OVERDUE FINES ARE 25¢ PER DAY
PER ITEM

Return to book drop to remove
this checkout from your record.

MSU

PUBLIC PARTICIPATION IN 208 WATER RESOURCE

PLANNING BY AN AREAWIDE AGENCY

BY

Paul Henry Lilly

A Thesis

Submitted to

Michigan State University

in partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

Department of Resource Development

1979

ABSTRACT

PUBLIC PARTICIPATION IN 208 WATER RESOURCE
PLANNING BY AN AREAWIDE AGENCY

By

Paul Henry Lilly

This study examines the basis and opportunity for
public participation and describes techniques to involve
the public in the planning process. Section 101(e) of the
1972 amendments to the Water Pollution Control Act required
that public participation be provided for and encouraged
in the development and revision of Areawide Waste Treatment
Management Plans specified under section 208 of the same
Act. Regulations specifying minimum guidelines for
public participation were developed by the Environmental
Protection Agency (EPA).

The Tri-County Regional Planning Commission (TCRPC)
of Michigan was designated to develop a 208 plan and
proceeded without previous experience to implement a public
participation program based on the minimum guidelines.
The TCRPC participation program was evaluated in this study
by utilizing descriptive attributes of individual tech-
niques and eight program objectives developed by the
author. The descriptive attributes quantified the utili-
zation of specific techniques while the program objectives

examined each technique's contribution to the entire
program.

Through this evaluation it is concluded that the
TCRPC's public participation program was limited in scope
and did not develop to its full potential. The TCRPC
staff failed to develop an overall participation program
plan and recognize opportunities for public participation
to occur. Without previous experience or training in
public participation the TCRPC staff was unable to trans-
late the minimum guidelines into an effective program.

This study is dedicated to my wife whose support and patience proved to be invaluable.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS

APAC	Areawide Planning Advisory Committee of TCRPC
CAC	Citizens Advisory Council of TCRPC
DNR	Michigan's Department of Natural Resources
EPA	Environmental Protection Agency
IWL	Issac Walton League
LWV	League of Women Voters
NRDC	Natural Resources Defense Council
NEPA	National Environmental Policy Act
TCRPC	Tri-County Regional Planning Commission of Michigan
TPCC	Technical Planning Coordinating Committee of TCRPC

INTRODUCTION

While water pollution has been recognized as a
problem in this country since the turn of the century, the
federal government did not become directly involved
until 1948, when the first Water Pollution Control Act was
enacted. Since that first act, considerable public
sentiment has developed around the federal government's
role in protecting our national environment.[1] Appendix A
provides a background of water resource planning.

The "War on Poverty" generated calls of "power to
the people" and "maximum feasible participation" in the
processes of governmental planning and decision-making
which led to legislative mandates for such opportunities.
One such mandate can be found in the 1972 amendments to
the Water Pollution Control Act, commonly known as the
"Clean Water Act." Commitment to an active public
involvement program in the administration of the various
goals and policies established under the Act was specified
under Section 101.[2] The Environmental Protection

---

[1]Joachim F. Wohlwill and Daniel H. Carson, eds.,
Environment and the Social Sciences: Perspectives and
Applications (Washington, D.C.: American Psychological
Association, Inc., 1972, p. 66.

[2]U.S., Congress, Federal Water Pollution Control
Act Amendments of 1972, 92nd Cong., 2nd Sess., 1972,
18 October 1972, pp. 816-903.

Agency (EPA) was to administer the Act and in doing so develop and publish regulations specifying minimum guidelines for public participation.[3]

These guidelines, although intended to encompass the entire Act, were developed emphasizing the opportunities for public input into the Areawide Waste Treatment Management Plans required under Section 208 of the Act. Areas were designated by the Governor of each state to develop such plans. In March of 1975, Michigan's Governor Milliken designated the Tri-County Regional Planning Commission (TCRPC) as one such area. (See Figure 1.) In July of last year, the Commission accepted a grant from EPA and began the development of their 208 plan.

With only the minimum guidelines,[4] issued in August of 1973 by EPA, the Tri-County Regional Planning Commission began to consider the requirements of public participation and their incorporation into the planning process. With a limited exposure to participation strategies and techniques, the work program for the plan was developed. The Commission's staff had been previously involved in water quality issues and had completed several technical studies in conjunction with

---

[3]U.S., Environmental Protection Agency, Water Programs, "Public Participation in Water Pollution Control," Federal Register 38, no. 163 part III, 23 August 1973, 22756-8.

[4]Ibid.

FIGURE 1

STATE PLANNING AND DEVELOPMENT REGIONS
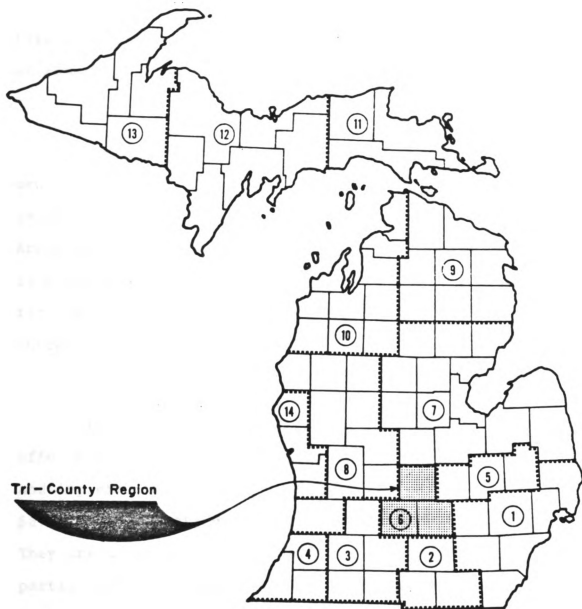
other agencies. Their public involvement and information
programs, however, were not developed. The information
services department of the Commission was responsible for
disseminating information, increasing the Commission's
visibility to local units of government and promoting
intergovernmental cooperation through improved channels
of communications.[5]

Proposition

This study will examine the development and imple-
mentation of the TCRPC's public participation program
as it relates to the development and implementation of an
Areawide Waste Treatment Management Plan. This examina-
tion and a review of the literature will identify speci-
fic characteristics of the program that influenced its
outcome.

Objectives

The objective of this study is to evaluate the
efforts of the TCRPC's 208 planning staff in establishing
and implementing their public participation program.
Several sub-objectives will contribute to this effort.
They are as follows: To determine the basis for public
participation in water resource planning and to identify
the roles the publics can play in the planning and

---

[5]Tri-County Regional Planning Commission,
"Designation Package for 208 Planning," TCRPC, Lansing,
Michigan, May 1975, Appendix H.

decision-making process; to identify the characteristics
and functions of public participation in each stage of
the planning process; to identify techniques used in the
implementation of public participation programs; to
develop a criteria for studying and evaluating public
participation programs.

Approach

These objectives were accomplished by combining
several study approaches. Observations, both documentary
and personal investigations and literature review were
combined to complete the objectives of this study. Liter-
ature and related study documentation review were the
primary sources of information used to investigate the
techniques of and the basis for public participation in
water planning.

Design

The TCRPC's 208 public participation program was
evaluated on two levels. Public participation programs
are comprised of techniques combined in a series to
address various interests. The techniques utilized by
the TCRPC were reviewed and rated against five attributes.
These attributes address the technique's focus, commit-
ment, communication, contribution and initiative. The
ratings were then utilized to compare the delivery of each
technique in the TCRPC program with a norm established
through the literature review.

The second level of evaluation is based on eight objectives. These objectives scrutinize the combination of techniques that make-up the program. This review of the total program considers how the techniques are distributed and utilized during the program.

Limitations

As with any study, there were some limitations in the scope and detail that could be considered. The 208 planning process began with its Congressional mandate in the 1972 amendments to the Water Pollution Control Act. The TCRPC was designated to undertake this planning process in 1975 prior to the formulation of this study. The planning process had progressed to the alternative development stage before personal observation was undertaken. Consequently, reliance upon documentation and personal recall by 208 staff, as well as participants, was used to establish the agency's formulation of the program. Delivery and content of the program elements were not under control of this research and therefore could not be manipulated to explore other approaches. This program represents only one out of eight 208 programs in Michigan that began in 1975. The TCRPC program was selected due to its proximity with Michigan State University where the author was enrolled. Secondary information, in the form of other participation studies in planning, were used to consider techniques not utilized in the Tri-County

program. Other designated areas have approached partici-
pation in different, sometimes unique, ways. The results
of many of these efforts have not been completed or
published. Whenever possible, preliminary information
was obtained from the agency involved and is cited as such
in this study.

The components of public participation programs are
very complex and are difficult to isolate as independent
variables. The comparison of one program with another
can identify differences that can be examined in further
detail. The application of each program, however, must
be considered independently since it is impossible to
modify what has occurred. The value of this examination
is found in the understanding it provides of public
participation and the avenues that exist to promote an
effective program.

CHAPTER I

THE FUNDAMENTALS OF PARTICIPATION

Philosophy

In the development of our democratic society some basic tenets have shaped the role individuals play in the decision-making process. Components of this democratic society dictate that the society must be open, allowing any issue to be the subject of public discussion and verdict, and that responsible leaders be held accountable for their decisions through sanctions provided within the system.[6]

These sanctions may be directed toward individuals in the form of non-support and/or recall or may be directed broadly at the problem. This broad access is through judicial, legislative and constitutional remedies and are considered to be the rights created under legislative authority of the state and federal governments or basic rights guaranteed under the constitution.[7] Elected officials have been subject to legal actions brought about by individual citizens and groups organized to represent

---

[6]Emmette S. Redford, Democracy in the Administrative State (New York: Oxford University Press, 1969), p. 202.

[7]Ibid., p. 78.

an interest area. This concept of interest areas has
developed in various "interest groups" which represent a
defined, at times very loosely developed, group of citi-
zens. The effect "interest groups" can have in shaping
public policy has been highlighted in resource management
literature.[8]

> Citizens are most effective when organized in
> groups in which they share concerns, educate
> each other and, in the process, become more
> clear and persuasive in arguing for a parti-
> cular policy alternative.[9]

Organized "interest groups" represent the coalition
of a segment of society that has been recognized and is
capable of presenting a concise input to those in a posi-
tion to incorporate it into the decision-making process.
This organization of individuals unified around common
values and goals represents the political theory of
Pluralism.[10] This theory suggests that as society becomes
more complex, these groups will take on an added impor-
tance. As a result, public policy will be developed from
the balancing of forces among opposing groups. The

---

[8]Donald R. Field, James C. Barron, and Burl F. Long,
Water and Community Development: Social and Economic
Perspectives, Man, His Community and Natural Resources,
no. 1 (Ann Arbor: Ann Arbor Science Publishers Inc.,
1974), p. 127.

[9]Transportation Research Board, National Research
Council, "Application of Interactive Graphics in Citizen
Participation," Transportation Research Record #553,
(Washington, D.C.: 1975), p. 30.

[10]D. Baskin, American Pluralist Democracy, (New
York: Van Nostrand Rienhold, 1971), p. 94.

success of these groups lies not only in their membership
size but more importantly in the tactics they employ.[11]
The Pluralism theory rejects the concept of the "public
interest" and supports the idea that if an issue is of
importance various groups will develop in support or
opposition and influence public policy toward their inter-
ests. Yet, a basic ideal in our Democratic society is
that persons are the unit of value in social arrange-
ments.[12] Where social action is substituted for individual
action "liberty exists only through participation either
in decision-making or in control of leaders who make the
decisions."[13] A concept that affected interests must
have effective access to administrative institutions and
their allied structures is the basic question. This access
can only be developed by the overt efforts of institutions.
It is not a passive process.

Within this concept of access lies a perplexing
question: how does one define the collection of indivi-
duals that make up affected interests? Members of society
can sometimes be identified as being affected directly
by some action. Taxpayers, for example, are identified
and can be directly addressed. More commonly, however,
affected interests are vague and do not permit such

---

[11]Ibid.

[12]Redford, Democracy in the Administrative State,
p. 6.

[13]Ibid.

specificity. In the situation where benefits are being derived by a large but undefined group of persons in society, the term "general welfare" is used. This esoteric term "general welfare" is applied over a wide variety of situations and interests. Basically, it provides to all the people of society well-doing or well-being in any respect and the enjoyment of health and common blessing of life while being exempt from any evil or calamity. "The general welfare can be considered roughly synonymous with a broadly viewed concept of the public interest."[14] In approaching public interest from this expanded view the concept can be applied to any individual or institutional action. When confronted with a number of conflicting interests, the decision-maker must search for the consequences for an action and, in doing so, consider the public interest as a "a symbol of the attempt to recognize and consult interests that might be forgotten or overlooked in the pressure of political combat."[15]

The decision-maker must determine the values which society and members of it place upon the outcome of his decision. These values are the result of human feelings being placed upon the subject of the decision being made.

---

[14]Carl J. Friedrich, ed., The Public Interest, Normos, no. 5 (New York: Atherton Press, 1967), p. 14.

[15]Glendon Schubert, The Public Interest (Glencoe, Illinois: The Free Press, 1960), p. 203.

Since values are subjective they vary from individual to individual. They can, however, be considered as collective groups and be looked upon as having a stake in the decision being made. These stakes or "value consequences" follow from any decision that is made and provide a vehicle to delineate the various groups.[16] One example of this concept is addressed by Harold D. Lasswell. He identifies four value related interest areas and considers their contribution to the public interest.[17] Given a social context and a specified activity that has some value effects, various interests of the society can be outlined.

Interests which are compatible with societal goals of human dignity are considered to be the common interests. Special interests are those value consequences that are incompatible with the common interest. Private interests, in part, are contained within the common interest. Additional values not held within the common interest exclude these private interests from being encompassed by the common interest. A public interest develops when the societal common interests are sufficiently great as to warrant their inclusion as an element of the decision. Figure 2 represents how a given issue might look if these

---

[16]Carl J. Friedrich, ed., The Public Interest, p. 63.

[17]Ibid., p. 64.

FIGURE 2

INTEREST FIELDS
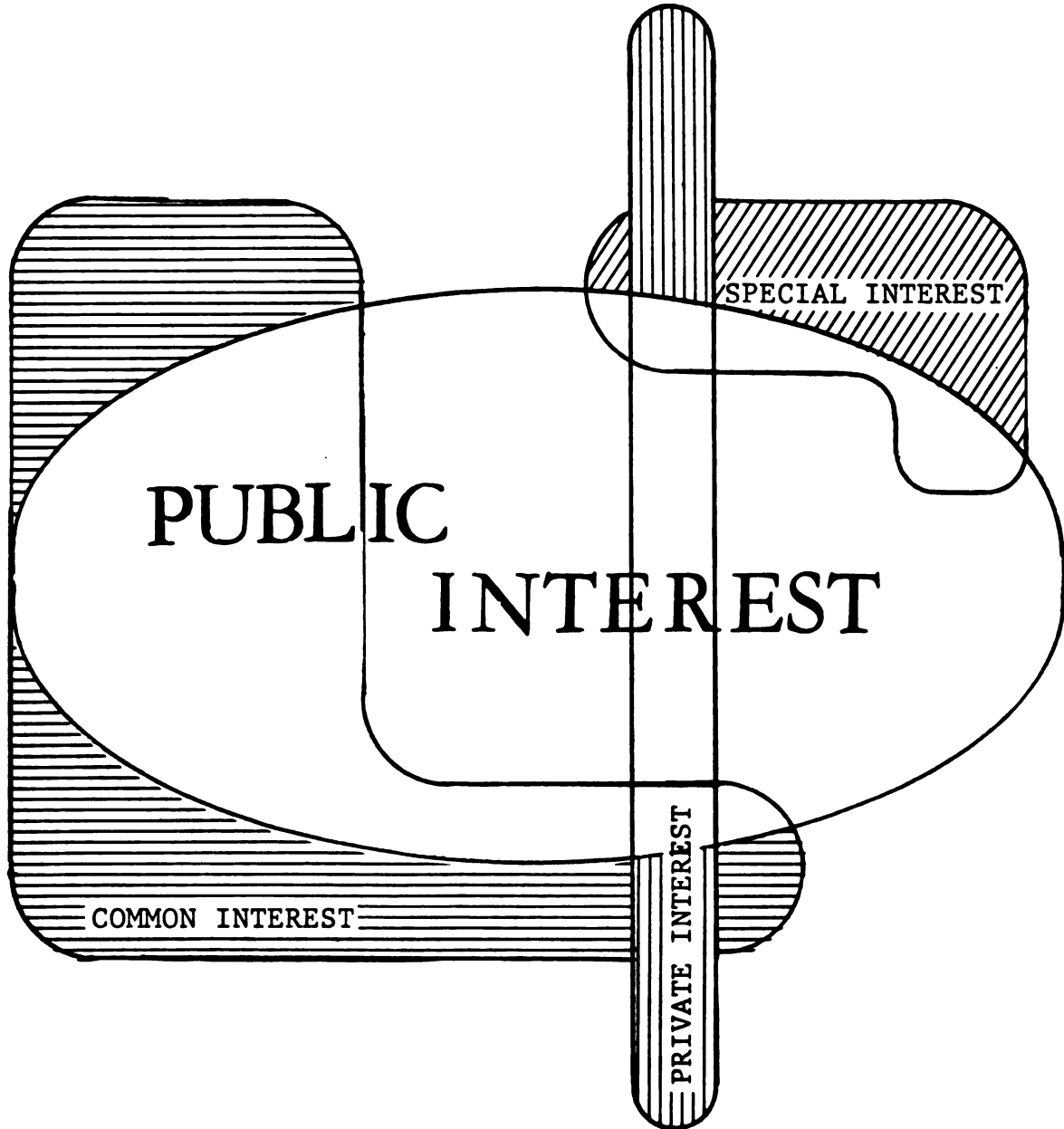
value interests were spacially distributed. The special
and private interests are assigned areas to demonstrate
their consideration as part of the public interest but
do not necessarily reflect a specific fractional portion
of the public interest.

While the public interest is accepted as a function
of the decision-making process, the specifics of its con-
tribution can not be identified. Anthony Downs draws these
conclusions when he states:

> ...the term public interest is constantly used
> by politicians, lobbyists, political theorists,
> and voters, but any detailed inquiry about the
> exact meaning plunges the inquiries into a wel-
> ter of platitudes, generalities, and philosophic
> arguments. It soon becomes apparent that no
> general agreement exists about whether the term
> has any meaning at all, or, if it has, what the
> meaning is, which specific actions are in the
> public interest and which are not, and how to
> distinguish between them.[18]

Since it seems to be impossible to always identify such
public interests, criticism has developed regarding their
consideration in the decision-making process. With the
growth of this country's administrative bureaucracy came
a separation of the public from the actual decisions which
were being made. This is demonstrated in the expansion of
agencies as an aspect of the government's administrative
process. While agencies such as the Corps of Engineers
and the Department of the Interior were accountable

---

[18]Virginia Heid, The Public Interest and Individual
Interests (New York: Basic Books, 1970), p. 2.

through the administrative structure, they seemed removed from direct public access. Publics were not able to associate their input with agency actions. Individual letters and verbal petitions while having potential impact, provided little satisfaction for the sender and commonly were treated as statistics by such agencies.[19] This continued reliance on agencies in the administrative decision-making process was based on the expertise model defined as:

> The division of labor around functional specialties and the recruitment of trained personnel capable of responding to narrow problems with speed, efficiency and competence.[20]

This model is presumed to reflect "value free" professional standards and ethics when applied to specific programs. Such "value free" decisions are not possible, however, when the task of such an agency becomes the establishment of goals. Goal setting must involve value judgements and most of the technically trained professionals are no more qualified than the general public to make such judgements.[21] Agencies have often catered to special interest groups to expedite successful implementation of their programs and to secure support for official

---

[19]Transportation Research Board, National Research Council, "Application of Interactive Graphics in Citizen Participation," p. 30.

[20]Field, Barron, and Long, Water and Community Development: Social and Economic Perspectives, p. 126.

[21]Ibid.

policies.[22] Such catering, at times directed at conser-
vation groups, has brought agencies into conflict with
other groups through judicial challenges, resulting in
delays, manipulations or terminations of agency projects.
Administrative decision-making relies upon such interest
groups in determining public policy. Demands for greater
public access to agency procedures, while not challenging
the expertise model with a participatory model, are direct-
ed toward the acknowledgment of citizen groups and con-
comitant public interests in setting goals in environ-
mental management.[23]

There currently exists two basic governmental per-
spectives concerning public involvement. First, if estab-
lished programs are to remain viable and not engender
destructive protest, individuals must be afforded an oppor-
tunity to affect the decision-making process. The second
perspective is that citizens have a proprietorial right to be
involved in decision-making that encompasses goal setting
and goal attainment considerations.[24] These perspectives
have recently focused sharply on the environmental

---

[22]See Geoffrey Wandesforde-Smith, "The Bureaucratic
Response to Environmental Politics," Natural Resources
Journal 2 (July 1971): 479-88; and Helen Ingram,
"Patterns of Politics in Water Resources Development,"
Natural Resources Journal 11 (1) (January 1971):102-18.

[23]Field, Barron, and Long, Water and Community
Development: Social and Economic Perspectives, p. 127.

[24]Ibid.

management responsibilities of the governmental decision-making process. While attempting to determine the publics' opinion regarding environmental management, the various governmental agencies found that they could:

> ...often detect only the grossest, broad gauge conceptualizations of issue areas among much of the mass public and this is particularly true of the assessments of values and value orientations among the public.[25]

Basis for Participation

Social

The public has, however, over the last ten years narrowed their focus and increased their awareness of environmental matters. This in part can be attributed to the increased media coverage and first hand exposure to such problems in their natural environment. With a clear and demonstrated deterioration in the quality of many aspects of the natural, rural and in particular, the urban environment, citizens demanded immediate actions to eliminate such deterioration. This increased interest was visible in the social climate surrounding the late 60's. The changing concern for the environment was evident and led to what Erskise called the "Miracle of Public Opinion."[26] From May of 1965 to June of 1970 as

---

[25]William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor, Social Behavior, Natural Resources, and the Environment (New York: Harper & Row, Publishers, 1972), p. 215.

[26]Field, Barron, and Long, Water and Community Development: Social and Economic Perspectives, p. 285.

determined in national polls, the proportion of people
viewing water pollution as a serious problem jumped
from 35 to 74 percent with a similar increase with regards
to air pollution.[27] These changes in opinion, however,
did not mean that the behavior of the general population
had changed. Realizing that such a change would be
necessary to improve the nation's environment, the govern-
ment began to focus on the fact that:

> ...Support for a program exists only when the
> proposal grows out of the thinking of a wide
> group. The best way to insure support at the
> solution level is to secure full participation
> at the problem-defining and decision-making
> level.[28]

The public continued to criticize government
agencies into the early 70's. The United States Forest
Service, Corps of Engineers, Bureau of Land Management,
National Park Service and others were seen as insensitive
to the publics' aspirations for environmental management.
The public criticized these agencies for:

> Maintaining elitist perspectives in which pro-
> fessional views are arbitrarily equated with the
> public interest and for failing to provide great-
> er opportunities for citizen involvement in
> decision-making and program implementation.[29]

---

[27]Ibid.

