expertise among existing personnel, and that larger organizations had more adequate staffing in general.

One of the key questions asked of all respondents in open-end format was intended to find out what kind of goals the organizations involved in 208 planning sought to achieve. The result was that the respondents for many organizations reported that their organization had no goals for 208 planning (n=4), their goals were whatever EPA said they were (3), were seeking information or were only monitoring the process (7) or were there simply to discuss water quality management (3). This is particularly interesting in light of the fact that when asked a closed-end question about how important water quality management was to their organization, 75 percent of the respondents reported that it was either important or very important to their organization.

The extensiveness of an organization's water resources program is an important consideration in their involvement with 208 planning. Those organizations with less involvement in water planning and management were expected to have less involvement in 208. We asked respondents to indicate the level of importance (greater, lesser, least) for a list of 19 water quality program categories (Question 15 of the interview schedule). The mean number of point and non-point pollution categories in which they were involved was 10.3 (standard deviation=4.1). The mean number of non-point categories was 6.6 (standard deviation=3.1). The majority of organizations

had some involvement in several categories, indicating that their programs were not narrowly focused on only a few water quality issues. The mean number of point and non-point categories which were very important to the organizations was 4.8 (standard deviation=3.3); the mean for non-point categories was 2.8 (standard deviation=2.0). However there were 5 organizations for which no non-point category was very important, although they had at least slight interest in 2 or more non-point categories.

There was little relationship between the rating of importance of water quality management to the organization and the total number of water quality program categories they had some interest in ($r=.09$, n.s.). However, rating of importance of water quality management is related to the number of non-point categories of great importance to the organization ($r=.22$, $p<.10$), and to the ratio of non-point to point categories where both are rated as of great importance ($r=.30$, $p<.10$).

These data on the importance of water quality as an organizational goal indicate two responses to 208 planning. First, non-point pollution was seen as more important than point pollution, which at this time seems hardly surprising. However, considering the importance of urban, industrial pollution to designated area classification, absence of urban and industrial representatives from participation in 208 planning is significant when considering the potential of 208 for successfully meeting its goals. Second, these organizations already had interests in or policies on several point and non-point pollution problems. This is potentially advantageous in terms of the organizations already having staff knowledgeable in the area and having established contacts with other water resources management agencies. At the same time these advantages may pose problems as organizations try to protect their domains and clientele's interests in the face of a large new program.

Based on their goal statements, nearly half of the organizations that participated in 208 planning took a reactive rather than a proactive approach to the 208 planning process. This can, of course, be taken as an indication that these organizations were satisfied with existing water quality and planning for water quality in their areas. If this is in fact the case, it is very unlikely that, without the Federal government's insistence, anything like the 208 process would have occurred in Indiana, given the State's reluctance to become involved in 208 planning.

Although the previous explanation was no doubt true for some organizations, an alternative explanation is that few organizations were aware of the potential of 208 planning or even what it involved. It is, of course, not possible to have a complete count of organizations that might have been involved. Nor did we try to have a complete count of organizations that had any level of involvement, regardless of how minimal that might have been. Nevertheless, we are struck by the lack of involvement by (1) local elected officials or their representatives at the city and county level (n=7), (2) industries directly or through industry associations (n=5, including 2 who work for firms involved in land use planning and waste treatment) and (3) within each region by persons outside of the central, most populous county (n=10; these 3 frequencies are not mutually exclusive).

In the PDR4 area, the public participation phase of the planning process didn't formally start until late in 1977, and the plan was completed in 1978. This allowed little time for citizen education and informed involvement. In the PDR4 area, public participation primarily involved public reaction to a plan created at the state level by the Indiana State Board of Health's Division of Water Pollution Control and its subcontractors. This clearly inhibits the development of local support for long term water quality management programs funded even in part by local dollars.

However, not all organizations played a passive role in the process. A notable exception is the League of Women Voters. They were heavily involved in 208 planning at both regional and state levels. They applied for and received a small grant from EPA (approximately \$5,000) to present public information and education workshops on 208 planning. It is important to note that their goal was not to influence the content of the 208 plans in these workshops. Rather, their goal was to increase the level and the quality of public input into the planning process.

Other groups like the Izaak Walton League, Soil and Water Conservation Districts, and other agricultural groups sought in various ways to provide information to the public, but more particularly, to their constituents. They did this through publications, organizing special programs and conferences as well as through regular meetings of their organizations. How successful were their efforts? As one member of a voluntary organization said: "This helped to identify more people with concern for issues and willing to be active. It exposed and caused discussion of issues. I was

impressed with how individuals representing divergent groups compromised but kept the goal of water quality in sight. Paid spokesmen didn't have the latitude to compromise." While various aspects of this response were mentioned by several respondents, there was another consequence mentioned by several people. This was that many people became burned out or discouraged because they felt their efforts were too little or to no avail. Voluntary organization members also served as citizen members of various committees for the regional planning agencies, and for state and federal agencies. This was very important to agricultural representatives who felt they were successful in keeping management of agricultural pollution (non-point) voluntary rather than it becoming mandatory.

Institutional Relations

Institutional relations constitute an important part of both 208 planning and of this study. A series of questions was designed to measure the nature and the frequency of the respondent organization's contacts with other organizations that participated in the 208 process. First, respondents were asked to name those organizations with which they had contacts regarding 208 planning. Then, considering only those contacts directly related to 208 planning, they were asked to rate the importance of their contacts with each of the organizations named.

Next were three questions concerning the frequency of various kinds of interorganizational contacts. These included: (1) 208 related contacts of any kind; (2) provision of information or expertise; and (3) provision of resources including equipment, personnel or financial resources. Together with a question about the number, if any, of joint programs shared with each of the other organizations, these three questions form a set of questions designed to measure the intensity of the interorganizational relationships, with each measuring a more intense form of interaction than the previous question.

Two additional questions about the respondent organization's relations with the named organizations were asked. The first concerned the extent to which incompatible responsibilities or priorities affected the relationship between their organization and each of the named organizations. This item was intended to measure the consequences of interorganizational conflict. The final item in this section asked the respondents to rate the influence

that each of the organizations named (including their own) had on the 208 planning process.

The number of other organizations named by respondents ranged from one to fourteen with a mean of seven. Table 8 depicts interorganizational contacts in two ways. The numbers on the left side of each column are the number of interactions classified by type of interaction and frequency of interaction. These are the number of times each category of frequency of interaction was selected by the entire set of respondents for all of the organizations. Respondents reported a total of 264 interorganizational linkages. The frequency of any contact was in most cases monthly or slightly less (see Table 8). Many 208 committees met monthly, so it is probable that most interorganizational contacts took place at these scheduled meetings.