[28]Hans B. C. Spiegel, Citizen Participation in Urban
Development, vol. 1, "Concepts and Issues," NTL Institute
for Applied Behavioral Science, National Education
Association, (Washington, D.C.: 1968), p. 32.

[29]Field, Barron, and Long, Water and Community
Development: Social and Economic Perspectives, p. 126.

The public was frustrated with the agencies' traditional responses to their concerns. Values placed on environmental questions were not manageable with existing agency techniques of evaluation. Benefit-cost ratios and engineering technology could not account for aesthetic considerations or political feasibilities. Four value areas have been identified by Daniel Ogden, Jr. that provide a basis upon which to look at the publics' environmental concerns. While not exclusive they do provide some structure to the illusive public interest. These four areas are as follows:

1. Economic - The amount of work an individual is willing to do to acquire desired goods or services. Measurement of economic value is in some standard, the price in dollars or their equivalent in our society.

2. Social - These values are established by custom and practice. Essentially, these values are the result of private attitudes toward non-economic matters. These values establish how individuals are to behave. Social values differ among community members, and only after the community is studied, can these values be measured by comparison.

3. Aesthetic - An individual's expressed preference in the recognition of beauty, stated as likes and dislikes without respect to the costs or moral consequences. These values can only be compared among themselves. Only after some ranking of aesthetic order is determined for an individual, can any equating to other value areas be accomplished.

4. Political - Consensus established these values, confirming that the majority of the people wish society to act in such a manner. These values are expressed in voting habits and the support afforded to elected officials.[30]

Since many of the proposed changes in our environment were interpreted as matters of value preference rather than as ecological imperatives for survival, many segments of the public did not participate in their resolution. While most people, if asked, would say they were in favor of clean water or air, many are not convinced that such benefits are worth the costs necessary to achieve them. While some reductions in environmental degradation can be achieved by individuals, the thrust must come at broader societal levels. Thomas A. Heberlein identifies three ways in which environmental problems can be alleviated. These include the technical fix which is a structural approach, the cognitive fix which relies on man as a rational actor and the structural fix which manipulates man's behavior by changing the social or physical structure in which the problem takes place. Each of these affect the environment in some form.[31] While the technical fix has been the dominant approach in the past it is currently

---

[30]Daniel M. Ogden, Jr., "Environmental Values and Water Project Planning," paper presented to Arkansas-White-Red Basins Inter-Agency Committee and the Missouri Basin Inter-Agency Committee, Fort Collins, Colorado, 8-9 July 1970, p. 8.

[31]Field, Barron, and Long, Water and Community Development: Social and Economic Perspectives, p. 202.

recognized that modifications in the behavior of man will be necessary to insure environmental quality in the future. Technology will no doubt assist in the protection of our environment but it is ultimately the behavior of our society and the individual members of it that will make the difference.

Our society relies on planning to determine the appropriate courses of action we must take to meet our needs. Planning basically considers existing or anticipated needs of the client group and determines what changes would and would not be deemed desirable to satisfy those needs. Historically, society has relied upon technological approaches to change in order to satisfy needs. As conflicts arose, new technologies were applied that manipulated the system in order to produce some form of need satisfaction. These technological fixes, however, normally accrued to only sub-groups of the total population and were often of short duration. This type of change is well defined and the course of action is specified before the actual process is initiated. Changes of this type and the planning involved with it is deductive. The problem is well defined and the change involved can be measured by some quantitative techniques.

Unfortunately, the changes in our environmental system necessary at this time are not ones of the technological type. The current situation is poorly defined and results from conflicts of interest rather than a need

to employ new, more advanced technologies. Social, political and other forces must be synthesized if a solution is to be reached. The situation or the multitude of problems that comprise it, while not well defined represent potential changes that would affect the society as a whole over a long period of time. Such changes then have the potential to drastically affect the environment and members of society. While a comprehensive planning approach to such changes would be desirable, the lack of data and tools for studying this area limit the analysis that can be performed. Without some comparison of the various change elements, no evaluation of alternatives can be performed. The interface of technological and social change must be improved if interaction and exchange is to occur. The political and social realities of our society must be considered and incorporated into the change, if implementation is to affect broad segments of society. These approaches to planning and change are depicted by Bishop[32] and have been modified in Figure 3 to demonstrate the interface necessary to implement the changes, both socially and technologically, that will be necessary to achieve an acceptable goal in environmental management.

The interaction among members of society necessary to establish such a goal is the basis upon which the

[32]A. Bruce Bishop, Public Participation in Water Resources Planning, U. S. Army Corps of Engineers, Institute for Water Resources, (Alexandria, Virginia: December 1970), p. 19.

FIGURE 3

APPROACHES TO SOCIAL/TECHNOLOGICAL CHANGE
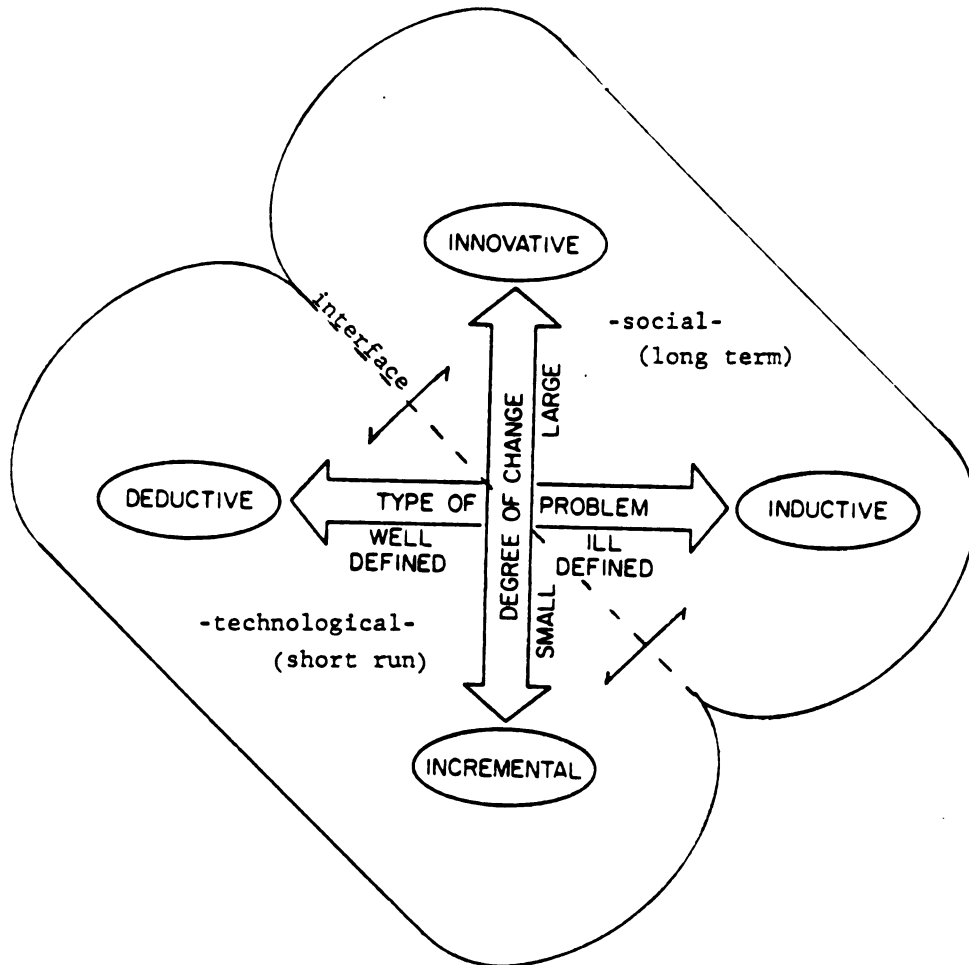
values described earlier are developed. These values
must then be articulated at the interface of the techni-
cally feasible and socially acceptable alternatives. While
such an exchange would contribute to the general under-
standing in a change situation, no universal acceptance of
the procedure has been accomplished.

Legal

Regulatory and management decisions by public and
environmental agencies require a basis in law. Public
participation in such decisions also requires a basis in
law. This basis is found in constitutional documents,
legislation, judgements concerning the law, and in con-
vention based doctrine. Only through such bases can the
publics' opportunity to affect decisions be guaranteed.
Various laws, and their interpretation by the judicial
system, have been used as a vehicle to confront agencies
with a view or opinion held by groups or individuals.

One area of conventional law that has been used
to argue the publics' point is that of the "public trust."
Through the courts, public trust cases have provided a
counterbalance to market forces. The interpretation of
this doctrine treats common property resources as an
asset belonging equally to each citizen. Such resources
can only be impaired when some clear compensatory benefit

can be provided for the beneficiaries of the trust.[33]
Success in protecting the environment along this line
has, however, been limited. The major difficulty lies
with identification of losses to the public and the degree
of support for public needs generated by a project or
action.

Actions on constitutional grounds have focused on
the rights of citizens under the first and fourteenth
amendments. The first amendment provides for the petition
of the government for a redress of grievances from citizens
when actions of the government effect them adversely. Due
process of law is guaranteed any citizen deprived of life,
liberty or property by any state under the fourteenth
amendment. The fourteenth amendment also provides equal
protection of the laws to any person within jurisdiction
of the United States. While these amendments have pro-
vided a basis for environmental protection their use is
limited because of difficulty in demonstrating interest or
harm related to a proposed action. Only after the
relationship between an action and its effect upon the
individual in question is established can a claim of
protection or redress be considered in the judicial system.

Legislative steps have been taken to bridge this
gap in protection by providing an access to concerned

_____

[33]Joseph L. Sax, Defending the Environment: A
Handbook for Citizen Action (New York: Vintage Books,
1979), p. 173.

citizens in a variety of administrative decision-making
processes. These provisions have been incorporated into
the environmental legislation of the late 60's and early
70's. The National Environmental Protection Act (NEPA)
and the Clean Air Act are two examples of such statutes.
By providing specific requirements of public access and
consideration within these laws the necessity of showing
a "standing" under constitutional and case law was forgone.
The incorporation of impact statements, required under
section 102(2)(c) of NEPA, into the planning and imple-
mentation process of federal agencies project development
changed many agencies' determinations. The Alaskan
Pipeline, Kennedy Library/Museum and several Corps of
Engineers projects are examples of initial agencies'
determinations being changed or completely abandoned due
to the environmental cost that became evident in the
preparation of an environmental impact statement.[34]

Opportunities for citizens to comment on proposed
actions increased as public hearings were held in con-
junction with the impact statements. Many states were also
enacting environmental legislation specifying the publics'
interest in the protection of air, water and other natural
resources. In Michigan, the "Thomas J. Anderson,

---

[34]Walter A. Rosenbaum, The Politics of Environ-
mental Concern, Second Edition (New York: Praeger Pub-
lishers, 1977), p. 121.

Gordon Rockwell environmental protection act of 1970"[35]

established the judicial review of administrative actions

necessary to insure the publics' interest in the environ-

ment. Agencies responsible for issuing permits were

forced to consider a wide variety of interests, which

later resulted in the establishment of advisory or review

boards and public review procedures.

Under the 1972 amendments to the Water Pollution

Control Act, public participation was to be accorded a

new significance. "Emphasis for public involvement was

placed at three levels: First, in the development of

statewide programs...; secondly, in the preparation of

basin and area-wide plans...; and thirdly, in the case-by-

case consideration of local projects and permit

applications."[36]

Make-up of Participation

The Planning Process

This study focuses on the public involvement aspects

in the preparation of an areawide plan. The basic aspects

of such an effort can be applied to the development of

statewide programs. The public involvement associated

with application and permit granting is a completely

---

[35]Sax, Defending the Environment: A Handbook for Citizen Action, p. 249.

[36]U.S., Environmental Protection Agency, Water Programs, "Public Participation in Water Pollution Control," p. 22756.

different situation. The general approach to public
involvement in permit granting is similar to a judicial
review with the opportunity for parties to ask questions
and state positions before the decision-making body.
The statewide and areawide programs, however, are a
planning effort and should follow the basic format of
plan development and implementation.

A planning program consists of several overlapping
phases that, when sequentially addressed, provides the
foundation for a continuing process. These phases have
been identified in various ways by several authors and
are, in principal, accepted by planners. Various planning
groups have a tendency to stress one phase more than
another due to their make-up and functional orientation.
Distinct labels have been attached to the phases and
these labels describe the planning activity that dominates
that particular phase. Considerable overlap from one
phase into the other often occurs since one effort does
not exclude the others and a return to the previous
phase may be necessary during the development of the plan.
The author has chosen a combination of previously
identified planning stages outlined by Borton,
Creighton, Warner and Bishop[37] which divide the planning

[37]See Thomas E. Borton, Katherine P. Warner, and J.
William Wenrich, The Susquehanna Communication-Participa-
tion Study, report submitted to the U. S. Army Engineer
Institute for Water Resources (Springfield, Virginia:
Clearinghouse for Federal Scientific and Technical Infor-
mation, December 1970), pp. 44-55; Synergy, Citizen

process into six generally sequential stages. As the planning process proceeds, the various stages are built upon each other.

The process begins with the identification of goals and objectives for the planning effort. After the goals and objectives have been determined and formed into an operational format, they provide a basis for gathering data which is the second stage of the process. Existing data as well as data derived from detailed studies specifically designed to provide data that was unavailable or incomplete, must be compiled and used to develop alternatives. Alternative development is the third stage of the planning process. The various alternatives should then be evaluated against themselves and considered for their contributions toward the goals and objectives specified in step one. After this evaluation is complete, a preliminary plan must be developed and considered as a total approach. Reaction to this preliminary plan is considered and a final plan is developed based upon the total program of work. The final plan preparation and its implementation is the sixth phase of the planning process. Figure 4 represents

Participation/Public Involvement Skills Workbook (Cupertino, California: Synergy Consultation Services, 1972), pp. 72-5; Katherine P. Warner, Public Participation in the Water Resources Planning Process, PB-204 245, report prepared for the National Water Commission (Springfield, Virginia: National Technical Information Service, July 1971), pp. 38-48; and Bishop, Public Participation in Water Resources Planning, pp. 21-5.

FIGURE 4

SIX STAGES OF THE PLANNING PROCESS

Identification of Goals and Objectives

Data Collection

Development of Alternatives

Evaluation of Alternatives

Preliminary Plan Development

Implementation
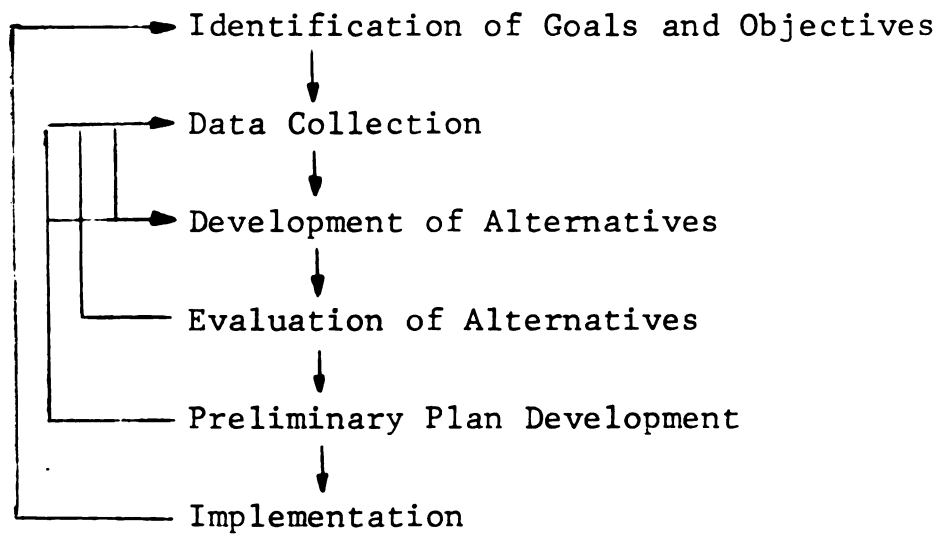
the sequence of stages that make-up the process and
demonstrates the cycling necessary to maintain a dynamic
approach to the planning effort.

Each of these stages contain specific opportunities
for public participation through a variety of techniques.
These opportunities and techniques will be discussed in
the next section. A more detailed description of each
stage is necessary to provide the framework for a
participation program.

Identification of
goals and objectives

The identification of goals and objectives could
also be called the issue definition stage since that is
the basic resultant of the efforts during this phase. The
agency must explore a wide range of issues related to the
general planning effort and clearly define those issues
which are related to the current effort. Since it is
people's values that are reflected in such identification,
these values must be transformed into an operational set
of objectives. This transformation must be accomplished
by integrating the participants' various desires into areas
and by choosing between expressed desires that conflict
or are not related to one another.

The choice between various inputs can only be
legitimized if the participants take an active role in
the decision-making. Agency credibility would be
jeopardized if such a step excluded active participant

exchange. The opportunity to adjust initial statements when new information or problems are identified is one way of focusing a number of desires into one objective area. As participants receive additional information their desires can often be more specific and relate directly to the identified problem or goal. Agency personnel should encourage the participants to consider the future implications of their goals and objectives. In this way, the relationships between various objectives and future development can be discussed. Once the goals and objectives are developed, the agency can begin to collect information necessary to understand the specifics of the problem and formulate alternative solutions.

Data collection

Data collection must be accomplished for the physical resource base, the social system and the economic factors which influence interaction between them. Contributions during this phase come from a wide variety of sources. Technical specialists can provide specific information on resource use and distribution. Citizens can provide additional information on local problems or the historical development of local activities. Some data will only be available through further studies and specific investigations must be undertaken to obtain such information. As information is compiled, the public should be informed and provided an opportunity to react. Such a

reaction might identify the need for further study. By interacting with the public and established contacts, the agency can verify the assembled data and reinforce its initial contacts. This phase of planning often becomes invisible, if it is not identified. Participants can also lose track of activities and may often lose the interest that was initially generated in the goal identification phase.

Development of alternatives

As the initial data collection phase is ending, the information must then be organized into a format that can be used to develop alternatives. The concerns expressed, the attitudes sampled and various data compiled will guide the alternative development phase. Agency personnel must consider a wide variety of alternatives. Ideas generated by the participants, that by agency standards would seem unreasonable, must be included into at least the first draft of any alternatives. The scope of alternatives must remain broad so that the public can react without having to support or reject a specific idea or proposal. It is at this point in the process that the social, environmental, political and economic effects of various alternatives should begin to play a role. The public can then provide information regarding constraints, implications and priorities of various alternatives. Some adjustment or modification in alternatives at this point

will encourage the public's participation and help insure
confidence in the next phases of plan development.

Evaluation of alternatives

      Evaluation of the various alternatives implies
some form of judgemental activity. In this phase the
various alternatives must be examined and integrated into
other decision variables. Each alternative must be
subjected to a review using some form of empirical
guidelines and philosophical framework. The public must
understand the basis for evaluation and have the opportu-
nity for input as to the reasonability and feasibility of
various alternatives. Information on how the alternatives
were derived must be provided. Some type of quantitative
displays for similar alternatives will help people to
establish their preferences and articulate concerns.
Patterns of people's preferences may help the agency
foresee conflicts in plan development. An accurate record
of such inputs should be made, noting the intensities of
these inputs for future reference. It is the agency's role
to facilitate mutually satisfactory conclusions.

      Trade-offs between various alternatives will estab-
lish a level of agreement among participants. Traditional
methods of evaluation should be included in this phase.
Benefit-cost and least-cost analysis of the alternatives
will provide inputs for evaluation but must not outweigh
the other methods of evaluation. The alternatives must

be considered for their impact and integration into
the existing local, regional and national environment.
Additional input on various alternatives may be required
to continue the evaluation. Some cycling to the data
collection phase can provide the needed information and
demonstrate the agency's commitment to make the best
choices. The philosophy that better information leads to
better decisions may not always be true. Participants
will, however, feel that the decision was based upon accu-
rate input rather than the agency's subjective interpreta-
tion. As the agency forms the alternatives into a package,
the preliminary plan begins to develop.

Preliminary plan development

As the agency staff consolidates the alternatives
and develops the preliminary plan, a considerable amount
of thought needs to be given to the form in which specific
alternatives are to be presented. The complex technical
and social considerations identified through the previous
stages form the basis upon which the preliminary plan is
developed. Consensus-formulation through trade-offs must
be made to establish the greatest possible common agree-
ment. While the agency and established committees will
ultimately select the alternatives to incorporate into the
preliminary plan, they must maintain a degree of flexibil-
ity. Certain new participants will inevitably want some
input into the process. This group of participants are

characterized by their reactive nature. While they were
not interested in the early stages they now feel affected
by the plan and desire an input to the planning effort.
The agency must look upon these groups as resources and
not as hindrances to the plan. Through education and
information programs, these participants can be brought up
to date and can begin to contribute positively to the plan.

After the alternatives have been incorporated into
a package, the public should be addressed and feedback on
the total preliminary plan obtained. Interaction with
various publics will facilitate a thorough review.
Attempts to have discussion among the various interests
will promote acceptance of the various program elements.
The preliminary plan represents the total of the planning
effort to date. Reaction by the public to elements of the
plan shall be considered and evaluated with the data and
information collected previously. New information, how-
ever, may point out considerations previously overlooked.
These considerations might call for further study. The
agency must maintain an open attitude during this phase of
the process and respond to inquiries in a positive,
interactive fashion. After a period of feedback, the
agency with the help of a small group of participants can
move into the sixth planning phase, that of final plan
preparation and implementation. Although final plan
preparation and implementation are addressed in this final
stage, the implementation process is open-ended and must

be addressed as a continuing process. The focus in the
final plan preparation should be on the issues and the
structured response mechanisms to address them. Through a
review and specification of the planning goals and objec-
tives, the agency can demonstrate how the plan will attain
the desired results. Impacts of the final plan must be
addressed in this final stage and the required public
meetings held. These meetings are more formal than those
earlier in the process but they still provide an opportun-
ity for the public to be involved. The agency should
develop a justification for the elements included in the
final plan.

Implementation

Implementation, or as it is often called, adoption,
of the plan involves its integration into the existing
social, political and economic systems. The agency can
facilitate implementation by working with those groups
that will be involved in following through on the plan's
recommendations. These groups should be identified and
consulted earlier in the planning process and brought along
with the plan development. Implementing agencies will
accept their roles more readily if they were involved in
the formulation of their roles.

Questions regarding the plan's implementation will
surface as the details of _inter_-agency and _intra_-agency
interactions develop. The planning agency staff and

citizen participants must act as facilitators. As questions arise about content of or responsibilities under the plan, these facilitators can bring those parties involved together. In doing so, they work toward a decision that will be consistant with the plan and will be satisfactory to all those involved. While this is an over-simplification of the implementation process it does address the most important role of the agency as a facilitator and information source during this stage.

Types of Participation

Types of participation or non-participation in planning range from citizen manipulation by an agency to citizen control of the agency and planning process. A typology offered by Arnstein in her article "A Ladder of Citizen Participation," displayed in Figure 5, suggests that participation be equated to the degree of power a citizen has in the planning process. Arnstein looks at power as the ability for citizens to determine how the planning process will be carried out and who will make the decisions. While her approach is aimed specifically at publics that are "powerless" and their need for movement up the "Ladder of Participation," it also serves as a guide to agency personnel in developing participation programs.[38]

---

[38]Sherry R. Arnstein, "A Ladder of Citizen Participation," AIP Journal 35(4) (July 1969):216-24.

FIGURE 5

A LADDER OF CITIZEN PARTICIPATION

| CITIZEN CONTROL |
| DELEGATED POWER | Degrees of Citizen Power
| PARTNERSHIP |
| PLACATION |
| CONSULATION | Degrees of Tokenism
| INFORMING |
| THERAPY | Nonparticipation
| MANIPULATION |
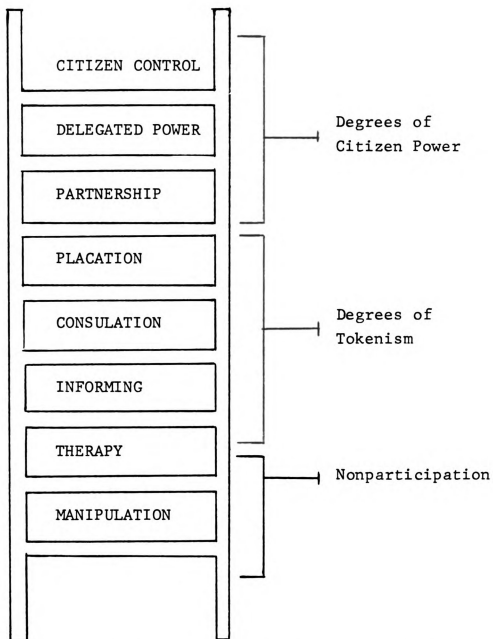
SOURCE: Sherry R. Arnstein," A Ladder of Citizen Participation." *AIP Journal* 35(4)(July1969):217, figure 2.

This eight-rung ladder is a simplification of the real-world situation citizens are faced with. The gradations of citizen input are affected by many factors in the planning process. One of the most influential factors is how the agency establishes the change relationship necessary in the planning process.

The planner-client relationship, clients being citizens, community and interest groups, community officials and their staffs, established by the agency is often referred to as the planning strategy. Strategy as defined by Bishop "is a procedure, established in advance, which determines how, when, and to what depth various parties will participate in the planning evaluation, and decisions."[39] In establishing a strategy the emphasis must be placed on broadening the interests involved, not restricting them to established groups. The seven planning strategies that follow are adapted from various planning experiences and studies by Bolan, Bishop, Creighton and others.[40]

---

[39]Bishop, Participation in Water Resources Planning, p. 36.

[40]Richard S. Bolan, "Emerging Views of Planning," Journal of the American Institute of Planners 33(4) (July 1967):237-40; Bishop, Public Participation in Water Resources Planning, pp. 36-43; and Synergy, Citizen Participation/Public Involvement Skills Workbook, pp. 105-8.

1. Information Processing (Figure 6a)

The planner controls the flow of information and conducts
the study. By developing alternatives and information
regarding their evaluation, the planner controls the
entire planning effort. One-way communication and the
reporting of work performed, typifies this strategy.

2. Information with Feedback (Figure 6b)

This strategy is a modification of the information ap-
proach. By incorporating a feedback mechanism into the
planning process, the planner obtains data from the client
groups. The planner is ultimately in control of goal,
need identification and plan development. Feedback may
or may not influence the plan's development. The feedback,
however, may contribute to the development of a wider
variety of acceptable alternatives. Feedback loops require
additional time to complete but will ultimately shorten
the implementation phase by resolving potential conflicts.

3. Coordinator (Figure 6c)

As coordinator, the agency seeks out clients that are
important to the plan's development. The agency assesses
client objectives then uses these assessments to evaluate
agency generated alternatives. Several different alterna-
tives may be presented to the various clients. The agency
controls the information and communications. Interaction
among the clients is not encouraged and provides the
agency with the structure to completely control the
process. Feedback is received by the agency from

FIGURE 6

STRUCTURES FOR PUBLIC PARTICIPATION IN PLANNING

FIGURE 6a Information Processing
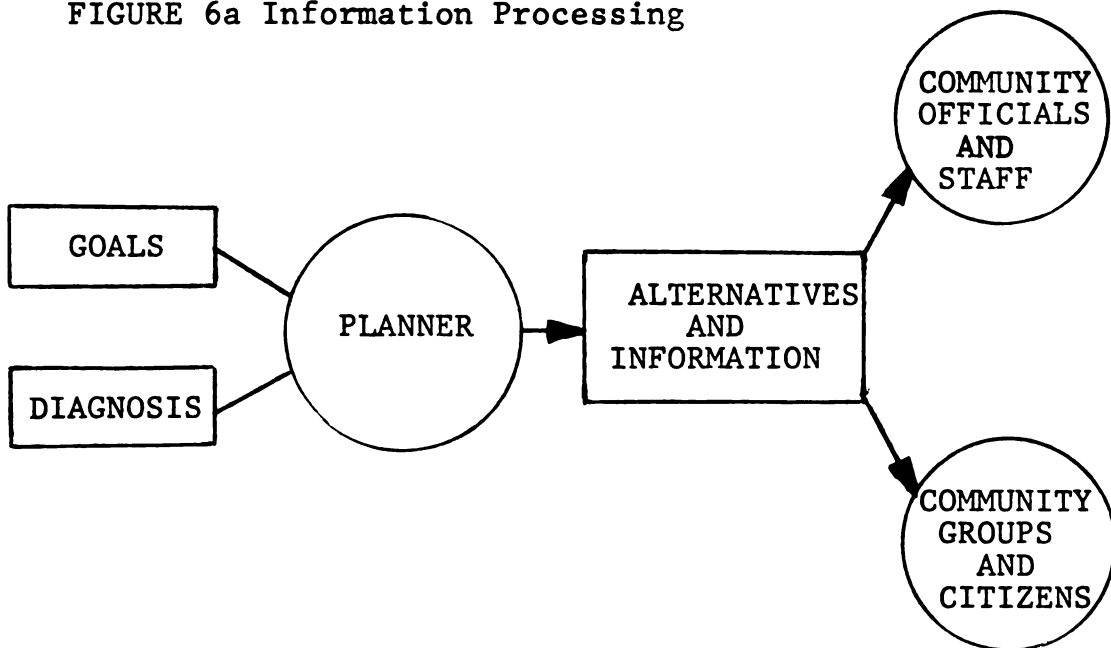
FIGURE 6b Information with Feedback
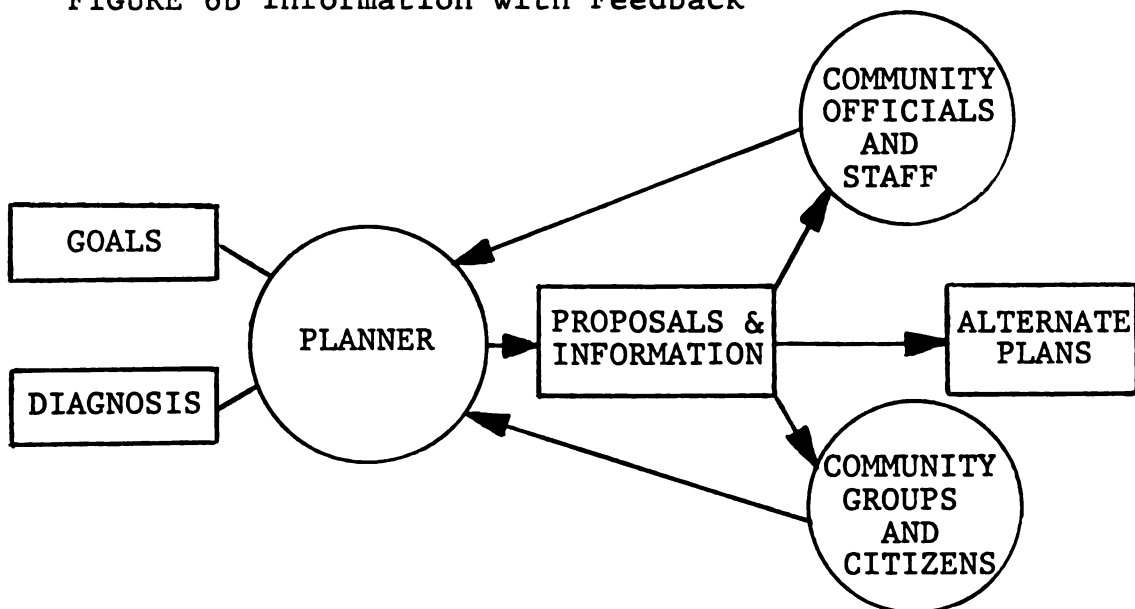
individual clients but may not be incorporated into the planning process. The agency has a role, as coordinator, to educate the client groups and provide them with information so they can articulate their objectives and feelings toward the plan's development.

4. Coordinator-Catalyst (Figure 6d)

Client interaction is recognized in this strategy. Agency expertise is offered to the clients to facilitate their understanding and input. The agency is in the position of promoting participation in the activities formerly limited to staff. Technical and methodological assistants are used to encourage client involvement. The agency acts as a facilitator between the clients as they interact and confront one another regarding the plan development.

5. Advocacy Planning (Figure 6e)

Advocacy strategy is similar to the coordinator-catalyst strategy. Client groups develop an understanding of their needs and objectives through discussion. The clients then present their desires to an advocate ombudsman who in turn presents it to the agency. The advocate continues to work with the agency to develop the plan and communicates with clients keeping them informed as to the plan's progress.

6. Arbitrative Planning (Figure 6f)

This strategy utilizes an independent hearing officer that is not affiliated with the community or the agency. Independent of the clients and the agency, the arbitrator acts

44

FIGURE 6c Coordinator
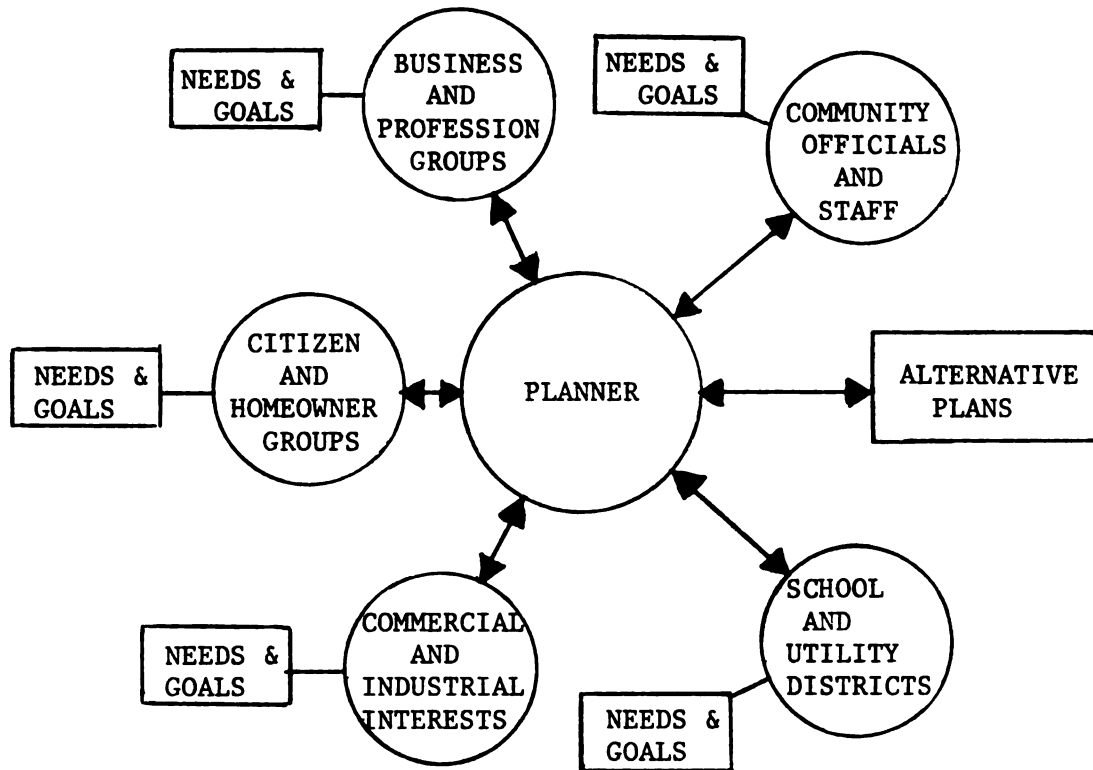
FIGURE 6d Coordinator Catalyst
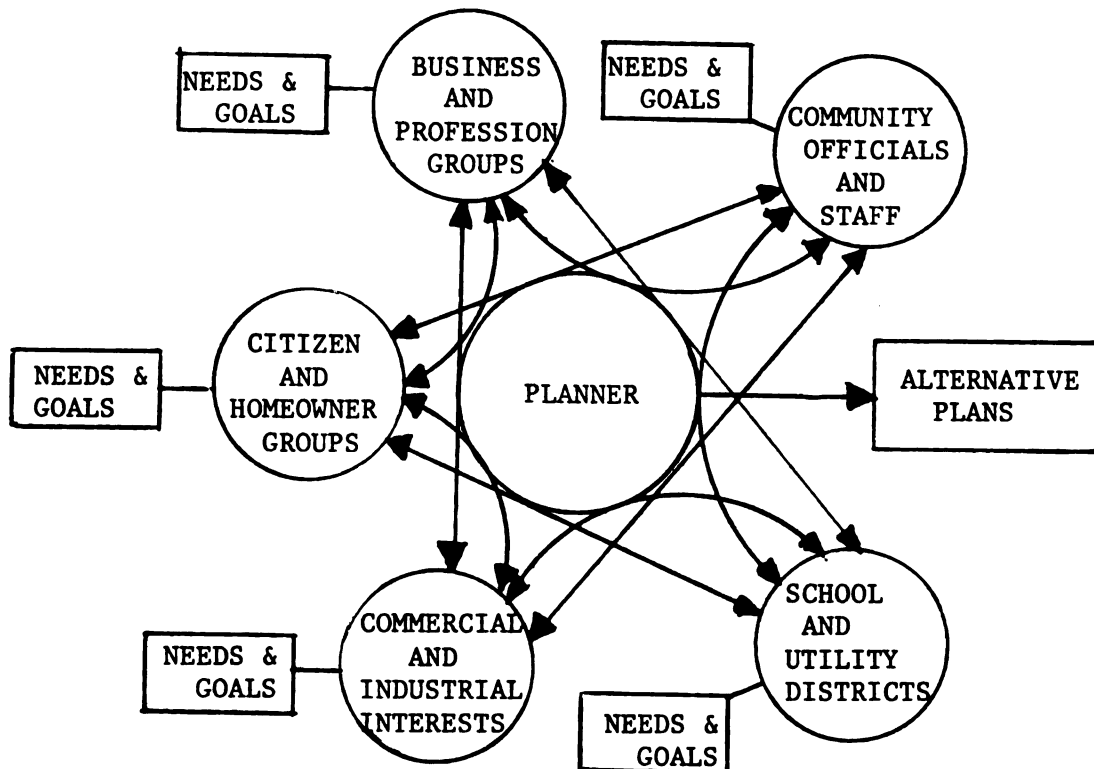
FIGURE 6e Advocacy Planning
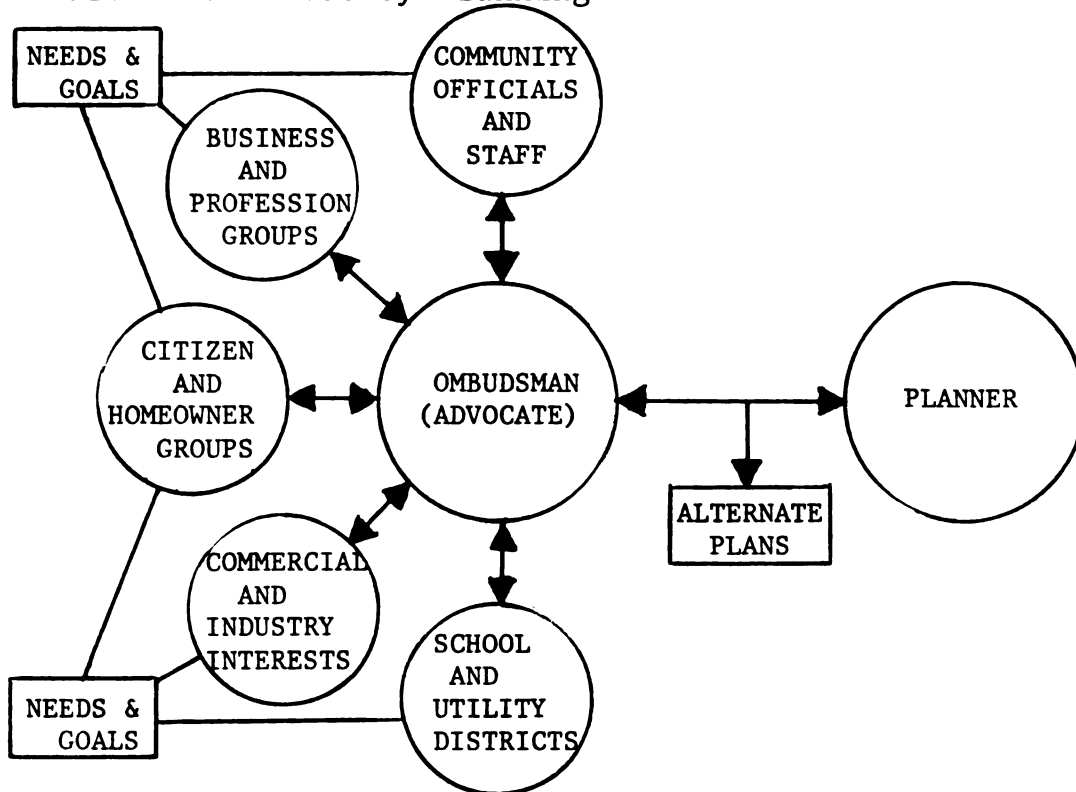
FIGURE 6f Arbitrative Planning
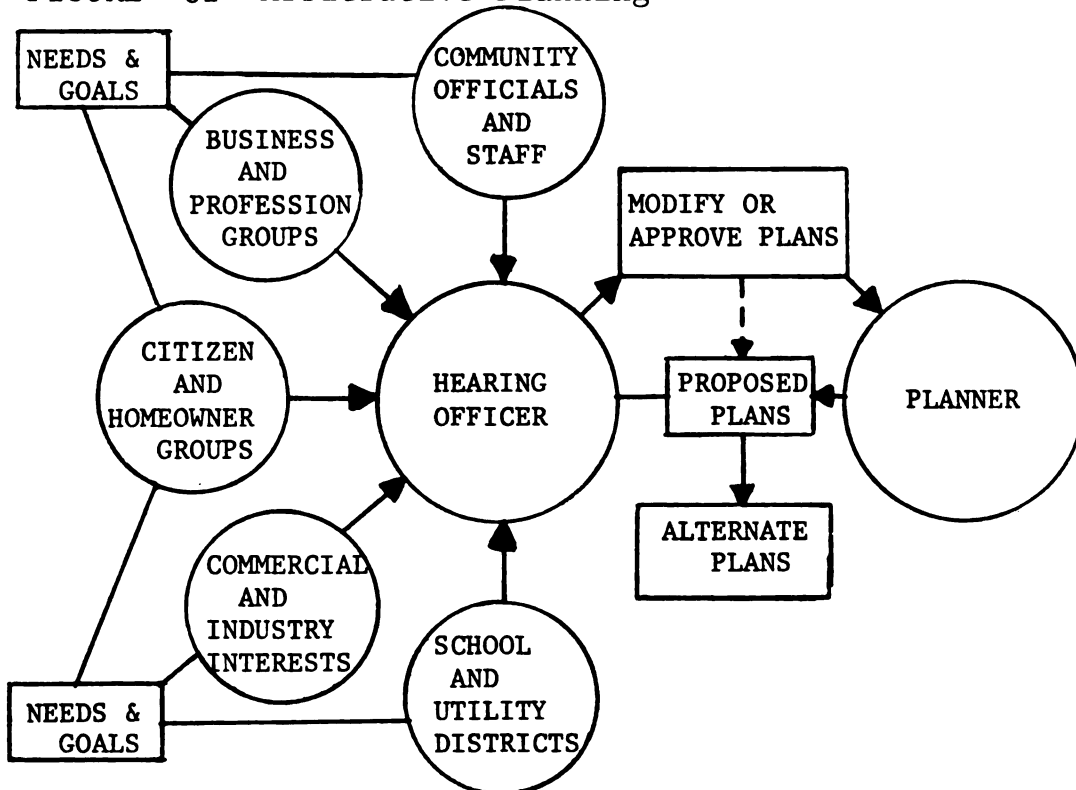
as the primary receiver in a three-step communications
process. The arbitrator is in a position to control
information received from various client groups and the
agency. By negotiating differences between client groups
and forwarding recommendations to the agency the arbitrator
exercises some degree of control in the planning process.
The arbitrator's role is to only communicate responses to
the agency's proposals and therefore the arbitrator is
active at specific periods in the planning process. These
periods would be during the initiation of the study, when
alternatives are being developed, during the time the
alternatives are being formulated into a plan and finally,
when the final plan is adopted. A disadvantage to this
type of sporadic contact is that it leads to gaps in
understanding among the client groups.

7. Plural Planning (Figure 6g)

Plural planning, as its name implies, is a strategy that
allows each client interest to independently develop alter-
natives and submit a plan. The agency would reconcile
conflicts between various client interests, alternatives,
and plans. Agency personnel would consolidate the various
plans and augment the final plan in areas not addressed by
the client groups. However, it is not realistic to assume
each client group would have the expertise necessary to
develop a plan. The basic idea that each group would
address their own needs and develop methods for dealing
with them is significant. Another form of plural planning

47

FIGURE 6g

Plural Planning

might develop by which client groups proposed alternatives that addressed their specific interests and then relied on the agency to develop the actual plan. The major difficulty in using this strategy is to coordinate the client groups and alternatives they developed. If the clients do not base their decisions on a common data base the agency may find the alternatives completely unacceptable. While plural planning does involve the various client groups, the uncertainty of the final product limits its application to comprehensive planning.