This is also shown by the fact that 26 of the 32 respondent organizations reported mean contacts of occasionally or monthly. This is shown by the values in parentheses (right side of columns) in Table 8 which are an indication of an organization's mean frequency of interaction with the organizations it named. These numbers represent the number of organizations whose average (mean) frequency of interaction with their named organizations fell into each of the categories listed.

Typically, these contacts involved information sharing, with resource transfer (money, personnel, etc.) occurring much less frequently. In general, state level organizations reported the highest frequency of interorganizational contacts, followed by Heartland area organizations, and last PDR4 area organizations ($\chi^2=13.5$, $df=10$, $p<.04$). As can be seen from the table of correlation coefficients (Table 9), there was a strong correlation ($r=.79$, $p<.001$) between frequency of contacts and information sharing, but a weak correlation between frequency of contacts and resource sharing ($r=.15$, $n.s.$). In nearly 85 percent of the contacts, there was no resource sharing and in slightly more than 10 percent of the contacts, it occurred less than monthly. This finding is not particularly surprising, for resource sharing indicates a fairly close relationship between organizations, and is generally not very common. Thus, although institutional relations were relatively frequent, they were not particularly intense, as few "hard" resources were exchanged.

The extent to which participation in Section 208 planning was perceived as having a positive effect on public support for the organization was

Table 8. Frequency of interorganizational interaction by type of interaction.

Frequency of interaction	Type of Interaction					
	Any contacts		Information sharing		Resource sharing	
	<u>Count</u>	<u>Mean</u>	<u>Count</u>	<u>Mean</u>	<u>Count</u>	<u>Mean</u>
Never, did not occur	0	(0)	12	(0)	215	(18)
Rarely, once a year or less	19	(1)	20	(3)	15	(10)
Seldom, 2-5 times a year	50	(5)	45	(5)	10	(3)
Occasionally, 6-11 times a year	51	(16)	49	(14)	6	(1)
Monthly, 1-3 times a month	110	(10)	103	(9)	10	(0)
Weekly, 1-4 times a week	24	(0)	22	(1)	2	(0)
Daily, once or almost once a day	6	(0)	9	(0)	2	(0)
Total	260	(32)	260	(32)	260	(32)

Count is the simple sum across all respondents of the number of organizations interacted with for each of the frequency of interaction categories, e.g., counting across all respondents, there were 19 organizations rarely interacted with.

Mean is the number of respondent organizations whose mean frequency of contact fell into each frequency of interaction category.

Table 9. Correlations between interorganizational variables.

	2	3	4	5	6	7
1. Importance of contacts	.16	.17	.19	.26	.01	.29*
2. Frequency of contacts		.79***	.15	.16	.25	.30*
3. Information sharing			-.01	.10	.46**	.26
4. Resource sharing				.42**	.09	-.09
5. Joint programs					.25	-.10
6. Effect of incompatibilities						.07
7. Perceived influence						

* p<.05
 ** p<.01
 *** p<.001

Table 10. Frequency of joint programming.

Number of joint programs shared	Count	Mean
0	185	(13)
1	44	(15)
2	10	(2)
3	11	(2)
4	3	(0)
5	2	(0)
6	2	(0)
7	0	(0)
8	1	(0)
9	0	(0)
10	0	(0)
11	0	(0)
12	2	(0)
Total	260	(32)

correlated with both frequency of contacts ($r=.46$, $p<.004$) and with information sharing ($r=.36$, $p<.02$). This would indicate that being active and involved in the 208 planning network led to increased visibility for the organization. This relationship remained strong even when controlling for whether the organization's constituents were generally in favor of the 208 process or not ($r=.43$, $p<.01$).

The number of joint programs shared does, however, reflect the variation in involvement in 208 planning. Less than 30 percent of the named organizations were involved in any joint programming with the respondent organizations (see Table 10). However, well over half of the respondent organizations had at least one joint program with one or more of the named organizations. These included a variety of programs ranging from co-sponsorship of local 208 meetings and workshops to participation in a large Model Implementation Project in the Heartland area. The Indiana Heartland model Implementation Project was one of the largest and most complex instances of 208 related joint programming. Organizations involved included the IHCC, several USDA agencies including the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS), and researchers from four universities. Both funding and organizational relations were complex, with IHCC administering EPA funding, and USDA organizations largely retaining administrative responsibility for USDA funds. In general, the purpose of the project was to encourage the use of the Best Management Practices (BMP's) to control non-point pollution in two watersheds in central Indiana. This was achieved through the use of financial incentives, increased promotion of BMP's and increased technical assistance.

Joint programming typically involves commitment of resources by the organizations involved. This is supported by a fairly strong correlation between resource sharing and joint programming ($r=.42$, $p<.01$). There is, however, little indication that joint programming occurred with organizations rates as most important to them. The correlation between these two variables was relatively weak, and not significant ($r=.26$, n.s.). In general, two-thirds of the multi-level organizations had at least one joint program, while less than one-half of the single level organizations had any joint programs.

However, quite apart from information and resource sharing, most respondents felt that their contacts with other organizations were important for their own organization with nearly 60 percent rating them as important or very important (see Table 11). The rating of named organization importance was poorly correlated with all other interorganizational variables except for perceived influence on 208 planning of named organizations ($r=.29$, $p<.05$). Although this correlation is not extremely strong, it appears that an organization's importance rating is in part political. That is, contacts with organizations more able to influence the 208 decision making process were viewed as more important by respondent organizations than contacts with less "powerful" organizations. The three organizations in key positions in the 208 planning process were ISBH, IHCC and PDR4. IHCC respondents said that their contacts were very important, while the ISBH and the PRD4 planning agency, the other two organizations with 208 responsibilities, reported them to be of lesser importance. There was little difference though in how other organizations rated their contacts with the three 208 planning agencies--all rated as moderately important to important.

The influence that named organizations had on the planning process is of particular interest. From Table 11, one can see that the ratings are fairly evenly distributed across the categories except for the "no influence" category, although the moderate and high influence categories account for slightly over 60 percent of the responses. Most respondent organizations (20) average influence rating for the organizations they named fell into the moderate influence category. Respondent organizations tended to have more frequent contact with organizations they perceived as influential ($r=.30$, $p<.05$). However, except for importance of contact, influence is not significantly related to any of the other interorganizational variables.

To elaborate the relationship between influence and frequency of contact, the organizations were divided into two groups--those named eight or more times, and those named less than eight times. Frequently named organizations were rated as much more influential (self-ratings excluded) than those named less frequently. About 57 percent of the respondents rated the frequently named organizations as highly influential or very highly influential, while nearly 75 percent of the less frequently named organizations were rated as moderately influential or lower (see Table 12). The perceived influence of the three 208 planning agencies reflects the scope

Table 11. Distribution of importance of contacts, influence of named organizations, and effect of incompatibilities.