Each of these seven strategies has some short-coming or negative feature. No one strategy can fulfill the needs of every planning effort. Combinations of the various strategies will produce a program tailored to the agency-client relationship and level of interaction necessary to develop acceptable plans. All of these strategies are a means to persuade client groups that the planning agency can benefit them in their decision processes. A plan no matter how well thought through is of no value if not incorporated into the decision-makers' considerations.

Functional Orientations of Participation

Influence upon the decision-making authority through public participation can be characterized into three main functional orientations. Warner identifies these primary functional orientations in order to classify agency-public

interaction during planning efforts.[41] These orientations are of an informational or educational, review or reactive and an interactive or dialogue nature and center on the means by which publics can influence the planning and decision-making process.

Information or education

The informational or educational emphasis focuses on a one-way flow of information. This information is developed by the agency or the public and is transmitted to the other. The intent in providing such information is to modify the recipient's orientation or activities. It is through such efforts that agencies establish themselves as a source of information and assistance to the planning effort. Most governmental agencies by their very nature have assumed this emphasis and refer to it as public education or public relations. While this approach has been used successfully in many agencies, some look upon it as a burden and contribute very little budget or staff time toward implementing such programs.

The agency is not the only generator of information in this emphasis. The general appeals heard from today's environmental awareness groups for action on environmental degradation, utilize the informational emphasis. Their audience is both the general public and elected

---

[41]Warner, Public Participation in the Water Resources Planning Process, p. 20.

decision-makers that could influence development and administration of legislation effecting the environment.

Review or reaction

Citizen review or reaction is the second emphasis type. Public participation activities focus on a one-way communication process. The flow of information is from the public to the agency and is of a reactive nature. Agency proposals or plans, received through some form of public exposure, (i.e., a public hearing or a formal announcement), provide the basis for communication and stimulate this type of involvement. The public review function has become common in most agencies. Legislation such as the National Environmental Protection Act and other state environmental acts dictate the specific requirements for public review. These requirements usually involve notification of public interests, a prescribed method of presentation and documentation of input from those participating. This emphasis has traditionally occurred at the end of a planning process. An expanded program along these lines might involve the public at numerous times in the planning process prior to the final plan presentation. By using this approach the agency could reduce the potential for conflicts in the final plan. This emphasis will however, leave the agency with an undesirable public image in the long run. Other participation emphases must be used to supplement the reactive form if a long term interaction is necessary.

Dialogue or interaction

The third emphasis is highlighted by a more frequent dialogue or interaction between the public and the agency through a structured program. The range of the public's role in this emphasis can range from an advisory or consultative role to that of decision-maker. Citizen advisory committees have been an example of interaction activity. A continuous two-way flow of communications must be maintained in these efforts if the public and planner are to develop programs and plans that are acceptable to all those involved. Direct communication between the planners and public are pursued throughout the planning process. Workshops, citizen-task forces and public meetings are typical public involvement techniques utilized in the interactive emphasis. These techniques have become more predominant as agencies try to develop ties with diverse and often unrepresented interests in the population.

Agency participation programs should contain all three emphases throughout the planning process. One emphasis does not detract from another, in fact, they actually compliment each other. Most public participation mechanisms consist of more than one emphasis. Informational and dialogue, for example, might describe a workshop technique. The agency must be aware of how the public views various techniques. To meet the needs of diverse groups and interests, the agency must offer a

variety of participation opportunities to the
public.

Goals and Objectives of Public
Participation Programs

"The success of a water quality plan or any plan
depends on its acceptance by the public and in particular,
effected units of local government."[42] While this state-
ment is true and few agencies involved in planning would
dispute this basic tenent, a great diversity in opinion
exists when specific goals or mechanisms are suggested.
Goals vary with the level of agency responsibility. At
each level of responsibility participants are guided by
their perceptions and vested interests. Support for
continued planning may depend on how the agency presents
its case to the higher levels of authority.

The levels involved in the development of areawide
208 plans are: areawide agencies, state water quality
agencies, the Environmental Protection Agency, and the
United States Congress. The chain of authority has led
to complications in the development of 208 plans. The en-
tire effort began with the passage of the 1972 amendments
to the Water Pollution Control Act and its requirement

---

[42]U.S., Environmental Protection Agency, Guidelines
for State and Areawide Water Quality Management Program
Development (Washington, D.C.: November 1976), part 4,
p.1.

for public participation under section 101(e). Section
101(e) directed the Administrator of the Environmental
Protection Agency in cooperation with the states to
develop and publish regulations specifying minimum
guidelines for public participation in the actions
covered by the Act.[43] In discussing what section 101(e)
was to accomplish, Representative Dingell stated on
October 4, 1972, during hearings on the bill: "In short,
the bill requires that its provisions be administered and
enforced in a fishbowl-like atmosphere."[44]

The language in section 101(e) was very specific
and related to any action undertaken under the Act. While
the specific interest under this section was to be articu-
lated by EPA, the Congressional goal for the entire
legislature was the improvement of water quality. Specific
requirements and levels for water quality standards were
called for under the Act. Programs to insure their imple-
mentation were also specified in the Act. The inclusion
of section 101(e) was in recognition of the increasing
environmental interest on the part of the public and by
federal agencies involved in planning. This recognition

[43]U.S., Congress, Federal Water Pollution Control
Act Amendments of 1972, pp. 816-903.

[44]U.S., Congress, Senate, Committee on Public
Works, A Legislative History of the Water Pollution
Control Act Amendments of 1972, vols. 1 and 2, 93rd Cong.,
1st sess., (Washington, D.C.: Government Printing Office,
1973), p. 249.

was highlighted in a report to the President by the National Water Commission.[45] They stated that by encouraging the public to participate in the development of water quality plans they will be more supportive of the final planning outcomes. The Congress made public participation an integral part of the effort to improve water quality. This was a new direction for the Congress in regards to water management and it was to become the most intensive program of comprehensive water management ever attempted. In summary, the Congressional goal was to improve the nation's water quality while pursuing a policy of public participation.

The Environmental Protection Agency (EPA), as the administrator of the Act, was responsible for developing guidelines under which the Act could be implemented. The EPA was also directed under the Act to assist and evaluate the states in developing and implementing the regional programs. In its short history, the EPA had developed a profile of action that established them as the watch-dogs of the nation's environment. Their administration of 92-500 was to follow this same philosophy. By controlling the funding appropriated through the Act, the agency established their command of the entire effort. Through the EPA regional officer, states were assigned program

---

[45]U.S., National Water Commission, Water Policies for the Future (Washington, D.C.: Government Printing Office, 1973), p. 372.

officers to directly oversee program development. Their initial efforts to describe the procedures designated agencies should use in fulfilling the participation requirements were typically of a check-list form emphasizing the minimum requirements. This type of communication style continued to dominate the information issued by EPA. In late 1976 and early 1977 EPA - Washington and several of the regional offices began to talk about public participation as a tool rather than a requirement. This new emphasis was articulated in the Proposed Guidelines for Public Participation in Region V, dated February 8, 1977. "The major goal of public involvement is an implementable plan."[46]

Although this approach to public participation was reflecting the spirit of section 101(e) of the Water Pollution Control Act Amendments of 1972, it came too late for the designated agencies to incorporate into their programs. This type of experience was to be repeated several times regarding various aspects of the 208 Water Quality Management Plans. EPA's goal was to administer the Act to the best of their ability with the resources available. Guidance throughout the process, as one designated agency staff person put it, "was always too little too late."[47]

[46]U.S., Environmental Protection Agency, Proposed Guidelines for Public Participation in Region V (Chicago: 8 February 1977), p. 1.

[47]Interview with Karna Hanna, Associate Planner, Public Participation Officer, Tri-County Regional Planning Commission staff member, Lansing, Michigan, 11 May 1978.

The states were the third level of responsibility in the 208 programs. In Michigan, however, the state was hesitant to become involved in the process and in February of 1973 the governor transferred the planning authority to designated regions within the state.

The state of Michigan through the Department of Natural Resources adopted a "wait and see" posture toward the 208 planning program. A few states rejected the concept altogether and began the process only after court action mandated them to do so.[48] The state government agreed to assist the regions in developing their 208 plans. The Department of Natural Resources, specifically, the division of Water Management and Environmental Protection, was to consult with the regions and were under agreement to do so. The regions were to reimburse the state for consultation time that was provided by DNR staff. This caused a further split in the line of authority. The ultimate control of water quality through enforcement remained with the state government and the responsibility to develop the 208 plans was passed on to the regions. This split caused the regions considerable difficulty once the plans started to be developed. Individually, each region had to establish contacts and information about water quality standards or effluent limitations. Municipal waste water treatment grants, commonly known as

---

[48]Elaine Moss, ed., Land Use Controls in the United States (New York: The Dial Press/James Wade, 1977), p. 74.

201 grants under 92-500, were processed through the DNR and led to confusion among the public. While the 201 and 208 programs were to be coordinated the administrative structure did not exist. In some areas, meetings held by the state for 201 plans were confused with 208 planning meetings and vice versa. Funds appropriated to the EPA Regional Offices had to be committed or returned each fiscal year. The idea was to get approval on as many projects as possible. While each project contributed to improved water quality, the state lacked an overall planning process. The state's goal was to facilitate the 201 funding program to the best of their ability and contribute to the 208 plans upon request of the regions.

Communications between the regions and the state did not support the planning effort. The regions began to bypass the state and interact directly with Region V EPA. Information obtained from such interaction was seldom returned to the state by EPA. By using their lines of direct communications to EPA the regions began to pressure the state to take a more active role. Regional planning agencies were expanding their areas of influence under the 208 planning program. Staff and funding support to the regions was essential. Those agencies funded in 1975 received a larger allocation than those funded in 1976. The region reviewed in this study was a 1975 funded program. Funding for the regional agencies comes from the participating units of government and special

projects. TCRPC's major emphasis therefore was in facilitating relations between participating units of government on a regional basis. This dependency upon the governmental units made the agency vulnerable. During the plan's development, the agency was put under such a stress in October of 1975. Several governmental units threatened to withdraw their support of the agency for a variety of reasons. While the 208 program was not specifically the focus of these actions its progress was affected. A portion of the project coordinator's time was channeled into an effort to stabilize the governmental membership. This meant that the 208 project manpower was decreased. Shifts in staff responsibility followed. The public participation coordinator became responsible for the land-use study and additional duties. While this might have been an administratively efficient use of available manpower at the time its impact on the entire effort was to be of a negative nature. The public participation coordinator found it very difficult to evaluate or brainstorm the program effort with other staff members. There were immediate tasks to be done and evaluation could wait until the tasks were completed. This philosophy was followed throughout the planning effort and is charcteristic of the methods used by the agency. The goal of the agency was to complete the plan. At the onset, this meant completing the tasks of the work plan. In the later stages, the emphasis shifted to the

implementability of the plan and its acceptability to the involved units of government. Funding for continued planning was to be approved upon the plan's implementation. The TCRPC wanted to maintain their involvement and staff levels so they made a last minute appeal to the units of government for support. The agency stressed the idea that this plan was an initial attempt and that changes could be made in it during plan updates. The agency once again shifted the resolution of conflict to some future date in an effort to promote its more immediate needs.

Agencies at each level, mentioned in this discussion, had their own goals and developed programs in order to meet them. The efforts of the various agencies might have been better coordinated if the time frames under which they were operating had been modified.

Levels of Participation

Public participation programs can also be viewed at different levels. The ultimate goal of a participation program must be reflected in a successful planning effort. To be a successful effort the plan must address the needs of the community, improve existing conditions and be implementable with available resources. Publics are involved in the planning program with the intent to develop better plans. If an agency develops and pursues a public participation program merely to satisfy a legal requirement, its outcome will contribute very little or

possibly detract from the desired goal of a better plan.
Only after the agency has identified and accepted this
overall objective of the participation program can the
second level of objectives, those of the individual
techniques, be specified. While each technique addresses
a different public or functions in a different way, the
objective is ultimately to contribute to the overall
effort. It is a mix and balance of the various techniques
that will ensure a productive program. These techniques
are usually identified in the literature by two methods.
First by the type of communication involved and secondly,
by the group at which it is aimed. One-way versus two-way
communication is the first breakdown and the idea of target
groups is an example of the second breakdown. While each
technique could be applied in a variety of ways, Table 1
depicts how some of the more common techniques are used in
this framework. However, if the agency does not select
techniques with specific objectives in mind they are likely
to overlook some that have potential. It is at this stage
of public participation that the current body of knowledge
and literature provides little assistance in the develop-
ment of participation programs. Most public participation
program literature addresses the structure of activities
and assumes that the objectives are obviously inherent.

61

TABLE 1

TECHNIQUE IDENTIFICATION

COMMUNICATION TYPE

TARGET GROUP	ONE WAY	TWO WAY
Government Officials	Progress Reports	Workshops
Local Contractor	Newsletters	Seminars
Environmental Interests	Legal Notices	Committee Memberships
Industrial Interests	Brochures	Advisory Councils
Agricultural Concerns	Special Mailings	Task Force
Labor Unions	Displays	Group Presentations
Educational Interests	Project Reports	Discussion Group
Neighborhood Associations	Posters & Bulletins	Interviews

Public Participation
Objectives

This study has identified eight objectives that should be used in developing and evaluating programs. Many of these objectives, often labeled as goals, can be found in the EPA and other guidelines for public participation. Goals tend to identify end products. The objectives stated below are not end products. They are factors that, when considered and incorporated into the planning process, will improve the entire effort.

The following objectives of public participation techniques are not analytical in nature, rather they are subjective and therefore do not lend themselves to any type of quantitative review. Numbers can be used to indicate people contacted, interviewed, number of meetings attended, committee involvement or meetings held and articles written in local newspapers. While these numbers can be displayed, little information on actual participation can be extracted from such data. It is only through an internal or external review of the participation program using objectives, like those that follow, that any type of descriptive information regarding the program's effectiveness will be obtained.

PUBLIC PARTICIPATION PROGRAM OBJECTIVES

1. to establish mechanisms for conflict resolution
2. to be an "active" versus "passive" effort
3. to address a diverse group of people

4. to facilitate two-way communication

5. to develop channels for public input

6. to assist the public in articulating their desires and needs

7. to inform and educate the public as to needs for the planning

8. to assist planners in testing and evaluating alternatives.

The objectives listed above can not be met by any single technique and should not be considered as a checklist for the agency to follow. These objectives should be used to develop a program for participation and as a guide for the agency to review its participation programming efforts. Through such a review, the agency can determine if their program is having the desired effect. If the program is inadequate this review will highlight the areas that should be reinforced. Such an evaluation on the part of the agency is essential. The entire planning effort should include some type of review process and mechanism for altering the public participation program. Further explanation and specification of these eight objectives are necessary before they can be applied to any specific program. The following section will address each of the eight objectives, individually, by specifying their role in the public participation program and their contribution to the planning effort.

Conflict resolution

Conflict resolution should not be considered as a win-lose situation. The majority of issues normally considered in a planning effort, are to some extent controversial because individuals and groups support various viewpoints. The very fact that their viewpoints are articulated to one another and the agency, allows conflict resolution to begin. Public and private viewpoints will differ according to subject. Allied groups may become adversaries as the process proceeds. The agency must seek out such subjects and gather input regarding them. While the agency seeks such information, they should not promote any one stance. After the issue has been articulated the agency can then begin to specify the conflict and implement some form of decision-making mechanism. This conflict resolution should occur throughout the planning process. As the planning stages proceed preferences will develop that can be carried into the next stage. The issues should be contained within a perspective and not be generalized to include the entire planning effort. It is the responsibility of the agency to determine what issues must be settled before proceeding and how such a decision will be made. The agency must, however, articulate this information to the public and be responsive to input regarding it. If decisions are made without public knowledge or input the agency will lose credibility and the cooperation of interested groups. The

process of conflict resolution must be well planned and
implemented firmly by the agency. If a few of the groups
control the process those without control will be sup-
pressed and may withdraw their participation. Constant
agency involvement and support will facilitate the
conflict resolution atmosphere necessary in the planning
process.

Active versus passive
programming

The agency's involvement leads into the second
objective of promoting an active versus passive participa-
tion program. The agency staff must be aggressive and
committed to the goal of involving the public in the
planning process. While such involvement may and commonly
does lead to new conflict such disagreements are better
dealt with during the plan's development rather than in
its implementation. It is the agency's responsibility
to seek out groups and individuals that are directly
involved or potentially affected by the planning process
and resulting program in order to keep them informed and
stimulate their desire to participate. While the agency
cannot force anyone to participate they can encourage
such participation by providing a variety of channels and
opportunities throughout the process. Such an active pro-
gram must begin with the identification of affected
interests. While this initial identification process will
identify a number of contacts, the agency should continue

to recruit others as they are identified. One difficulty in such recruiting is the discrepancy in information which exists between those involved in the process from the beginning and those entering it in the later stages. This discrepancy can be overcome with an education/information program and encouragement from staff members and participants that were previously active. The agency can reinforce participant identity with the planning effort by encouraging them to recruit new participants.

Identification of interests

Identification of interested groups and individuals should not be limited to traditional publics. Diverse interests will help ensure a more comprehensive program. Some interests will naturally be identified with certain projects. The agency will have to be imaginative in their efforts to address diverse interests. Typically, agencies have an established clientele and find it difficult to expand their interaction.[49] The representation of specific groups also becomes a question.[50] The agency must evaluate the input and determine how it will be

------

[49]See William R. Burch, Jr., "Who Participates: A Sociological Interpretation of Natural Resource Decisions," Natural Resources Journal 16(1) (January 1976):46-9; and Warner, Public Participation in the Water Resources Planning Process, p. 161.

[50]Warner, Public Participation in the Water Resources Planning Process, p. 25.

utilized.[51] As with any collection of people, a single representative may not articulate the interests of those represented when the entire range of issues is considered.

Two-way communications

Two-way communications with all participants is another objective in developing a public participation program. The assumption is often made that this objective is a natural function in participation, however, it may not occur without a concerted effort on the part of the agency. The dissemination of information can become the overriding force in a communication effort. If atten-tion is not paid to the avenues of feedback from such dissemination little public input will be generated. Timing, content and channels for communications should be carefully considered and implemented to provide the best possible link with the public.

Channels for public input

Providing channels for public input is the fifth objective. This objective is linked to the communication process through public feedback. As information is returned or directed to the agency, a framework for incor-porating it into the process must be utilized. If each piece of input is handled independently, a bias may develop on the part of the staff and some information

[51]Harvey Frauenglass, "Environmental Policy: Public Participation and the Open Information System." Natural Resources Journal 2 (July 1971): 495-6.

may be disregarded. While such a bias may not be evident
to the staff it could affect the program's content. This
objective should also be applied to the public involvement
mechanisms. Various techniques are currently used to
accomplish this objective and will be discussed in the next
section of this study. While some of these techniques
require specific talents and resources not normally avail-
able to most agencies, other techniques can be implemented
utilizing the existing resources found in many organiza-
tions.

Articulation of desires
and needs

Once the channels of communication and input are
established the agency must assist the public in articu-
lating their desires and needs. If input is derived in
an atmosphere of understanding, the output will be more
representative of the problems at hand. The publics'
needs are often assumed by the agency. A reinforcement
and specification of such desires with specific reference
to the planning effort will establish a trust between the
agency and participants. This relationship must be main-
tained through the planning process. If uncertainty
develops, the agency should pursue the question to the
mutual satisfaction of all those involved. If the planning
process is pursued without establishing the desires of
those for whom the plan is being developed the final
outcome will not accomplish the desired effect. While not

all desires and needs can be met in a single effort,
the agency must be cognizant of such interests and
address them in the plan.

Educational programming

The agency must also address the educational needs
of the public. This objective encompasses the entire
effort and is particularly important because much of the
information is of a technical nature. Alternatives are
often complex and difficult to communicate to lay groups.
Technical language and data should be in a form that
the public can understand and utilize in their discussions.
As the publics' understanding of the problem develops, the
agency is in a position to reinforce the need for the
planning effort. While some might believe that such
reinforcement is only a promotion of agency interests, it
is a necessary function during the planning process.

Alternative evaluation

The public participation program should also func-
tion as a mechanism for the agency to test and evaluate
alternatives. By using the participants in this manner,
the agency will be able to obtain an indicator of public
reaction. Such reaction can then be used to consider
modification of the planning process or the plan itself.
Testing of alternatives is an important function during
the planning process, an understanding of the publics'
perceptions of the plan can be evaluated. Appropriate

changes in presentation could then be made before the plan goes to the general public. While these examples of how the agency could utilize participants are significant, the basic concept is paramount. That is, the agency should consider the participants as an indispensible aspect of the planning process.

The previous eight objectives do not set a hard and fast program for agencies to follow. They do, however, provide the basis upon which public participation programs can be developed and evaluated. It must be considered that the public involvement program is only one aspect of the entire planning effort. However, without a participation program, the best planning efforts could be misdirected.

CHAPTER II

TECHNIQUES FOR PUBLIC PARTICIPATION

A Framework for Evaluation

Public participation is not the result of a single technique addressed to a specific audience. Rather it is a variety of activities and contacts an agency utilizes through a planning program. One must address the specifics of the planning effort in order to implement the appropriate techniques for participation. The variety of techniques for public participation should be looked at as components of the total program and utilized to achieve specific tasks. If each technique is looked upon as an end product the process will ultimately breakdown. The idea of a checklist for compliance was often stressed in the EPA guidelines. This verbiage may have led many agencies to offer a technique merely as a token gesture so that it could be checked off the list. The following is an example of such an approach suggested by the EPA.

> One useful method by which planning agencies
> can assure compliance with the public parti-
> cipation guidelines is to match the public
> participation items in the table with their own
> definition of planning tasks. Those responsi-
> ble for assuring compliance can then 'check'
> a participation activity as it occurs and be

sure, finally, that for each major planning
task all the major participation activities
have been assured.[52]

While such checklists can provide an excellent aid
to insure that details regarding the public involvement
process were not omitted, it should not be considered as
a framework upon which to establish the program. When
developing a program, the agency must guard against over-
emphasis on technique. The agency objectives and resources
available will determine what techniques will best serve
the needs identified.

The publics with whom the agency will be interacting
will vary, and therefore, the techniques must also vary.
Publics will differ in their knowledge regarding the plan-
ning effort, their interest in the plan and their willing-
ness to express opinions through a variety of communication
channels.[53] Identification of the various publics and
the development of methods to address them is the responsi-
bility of the agency. A common example of such a situation
is the presentation of tabular data regarding water quality
to a lay group. While the agency staff and technical pub-
lic can interpret such data the general public is left with
little more than a mass of numbers and a feeling of
frustration.