Importance of contacts	Count	Mean
Not important	6	(0)
Slightly important	26	(1)
Moderately important	75	(12)
Important	75	(14)
Very important	80	(5)
Total	262	(32)

Influence of named organizations	Count	Mean
No influence	6	(0)
Little influence	51	(2)
Moderate influence	84	(20)
High influence	77	(9)
Very high influence	45	(1)
Total	263	(32)

Effect of incompatibilities	Count	Mean
No incompatibilities	96	(7)
No effect	47	(12)
Little effect	57	(11)
Moderate effect	44	(2)
Great effect	18	(0)
Total	262	(32)

Table 12. Organization influence rating by frequency of being named.

	Less frequently named organizations	More frequently named organizations
No influence	5	1
Little influence	29	22
Moderate influence	32	52
High influence	16	61
Very high influence	8	37
Total	90	173

$\chi^2 = 30.2$, $df = 4$, $p < .001$.

Table 13. Organizational commitment to public participation and to regional planning by organizations' locus.

Commitment	Public participation			Regional planning		
	Non-designated area	Designated area	State	Non-designated area	Designated area	State
Very opposed	0	0	0	0	0	0
Moderately or slightly opposed	0	1	0	1	2	0
Neither	1	1	1	1	1	1
Slightly or mod- erately committed	6	1	1	7	4	3
Very committed	8	7	6	6	3	4
Total	15	10	8	15	10	8

of the role they each played in the process. IHCC and ISBH were both seen by others as having quite high influence, with the PDR4 planning agency having moderate influence on 208 planning. Agricultural organizations such as the Soil Conservation Service, Farm Bureau, etc., were generally rated as both important contacts, and also as at least moderately influential. The Soil Conservation Service and State Soil and Water Conservation Districts in particular were rated as quite important and were also highly influential. Although several of the agricultural organizations put a great deal of effort into 208 planning, one respondent felt that 208 planning "... breathed new life into the Soil Conservation Service" by calling attention to the role of soil erosion in non-point pollution and its negative effect on water quality. Section 208 planning was seen as a means of revitalizing their program and SCS put considerable effort into staking a claim for their organization in the domain of non-point pollution control.

Overall, there does not appear to have been a high level of conflict among the organizations involved in 208 planning. For the entire set of named organizations, respondents reported either no or little effect from incompatibilities on their relationship with over 75 percent of the organizations they named (see Table 11). Nearly 60 percent of the respondents' mean incompatibility scores indicate that on the average, they either perceived no incompatibilities with their contact organizations, or that the perceived incompatibilities had no effect on their relations.

Noteworthy is the fairly strong correlation between effect of incompatibilities and frequency of information sharing ($r=.46$, $p<.01$; Table 9). The correlation between incompatibilities and resource sharing is quite low and not significant ($r=.09$, n.s.). This would indicate that while information sharing may occur between organizations with perceived incompatibilities, they are much less likely to engage in resource sharing, a more intense form of interaction, with those organizations. A conclusion consistent with the results of Warren, et al. (1974) study of urban community decision organizations is that information sharing may serve to increase awareness of incompatibilities. Thus, increased interorganizational contacts may not necessarily lead to harmonious relations, and may in fact have the opposite effect. An alternative possibility is that interorganizational contacts go on even in the presence of incompatibilities. This would seem particularly true in relations involving regulatory agencies. However, cross

sectional data are not sufficient to distinguish between these two approaches as process phenomena.

One of the organizational variables associated with perceived incompatibilities was adequacy of amount of staff ($r=-.42$, $p<.01$), while there was no correlation between incompatibilities and adequacy of budget ($r=.01$, n.s.). This suggests that money in itself is much less important than having sufficient staff to carry out the organization's program. As one might expect, staff adequacy and budget adequacy are related ($r=.32$, $p<.04$), and controlling for budget adequacy did not alter the correlation between incompatibilities and adequacy of staff.

Respondents reporting higher incompatibilities were also more likely than others to agree with the statement that governmental pressure is necessary for organizations to develop coherent and effective means for water quality management ($r=.35$, $p<.02$). It is likely that their somewhat negative experiences with other organizations has made them skeptical that purely voluntary efforts are likely to produce much in the way of meaningful results.

Incompatibilities between organizations are frequently a problem in multi-organizational efforts, and clearly 208 planning was no exception. Problems were frequently reported by respondents as being related to the ISBH. ISBH's structural position is important, since it was the state agency responsible for 208 planning, and for water quality generally. Thus it lies between local organizations and federal organizations on many environmental matters. Heartland area organizations in particular reported problems in their relations with ISBH. Although IHCC staff and other participants in the process in that region were not directly responsible to ISBH, the Heartland 208 plan still had to be approved by the state personnel. While the overall goal/priority incompatibility with other organizations was generally low with little effect on relations, of those naming ISBH as an organizational contact, nearly 60 percent said that incompatibilities had either moderate or great effects on their relationship. This is consistent with anecdotal data in which the ISBH was described as inflexible and apparently unwilling to seriously consider ideas from outside of the agency. However, the ISBH had a number of able and dedicated staff, and it should be made clear that this description applies to the organization as a whole, and not necessarily to individual staff. This organizational lack of responsiveness is most likely

a result of a combination of factors including their history as a regulatory agency, their staff shortages, and that as a whole, the agency had little enthusiasm for 208 planning. Clearly, there was not always agreement between ISBH and participants as to procedures and outcomes for 208 planning.

Public Participation

As was mentioned earlier, Congress mandated regional planning and public participation in 208 planning. Congress appeared to have two reasons for this. The first was that these two elements were necessary for the success of water quality management planning. Water quality management and especially non-point pollution are problems that tend to involve more than one governmental jurisdiction. Thus, any serious attempt to assess and reduce non-point pollution could not be bound by traditional city or county boundaries. Since the water quality plans could conceivably have had a great impact on the public (e.g., if the plan included land use regulations), it was important that those affected by the plan have some input into it. The second reason was that Congress apparently expected that local agencies would fail to carry out 208 planning unless it was mandated.

Thus, 208 planning featured an interesting combination of required participation and volunteerism. On the one hand, areawide or regional planning and public participation were required. On the other, no particular groups or organizations were required to be involved and it was left to the states (and regional planning bodies) to implement these specified features.

This led to some differences in implementation of 208 planning, depending on who the responsible agency was. In general, the respondents stated that their organizations were quite committed to public participation as shown in Table 13. There were 21 of 33 who responded that their organizations were very committed to public participation, and only 1 reported opposition to public participation. However, respondents for the agency in charge of planning for non-designated areas reported that their agency was neither committed nor opposed (aggregated responses) to public participation in 208 planning. This may explain to some extent the relatively low level of public participation in PDR4. Although there were public meetings and Citizens Advisory Committees, these were primarily vehicles for State Board of Health personnel to inform people about the status of 208 planning in their region rather than as channels for public

input. In fact, several of the voluntary organization respondents reported that at least part of their efforts were directed toward getting the State Board of Health to implement as much public participation as they did. Even so, three respondents from the PDR4 area spontaneously said that they felt the plan for their region was "handed down" from the State Board of Health, and felt that there should have been more public input.