[52]U.S., Environmental Protection Agency, Guidelines
for State and Areawide Quality Management Program
Development, part 4, page 6.

[53]Warner, Public Participation in the Water
Resources Planning Process, p. 48.

The agency must also recognize that the needs of the public will vary as the planning program develops. These publics must be observed during the process and addressed through the appropriate techniques. As the planning process proceeds, other publics may want to become involved. While these publics will not have the same information base as those involved earlier in the process, they should be incorporated into the process.

The agency will find that many of the techniques can be used to cover a broad range of interests. Depending on subject matter, many techniques could play a role throughout the planning process and should be utilized more than once if appropriate. The subject material may be changed in a series of workshops while maintaining the same format and participants. This type of forethought must be incorporated into the public involvement process. To insure continuity and flow throughout the planning process the agency must develop and utilize a plan for the public involvement program.

Public involvement plans like any other type of plan must have mechanisms for change. As the plan develops circumstances change and certain techniques for involvement may no longer be appropriate. The agency must be responsive to such changes and adjust the program when possible to maximize the public's participation. In developing a plan, the agency must consider the planning objectives upon which the program will focus, the resources available to

the agency and the range of techniques that would address
the public. With a wide range of techniques identified,
some form of classification should take place. One cate-
gorizing system, identified by Warner, utilizes the
mechanism's primary functional orientation for classifica-
tion.[54] While some techniques are considered universal,
their primary emphasis or thrust is considered for this
classification. Table 2 displays some common techniques
and their functional orientation. The functional orienta-
tions are derived primarily from the form of communication
that takes place between the agency and the public. The
role of information dissemination and education is critical
if the agency is to have a successful public involvement
program. Participants must have a clear understanding of
the problems at hand and current data upon which to formu-
late their input. The review and reaction emphasis is
considered the more traditional approach to public inter-
action and is utilized primarily to consider a selected
set of alternatives or proposals. State and federal
regulations emphasize this function and the legal system
acknowledges it as the fundamental avenue for public
resentment to an agency action. In fact, many projects in
the early 70's were stopped by court action until such a
public review could be held. While this function is
important in the entire planning effort it does little to

---

[54]Ibid.

TABLE 2

PRIMARY FUNCTION LISTING OF

IDENTIFIABLE TECHNIQUES

EDUCATION/INFORMATION	REVIEW/REACTION	INTERACTION/DIALOGUE
Newspaper Articles	Public Hearings	Special Task Forces
Agency Newspaper Clipping File	Public Meetings	Advisory Boards & Committees
Radio & TV Programs	Press Conferences	Citizen's Committees
Mass Media Advertisements	Public Inquiries	Study & Discussion Groups
Conferences	Televised Planning Discussions	Workshops
Speeches & Presentations to Groups	Legal Notices	Seminars
School Programs	Response Forms	Special Forums
Field Trips--Project Field Review with Citizens	Circulate Project Reports	Delphi
Demonstration Projects	Codinvolve	Brainstorming
Field Offices	Voting-Referendums	KSIM
Telephone Network	Suits-Legal Actions	Role Playing
Telephone Hotlines		Gaming
Citizen Band Radio Announcements		Interviews
Surveys-Questionnaires		Informal Contacts
Mailing Lists		
Special Mailings		
Newsletters		
Brochures		
Reports		
Published Project Development Schedule		
Letters-Response and Inquiry		
Depositories		
Exhibits-Displays		
Bulletin & Billboard Announcements		

develop the relationship between the agency and the public at large. This concept of public interaction with the agency is highlighted in many of the interaction/dialogue techniques. These techniques provide for a continuing exhange of information between all groups involved throughout the planning process. These techniques establish the public as a part, rather than a reviewer of, the planning activity. The agency must take the initiative for establishing and promoting dialogue techniques by utilizing staff time and expertise. The amount of agency involvement or commitment varies depending on which technique they are utilizing.

Agency commitment or initiative is one of several descriptive dimensions that can be used to evaluate techniques for public participation. Just as these techniques have functional orientations they also can be characterized and compared using a number of descriptive attributes. The degree to which the technique utilizes two-way versus one-way communication is one such attribute. Other attributes include, but are not limited to, the numbers of people involved, the range of participants both in background and geographical distribution, the amount of agency commitment and participant time commitment. These attributes are considered in relationship to ten techniques commonly used in public participation programs. They are tabularly displayed in Table 3. While this table indicates a characteristic application of the attribute to the technique

TABLE 3

DESCRIPTIVE ATTRIBUTES OF COMMON TECHNIQUES

TYPE OF PUBLIC INVOLVEMENT TECHNIQUE	DESCRIPTIVE DIMENSIONS				
	FOCUS		Degree of Two-way Communication	Level of Citizen Activity Required	Agency Staff Time Requirements
	Scope	Specificity			
Workshops	L	H	H	H	H
Public Hearings	M	L	L	H	M
Mass Media (Including use of newspapers and radio and TV)	H	L	L	L	L
Task Forces	L	H	H	H	H
Agency Publications	H	M	L	L	M
Speeches and Presentations	M	M	M	L	M
Survey Questionnaire	M	H	L	M	M
Advisory Boards	L	H	H	H	H
Informal Contacts	L	H	H	M	M

H – High Degree
M – Medium Degree
L – Low Degree

SOURCE: Katherine P. Warner, Public Participation in the Water Resources Planning Process, PB-204 245, a report for the National Water Commission, (National Technical Information Service, Springfield, Va., July 1971), Figure 3, pp. 52.

some variation will occur in their application. This table
should be utilized as a general indicator and not a final
assessment.

The focus of a technique is made up of two compo-
nents. One is the scope, which refers to the number of
participants that become involved in utilizing the tech-
nique, and the other is its specificity. Specificity re-
lates to the technique's capacity to address a variety
of audiences. The focus of a technique is very basic to
its application in a public participation program.
Different types of information require the use of different
degrees of scope and specificity. The degree of commitment
is an attribute that considers the extent to which the
participants and the agency will be involved over time.
Some techniques require only a single interchange, while
others may extend over several months or more. The level
of citizen activity required to utilize the technique
is one component of commitment. If a technique requires
a long term commitment on the part of a participant, the
agency should clarify this at the onset. The agency must
also recognize that it has a long term responsibility
when it chooses to initiate a technique that will require
agency involvement over a period of time.

The type of communication involved is the third
attribute that can be considered in selecting a technique.
One-way versus two-way communication is the factor involved
in this comparison. While some techniques employ only a

one-way mode of communication others are designed to foster the exchange of information through a two-way process. This attribute labels the degree to which the technique utilizes two-way communication. While the two-way process is often the preferred method of communication, the one-way process allows the agency to reach more people.

The degree to which the technique's output can be utilized in the development of the plan and the usefulness of the technique throughout the process is the fourth attribute. This attribute can be thought of as the technique's contribution to the total planning program. This deals not only with the type of output but also the timing of and usefulness of the information obtained. An example is the formation of a task force during final development of the plan. While such a group might be very effective in implementing the plan, their efforts could have contributed to the plan's formation.

The last attribute involves the degree to which the agency must assume the responsibility to initiate the technique. While some techniques do not require agency initiative they do reflect the agency's commitment to the public involvement process and must be considered in developing the program. An example might be the walk-in visitor to a planning office. While the participant took the initiative, the planning agency must be prepared to handle such a situation.

The techniques themselves vary and should be considered separately. In utilizing any of the techniques listed in Table 3, the agency should consider the attributes noted and make optimum use of each to improve their public participation program. Many of the common techniques will be discussed and their application to the planning process reviewed in the next section of this paper.

Technique Description and Application to the Planning Process

The activities that currently make up the body of involvement techniques, which are found in the literature and are practiced by various agencies, vary in their content and presentation. In searching the literature available on the subject, the author has developed a listing of these techniques according to their primary functional orientations. (See Table 2.) Utilizing the three functional orientations of Education/Information, Review/Reaction and Interaction/Dialogue, the discussions that follow will focus on each technique by describing its operation and potential contribution to a public involvement program. No ranking of the technique's applicability is inferred in their order. Each technique must be considered separately. While some overlap does exist between the various techniques in their orientation and delivery, each can play a role in the development of a public involvement program.

Newspaper Articles

Newspaper articles can take on many forms. A story may focus on a particular aspect of the planning program, it may announce an upcoming meeting or it might give a reaction to a recently held meeting. Feature stories are another type of newspaper article that can highlight the planning program. In such an article some aspect of the planning program is explored and particular emphasis is given to its community relationship. The role of a planning advisory group and a background on some of the people that make it up might be one such feature article. Another source of newspaper exposure could be in letters to the editor, however, this form is not commonly used by agencies because of the reactionary type of atmosphere that surrounds this part of the newspaper. Newspapers can be an important source of information to the public. The agency must take the initiative in developing and maintaining a good relationship with the newspaper sources. By maintaining good relations with this media through news releases and briefing throughout the planning process, the agency can be in a good position to distribute information in a timely fashion. While the newspaper can not be used as the sole source of information dissemination, it does play a very important role in the communication process used by the public.

Agency News Clipping File

A comprehensive file of area newspaper articles that pertain to the planning effort at a local, state or federal level should be maintained by the agency. A file of this type can provide individuals interested in the program with a general background of information regarding the planning effort and its impact in their area. Such a file should also be used by the staff to gauge what information the public has been exposed to. If the staff periodically reviews such a file it can also assist their interactions with the public by updating their knowledge of local plan-related issues in the community.

Radio and Television Programming

The variety of activities covered under this topic are numerous. Special programming, documentaries, news programs, interviews or broadcasts of actual planning activities all have the potential of educating/informing the public. Some agencies will avoid this type of inter-action because of the position in which it places members of the staff. While it is necessary to realize that the staff are not broadcasters or television personalities, the format of such programming can be adjusted to utilize their talents. Unfortunately many agencies tend to view the media in a negative way. While the media does tend to look for sensational types of stories, they do offer a variety of opportunities for public interest programming.

The agency, however, must be aggressive in its efforts to promote such programming. Staff time is required to prepare the materials necessary to produce the programming as well as to participate in its actual production.

Cable television programming is a new area which the agency can use to promote its programs. Many cable companies provide public service channels and technical assistance to produce programming that will educate/inform the local audiences. A program produced for this type of exposure could also be used in conjunction with speaking engagements to interested groups. The radio and television media allows the agency to address a segment of the public that would have been missed if only print materials were utilized.

Mass Media Advertisements

Advertisements generally fall into two categories: those which are considered public service, being aired free of charge, and those which are strictly paid spots that occur during regularly scheduled programming. Public service announcements are available to public groups as part of the requirements for licensing imposed by the Federal Communications Commission. The format of such service time, however, is usually controlled by the station and may not fit the agency's needs. An example would be the materials prepared by the EPA and distributed to the planning agencies promoting water quality and 208 planning.

Such materials were developed around thirty, sixty and
ninety second time slots. These materials contained
background music and were often read by well known tele-
vision and radio personalities. These spots rarely fit
into the public service format used by broadcasters. In
such instances paid air time might well be worth the in-
vestment. While such paid spots are costly, they do pro-
vide a general audience and can be justified under special
conditions. The agency personnel must establish a working
relationship with the media people by providing them with
updates and briefings throughout the planning program.
Budgets for paid spots and production costs for public
service announcements should be established at the onset
of the planning process to insure their inclusion through-
out the planning effort.

Conferences

        Conferences differ from other types of meeting for-
mats that will be discussed in a later section because of
their focus and format. Conferences are normally organized
to provide information to specific interest groups. This
information/education process can be directed at updating
a group on the current status of some effort or project,
or it could be utilized as a training exercise from which
the participants can reapply the information to their own
situations. Conferences normally utilize a combination
of large and small group meetings. Each session is

directed by a chairperson or discussion leader and may involve a panel or group of professionals recognized in the field under discussion. Agencies may often find themselves in the position of co-sponsoring a conference with some civic group. It is important for the agency to take an active part in the planning process for such a conference because the agency name will then be linked with the philosophies and positions that are expressed during the conference.

The emphasis in most conferences is the dissemination of information to the collective group. While such an effort does have its place in the planning process, the agency should be ready to provide additional activities that would encourage interactions between this group of informed participants and others such as staff members, politicians and appointed public servants that will influence the final plan.

Speeches or Presentations to Groups

This technique utilizes one of the existing resources that community groups provide. This resource is the gathering of people together to educate/inform the public about the planning program. Agencies can utilize their personnel to speak with interested parties and discuss the planning program and its potential impact. Agencies can also develop a speaker's bureau with non-agency persons interested in promoting the planning program. By

providing these members of the public with a general understanding of the program and appropriate support materials the agency can extend its program to a wide range of publics. Use of audio-visual techniques, charts and other props can aid in this communications effort. The agency can utilize the informal atmosphere of such engagements to interact with the public on a variety of issues. While the author has placed this technique under the functional orientation of education/information, it can also be utilized as a interaction/dialogue technique depending on its format.

School Programs

School programs are generally comparable to speaking engagements. Efforts to inform the younger citizens about the planning program and recruit their support can play an important part in insuring the future success of the program. Educational units utilized in the classroom or activities that the students perform outside the school are commonly used in this technique. Field projects like litter clean-up and pamphlet distribution can be utilized to give the students a sense of involvement. Agencies should utilize existing materials developed by the Soil Conservation Society and the National Wildlife Federation whenever possible. By utilizing these materials students will be in a better position to put into practice the concepts which they learn from agency and school personnel.

Field Trips and Project Reviews

A visualization of conditions discussed during other planning activities and mentioned in publications can have a significant impact on the public's comprehension of the planning effort. Visits to project sites and areas that demonstrate the need for the planning program will give the public a better understanding of the agency's efforts. Participation in a field review is an educational experience for both the citizen who may not be familiar with the program and the agency's staff because it will expose them to the concerns the public may have regarding the planning effort or project location.

Demonstration Projects

Demonstration projects are not always possible to develop. A dramatization causing pollution on a city street may draw criticism from the participants. However, there are some types of projects that can contribute to the public's understanding and motivate them to take action. A river clean-up and the improved recreational activities associated with it could be one such project. A collection of roadside litter and a display which points out the costs for such a clean-up, demonstrates the need for litter control. The planning agency itself may not have the resources to develop and implement such a demonstration on its own. Agency personnel could, however, encourage others to offer such demonstration projects

thereby promoting a cooperative spirit and identifiable link with the planning program.

Field Offices

Field offices provide an important link between the agency and the public when the project area is large or a great distance from the agency headquarters. These offices provide an opportunity for local populations to input their values and concerns into the planning process. Field office personnel can also act as disseminators of information to those populations that might normally be overlooked. While these offices would draw upon the resources available to the main offices, their outreach could be well worth the investment. The operations of field offices vary greatly and may include seasonal or staggered availability. These field offices can draw on the support of local groups. Physical space, volunteers to answer phones and their knowledge of local concerns are a few ways such groups could lend their support.

Telephone Network

Telephone networks enable the agency to interact with publics over a wide geographic area at the same time. A system of two-way interactive communication can allow a person in the most remote section of the state to directly participate in the planning process. The system could be focused around a series of meetings in each area that would provide the basic information about the planning

effort. After the meetings have covered the basic infor-
mation, the system would be activated and the interactive
communications could be pursued. Various publics could talk
to one another and to the agency planners without having
to leave their own area. While the telephone network has
proved successful in several applications, there is a
considerable amount of preparation which is necessary to
insure its success. The information materials must be
prepared and distributed to the public. In addition, an
organized format for the meetings must be developed and
executed to insure the necessary coordination required to
involve all the participants. One of the best examples of
such a phone network is the University of Wisconsin
Extension Educational Telephone Network (ETN). The system
has 110 sites located throughout the state and is utilized
for adult education programs, special public forums and
statewide professional meetings.[55]

Telephone Hotlines

Hotlines can provide a frustrated member of the
public with the assurance necessary to maintain their
involvement. Locating the correct person to talk to within
an agency or following up on a previous request for infor-
mation can be facilitated through the use of such hotlines.

_____

[55]Jon Grand, "The Educational Telephone Network:
Its Use in Public Participation," summary report prepared
by the Water Quality Planning Section (Wisconsin Department
of Natural Resources), February 1977.

Such a hotline can also aid in gathering information from the public. Citizens could call the established and well publicized number to ask questions about upcoming meetings or comment on an aspect of the agency's operation. Establishment of such a hotline requires a commitment to maintain it through the entire planning effort. Such a service could be extended to cover all the agency's activities and provide a long-term resource to the public.

Citizen Band Radio Announcements

The current popularity of citizen band radios provides an opportunity to disseminate information to a segment of the population. Meeting announcements and short information pieces could be developed. These announcements could then be given to involved members of the public to announce at various times of the day.

Surveys

Surveys can be designed to solicit a variety of information. Surveys may focus on determining local values, attitudes or preferences regarding some specific planning activity or proposal. Surveys often point up areas where further work is necessary to improve a pro-posal or the communication regarding it. Agencies must utilize the survey process as a means to an end rather than a final statement of public sentiment. The agency must be concerned about biases that would influence the survey's outcome. Interviewer and structural biases, as

well as non-representative samples can contribute to false assumptions. Shortcomings of survey techniques can be minimized through careful planning and follow-up by those administering the survey. In general, surveys should be developed by professionals knowledgeable about sample selection and testing design. The agency staff should take an active role in developing the survey and pointing out possible areas of question. The interpretation of results, however, are better left to professionals since significant biases could be introduced by staff members. Surveys take a considerable amount of time to develop, administer and analyze. Costs may be extensive depending upon the sample size and area of inquiry. Surveys that are done without thorough planning and reliable methods may develop a false representation of the public's interest and affect the credibility of the agency's program.

Questionnaires are a survey instrument that can be misused in obtaining information. Just as bias can be introduced into a survey so can it alter the results of a questionnaire. Agencies sometimes use questionnaires to determine preferences for some selection of alternatives. If the questionnaire is not carefully planned and administered the public responses may not reflect the actual public sentiment or understanding.

Mailing Lists

This technique is generally considered as a requirement of all planning activities. A program mailing list or group of lists are necessary to keep in touch with those involved in the planning process. The number of participants in a program is often equated with the number of names appearing on the project mailing list. While this may be a rough approximation of the number of participants, it does provide a reflection upon the number of people receiving information. A log of mailings should be maintained. By breaking down the entire list into interest groups the agency could target mail some correspondence tailored specifically to them. This selective capability may require the assistance of a computer if the project involves a large number of participants. A computer can also aid in keeping track of the participants and their specific involvement. A wide variety of information can be distributed by utilizing mailing lists. Generally the information falls into two categories, that of information and notification. The notification category should include any person required by law to receive information regarding the project or planning effort. The information category should include all participants in the program as well as local and state officials, organizations and businesses when they are affected but not participants in the program. Such a list can provide the basis for public interaction if it is developed with a broad

perspective and utilized throughout the planning program.

Special Mailings

Specific information can be communicated to groups or individuals by using special mailings. Such a mailing may announce meetings, highlight a particular concern or recruit support. The topic would vary and its distribution would depend on the agency's needs. Mailings of this type are not restricted to the established mailing list and may be directed to the entire population of a given area. Such mailings are expensive and should be carefully planned to best utilize available resources.

Newsletters

Newsletters are a source of information for many persons that cannot actively participate in the planning effort. While their distribution should include all those on the mailing list a broader application must be accepted. Newsletters commonly contain information about the progress of the planning effort, notes from meetings held, announcements of upcoming meetings, details of special projects and they also may contain letters or editorials written by the public. Through such information all those participating in the planning effort will be better informed. The participants will also have more of an opportunity to communicate with one another. Newsletters can be valuable tools for communicating with the public if

some basic guidelines are followed. Distribution of the newsletters should not be limited to just the formal participants; the information can also be utilized by the public if it is available. Newsletters should be established at the onset of a program and should then be distributed at predetermined intervals throughout the planning process. As with any information source it is dependent upon the people's demand for information rather than the agency's need for feedback. If the agency prints a newsletter only when it has a particular goal in mind the public will not look upon it as a dependable source of information. Newsletters do not need to be done with any particular style, and emphasis should be on their distribution not format.

Brochures

Information about the entire planning effort or some specific aspect of it can be highlighted by using brochures or pamphlets. In-house publications can be supplemented by other publications available through a variety of sources. A brochure is usually printed and assembled using methods that would attract and hold the attention of the reader. Brochures traditionally have been considered a one-way form of communication. Brochures can be, however, developed to generate feedback from the readers. This technique of including a feedback mechanism in the brochure can be very effective in integrating public involvement into the entire planning effort. It is a convenient

technique for disseminating information, educating
publics and obtaining reactions to the information
presented.[56] Brochures fill a specific need created as a
result of the educational responsibility that the agency
undertakes. These printed materials can highlight the
program and inform the public without directly involving
the staff. Brochures can be distributed by mailings,
making them available in public places, or in conjunction
with a display or public appearance.

Reports

Reports are normally associated with particular
accomplishments or phases of the planning program. These
reports are normally in-house or administrative documents
prepared to document the planning effort. While their
distribution should not be extensive, they should be
placed in depositories and available to the public for
review. Studies associated with the planning effort are
commonly considered as reports and should also be announced
to the public with references to their availability.

Published Project Development
Schedule

Agencies should publish project development sche-
dules or time tables to remind the public and agency

[56]Thomas P. Wagner and Leonard Ortolona, "Analysis
of New Techniques for Public Involvement in Water Plan-
ning," Water Resources Bulletin 2(2) (April 1975):329-44.

personnel of the objectives and goals associated with the planning effort. Dates and places of activities should be included in such a schedule if available and some mechanisms should be developed for updating the information. The schedule is not a public involvement technique in itself but rather an aid to the program which could be included in brochures, newsletters or newspaper articles.

Letters-Responses and Inquiries

Written communications will always play an important role in any agency effort. Letters with specific questions or general comments must be considered and incorporated into the planning program. Letters are considered one of the formal methods for registering a comment to the agency. Such letters, under current federal and state planning guidelines, must be acknowledged and maintained in a file for future reference. Without a system for responding to written inquiries, the agency could find itself deluged with material and unable to respond. While many letters may be of a similar nature, each should be treated individually and a response issued consistent with what was requested. Many responses can be handled with a series of form letters but each inquiry should be noted by a staff member and incorporated into the planning program. The agency may also find unsolicited letters very useful in communication to specific groups. Such letters may inform

the interest groups and the public of upcoming activities
or solicit some form of assistance for the agency.

Depositories

Depositories are simply places where the public can
obtain or have access to agency publications and informa-
tion regarding the planning program. These depositories
could be in libraries, schools or public buildings such
as city halls. Adequate copies and information on how
to obtain more details should be available at each loca-
tion. Copy machines and reading areas at each location
will assist the users. The agency must assume the respon-
sibility for supplying these depositories with material and
periodically verifying their availability and usage.

Exhibit-Displays

The make-up of exhibits can vary according to the
type of subject and audience that it will address. They
may be used in conjunction with a staff member presentation
or they may be left unattended with brochures and news-
letters placed on tables or attached to the display in
order to provide the necessary information to those who
pass by. Displays are often connected with social gather-
ings such as fairs, political rallies, bazaars and civic
meetings. Displays and exhibits do demand staff time to
prepare and set up the exhibit. Such an investment,
however, can be justified because of the diverse group
it addresses.

98

Bulletins and Billboards

Visual materials can be used to promote the plan-
ning effort in a variety of ways. To draw attention to a
planning program the agency could develop a series of
posters and supporting printed materials. Bulletin boards
in public places and in offices where the public often
congregate could be utilized by mailing the materials to
a contact person who would then post the information. A
post card could be provided for persons wishing to obtain
more information. By coordinating these announcements with
nationally recognized campaigns, the project can bring
some local significance to a national concern. Billboards
can also be used to draw the attention of the public to the
planning program and introduce them to the agency. This in
itself does little to promote the program. Billboards,
however, create some awareness and may motivate someone to
follow-up with a visit to the agency or planning meeting.

Public Hearings

Literature reviews show that "public hearings are
by far the most frequently used method for involving the
public in the decision-making process."[57] Public hearings,
however, are not as useful as their popularity might
suggest. Agencies have used public hearings to legitimize

---

[57] Adam Clarke Davis, Jill Anderson, and Richard I. Gough, Alternative Information and Interaction Approaches to Public Participation in Water Resources Decision Making: A State of the Arts Report (Raleigh: Water Resources Research Institute, 1975), p. IV.

planning decisions reached by other methods.[58] "General legal requirements for public involvement are usually satisfied by the notice and actual holding of a public meeting, regardless of who shows up and what information is transferred at the meeting."[59] The typical format for public hearings involves formal presentations by agency personnel, the availability of data and project information, comments and questions by the public or representatives of other agencies that are answered by agency representatives and a transcript of the entire meeting which will establish the official meeting record. Public hearings are normally scheduled at points in the planning process where critical decisions must be made.

Attendance at a public meeting is open to the entire public. Oftentimes, large groups of special interests dominate the program. The emphasis of such meetings is not on input to develop alternatives but reaction to those already developed. The emphasis on one-way communication and formality of public meetings limits their usefulness. It is likely that the legal requirement for public hearings will insure their widespread use in the future. Planning agencies developing public participation programs, however, should seek other

---

[58]Bishop, Public Participation in Water Resources Planning, p. 78-9.

[59]Thomas A. Heberlein, "Principles of Public Involvement," 5 April 1976, Cooperative Extension Programs, University of Wisconsin, Madison, Wisconsin, p. 18.

more open and flexible techniques along with the use of public hearings to insure public input into the planning effort.[60] Agencies must be careful, however, to follow the legal requirements for public hearings such as notification and documentation if they are charged under law to do so.

Public Meetings

Public meetings are similar to public hearings in that large audiences are addressed by individuals presenting information about the planning program. Such meetings, however, need not be organized or executed by agency staff. These meetings are informal and do not require testimony or legal notices. The flexibility of public meetings allows the public an opportunity to interact with agency staff and others in a personal, two-way exchange of information. The meeting sponsors must provide the participants with information about the planning effort and be prepared to discuss its use and integration into the entire effort.

The meeting sponsors play an important role in public meetings. They must be capable of shifting the format so that the audience can best express their desires. The sponsors must also control the dominating effect that any special interests might exert to influence the general public. While special interests must be considered in the

---

[60]U.S., Environmental Protection Agency, A Statement of Policy for Implementing the Requirements of the Federal Water Pollution Control Act as Amended and Certain Requirements of the Marine Protection Research and Sanctuaries Act (Washington, D.C.: 18 August 1975), p. 21.

entire planning process they should not be allowed to dom-
inate any one technique. Public meetings can be developed
to focus on special audiences. These audiences may be
targeted geographically or by identifiable interests. If
the number of people at such a meeting exceeds one hundred
it would be very difficult to maintain a feeling of parti-
cipation. The meeting would seem more like a hearing with
a few people talking and many only able to listen. If
the audience is large, the sponsors may promote discussion
by breaking down the total group to smaller ones and sug-
gesting topics for discussion. Public meetings should be
held throughout the planning process to inform the public
of agency activity and provide an avenue for citizen
comment.

Press Conferences

Because of the competitive and independent nature of
today's news media, information must be disseminated to all
contacts simultaneously if good relations and credibility
are to be maintained. Press conferences allow the agency
to announce new programs or major decisions in an
organized and prepared fashion. The agency staff would
normally read a statement and then allow reporters to ask
follow-up questions. The agency must be prepared to
respond to questions in a manner that will reflect the ac-
tual agency position. For this reason press conferences
are normally conducted by information officers or manage-
ment level officials. Not every piece of information the

agency wishes to disseminate requires a press conference. News releases, as mentioned in a previous section, can accomplish this task and are less time consuming. Press conferences should, however, be held if the announcement is of a significant nature that effects the entire area of media coverage.

Public Inquiries

While there could be many techniques covered under this classification it is significant enough to be noted separately. As the agency makes material available or comments about the planning effort it is natural for the public to respond. Such inputs, however, can be lost in the complexity of a modern agency if specific channels and response mechanisms do not exist to deal with the information. Each response should be considered and incorporated into the planning program. When appropriate, the agency should respond directly to the inquirer with a letter, phone call or personal visit. While this may seem very time consuming, its long term benefits to the program and agency far outweigh the costs involved.

Televised Planning Discussions

By televising planning discussions whenever possible the agency can offer information to a segment of the public that may not be capable of participating in person. These groups might include senior citizens, handicapped persons and those too great a distance to attend the meeting.

Charts, graphs and additional prepared material can be used to help illustrate the points discussed. These materials could be mailed out before the broadcast to those who requested them and utilized as a follow-up for persons that requested additional information after the broadcast. The viewing audience could be allowed to phone in questions for the planning group to answer. In this way a broad audience could highlight the concerns of the public regarding the topic under discussion. The actual broadcast of a planning discussion is only part of this technique. Pre-broadcast publicity and arrangements must be emphasized if the effort is to be successful. This technique will yield maximum benefits if the public can rely on its continuation on a regular schedule.

Legal Notices

While legal notices are not considered a productive technique for public information and participation programs, they may be required by law. Formal notices announced to the public in paid advertisement sections of the newspaper or through registered letters sent to property owners are examples of legal notice. While some people might respond to such notice it is unlikely that the general public is motivated by them. Legal notices are usually required before the announcement of a plan's approval by the agency. At such a point, public input is merely a formality. It is unlikely that significant

changes in the plan would result from the issuance of legal notices.

Response Forms

Response forms can be considered brief questionnaires which are self-administered by the public and returned to the agency at the end of a meeting or returned by mail. Response forms usually contain a few questions dealing with basic issues or alternatives. A standard set of answers are provided to facilitate the public's response. The opportunity should be extended to include a written response if the person was so inclined. Response forms can also aid in identifying persons interested in the planning effort. If a mass mailing were made at the onset of the planning program, with some written indication of the project's scope and impact, a response form could provide the agency with a broad range of identified publics.

Circulation of Project Reports

Project reports are commonly used to secure continued funding from sponsoring agencies. These reports normally review the planning effort to date and indicate what activities are planned. These reports could provide background information to persons interested in becoming involved in the planning process. Another form of the project report is developed when a study or sub-section of the plan is completed. This type of report would

normally contain details of the study and its results. While much of the information in the report might be of a technical nature, they should still be made available to the public. In some cases agency summaries might be more appropriate but the original documents should be available at the agency and established depositories.

Codinvolve

Codinvolve is not a public participation technique in itself. It is a method of content analysis that has been developed to yield an accurate, replicable summary of public input. The system is based on the concept that virtually all public inputs are opinions offered for, against or about the issues in question and may include reasons to support the views.[61]

Clark and Stanley, in an examination of Codinvolve, point out six broad principles which Codinvolve and other analysis systems should meet. These six principles are:

1. analysis should be separate from evaluation

2. decision-maker's questions should guide analysis

3. all input is relevant and must be processed

4. analysis must be systematic, objective, visible and traceable

5. identity of the input must be maintained

6. analysis must be a continuing process.[62]

---

[61]Roger N. Clark and George H. Stankey, "Analyzing Public Input to Resource Decisions: Criteria, Principles and Case Examples of the CODINVOLVE System," Natural Resources Journal 16(1) (January 1976):215.

[62]Ibid., p. 217.

The Codinvolve system, through a predetermined content code, allows trained personnel to record inputs generated from a variety of sources. The information is then tabulated and summarized. An analyst must interpret the data and prepare narrative statements that reflect the information obtained. The analyst and decision-makers must then together discuss the narrative in order to accurately assess the large quantity of diverse input received. This system does not evaluate the input. It does, however, provide the decision-maker with information in an undiluted, nonjudgmental state. Codinvolve has been used in a number of Forest Service study projects since its development in 1972. The system's flexibility and adaptability to a variety of study problems makes it a technique that decision-makers will increasingly rely on to improve public participation.

Voting-Referendums

Voting is one of the traditional ways in which the public can participate in the decision-making process. However, voting for representation is an entirely different concept from that of public participation. While representation is vitally important, it cannot replace the impact and detail a personal involvement provides.

The public has also used the polls to express their support or non-support for a project by utilizing referendums. Referendums are often associated with a project

that requires community support in the form of bonding or tax assessment. Through voting, the public can influence the final outcome of many issues. The entire concept of public participation, however, stresses the involvement of people in developing a program not just approving or rejecting it. The act of voting will continue to play an important part in the public's overall participation, but other techniques that directly involve them in the planning process must be utilized to insure public involvement.

Suits-Legal Action

There are a variety of legal actions that can be instituted against an agency during the development and implementation of a plan. The public can bring suit against the planning agency for a variety of reasons. There have been numerous examples of court action stopping or altering a planning program due to citizen or interest group suits. As a public participation mechanism, court action should be considered only as a last resort. Besides being expensive and time consuming, hostilities between the parties involved may severely affect their future interactions.

Special Task Forces

Task forces are usually organized around a problem of a specific nature or geographic location. These task forces often have their emphasis in technical areas.

108

Agency staff and professionals from the community that have an official role in the governmental and planning structure often dominate the composition of such task forces. Their role is to provide the agency with information. The information they provide can have a significant impact on the direction and outcome of the planning program. Alternatives may be overlooked or rejected by such professionals because of biases developed during their training and work experiences. The make-up and charge given to the task force can significantly affect the output. Agencies should utilize such groups to generate information but not to evaluate and disregard alternatives. The evaluation must be done in a broader context that will include a wider range of publics. Such a review process may come to the same conclusion as the task group. The public and the agency will be informed and capable of utilizing the information provided.

Non-technical persons should be considered for participation in task groups. The educational process would be extensive in order to prepare non-technical persons to be able to fully participate in technical matters. These lay members would have a role in the process by directing study alternatives and providing input on public desires.

Advisory Boards and Committees

Advisory boards and committees vary greatly in their structure and function. Generally, such boards are

composed of persons representing interests effected by the plan. These boards may have only advisory authority or they may be vested with considerable decision-making authority. Under most circumstances some officially elected or appointed group would ultimately approve the board's proposal. Such approval, however, is often only a matter of procedure. Advisory boards may be developed as a representation of the entire public or they may be narrowly constructed from only elected governmental or organizational representatives. In terms of public involvement, an advisory board should be made up of a diverse group of individuals each representing an aspect or segment of the effected population.

Advisory boards have an advantage over many other techniques because they maintain continuity over time. This continuity allows issues to be explored in detail and opinions to be developed after careful consideration. Advisory groups are usually recruited for specific goals. Once these goals are met the board is often disbanded and may never be utilized as a group again.

The agency must establish its relationship with their advisory groups and the agency must also specify the desired product. Agencies normally provide clerical and technical staff support to advisory boards. Services and operational guidelines are usually established by the agency before recruiting is begun. Under the guidelines for public participation developed by the EPA, planning

agencies were required to establish or utilize policy advisory committees to advise them on development and implementation of 208 plans. While this required agencies to utilize advisory groups, the specifics of such utilization remained up to the agency to develop. Some requirements for representation were established by EPA. They called for a majority of locally elected officials, officials from federal agencies and appropriate state agencies to be represented on advisory committees. Advisory groups like any other organization of individuals must operate in a democratic fashion. Individuals cannot be allowed to dominate the discussions or control the exchange of information. Advisory groups to some extent become a part of the agency and as such may become intertwined in the political and bureaucratic make-up of the agency. While such an involvement is a realistic outgrowth of involvement, it could cause some participants to drop out because of frustration. The agency has a management role to play in organizing and utilizing advisory groups. Such groups are a valuable resource. However, if not handled properly, they can become a burden to the agency. Specific goals and guidelines should be established at the onset to insure that the advisory group accomplishes the desired goal.

Citizen Committees

Citizen committees serve to advise the agency in

the development and evaluation of alternatives from the perspective of the community from which the committee members are drawn. The exchange of information between the committee and the agency is the critical function of this technique. The citizens provide the agency with information on the impact of proposed activities and preferences of the communities. The agency provides the committee with information regarding the planning program and details of specific alternatives so that this information can be disseminated to a broader public. While such citizen committees can be used as a separate technique in a public participation program, they are more advantageously utilized as part of an overall advisory board. Membership must represent the broad community. By bringing such divergent publics together, certain conflicts are bound to exist. The agency must have specific plans and goals for its citizen groups to accomplish if the full benefit of such a group is to be realized.

Study and Discussion Groups

The use of study and discussion groups as a technique encompasses a wide array of communication and involvement tools. These groups are brought together by the agency with a specific goal to be accomplished. The agency may use a variety of mechanisms to encourage discussion among the participants. While the size of such a group will vary, the number should not become so large

as to hinder direct communication between participants.
For most activities a maximum of 20-30 participants per
group is advantageous. If groups were larger, the
opportunity for each individual to participate would be
reduced. The agency can become an active participant in
group sessions or it can act as an observer and facilita-
tor. Some of the commonly known group processes are the
Charrette, Nominal Group and Samoan Circle techniques.[63]
While each of these employs a different organizational
structure they each provide an opportunity for participants
to express their ideas and develop some consensus regarding
their importance. Role playing and gaming, two techniques
that will be discussed in greater detail later in this
text, are commonly used as part of the group process.

The agency must be prepared to utilize the output of
these groups. Output is directed by the goals and
organizational framework that the agency establishes in
bringing the group together. Agencies with little experi-
ence in such activities should seek the assistance of con-
sultants and meeting specialists to insure that the output
will be a valid expression of the entire group's sentiment.
Participants in these groups are investing time and taking
personal risks by expressing their attitudes. The agency

[63]James F. Ragen, Jr., Guide 1: Effective Public
Meetings, report prepared for the U.S. Environmental
Protection Agency, (Washington, D.C.: May 1977), p. 69.

must be responsive to this investment by utilizing the output in the planning process.

Workshops

Workshops focus on a theme and provide an opportunity for education and information exchange. The format for workshops consists of some form of information presentation followed by discussion in large or small groups. In presenting the initial information, the agency or established group provides a basis upon which to discuss one or more topics. The participants may represent interests already involved in the planning process as well as those involved for the first time. This mix of participants demands that basic information be provided. Opinions expressed by those new to the planning effort must be considered on an equal basis with those of established interests. It is through such opinions that new ideas and approaches to the stated problems will develop. Workshops, because of their requirement for interaction, cannot accommodate a large number of participants at one time. A number of workshops planned over a period of time and held in different geographic locations can involve a greater number of participants.

Workshops demand a great deal of planning on the part of the sponsor. Agencies should recruit other groups to help sponsor workshops, thereby developing some feeling of involvement and support for these groups and their

memberships. Workshops should be followed up by a written summary that is distributed to all participants and others interested in the planning program. Workshops can also focus on a specific group of participants. An example of this may be elected officials representing the political subdivisions within the planning area. Problems regarding funding and enforcement can best be articulated by those involved with them on a day to day basis. Workshops cannot stand alone as a participation technique and must be supported by other opportunities for participation in the planning effort.

Seminars

Seminars focus on education and provide little opportunity for feedback during the activity. Seminars do, however, provide a technique for agencies to disseminate information to participants. The participants can then utilize other reaction techniques to feedback information to the agency. The amount of information generated during a planning program necessitates the use of some form of information dissemination where follow-up questions and discussion are possible. Participants for seminars are usually recruited by invitation. This could cause some alienation among the participants if specific interests were repeatedly not invited to participate.

Special Forums

The agency may find a need during the planning pro-
cess to evaluate specific alternatives and identify the
needs, goals and issues associated with each alternative.
Technology assessment is a technique that involves analysis
of alternatives by groups following a specified format.
By utilizing the same format, a variety of groups assess
the alternative and its application to the specified goals,
needs and issues. A comparison of the group's results will
provide the agency with an assessment of each alternative.
This technique is useful for generating feedback on alter-
natives and can be used during any stage of the plan's
development. The groups should be composed of a variety
of participants so that each represents the spectrum of
effected interests.

Delphi

Delphi forecasting is a method for developing a
consensus on the future technological and social develop-
ments that will affect the plan's outcome. Developed by
the Rand Corporation, its early applications dealt with
military problems.[64] The technique basically involves the
identification of individuals who are experienced and
involved in the study area. These individuals then respond
to questionnaires. The questionnaires are then analyzed

---

[64]Thomas P. Wagner and Leonard Ortolano, "Analysis
of New Techniques for Public Involvement in Water Plan-
ning," pp. 331-2.

and new questions are generated to narrow the consensus.
Through a series of questionnaires and responses, the
consensus will narrow and a forecast can be developed by
the staff. This technique has a variety of applications
and advantages over task forces and committees which are
commonly used.[65] The anonymity of the individual partici-
pants is maintained throughout the process and the need
to physically bring the respondents together is avoided.
By utilizing a series of questionnaires, the staff can edit
and feedback information to the participants that might
assist them in responding to the next questionnaire while
eliminating irrelevant or redundant material. Statistical
summaries can also be applied to the information generated
allowing the staff to preserve the opinions of various
participants throughout the process. This technique is
currently untested in an actual field level water planning
study due in part to cost and the requirement for extensive
evaluation on the part of agency staff. While many agen-
cies may not be capable of implementing Delphi in such a
broad way, there is potential for its use in conjunction
with other techniques.

Brainstorming

Brainstorming is a technique that can be utilized
with a group of participants to facilitate the expression
of their needs and ideas. This technique is commonly used

---

[65]Ibid., p. 331.

to explore the issues and gather information about the problem. The agency would present a statement or question and ask the participants to react. The agency would defer any judgment until all have had an opportunity to respond. Brainstorming is a free flowing, fast moving technique that requires a facilitator and recorder. After the ideas are expressed, another round of input is solicited on another aspect of the topic. The responses are then reviewed and some type of ranking is determined by consensus. While the outcome of brainstorming is not a single idea or total consensus it does help the agency identify the important points of concern.

KSIM

KSIM is a mathematical model developed by Kane and his associates at the University of British Columbia. The nonlinear feedback system allows mathematically unsophisticated persons, knowledgeable in the subject's variables, the opportunity to actively participate in structuring the model.[66] The model allows users to look at the cross impacts of various alternative actions. The procedure, however, is still being developed for water resource applications. The cost involved in adapting the model and the level of technical sophistication necessary to utilize it make most citizens uncomfortable.[67]

---

[66]Ibid.

[67]Ibid., p. 334.

Role Playing

Role playing can be a useful technique for the agency
to help participants develop some sensitivity to the com-
plexity of various issues. By assigning a specific role to
each participant that is different from their actual
interest, they are thrust into looking at issues from
entirely different perspectives. The outcome of such an
exercise may not be immediate. The goal of role playing is
to make others aware of the total problem and possibly
present a different perspective of the problem at hand.

Gaming

Gaming allows participants to make decisions and
simulate the outcome of those decisions using a model of
the natural or social system in question. These models
are simplifications of the real systems with specific rules
and procedures that must be followed. Gaming simulations
can be developed around any issue that has decision or
action variables that effect either qualitatively or
quantitatively other aspects of the modeled system. The
modeled system, however, can only be a simplification of the
real world situation and should act as an educational
tool not a decision-making device. Through careful plan-
ning and administration of the gaming technique the agency
can give participants a holistic exposure to problems at
hand. Participants will also gain some understanding of
the relationships between the decision variables and the

consequences of specific actions. The financial investment
and time required to construct models precludes their
development for each planning area. Many models already
developed are generally broad enough to allow applications
to many different field situations.

Interviews

Interviews conducted on a one to one basis can pro-
vide a very good appraisal of the issues and potential
controversies surrounding a planning program. In addition
to providing the agency with in-depth information, the
interview itself can help establish a working relationship
with the person being interviewed. The agency must care-
fully consider the population effected by the planning
effort and interview representatives of all identifiable
interests. The interview process does require a consider-
able amount of staff time to identify, solicit, interview
and summarize the input. This investment, however, can be
justified to establish a basis upon which the planning
program can be developed. Interviews with special
interest representatives can also be useful to explore
alternatives in a preliminary way. On a one to one basis
the agency is not placed in a position of advocating any
one alternative. In some cases the agency may wish to
hire consultants to develop and carry out the interviews
in order to reduce the bias that might be introduced by
staff persons.

Informal Contacts

Informal contacts may occur in a variety of ways. Persons may stop by the planning office unannounced or they may approach staff persons at some function unrelated to the planning effort. These contacts while difficult to predict must be planned for and incorporated into the public involvement process. Persons utilizing this technique are often unable to participate in or unaware of other established techniques. By planning for such interactions the agency can prepare written material describing the planning process and opportunities for input. The written material should also contain a listing of agency and governmental staff actively involved in the process. By utilizing such a list, interested individuals can follow-up on a question or comment on some specific area of concern. Agencies often have a telephone number for persons to call and a staff member at the agency office to follow through on inquiries.

Another type of informal contact can be developed through the agency staff members themselves. In their personal lives, these staff persons are commonly members of the community for which the plan is to be developed. Their professional training identifies them as sources of information. They may be sought out for assistance in a variety of ways. The agency administrators must be cognizant of such interaction and encourage it whenever possible.

Implementation

The techniques discussed in the previous section can all be useful in developing a program of public participation. An agency responsible for such a program must, however, approach the participation program with a definite set of objectives and some type of plan to achieve them. Just as the agency would develop a plan to sample a river for water quality so must they develop a plan for their participation program.