In the Heartland area participation was much greater. Although the bulk of the planning work was done by IHCC staff and a citizen steering committee, they also had five large committees that dealt with problem areas such as agricultural non-point pollution, contamination from septic tanks, etc. Respondents for the Heartland agency reported very high commitment to public participation. Similarly, respondents in state level organizations indicated strong support for public participation.

We found no significant difference in commitment to public participation whether respondent's organization was local (whether elected official or employee), regional, state, federal, voluntary organization or for-profit organization. However, those organizations that had more contacts with other organizations, regardless of level, were more committed to public participation ($r=.42$, $p<.01$). With regard to resources, several variables were only very slightly related to public participation (i.e., were not significant and $r<.15$), including adequacy of staffing and staff expertise, number of paid employees, and adequacy of funding for 208. Adequacy of annual budget had a modest, negative correlation ($r=-.22$; $p<.10$) indicating the less adequate the budget, the stronger the support for public participation. Percent of budget from state sources, but not from federal or local sources, similarly was modestly related ($r=-.21$). Conversely, there was a positive relationship between percent of budget from dues and support for public participation ($r=.29$; $p<.06$). Organizations funded at least in part by dues include the regional planning organizations and voluntary organizations. However, none of these correlations are very large and given the number of resource variables not related even this strongly, it appears here that resources availability was not a major factor in support for public participation.

Overall, commitment for public participation was quite strong. Although there was public participation in both of the regions studied, it is clear that it was lower in the non-designated area, where planning occurred within

the state agency, and higher in the designated area where there were greater opportunities for public participation, and in state level organizations. Local officials were not more supportive than state or federal officials, nor were the kinds and levels of resources available generally related to commitment for public participation.

Regional Planning

The second aspect of the mandate--regional planning--was quite controversial in some areas of the state where it was seen as an attempt to create another level of government between the county and state levels. Although not a major issue in either of the two areas studied, it was less popular than the public participation element (see Table 13). Only 13 of 33 respondents reported high commitment to regional planning, while 14 of 33 indicated slight to moderate commitment. While this is not a major decline from support for public participation, it is noteworthy given that regional planning is at the core of 208 planning.

As with public participation, the State Board of Health respondents reported less commitment to regional planning than most other respondents, and indicated that there was some opposition to it within the agency. The Heartland respondents, however, indicated strong commitment to regional planning. This could be expected since the IHCC was a regional planning agency. This is highly consistent with the evidence that planning for the non-designated area (PDR4) occurred primarily at the state level, while planning for the Heartland area occurred at the regional level with associated higher public involvement.

There is a rather strong relationship between commitment to regional planning and to public participation ($r=.61$; $p<.01$). This is further supported by positive relationships between support for regional planning and the number of other interest groups the organization is in contact with in general ($r=.23$; $p<.10$) and the number of organizations they contacted about 208 ($r=.38$; $p<.01$). Although the numbers are small, some concern about regional planning does exist. However, it does not appear to be related to organizational locus or to sources or amount of resources, except for being modestly negatively related to rating of adequacy of annual budget ($r=-.22$; $p<.10$).

There were, of course, a number of benefits from 208 planning in the two regions studied. In response to an open-ended question concerning benefits of 208 planning, close to half of the respondents (17) felt that it had increased their organization's and other organizations' awareness of water quality management problems. Additionally, twelve felt that 208 planning had heightened the general public's awareness of water quality issues. Sixteen respondents felt that 208 planning had led not only to increased inter-organizational contacts, but had improved the quality of interorganizational relations as well. Seven respondents noted an increase in information sharing among organizations involved in 208 planning.

The regional planning aspects of 208, despite whatever benefits it may have for area or watershed-wide pollution control, addresses a different value of American society than public participation. Regional planning places constraints on private property, a strongly held value. Public participation is consistent with democratic participation, with equality in government. Although the differences in support between these two components found here are small, it is important to recognize who the respondents are. They are people working in 208 regional planning. They may not reflect a broader view of these two aspects of the 208 program, especially the view of the regional planning component.

CHAPTER 4. SUMMARY AND CONCLUSIONS

Summary

This is a study of institutional relations, or interorganizational relations that are mandated by law. The objective is to examine these relations and their effects on water quality management planning, particularly for Section 208 planning under the 1972 Clean Water Act. Data for the study are from personal interviews with 39 respondents who held responsible positions in 33 organizations that had varying levels of involvement with 208 planning in Indiana. There was considerable diversity among these organizations. They were located in one designated 208 area and one non-designated area. They include local, regional, state and federal government offices and agencies, and a variety of voluntary and for-profit organizations.

Several organizational characteristics were examined. Multi-level organizations were more strongly committed to public participation than were single level organizations. Multi-level organizations were also more likely to have received additional money specifically for 208 planning, indicating the importance of vertical linkages. Age is often an important attribute since it may be a factor in organizational competence, linkages and size, but it did not have a consistent relationship with various indicators of such variables here. Some regional, state, federal, voluntary and for-profit organizations received additional 208 funds; none of the cities or counties in the two 8-county areas received 208 funds.

Overall the organizations rated their annual budget and their budget specifically for 208 as generally adequate. Staff expertise for the 208 task also was rated as quite adequate. However, number of staff working on 208 was more likely to be rated as only fairly adequate; it was positively related to rating of staff expertise and to number of paid employees. Number of staff was a greater problem than expertise. The state agency responsible for 208 planning rated the adequacy of their annual budget and staffing relatively low, the designated area agency rated their budget and staffing relatively high.

The goals of these organizations were quite diffuse, although they indicated important linkages vertically and horizontally through goals being set outside of the specific organizational unit or as being a member of an

information network. These organizations generally had extensive water quality management programs including both point and non-point pollution. However, non-point pollution received the most emphasis in both the designated and non-designated areas.

The indicators of interorganizational relations tended to be correlated in pairs rather than uniformly across all items. Many interorganizational contacts involved information sharing rather than resource sharing or joint programming. However, increased information sharing was related to higher levels of incompatibilities between organizations. Thus, increased levels of interaction may not always be positive for the organizations involved. Resource sharing and joint programming were positively related, though levels of both were considerably lower than were simple contacts and information sharing. Multi-level organizations were more likely than single level organizations to be involved in joint programs. Respondents were likely to rate contacts with organizations they perceived as influential as more important than with less influential organizations. Finally, increased public support for the organization was fairly strongly related to higher levels of interorganizational contacts and information sharing, indicating that a high level of participation in 208 planning was beneficial for the organization.

There was generally strong support for public participation shown both through attitudes and actual involvement. Commitment to public participation was especially strong in the multi-level organizations, and it was moderate among the non-designated area organizations, which also had the least involvement with the 208 plan. There was extensive involvement by several agricultural and environmental voluntary organizations at the local, regional and state level. Attitude or commitment to public participation was positively correlated with number of contacts made with other organizations regarding 208 planning, but it was not generally related to resources available.

Regional planning had moderately strong support but not as much as public participation among these organizations. There was a rather strong correlation between commitment ratings to these two components of 208 planning. Commitment to regional planning was also related to interorganizational contacts, but not to amounts of resources available. The difference in views about public participation and regional planning may be

in part a function of the former being consistent with the social value of political equality, while regional planning is sometimes seen as contradictory to private property, another major value.

A comparison of the 208 planning process in the two study regions reveals a number of differences. The first point concerns the two regional planning agencies. The Heartland group had full responsibility for 208 planning and engaged in extensive data collection and documentation for their plan. They received additional money for a Model Implementation Project and for a study of on-lot disposal problems in one of their member counties. They also sought (unsuccessfully) to have the ISBH Stream Pollution Control Board approve a "limited-use stream designation" regulation. While it is difficult to determine with any certainty the level of their involvement, several hundred people representing all eight counties had committee appointments, and at least had formal opportunity for input into the plan. This is in addition to the public meetings sponsored by IHCC.

In PDR4, on the other hand, the regional agency had only partial responsibility for 208 planning, including land-use mapping, inventories, and projections. Soil erosion assessment, for example, was subcontracted to the State Soil and Water Conservation Committee, and overall public participation responsibility was retained by the ISBH. Thus, the advantages of using an existing regional agency were largely lost, and 208 planning and public participation became a "top-down" process in PDR4. Although the PDR4 Policy Advisory Committee did meet monthly for a six-month period in late 1978 and early 1979, the minutes of the last regular meeting (May 9, 1979) show that "It was felt by many committee members that the material presented was too technical and did not contain very much policy material." This in large part reflects the difference between data and information generated regionally as in the Heartland region versus data and information generated by the state agency and then presented to the region. Clearly, the ISBH took an "educational" approach in PDR4, while the IHCC implemented a more participatory approach.

The second point of this comparative analysis concerns the ISBH. The ISBH's Stream Pollution Control Board had overall responsibility for approving and submitting 208 plans for all designated and non-designated areas in Indiana. It did not necessarily wish to become involved in 208 planning, but had little choice in the matter for two reasons. First, the

Governor assigned 208 planning to the ISBH (though presumably the Board had some input into this decision). Second, and organizationally more important, was that this agency had responsibility for water quality in Indiana, and the Indiana Department of Natural Resources, in general, had responsibility for water quantity. The ISBH either had to accept responsibility for 208 water quality management planning or else allow another organization to encroach on its domain. This lack of enthusiasm for 208 planning in conjunction with a shortage of funds for additional personnel and perhaps a lack of management expertise resulted in the ISBH's eventual compliance with EPA regulations and directives, but at the most minimal level possible. This is not to say there were not dedicated personnel in the Division of Water Pollution Control. Rather, there were not enough of them, and evidence suggests that those staff were probably not utilized as effectively as they might have been. This is perhaps not too surprising if, as one of the respondents suggested, promotion policies tended to advance personnel with engineering and scientific training rather than filling management positions with trained administrators.

The final point to be made in this comparison concerns the interorganizational relations among the organizations participating in 208 planning. In general, agricultural organizations such as the Farm Bureau, Soil and Water Conservation District Boards, etc., were well represented and involved in 208 planning both at the regional and state levels. The remaining organizations primarily included citizen/environmental groups, a few city and county officials and employees, with very few business organizations involved. The organizations with a surprising lack of involvement were county level governments. None of the elected county commissioners from the sixteen counties in the study regions played a central role in the 208 process, and only two were reported to have played even a peripheral role. There are several explanations for this. One, of course, is that 208 planning was not perceived as relevant to county government. An alternative is that it was unclear what the outcome was to be and therefore what the political consequences of 208 would be. Thus, the politically expedient course of action was to ignore the process entirely. This is a significant institutional factor, because the regional agencies had no real enforcement powers, and any implementation of a water quality management plan would almost certainly involve county government as well as the state government.

The nature of the contacts between organizations was generally perceived as being cordial with a relatively low level of conflict. Disagreements that did occur were most likely to occur between the ISBH and other organizations or between organizations from different sectors of the economy such as environmental and business organizations. But also, there was not a particularly high level of intense contact between the organizations. As mentioned before, many of the organizations did not have strong goal positions for the 208 process. Second, much of the process involved technical rather than policy decisions which no doubt averted some potential conflict.

Staffing was somewhat of a problem for 208 planning agencies. Organizations had to hire staff, which meant acquiring funds and positions to do so. When the impetus for the program has not come at the local level that may be difficult to do, for institutional factors become relevant here. Even though funding may come from the federal level at the present, the duration of federal money is uncertain. Local government may be reluctant to expand, fearing it will be faced with a choice of picking up program costs in the future, or cutting the program back and firing people, neither of which are seen as desirable. Also there may be local opposition to the program.

It needs to be recognized that the expansion of environmental protection in the early 1970's was enormous. For example when the level of detailed information needed for 208 planning alone was extended to non-designated areas as well as designated areas, a great amount of work was created beyond what planning agencies were previously doing.

Conclusions

What conclusions can we draw for future programs? Three factors stand out as important to modify in future water policies involving federal-state-local relations: length of time required for planning and implementation, sources of funds, and local support.

The length of time provided for 208 planning posed problems both for the content of plans and personnel for doing the plans. Largely, it was assumed the data and personnel were available. A longer period of time would have alleviated some problems by allowing agencies to carry the work out over a longer period which could be done with fewer staff, and also provided time for training more staff. While federal funding seemingly solves the direct

costs problem for an organization doing 208 planning, its limited duration with no certainty for future funds does little for longer term stability in an organization that needs to hire personnel to carry out such planning. In addition, uncertainty about funds for implementation may make the activity seem trivial or futile.

Even so, stable funding alone may not be sufficient to secure organizational support for a program. As one of the ISBH respondents suggested, for any future water quality management program, some attempt must be made to "sell" the program to the agencies responsible for its implementation. Had the State of Indiana and the ISBH been more committed to 208 planning, the results would likely have been quite different, with much clearer outcomes than those generated by the 208 process in Indiana.

Section 208 planning contained a substantial citizen participation component, at least potentially. We found this component implemented much more in the designated than non-designated area. The third change to be considered in future programs is to place greater emphasis on the public participation component with two objectives in mind. It would develop the plan out of local citizens' concerns, not simply as a technical activity, and in the process build the basis for stronger local support for moving toward funding and implementing the plan. For example, the planning process might be structured as a large quasi-nominal group process, at the regional level for example, in which the stakes are potentially real. Presumably the objective of 208 was not to develop a set of plans, but to develop a means to deal with water quality problems. While there is a need to develop technical knowledge of water quality, there is also a need to develop a constituency to support such monitoring activity and to support action for alleviating problems.