The previous chapter outlined a series of steps that made up the planning process. These steps can also provide a framework for the participation program. By laying out the planning steps along an appropriate time frame, the agency can begin to get a feeling for the critical points and opportunities for public participation. While each planning effort will differ, some basic participation opportunities exist in every program and should be considered as a foundation upon which to build a program. Figure 7 displays these basic opportunities in the planning process by utilizing a two year planning period. As the agency begins to specify techniques it must take into consideration their participation objectives and the resources available.

While the objectives found on page 62 were developed to review the TCRPC program, other agencies might have additional objectives unique to their planning effort. The most important point is to specify those objectives

FIGURE 7

A Model For Public Involvement in the Planning Process
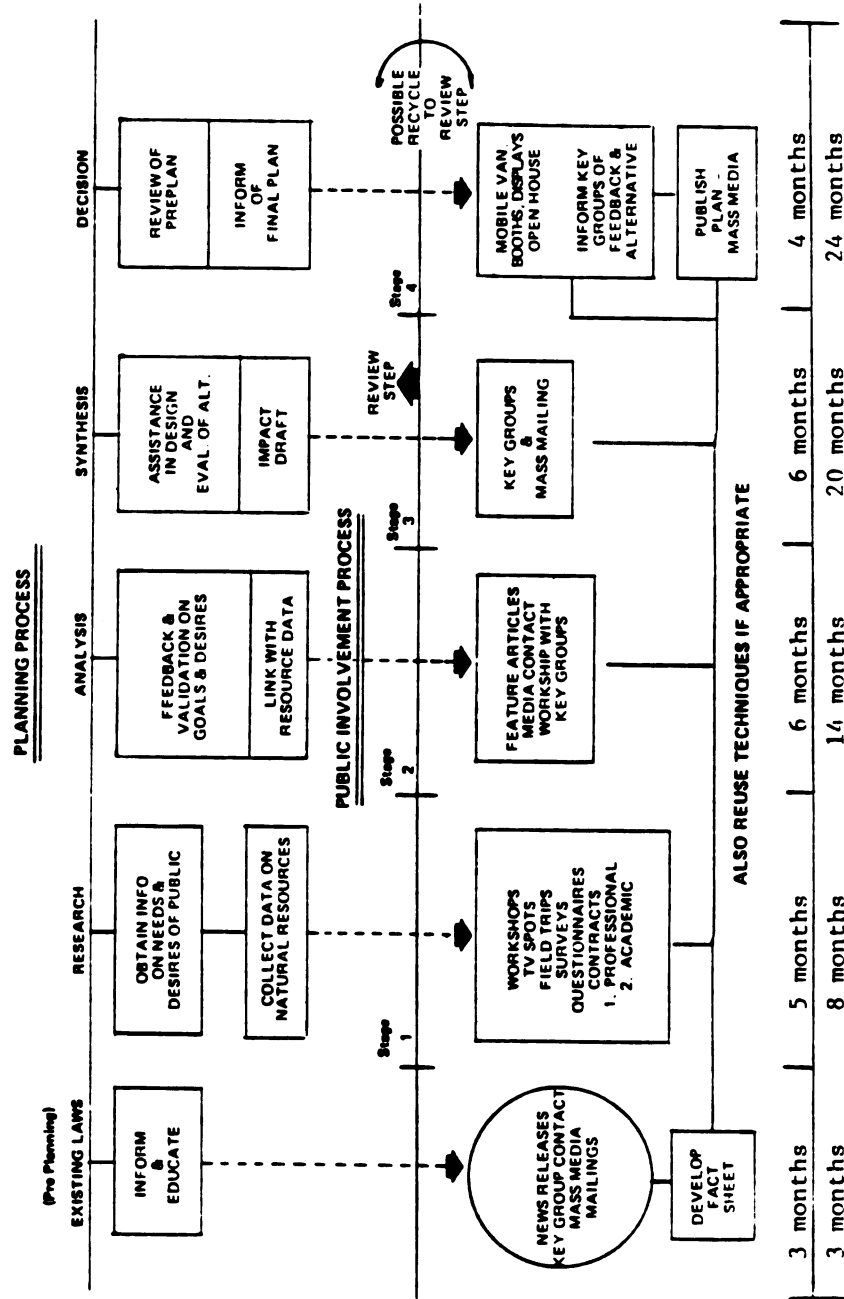
SOURCE: Synergy, Citizen Participation/Public Involvement Skills Workbook, (Cupertino, CA: Synergy Consultation Services, 1972), pp. 78.

before developing the plan. There is a tendency to select techniques on the basis of their success at other agencies. This emphasis on techniques obscures the importance of the objectives and encourages the borrowing and adopting of techniques without a critical evaluation of their benefit.[68] The experience of other agencies should be utilized to tailor the technique to the objectives of the sponsoring agency. This type of tailoring effort requires the expertise and commitment of agency personnel beyond the traditional levels known to most governmental planning agencies.[69]

The commitment of agency resources to public involvement programs had been mandated by legislation and planning guidelines. These mandates, however, are general in nature and leave responsibility with the agency to implement a program. Agencies find themselves requiring additional staff support not found within their ranks and expenditures in areas where there is little or no previous experience to guide their judgments. In a survey of government planning organizations, conducted by Katherine Warner, the two most frequently mentioned factors needed by agencies to accomplish public participation programs

---

[68]Patricia Bonner and Ronald Shimizu, eds., "Proceedings of a Workshop on Public Participation," Great Lakes Research Advisory Board, International Joint Commission, June 1975, p. 53.

[69]Ibid., p. 183.

were "additional staff members and additional funds."[70]
This self-reported survey reflects only the agencies'
point of view. However, it does indicate the need for
such programs to be adequately funded and staffed.

The agency must develop their plan for public in-
volvement with these constraints in mind. By specifying
the resources required before the planning process begins,
a realistic budget can be developed and funds can be ear-
marked for implementation of the desired techniques. As
with any effort, the funding requirements for techniques
that occur in the final stages will be jeopardized if a
commitment does not exist to carry them out. With little
previous experience in public participation, many agencies
underestimate the total cost involved in offering a pro-
gram. Some of the expenditures necessary in the program
can be obtained through agency staff. Printing, meeting
room rental, transportation and mailing charges are common
to agency programs. Funding for guest speakers, surveys,
advisory committees and informal contacts are much more
difficult to establish.

Equally important to the funding requirements are
the manpower skills that will be necessary to carry out
the program. By developing a plan the agency can be pre-
pared for such requirements by training their staff or
hiring consultants to perform the tasks. Staff training

[70]Ibid., p. 183.

should be extended to the entire agency staff to help them interact with the public. Technically trained staff members may find it difficult to relate to the public and should be assisted in this effort by specialists in communications and public relations.

The agency must allocate the resources, that will be required throughout the program, at the onset of the program. By doing so the staff and participants will feel that a commitment to implement them exists. Uncertainty on the part of the agency will cause the participants to lose faith in the process. With a plan developed and the resources necessary to carry it out allocated, the agency will be in a position to follow through with its program.

CHAPTER III

AN APPLICATION OF PUBLIC PARTICIPATION

OBJECTIVES TO THE TCRPC's 208

PARTICIPATION PROGRAM

TCRPC's Public Participation Effort

With any planning effort the actual implementation
and realization of some specified desire may not be con-
sistant with its conceptualized notion. The TCRPC's pub-
lic participation program and the staff's perceptions
exemplified this phenomenon. With little public involve-
ment experience, the TCRPC 208 staff attempted to develop
and implement a public participation program. This pro-
gram was to assist the agency in developing an Areawide
Water Quality Management Plan. This plan was part of a
national effort to develop and implement measures to meet
the long range goals of the Federal Water Pollution Control
Act Amendments of 1972. In referring to Section 101(e) of
the Act, the Environmental Protection Agency, as admini-
strator of the Act, specified that "the purpose of public
participation in the water quality management process is
to aid public education, create a plan sensitive to
local needs and values, and build support for plan

implementation."[71]

The sequence of events that the TCRPC used to develop its 208 plan and public participation program can be reconstructed through program documentation. The motivations behind these events, however, can only be speculated. Changes in staff and program emphasis continually modified the program since its inception. The text that follows is a documentation of events and procedures used by the TCRPC to develop and implement its public participation program.

The TCRPC 208 planning program was initiated when Michigan's Governor Milliken announced in January of 1975 that the regional governmental agencies of Michigan would have the primary responsibility for developing the required plans. Each of Michigan's 14 regions was to submit a program documentation and a request to the Governor for official designation. On March 28, 1975, the Governor designated the TCRPC as the areawide waste treatment management planning agency for Clinton, Eaton and Ingham Counties. Shortly after designation, the TCRPC began developing a study design to submit to EPA for approval and funding. The EPA Region V office officially offered financial assistance to TCRPC on June 27, 1975, and a Study Design was completed in August. Documentation and elements

---

[71] U.S., Environmental Protection Agency, Water Planning Division, Public Participation Handbook for Water Quality Management (Washington, D.C.: June 1976), p. 1.

of a work program were developed by the TCRPC staff for submission to EPA. This documentation outlined the work tasks necessary to develop the 208 management plan. Many of the tasks outlined in the Work Program had already begun when it was submitted in March of 1976. The formation of the 208 Technical Planning and Coordinating Committee (TPCC) and Areawide Planning Advisory Committee (APAC) in November of 1975 were significant in retrospect because they represented the only long term contacts the 208 planning staff developed. APAC represented the governmental units and agencies of the region. TPCC represented the technical agencies of the region. These two committees provided the agency with feedback and suggestions for the plan's development. A Citizens Advisory Committee had been formed by TCRPC in March of 1975 to provide input on a variety of program and planning areas. This committee, however, never became actively involved in the 208 process. The 208 program had its first public exposure in a Workshop sponsored by the League of Women Voters in April of 1976. This workshop was developed to stimulate interest in the planning effort and to acquaint participants with the TCRPC.

A public meeting held in August of 1975 to disseminate and discuss project information marked the midpoint in the 34 month planning program. Printed materials in the form of brochures were first disseminated in September of 1975 although no records of recipients or quantity of

of brochures mailed were maintained by the agency. The agency utilized the membership list of APAC and TPCC for its information mailings. The agency also utilized its governmental unit's mailing list and an "interested persons list" for the mailings. This "interested persons list" was referred to as a participants list by the 208 staff in their reports to EPA. The agency produced and disseminated the first of three newsletters in November of 1976. The agency utilized the previously mentioned mailing lists to distribute the newsletters. The 208 staff promoted a workshop in April of 1977 that was developed and presented by the Issac Walton League.

In the spring of 1977, the agency held meetings with local elected officials to encourage them to support the plan and upcoming river basin meetings. These basin meetings in May, June and July were to get people involved in the final stages of the planning process. These meetings were publicized in local papers and announced in a brochure that received the broadest distribution undertaken by the agency. The river basin meetings were followed by two months of final plan preparation that culminated with a public hearing on September 21, 1977. This hearing and the written comments generated from it were the last opportunities for the public to influence the final plan.

The Tri-County Regional Planning Commissioners had an information session on October 19 to review the staff

recommendations and comments received regarding the final

plan. Less than a month later at a normally scheduled

TCRPC meeting on November 16, 1977, the Commissioners

approved the plan for submission to the Governor and EPA

with a nine to six vote. The elements of TCRPC's 208 plan

discussed in this section are displayed in Figure 8. A

review of the time scale and mechanisms documented in

Figure 8 demonstrates the emphasis that the 208 staff

placed on public participation in the final stage of the

plan's development. This reconstruction of the 208 public

participation program documents the mechanisms that were

utilized by the staff. A comparison of the public parti-

cipation elements outlined in the March 1976 Work Program

and the elements actually utilized by the 208 staff indi-

cate that the public participation program was not

executed as it was planned.[72] Some changes in the planned

public participation program might have been justified.

However, TCRPC 208 staff manipulated the program without

developing an alternative strategy. In fact, two work

tasks vital to the implementation of the entire public

participation program, outlined in the Work Program, were

never implemented.[73] The tasks were to develop a

criteria to evaluate citizens participation input and to

---

[72]Tri-County Regional Planning Commission, 208
Areawide Waste Treatment Management Program: Work Program
(Lansing, Michigan: March 1976), p. 113-5.

[73]Ibid., p. 34, 60.

131

FIGURE 8

TCRPC 208 PUBLIC INVOLVEMENT PROGRAM
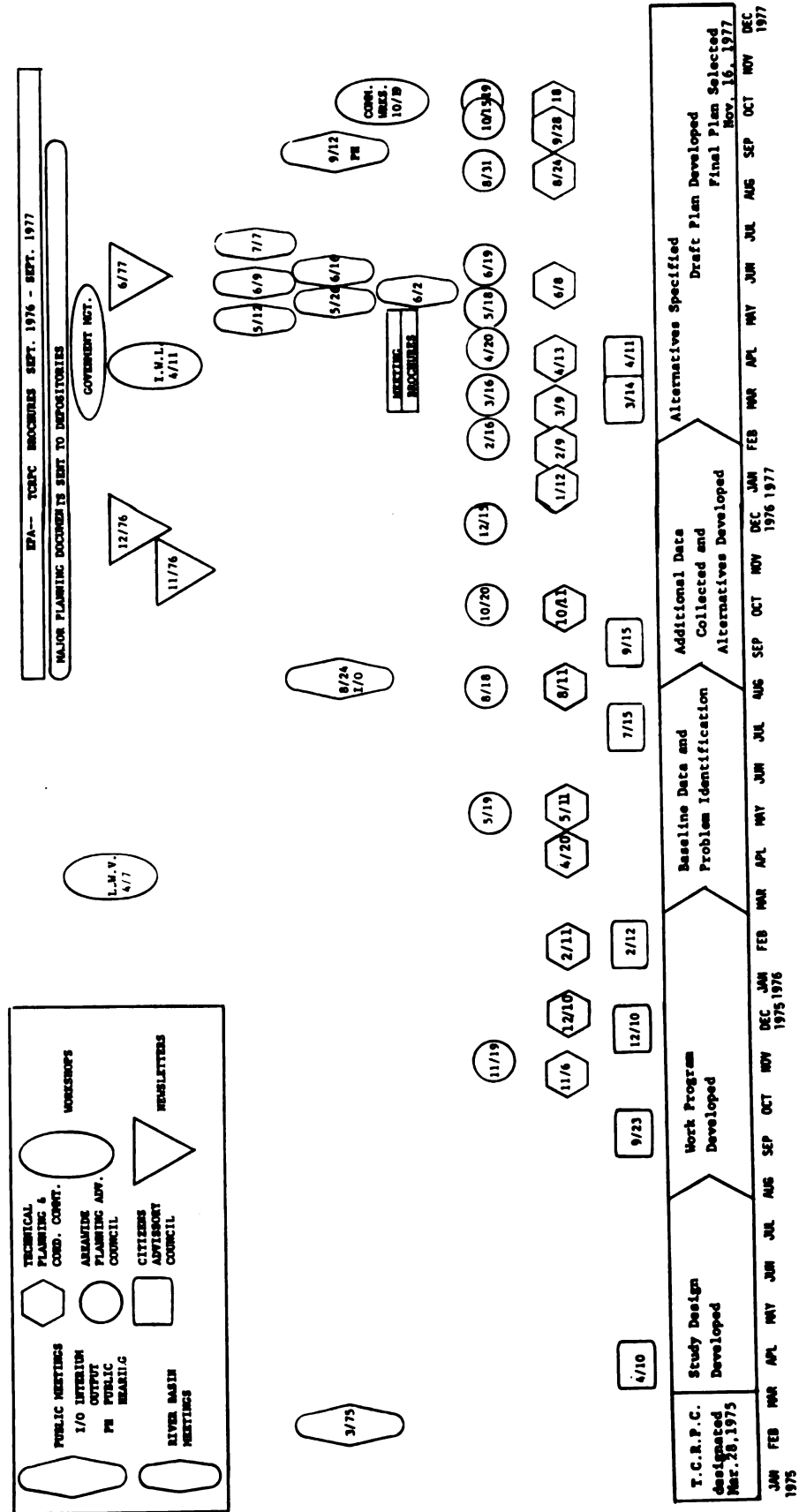
develop a participation log. The evaluation criteria was to "assess the effectiveness of TCRPC public participation efforts" and the participation log was to be a "file to facilitate public participation evaluation work tasks."[74] The agency, in a final documentation of its public participation program, failed to make any reference to these tasks. When asked in an interview why these tasks were not completed the project coordinator stated "we should have done them, but we just could not find time. We felt it was more important to get a final plan."[75] While this statement has some merit when applied to the preparation of the final document, it is not a valid justification for the staff's dilatoriness during the preceding two years of the planning process.

The public participation tasks outlined by the TCRPC staff, in its Study Design and Work Program documents, were the only written materials generated that addressed how the public participation program was to be developed. The tasks documented by the Work Program are listed with those actually utilized in the planning program and are displayed in Table 4. This comparison does not evaluate the individual efforts, it simply indicates which of the work tasks were utilized and

---

[74]Ibid.

[75]Interview with Karna Hanna, Associate Planner, Public Participation Officer, Tri-County Regional Planning Commission staff member, Lansing, Michigan, 11 May 1978.

TABLE 4

WORK TASK IDENTIFICATION AND UTILIZATION

	Listed in Work Program	Undertaken	Completed
APAC	X		X
TPCC	X		X
Participation Log	X		
Information Depositories	X		X
Institutional Map	X		
Opinion Leader Surveys	X	X	
Participation Program Evaluation Criteria	X		
Public Hearing	X		X
Newsletters		X	
Brochures			X
Interim Outputs Public Meeting			X
River Basin Meetings			X
Local Government Meetings			X
Mailing Lists		X	

*

*Dissemination of project information was noted as a work task without addressing mechanisms to do so.

documented in the development of TCRPC's 208 plan. A description of the individual mechanisms used by the TCRPC 208 staff can be found in Appendix B. The omission of work tasks that were specified in the first stage of the planning process may be justified but to do so without considering the consequences or developing an alternative strategy is capricious. The entire TCRPC 208 public participation program was characterized by a lack of forethought and follow through on the part of the staff members.

The TCRPC staff did not document any evaluation of their public participation program. The only technique evaluation generated during the planning program was from participant questionnaires distributed at the river basin and interim outputs meetings (see Appendix C). The questionnaires distributed to the participants at the interim outputs meetings focused on the meeting format. Questionnaires utilized at the river basin meetings focused on alternative and preference identification although they contained some participant identification and program evaluation items. Each of the six river basin meeting questionnaires was tabulated independently. The tabulation from the first meeting was presented to the APAC on May 18 and to the TPCC on June 8. The TPCC also received the tabulation for the second river basin meeting on June 8. In documenting the river basin meetings, the staff referred to the questionnaires and the fact that "generally about

half of those in attendance filled them out."[76] The staff

went on to say that "while the results of the survey were

in no way statistically valid, they did provide a signi-

ficant level of response from a public...."[77] The text

that followed this statement described a summary of the

basin questionnaires and staff responses. Assumptions

regarding program format, information sources and alterna-

tive preference were articulated in these staff responses.

To base any statement of program or public preference on

an unvalidated sample of less than one-thousandth of the

region's population seems to be presumptuous on the part

of the staff.

These inferences by the staff refer to the feedback

obtained through only one of the mechanisms used during

the thirty-four month public participation program. To

evaluate this and other input, the staff should have

considered the entire effort. Evaluation of the public

participation program must be done on two levels. The

techniques themselves should be reviewed, utilizing des-

criptive attributes. Attibutes listed in Table 3 and the

text describing them have been applied to the techniques

used in the Tri-County effort to evaluate their utility.

The second level of evaluation refers to the objectives

[76]Tri-County Regional Planning Commision, 208
Water Quality Management Plan, vol. I, part 1 (Lansing,
Michigan: August 1977), p. 71.

[77]Ibid.

or goals of public participation programs specified by the author in a previous section.

Comparison With State of The Arts and Objectives

Technique Evaluation

The first level of evaluation compares the individual techniques with their state of the arts descriptions and applications (see Table 5). The second level of evaluation considers how each of the techniques, identified by the author as significant through the first level of evaluation, contribute to the specified objectives of public participation programs.

This evaluation of techniques utilized by the TCRPC staff begins with the two committees developed in the early stages of the planning process. APAC and TPCC were the only long term contacts established in the agency program. APAC was developed to involve the governmental and agency interests of the region. In developing this committee the agency created a representative contact. "Resolutions of Intent" to join the planning process were required of participants. These resolutions created some anxiety among governmental units and may have contributed to their non-participation. The TCRPC's requirements for and selection of participants created a low scope of involvement. Reviewing the attendance record for APAC showed that an average of fewer than twelve voting members attended meetings. The high specificity of APAC impacted

TABLE 5

DESCRIPTIVE ATTRIBUTES EVALUATION OF TCRPC TECHNIQUES

	FOCUS		COMMITMENT		COMMUNICATIONS		CONTRIBUTION		INITIATIVE	
	scope	specf	agenc	partc	one/w	two/w	addit	univr	agenc	partc
APAC	L	H	H	H		H	H	M	M	H
TPCC	M	H	H	H		H	M	L	M	H
CAC	L	L	M	H		H	L	L	L	H
Public Hearings	L	L	L	M		L	L	L	L	M
Newsletters	M	M	M	L	H		L	M	H	L
Depositories	L	H	L	M	M	M	L	M	L	M
LWV Workshop	L	H	L	M		M	L	L	M	M
IWL Workshop	L	M	L	M		M	L	L	M	M
River Basin Meetings	M	L	H	M		L	M	L	H	M
Brochures	H	M	H	L	H		L	M	M	L
Interim Outputs M.	L	L	L	M		M	L	L	M	M
Committee Workshop	L	H	L	L		H	L	L	L	L
Government Meetings	L	H	M	L		L	L	M	M	L
News Media	H	L	H	L	H		L	H	M	H
Mail Lists	M	H	M	L	H		L	M	M	L
Interviews	L	H	L	M		H	L	L	L	L

H - High degree of attainment
M - Moderate degree of attainment
L - Low degree of attainment

on its toal involvement in the planning program. The focus of TPCC differed from APAC in the fact that a larger number of participants were involved.

The agency identified the membership of TPCC with the professional interests of the region. Participants included persons involved in planning or implementing water related programs and services. Although more persons were identified as participants in TPCC, this committee was also characterized by a high degree of specificity. The agency created a greater specificity among the participants by specifying subcommittees in technical areas and identifying participants as subcommittee members.