In conclusion, although 208 planning was never a smooth process in the two study regions, and many participants were frustrated by their experiences and the lack of clear results from the planning process, it may in fact have laid the foundation for future water quality management programs within the regions. It was clearly a learning process for all participants, and as such, responsibility for any shortcomings in 208 planning cannot be laid solely on any one organization.

REFERENCES

1. Aldrich, Howard, "Resource Dependency and Interorganizational Relations," *Administration and Society*, Vol. 7, 1976, pp. 419-454.
2. Babbie, Earl, The Practice of Social Research, Wadsworth Publishing Company, 1975.
3. Barton, Kathy, "The Other Water Pollution," *Environment*, Vol. 20, 1978, pp. 12-20.
4. Benson, J. Kenneth, "The Interorganizational Network as a Political Economy," *Administrative Science Quarterly*, Vol. 20, 1975, pp. 229-249.
5. Centaur Management Consultants, Inc., Areawide Water Quality Management Program Survey, Prepared for the U.S. Environmental Protection Agency, 1978.
6. Coleman, James, "Relational Analysis: The Study of Social Structure with Survey Methods," *Human Organization*, Vol. 17, 1959, pp. 28-33.
7. Cook, Karen, "Exchange and Power in Networks of Interorganizational Relations," *Sociological Quarterly*, Vol. 18, 1977, pp. 62-82.
8. Dersch, E. and E. Hood, "Watershed Organizations: Impact on Water Quality Management: An Analysis of Selected Michigan Watershed Councils," Department of Natural Resources, Michigan State University, 1974.
9. Esman, Milton J. and Hans C. Blaise, "Institution Building Research: The Guiding Concepts," Inter-University Research Program in Institution Building, University of Pittsburgh, 1966.
10. Glaser, Barney G. and Anselm L. Strauss, The Discovery of Grounded Theory, Aldine Publishing Company, 1967.
11. Kaynor, Edward R. and Irving Howard, "Attitudes, Values and Perceptions in Water Resource Decision-Making within a Metropolitan Area", University of Massachusetts Water Resources Research Center, 1973.
12. Levine, Sol and Paul White, "Exchange as a Conceptual Framework for the Study of Interorganizational Relationships," *Administrative Science Quarterly*, Vol. 5, 1961, pp. 583-601.
13. McPherson, M. B., Ed., "Urban Runoff and Section 208 Planning," ASCE Urban Water Resources Research Program, American Society of Civil Engineers, Technical Memorandum No. 39, 1979.
14. Page, G. William and Alan C. Weinstein, "The Costs of Conflicting Environmental Policy: A Case Study in Milwaukee," *Water Resources Bulletin*, Vol. 18, 1982, pp. 671-677.

15. Raelin, Joseph A., "A Mandated Basis of Interorganizational Relations: The Legal-political Network," *Human Relations*, Vol. 33, 1980, pp. 57-68.
16. Schmidt, Stuart M. and Thomas A. Kochan, "Interorganizational Relationships: Patterns and Motivations," *Administrative Science Quarterly*, Vol. 22, 1977, pp. 220-234.
17. U. S. Congress, "Federal Water Pollution Control Act Amendments of 1972," Public Law 92-500, 92nd Congress, S.2770, October 18, 1972.
18. Van de Ven, Andrew H., Gordon Walker, and Jennie Liston, "Coordination Patterns Within an Interorganizational Network," *Human Relations*, Vol. 32, 1979, pp. 19-36.
19. Warren, Roland, Stephen Rose, and Ann F. Bergunder, The Structure of Urban Reform, Lexington Books, 1974.

INTERVIEW SCHEDULE

Urban Water Project	Schedule (83238) _____
Department of Sociology	Organization _____
Purdue University	Respondent _____
Summer, 1983	Title _____
	Address _____

	Date _____
	Starting Time _____
	Single-Level Organization _____
	Multi-Level Organization _____

Our primary interests in this research project are first, understanding the 208 process in Indiana, and second, how the organizations involved in 208 planning affected the process. Thus, the majority of the questions focus on the role your organization played in 208 planning, and on your 208 related activities as a member of your organization. Also, we would like to get your opinions on some issues related to water quality management.

I can assure you that the information you provide will be kept in strict confidence, and your name will not be used in our research reports.

NOTE: TO REDUCE THE OVERALL PAGE LENGTH OF THIS TECHNICAL REPORT, THE AMOUNT OF SPACE PROVIDED FOR ANSWERS FOR MOST OF THE OPEN-ENDED QUESTIONS IN THIS INTERVIEW SCHEDULE HAS BEEN REDUCED.

I would like to begin by asking you to describe your personal participation in the Section 208 planning process.

1. What was your position in your organization during the Section 208 planning process?

2. Briefly, what did you do for the Section 208 planning process?

3. Who was in charge of 208 planning for your organization? (Modify for multi-level orgs.)

4. What activities or responsibilities did your organization undertake that were related to 208 planning, other than your own activities? (Modify for multi-level orgs.)

5. What were the dates of your organization's involvement in the 208 process? (Modify for multi-level orgs.)

6. Were the dates of your involvement in 208 planning the same as the dates of your organization's involvement?

Next, I have a some basic questions about your organization and its goals in general, not just in regard to 208.

7. What would you say were your unit's major purposes or goals?
8. What were the specific objectives or goals regarding 208 planning in particular?
9. Can you tell me how the decision on 208 objectives was made and why you and your organization decided to become involved in 208?

(PROBE) Who made the decision that your organization should participate in the 208 process?

10. To what extent were these goals defined within your unit rather than defined externally or at higher administrative levels?
(IF POSSIBLE, ONLY ONE PRIMARY RESPONSE.)

_____	Primarily at Higher Levels	_____	Some Higher Levels
_____	Primarily Internally	_____	Some Internally
_____	Primarily Externally	_____	Some Externally

11. In terms of your unit's overall goals, how important was water quality management in general to your unit? (USE CARD A)

_____ (5) VERY IMPORTANT
_____ (4) IMPORTANT
_____ (3) MODERATELY IMPORTANT
_____ (2) SLIGHTLY IMPORTANT
_____ (1) NOT IMPORTANT

12. Does your organization have a general approach to how problems of water quality management should be handled, and if so, would you describe it for me?

(PROBE) Are there general approaches, strategies, or techniques that you usually use, regardless of the specific features of any one problem?

13. Two important elements of the Section 208 planning process were its emphasis on broadly based participation and on coordinated regional planning. How committed was your organization to broadly based participation? (USE CARD B)

- ___ (7) VERY COMMITTED
- ___ (6) MODERATELY COMMITTED
- ___ (5) SLIGHTLY COMMITTED
- ___ (4) NEITHER COMMITTED NOR OPPOSED
- ___ (3) SLIGHTLY OPPOSED
- ___ (2) MODERATELY OPPOSED
- ___ (1) VERY OPPOSED

14. How committed was your organization to coordinated regional planning? (ALSO CARD B)

- ___ (7) VERY COMMITTED
- ___ (6) MODERATELY COMMITTED
- ___ (5) SLIGHTLY COMMITTED
- ___ (4) NEITHER COMMITTED NOR OPPOSED
- ___ (3) SLIGHTLY OPPOSED
- ___ (2) MODERATELY OPPOSED
- ___ (1) VERY OPPOSED

On CARD C are listed the problem categories identified by the State of Indiana and included as elements in both designated and non-designated area plans. Some organizations were concerned with many of these problem areas, while others were concerned with only a few of them.

15. First, I would like you to indicate which of the problem areas were related to the interests or policies of your organization. Then, only for those problem areas that you indicated were relevant, assign a 1, 2, or 3 to each with "1" indicating great importance, "2" indicating lesser importance, and "3" indicating the least important areas.

Sewage and Industrial Discharge

- _____ Municipal Point Discharges
- _____ Semi-Public Discharges
- _____ On-Lot Disposal (Septic Systems)
- _____ Industrial Discharges

Agricultural

- _____ Animal Feedlots
- _____ Agricultural Non-Point

Other Non-Point

- _____ Forestry Non-Point
- _____ Mining Non-Point
- _____ Construction Non-Point

Stormwater

- _____ Urban Storm Runoff
- _____ Combined Sewer Overflow

Other

- _____ Recreational Area Problems
- _____ Development Pressures on Water Quality
- _____ Preservation of Environmental Sensitive Areas

Solid Waste

- _____ Landfill Leachate
- _____ Waste Sludge Disposal or Reuse

Streams

- _____ Dredged Soil Disposal
- _____ Stream and Watercourse Modification
- _____ Inter-Basin Water Transfer

I now have a few questions about your organization and the resources it had available during the 208 planning process.

16. What year did your unit begin operations? _____

17. Could you describe how your organization was structured, or if one is available, provide an organization chart?

The next section contains items concerning your unit's relationship with higher administrative levels. Turning to CARD D, please indicate how strongly you agree or disagree with the following statements concerning your unit's relationship with higher administrative levels.

- | | |
|---|---------------------|
| 18. Higher administrative levels emphasized our participation and activities in the 208 process in evaluating our unit. | SA A U D SD |
| 19. Our organization's higher administrative levels strongly supported our unit's decisions and policies. | SA A U D SD |
| 20. Our unit's decisions were limited by specific requirements set by higher administrative levels. | SA A U D SD |
| 21. Most planning for our unit took place in higher administrative units. | SA A U D SD |
| 22. Our supervisors rarely issued explicit directions for our activities. | SA A U D SD |
| 23. Our unit was free to develop new projects with other organizations. | SA A U D SD |
| 24. Our unit was relatively free to make decisions concerning its day-to-day operations. | SA A U D SD |

New programs or policies may require new staff or areas of expertise different than you previously had. We'd like some information on your organization's staffing.

25. First, how many paid positions did your unit have, on the average, during the Section 208 planning process?

26. During the 208 process, did your unit have any temporary or outside staff assigned, including through interagency personnel agreements, whose duties were related to 208 planning and if so, how many?

(PROBE) From what organization?

27. How adequate was your level of staffing during your unit's 208 participation? (USE CARD E)

- (5) VERY ADEQUATE
- (4) ADEQUATE
- (3) FAIRLY ADEQUATE
- (2) NOT VERY ADEQUATE
- (1) INADEQUATE

28. What were the primary areas of your staff's expertise?

29. How adequately were your staff's areas of expertise suited to your unit's role in the 208 planning process? (ALSO CARD E)

- _____ (5) VERY ADEQUATE
- _____ (4) ADEQUATE
- _____ (3) FAIRLY ADEQUATE
- _____ (2) NOT VERY ADEQUATE
- _____ (1) INADEQUATE

Next, I would like to know something about your unit's financial resources during its 208 involvement.

30. On the average, about how much was your unit's total yearly budget during its participation in the 208 process?

31. Did you receive any special funding in addition to your normal budget for your role in the 208 process and if so, about how much?

(PROBE) Is this included in the figure you gave me for your total budget?

YES NO

32. What percentage of your annual budget came from each of the sources listed on CARD F?

- Federal Government _____ %
- State Government _____ %
- Local Government _____ %
- User Fees _____ %
- Dues and Contributions _____ %
- Other (SPECIFY) _____ %

33. Approximately what percentage of your unit's expenditures were related to:

- Water quality management in general _____ %
- Section 208 planning specifically _____ %

34. How adequate was your annual budget during the 208 planning period?
 (USE CARD E)
 _____ (5) VERY ADEQUATE
 _____ (4) ADEQUATE
 _____ (3) FAIRLY ADEQUATE
 _____ (2) NOT VERY ADEQUATE
 _____ (1) INADEQUATE

35. How adequate was your funding for your Section 208 participation?
 (ALSO CARD E)
 _____ (5) VERY ADEQUATE
 _____ (4) ADEQUATE
 _____ (3) FAIRLY ADEQUATE
 _____ (2) NOT VERY ADEQUATE
 _____ (1) INADEQUATE

Now, I'd like your views about some issues related to water quality management. Again, I will read a statement and using the categories on CARD D, please tell me how strongly you agree or disagree with the statement.

- | | | | | | |
|--|----|---|---|---|----|
| 36. The wide variety of agencies and governmental structures unnecessarily complicates environmental planning and management in our region (Indiana). | SA | A | U | D | SD |
| 37. Governmental regulation is not an effective means of dealing with water quality problems. | SA | A | U | D | SD |
| 38. Our unit should concentrate on its own goals rather than become involved in broader programs where our personnel do not have special preparation. | SA | A | U | D | SD |
| 39. Governmental pressure is necessary for the organizations in our region (Indiana) to develop coherent and effective means for water quality management. | SA | A | U | D | SD |
| 40. Public participation should be a requirement for any regional water quality management planning process. | SA | A | U | D | SD |
| 41. Regional planning for water quality management seemed to create more problems than it solved. | SA | A | U | D | SD |
| 42. If the present trend in water quality management continues, our region (Indiana) is going to experience greater problems with water quality in the future. | SA | A | U | D | SD |

In the course of carrying out their activities, some organizations tend to focus their efforts on particular groups and organizations. In some cases these groups may be seeking specific assistance of some kind or may be subject to regulation, while in others, they may just be seeking information.

43. Who, in general, would you say were your unit's constituents--the public in general or, a particular segment of the public?

(PROBE IF SEGMENTS) What segments are these?

(PROBE IF NOT SEGMENTS) Were there any groups or individuals that had more contact with your organization than others?

44. In some organizations, policies are determined internally, while others seek input from their constituents for these decisions. How much direct input did the constituents you mentioned in the previous answer have into your organization's policies and activities? (USE CARD G)

- ___ (5) HIGH INPUT
- ___ (4) MODERATE INPUT
- ___ (3) SOME INPUT
- ___ (2) LITTLE INPUT
- ___ (1) NO INPUT

45. Do you feel that there was general agreement among your constituents about priorities and needs in regard to 208 planning?

(PROBE) What, in general, were their priorities and needs?

46. Were your constituents generally in favor of the 208 process?
(USE CARD H)

- ___ (5) VERY FAVORABLE
- ___ (4) FAVORABLE
- ___ (3) NO CONSENSUS
- ___ (2) OPPOSED
- ___ (1) VERY OPPOSED

47. Were any (other) interest groups in contact with your organization and if so, who were they?

YES NO (IF YES, PROBE) What issues were they concerned about?

The organizations that took part in the Section 208 planning process may be thought of as a network of organizations. We are interested in the nature of your contacts and experiences with other participants in the planning process. Please note that these questions refer only to 208 related contacts, and do not count contacts with organizations concerning non-208 matters.

48. Please list those organizations and groups, including 208 committees, that your organization had contacts with relating to the 208 process.

(PROBE IF MORE THAN TEN) Could you identify the ten organizations that were most important to your organization?

49. How important for your organization were your contacts with each of the other organizations? (USE CARD A)

- (5) VERY IMPORTANT
- (4) IMPORTANT
- (3) MODERATELY IMPORTANT
- (2) SLIGHTLY IMPORTANT
- (1) NOT IMPORTANT

50. On the average during a year, how frequently was there contact of any kind between your unit and each of the other organizations concerning 208 activities?

(PROMPT ONLY IF NECESSARY USING CARD I)

- (A) NEVER, DID NOT OCCUR
- (B) RARELY, ONCE A YEAR OR LESS
- (C) SELDOM, TWO TO FIVE TIMES A YEAR
- (D) OCCASIONALLY, SIX TO ELEVEN TIMES A YEAR
- (E) MONTHLY, ONE TO THREE TIMES A MONTH
- (F) WEEKLY, ONE TO FOUR TIMES A WEEK
- (G) DAILY, ONCE OR ALMOST ONCE A DAY

51. How frequently did your unit provide information or expertise to each of the other organizations?

(PROMPT ONLY IF NECESSARY USING CARD I)

- (A) NEVER, DID NOT OCCUR
- (B) RARELY, ONCE A YEAR OR LESS
- (C) SELDOM, TWO TO FIVE TIMES A YEAR
- (D) OCCASIONALLY, SIX TO ELEVEN TIMES A YEAR
- (E) MONTHLY, ONE TO THREE TIMES A MONTH
- (F) WEEKLY, ONE TO FOUR TIMES A WEEK
- (G) DAILY, ONCE OR ALMOST ONCE A DAY

52. How frequently did your unit provide resources such as equipment, personnel, or financial resources to each of the other organizations?

(PROMPT ONLY IF NECESSARY USING CARD I)

- (A) NEVER, DID NOT OCCUR
- (B) RARELY, ONCE A YEAR OR LESS
- (C) SELDOM, TWO TO FIVE TIMES A YEAR
- (D) OCCASIONALLY, SIX TO ELEVEN TIMES A YEAR
- (E) MONTHLY, ONE TO THREE TIMES A MONTH
- (F) WEEKLY, ONE TO FOUR TIMES A WEEK
- (G) DAILY, ONCE OR ALMOST ONCE A DAY

53. Were there any joint programs shared with each of the other organizations and if so, how many with each?

54. Did incompatible responsibilities or priorities affect the relationship between your unit and each of the other organizations and if so, how much? (USE CARD J)

- (4) GREAT EFFECT
- (3) MODERATE EFFECT
- (2) LITTLE EFFECT
- (1) NO EFFECT
- (0) NO INCOMPATIBILITIES

55. Organizations often try to influence the outcome of programs like 208 to reflect issues they think are important. Would you rate the amount of influence that each of the organizations, including your own, had on the 208 planning process? (USE CARD K)

(5) VERY HIGH INFLUENCE

(4) HIGH INFLUENCE

(3) MODERATE INFLUENCE

(2) LITTLE INFLUENCE

(1) NO INFLUENCE

(PROBE) What outcomes in particular were you able or not able to achieve?

I would like to get some information about your organization's experience with and your assessment of the 208 planning process.

56. How much did your participation in the Section 208 planning process affect public support for your agency? (USE CARD L)

___ (7) VERY POSITIVELY

___ (6) POSITIVELY

___ (5) SLIGHTLY POSITIVELY

___ (4) NO EFFECT

___ (3) SLIGHTLY NEGATIVELY

___ (2) NEGATIVELY

___ (1) VERY NEGATIVELY

57. What benefits and problems did your organization experience as a result of the Section 208 planning process?

(PROBE 1) First, what were the benefits for your organization? (E.g., awareness of others' objectives, improved service delivery, increased awareness of WQM problems, etc.)

(PROBE 2) What problems resulted from 208? (E.g., insufficient personnel, budget, expertise, or time; communication of objectives, goals of the 208 process, etc.)

(PROBE 3) Although the primary goal of 208 was the creation of an areawide water quality management plan, do you recall any other consequences of the 208 process?

58. Which organizations in your region would you say have provided leadership in the area of water quality management, especially in the area of Section 208 planning?

(PROBE IF MORE THAN ONE) Would you rank the top three?

59. Were there any organizations that should have taken a leadership role, but didn't?

(PROBE IF YES) Do you have any idea why they didn't?

60. If a new areawide water quality management program were to be started, which organizations do you think should be involved?

(PROBE IF SAME AS 208) Can you think of any other organizations that should be involved or any 208 organizations that made few useful contributions to 208 planning?

It is important for this research that we interview a variety of people who were involved with Section 208 planning.

61. Can you suggest any other persons who had experience with or are knowledgeable about the 208 planning process that we should interview, including people who are or were in your organization?

(PROBE) May I use your name as a reference when I contact these people?

Finally, this last set of questions concerns your professional and occupational background.

62. What is your age? _____

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

(PROBE IF 16 YEARS OR MORE) In which field did you receive your degree?

64. Do you maintain memberships in any professional associations and if so, which ones?

YES NO

65. How many years have you been with this organization? _____

66. How many years have you been in your current position? _____

ORGANIZATION CHART

YES

NO

TIME AT END _____

Water Resources Research Center
Lilly Hall of Life Sciences
Purdue University
West Lafayette, Indiana 47907

BULK RATE
Non-profit Organization
U.S. Postage
PAID
Permit No. 221
Lafayette, Indiana