The agency took a very active role in APAC and TPCC. Agendas and meeting announcements were developed by the staff. Committee chairpersons actually ran the meeting but the items under discussion were usually introduced by staff members. A high degree of commitment characterized the core participants of both of the committees. TPCC, like APAC, had a small number of active participants with twelve to fifteen members attending the meetings during the final phase of the plan's development.

Emphasis was placed upon two-way communication with these committees. Participants were encouraged to contribute and introduce new topics for discussion. The small meeting format facilitated these discussions which often continued after the formal meetings were adjourned.

The contributions that these committees made to the planning program did not parallel one another. APAC was more active during the final stages of the plan's development whereas the TPCC was more active in the initial stages of the planning process. The advisory and reviewer roles of APAC demanded that this committee be involved in a broader spectrum of activities than the TPCC. The specific tasks identified with the TPCC subcommittees limited their involvement in the actual program. As the tasks were completed by the TPCC, the subcommittees became inactive. APAC, however, continued to review the inputs from staff, consultants and TPCC as the plan was developed.

The staff supported these committees consistently throughout the planning program. Their support, however, was directed by the agency's limited perspective of the committee's roles. The agency ignored the opportunity to utilize the participants in other aspects of the public participation program. These participants could have acted as information disseminators for the planning program. Active committee participants displayed a high degree of commitment to their respective committees. While not all the persons identified on the official committee membership lists actively participated, those that did demonstrated a commitment to the agency and planning program.

In summary, these committees were the most signifi-
cant mechanisms utilized by the TCRPC to involve non-agency
participants in the planning process. The specificity
which was used to select participants, however, limited
the type of output these committees could provide. The
agency staff could identify and interact with these
participants because of their technical or governmental
affiliation. In most cases these participants had
previous knowledge of and contacts with the agency. In
theory, the agency planned to address a broader public
through the Citizens Advisory Council (CAC), however,
this group never became actively involved in the planning
program.

The CAC was formed in April of 1975 "as an
educational and communication forum whereby representatives
of interested groups may have the opportunity to become
knowledgeable about TCRPC plans and programs and also to
comment on potential impacts of these efforts on neighbor-
hood or organization objectives."[78] In developing this
council the TCRPC invited organized groups to select one
representative to serve on the council. The TCRPC staff
limited the scope of the CAC by focusing their recruitment
efforts on soliciting representatives from organized
groups. Although the attendance record summary for

---

[78]Tri-County Regional Planning Commission, Citizens
Advisory Council Handbook and Guidelines: Policy for
Participation and Operating Procedures, (Lansing, Michigan:
August 1977), p. 71.

April of 1975 through June of 1976 recorded total individual participants of 126, fewer than thirty persons were active participants. A membership survey in September of 1975 generated twenty-nine responses. A similar survey mailed to those on the membership list of ninety-five persons in January of 1977 resulted in only 17 returns. The agency was successful in recruiting participant interests not represented on APAC or TPCC but failed to broaden the scope of such participants or direct their efforts to the water planning program.

The agency did not demonstrate a commitment to the CAC. In April of 1976, the Council was informed that they would be disbanded if HUD money was lost.[79] With little support for the entire CAC, the staff simply briefed them "on 208 progress as often as necessary."[80] The participants were expected to seek out information on their own. A core group of CAC members and the executive committee demonstrated a high degree of commitment to the program but were able to generate a similar enthusiasm among the membership at large.

CAC meetings were conducted in a workshop fashion with discussions following each staff presentation. This

[79]Tri-County Regional Planning Commission, Minutes of Citizens Advisory Council Meetings, Lansing, Michigan, March 1975-April 1977, (Typewritten.), p. 17.

[80]Tri-County Regional Planning Commission, 208 Water Quality Management Plan, Interim Outputs--Technical Appendices, (Lansing, Michigan: August 1976), part III, p. 1.

format encouraged two-way communications among partici-
pants and the staff members presenting the program. These
discussions, however, were limited by the amount of infor-
mation presented during the presentation and the degree to
which staff persons facilitated the actual discussion
group.

In the area of water quality planning the CAC
contributed very little input. By reviewing and discussing
information that was presented, the council was aware of
the planning program. Staff members presented information
to the group on so few occasions that no accumulative
information transfer occurred. The CAC could have pro-
vided a continuous link between the staff and public if
the agency would have taken the initiative to establish it
as they did the APAC and TPCC. In an attempt to concen-
trate their efforts, the CAC participants created task
forces on certain issues. Unfortunately a water quality
task force was never developed. The TCRPC's 208 staff
ignored the need for a water quality task force and
continued to interact with the CAC on an informational
basis. By forming these task forces, the participants
demonstrated a high degree of initiative. Unfortunately,
none of the participants at that time pursued the area of
water quality and therefore the agency was left without a
group to interact with the water quality planning program.

Consequently, the CAC was not directly involved in
the planning program. In referring to the development of

a CAC, the agency stated that "An organized citizens' council will provide constant and dynamic citizen involvement in all areas and phases of community planning at the regional level."[81] What the agency failed to recognize was that this group could only be effective if they were provided with the information and support necessary to motivate their involvement.

A public hearing concerning the draft plan was held on September 21, 1977. This hearing provided the general public and other concerned parties with a formal mechanism to comment on the plan. The hearing stimulated a low degree of participation. Excluding staff, consultants and TCRPC members, the recorded attendance at the hearing was only 115. As required by law, the hearing addressed the broad spectrum of topics involved in the planning program. Representatives of various interests were present at the hearing but few actually provided statements.

In developing the hearing presentation and arranging for the hearing facilities, the agency provided the minimum input required by law. By holding a single hearing as opposed to multiple hearings at various locations and times, the agency forced the participants to travel and adjust their schedules in order to attend. Participants were provided with information about the plan upon arrival.

---

[81]Tri-County Regional Planning Commission, Citizens Advisory Council Handbook and Guidelines: Policy for Participation and Operating Procedures, p. 1.

This information, however, was general, providing only a superficial understanding of the plan and its potential impact. Participants were given an opportunity to ask questions after the information program. This opportunity generated only a few questions. The agency staff simply replied to the inquiries with a statement and then proceeded to the next question. Participants and staff did not develop any dialogue. Therefore, the degree of two-way communications was very low.

Public hearings for final or draft plans contribute little new information to the planning program. Since this hearing was held, as required by law, after the alternatives had been specified, participants could only provide some expression of alternative preference. Such expressions of preference can assist the agency in their formulation of the final plan. These expressions, however, are only of a reactionary nature which limits their incorporation into the planning program's information base. This public hearing was not unique in this respect. It was typical of the negative atmosphere that surrounds public hearings and the contributions they make. As a legal requirement, the hearing fulfilled a mandate. Hearings of this type would not be beneficial to the planning program in its earlier stages. The technique, therefore, provides a very limited contribution to the overall program.

Public hearings develop a considerable amount of anxiety on the part of the agency even though they require

only a minimal amount of preparation by the agency. The
TCRPC staff utilized previously printed material and up-
dated a slide presentation for the hearing. Meeting
room accommodations and hearing announcements were handled
by the agency on a routine basis. Participants attending
the hearing displayed only a moderate degree of initiative.
They did display some degree of initiative by attending
but few actually came prepared to respond to the draft
plan. While no survey of motivation for attendance was
attempted by the agency, the comments made during the
hearing demonstrated the participants' concern regarding
how the plan would affect them personally.

The input from and the format and timing of this
hearing were typical examples of the mechanism's applica-
tion to a planning program. Hearings will continue to play
a role, even if only a legalistic and symbolic one, in the
development and implementation of public participation
programs. Agencies such as the TCRPC can make public
hearings a more viable mechanism if they consider and
address them as an opportunity to inform and encourage
participants rather than a mandate to be satisfied by the
minimum requirements.

The newsletter, Waterlog, developed by the TCRPC
staff to provide participants with information about the
water planning program, was never fully implemented. News-
letters were distributed to APAC, TPCC, CAC and TCRPC
members. These newsletters were also distributed to a

limited number of participants identified by the staff.
Approximately 1200 copies of each newsletter were printed.
The majority of the newsletters were sent to the previously
identified participants. The staff utilized the balance
of the newsletters by placing them in lobbies of public
buildings and by providing them to walk-in visitors at the
TCRPC office. Through the distribution in public buildings
the agency expanded its contacts beyond the traditional
audiences, increasing both the numbers and diversity of
participants contacted.

The agency made a commitment by publishing the
first newsletter and introducing it as a bi-monthly
publication whose purpose was to maintain contact with
participants. Unfortunately, only three of six newsletters
were published. The idea of bi-monthly publication became
a November, December and June distribution. While the sub-
ject matter of the newsletters did provide information to
participants, their timing and distribution subtracted
from the mechanism's usefulness in the planning program.
Newsletter recipients were very passive in their use of
this one-way communication device. Agency staff reported
few comments regarding the distribution or content of
the published newsletters.[82] The newsletters were sent
by bulk mail with no feedback mechanism or recipient

[82]Tri-County Regional Planning Commission, report
submitted by the Information Officer to the Commission
regarding 208 programming, Lansing, Michigan, September
1977, p. 7.

questionnaire included in them. The agency simply used the
newsletter as a one-way communication source with an iden-
tified group of participants.

Without a feedback mechanism incorporated into the
newsletter, the inconsistent nature of their distribution
detracted from their potential contribution to the planning
program. The agency could have utilized the newsletters
in the early stages of the planning process. As the plan-
ning program began, these newsletters would have provided
a mechanism to recruit participants and inform the public
about the planning program. The control of a newsletter is
solely the responsibility of the agency and in this case
they chose to neglect the broader application newsletters
can provide.

In part, the TCRPC staff was forced to modify their
original newsletter program. Funds for the publication
of the newsletter were not committed to the project and
as other demands for program funds developed, the news-
letters became a lower priority. Participants were not
actively involved in preparing the newsletter and there-
fore did not become involved in the decision to modify it.

Newsletters can provide a continuous source of
information to participants if they are carefully planned
and distributed by the agency. The Waterlog newsletter
was characterized by poor planning and a lack of commit-
ment on the part of the agency to make it viable.

Information depositories, like public hearings, have

a traditional role in public participation programs but
their utility depends on how the agency utilizes the mech-
anism. The TCRPC information coordinator was responsible
for distributing material to local libraries. The thirty-
two libraries listed as depositories received planning
documents throughout the planning process. After receiving
the documents, these depositories actually determined how
they would be used. In a spot check of five of these
depositories in August of 1977, the author was informed
at three locations that only a portion of the material was
available. Two of the three locations lacking material
had not catalogued the documents because no one else had
requested them. This low demand on the part of the public
could be attributed to their lack of motivation to seek
out the material or their lack of awareness regarding
its availability. Whatever the reason, the depositories
were utilized by only a small number of participants.
Depositories, by their location and affiliation with
libraries, focus their contacts on a very specific
audience.

The agency had a very low degree of commitment
in establishing the depositories. By providing the library
with a copy of each major planning document, the agency
fulfilled its legal obligation. Participants who were
informed about the location of depositories and who were
also motivated to utilize them, were confronted with
hundreds of pages of unsummarized data and text. These

documents, while fulfilling the legal requirement to publish information as it was developed, were not organized or written at a level that the general public could readily comprehend.

In this basic form, the written documentation requires a moderate degree of participant commitment to read and grasp a fundamental understanding of the planning program. Participants were not provided with any other mechanism at the depositories to enhance the one-way communication such documents provide. Without a feedback mechanism, these depositories provided a low degree of support to the total program. Participants may have read all or parts of the documentation but were not provided with any avenue to feedback information until formal meetings were held. The depositories were established at the beginning of the planning program and were available to the public on a continuous basis during the entire planning period. Although the information was provided as it became available, the agency took a very passive approach to its utilization. This may have been justified, although not documented, by previous agency experience with the public's use of established depositories.

The agency was involved in two participant workshops during the planning program. The first was for governmental officials and industrial representatives in the region. Sponsored by the League of Women Voters (LWV), the workshop attracted a total of 138 participants from this

specifically identified audience. While the number of persons involved in this workshop was enough to provide a viable interaction among participants, it represented only a small portion of the regional population. The second workshop was sponsored by the agency and developed by the Issac Walton League (IWL). This workshop, while directed at the general public, attracted less than thirty participants. This second workshop entitled "Waterwagon," a part of the IWL's "Save our Streams" program, was promoted to encourage citizen involvement in a broad spectrum of water related issues. This focus on the national issues of water quality and conservation limited the workshop's application to the Tri-County water quality planning effort. While the workshop did stimulate interest among participants, it did not provide the agency with any identifiable output. Each of these workshops addressed a different audience. Although there was no program tie between these workshops, the remainder of the attributes describing them are the same. The agency had only a minor role in developing the format of the workshops. The TCRPC staff acted as discussion leaders during the workshops but were not involved in developing the summary statements for or evaluation of these workshops. Both workshops were held during normal business hours. Participants at the LWV workshop addressed the need for future workshops as the planning program progressed. TCRPC staff acknowledged this desire but failed to develop any other

workshops for this audience.

Both workshops utilized a typical format of infor-
mation presentation, discussion groups and participant
summaries. This format generated a moderate degree of two-
way communications among participants. The greatest amount
of participant exchange took place during the discussion
groups. Unfortunately, they were scheduled for only a
small portion of the available time.

While each of these workshops had the potential
for generating a continued interest and involvement on
the part of participants, little spin-off occurred from
either program. The agency announced at the LWV workshop
that "interested and committed citizens can make their
voices heard in the Technical Planning Coordinating
Committee for '208' and the TCRPC Citizens Advisory
Council."[83] Interested persons were asked to contact the
agency for further information rather than recruiting them
on the spot. This delay, in some instances, could have
been enough to diminish a participant's motivation. The
agency staff encouraged participants at the IWL workshop
to attend the upcoming river basin meetings rather than
encouraging their direct involvement in the planning pro-
gram, since there was such a short time remaining in the
planning program. The agency, in effect, isolated both of

[83]League of Women Voters, Lansing Chapter, Workshop
Report and Proceedings, "Cooperation for Clean Water,"
held at Kellogg Center, East Lansing, Michigan, 7 April
1976, p. 2.

these workshops from the planning program. Because of timing, whether intentional or not, the agency was not able to incorporate the workshops' output into the planning program. Rather than take the initiative to develop other workshops or modify their focus, the agency was content to act as a participant.

The six river basin meetings sponsored by the agency, in the final stages of the planning effort, were the most aggressive attempts the agency made to involve the public in the 208 program. Although the number of participants was very small, with respect to the region's population, they did represent diverse interests and backgrounds.

The agency recognized the need to hold some type of public forum prior to the public hearing. These basin meetings were not included in the original public participation program. The agency staff believed that the alternatives developed through other mechanisms would provide the public with some idea of the plan's scope. While the agency was highly committed to this concept and the river basin meetings, they were possibly excluding the general public from the alternative development stage of the planning process. By holding these meetings after normal working hours and at various geographic locations within the region, the agency expanded its contacts. Participants demonstrated only a moderate

commitment by attending and filling out a questionnaire following the session.

These meetings provided a low level of two-way communication because of the limited amount of time available and the amount of information necessary to explain the alternatives. The agency staff did attempt to answer any questions participants asked. This question/answer format, however, provided little opportunity for others to voice their opinions or concerns on the same topic. Questions asked of the staff were often of a personal concern and not applicable to the broad problems addressed by the alternatives. These questions did provide the agency with an awareness of the publics' knowledge and understanding of the planning program. However, these questions provided only a moderate amount of feedback that could be utilized to select alternatives.

Regardless of the feedback obtained, the agency demonstrated a high degree of initiative by developing and promoting the meetings. Participants, while displaying certain concerns during the meetings, were not motivated to involve themselves in the selection of the final plan.

Brochures distributed by the agency through a variety of avenues addressed a larger number of participants than any other mechanism. The entire range of brochures and their distribution will be addressed as a single technique. Not all the brochures were sent to every participant. The agency concentrated its brochure

program on established contacts using agency mailing
lists to distribute them. This reliance on the agency
mailing lists restricted the impact of the brochures on the
general public. The only exception to this type of dis-
tribution was a brochure called "Water and You - Let's
Talk About It" that received a broader distribution of
the brochures and actually developed two of them as in-
house publications. Brochures not utilized in mailings
were distributed to depositories and other public build-
ings. There were no records of quantity or locations of
distribution maintained by the agency.

Participants receiving the brochures were not
surveyed by the agency to determine the effect or utiliza-
tion of the printed material. Without a feedback mech-
anism incorporated into the brochures, the agency could
only utilize these brochures as disseminators of informa-
tion. As information disseminators, the brochures may
have provided the agency with a convenient method to
remind participants of the program. Since the brochures
concentrated on information dissemination and did not
provide a feedback mechanism, they provided a low degree
of input to the planning program.

Brochure dissemination as utilized by the TCRPC
during the last year of the planning process may not have
provided sufficient information to participants to justify
their use. The timing and content of the brochures distri-
buted by the agency characterized them as agency publicity

rather than viable additions to the public participation program. Tri-County may have been encouraged to utilize the brochures by the EPA Regional office since they were provided as part of the regional information campaign.

The Interim Outputs Meeting held in August of 1976 marked the midpoint of the thirty-four month planning process. It was the first public meeting held by the agency to discuss the planning program. Although the meeting was open to all persons in the Tri-County Region and was announced in the major Lansing newspaper, fewer than forty participants attended. The author was unable to find any documentation in the TCRPC files to indicate what type or size audience the staff expected to recruit for the meeting. It is the opinion of the author, as a result of discussion with staff and participants, that this meeting lacked the agency commitment necessary for it to be an effective mechanism to involve the public and it also established the posture the staff would hold toward public meetings. The staff provided the participants with information but failed to establish the role participants could play in the remainder of the planning program. Audience questions were answered by staff members during the meeting. A moderate level of two-way communications was developed by this question/answer approach to participant concerns. By answering one question and moving on to another, the staff did not allow any dialogue to be developed between participants. The staff made no attempt

to evaluate their approach to the public. In referring to
this meeting in the final plan, the staff characterized
the meeting as "fairly successful," however, they failed
to explain their method of evaluation.[84] The meeting,
once over, was merely noted as a part of the program and
was not utilized as a foundation for the public participa-
tion program.

To some extent, the lack of initiative on the part
of the public to attend the meeting justified the agency's
dismal outlook toward other such meetings. The agency
staff had prepared the subject matter material to be
presented at the meeting but had not considered the
audience they would address. Since this was the first
public meeting of the planning program, the agency staff
had prepared the subject matter material to be presented
at the meeting but had not considered the audience they
would address. Since this was the first public meeting of
the planning program, the agency lacked any reference
point for comparison. Without established goals for such
meetings, or the public participation program as a whole,
the agency had no way of evaluating the Interim Output
meeting.

During the final month of the planning program,
the staff developed a workshop for the agency's commis-
sioners. The workshop addressed the composition of the

---

[84]Tri-County Regional Planning Commission, 208
Water Quality Management Plan, vol. I, part 3, p. 136.

plan in its final form. While the actual voting for
adoption was to take place at a regular meeting of the com-
mission, the staff viewed this workshop as the final step
in the planning process. The lack of any public input
at this meeting warrants its inclusion in this evaluation.

During the final month of the planning program, the
staff developed a workshop for the agency's commissioners.
This workshop is included in this evaluation because it was
part of the decision-making process even though it lacked
any form of public involvement. By focusing this workshop
effort on the commissioners, the staff attempted to pro-
vide them with information about the final plan and develop
some consensus regarding its adoption. The fact that all
participants were commissioners limited the scope of this
workshop. Neither the agency nor the commissioners demon-
strated a commitment to the workshop. The staff utilized
the workshop to discuss the plan in detail with the com-
missioners. This was the first opportunity during the
planning program that the commission, as a whole, had to
meet with staff to discuss the plan. The high degree of
two-way communications allowed the participants to pursue
issues in detail. The workshop stimulated the staff and
commissioners to consider the plan's implementation in
greater detail than had previously been necessary. With
less than a month left in the planning program, the staff
could do little more than respond to questions. Requests
for more information by the commissioners could not be

fulfilled because the planning program was winding down, staff had begun to leave for other jobs and the remaining budget was committed to printing the final plan. The staff emphasized that the plan could be changed in the future when more information was available. While this workshop did contribute to the commissioners' understanding of and their decisions to support or reject the plan, it had little influence on the plan itself.

The workshop was scheduled in an effort by the staff to induce the commissioners to support the plan as written. The staff realized that some of the commissioners were unsure about the plan and that its approval was in jeopardy. The commissioners had demonstrated only a minimal interest in the planning program prior to the workshop. As the time approached for the commissioners to accept or reject the plan, their interest increased. While the workshop did support the commissioners in the decision-making process, its timing and limited scope reduced its contribution to the planning effort.

Agency staff concentrated their participant contacts on governmental groups during the three months preceding the River Basin meetings. These governmental meetings occurred at executive sessions for or actual meetings of these units. By focusing on the elected or appointed officials of the region, the staff intended to encourage their support of the plan and upcoming basin meetings. The staff held eleven such meetings across the region. While

there were some non-elected or appointed participants present at these meetings, the total number of contacts was low.

By developing this series of meetings, the agency demonstrated a desire to inform governmental officials, an established client group of the agency, about the plan's progress and how they could assist in the effort. The governmental groups on the other hand viewed the plan as the agency's responsibility and were not motivated to take a more active role in the final stages of the planning program. Because of this stance, the meetings functioned primarily as disseminators of information. A low degree of two-way communications between the governmental officials and staff normally occurred after the staff presentation. This communication usually focused on the timing necessary for the plan's approval and its potential impact on governmental units.

Because of the information dissemination approach utilized by the staff in these meetings, this mechanism did not provide a direct input to the planning program. The staff reported on their meetings with the groups to APAC and TPCC but did not evaluate or summarize their input. Meetings of this type could have encouraged the governmental groups to take a more active role in the planning program. The passive, "wait and see" attitude demonstrated by the governmental officials at the meetings emphasized their lack of involvement despite the staff's

efforts.

The agency placed a considerable amount of emphasis on its established news media contacts to disseminate program information to the public. As an outgoing aspect of the TCRPC program, the media provided the broadest public exposure that the planning program received. This study will not attempt to evaluate the impact of such media coverage on the plan's content. It does, however, consider the contribution made by the media to inform the public about the planning effort.

The agency provided press-releases to the media throughout the planning process and encouraged reporters to attend public meetings. Media coverage of the planning program focused on the major events. Public hearings and final plan approvals are more significant to major media sources and allow them to highlight the planning effort while reporting on current events. These media contacts provide a high degree of one-way communication to the general public. As a mechanism for public involvement, the media can only stimulate the participants desire to become involved. The agency must provide the avenue for individuals to involve themselves in the planning process. Such stimulation can occur at any stage of the planning program. In this case the media had its greatest impact during the final stage of the planning program because of local government units' objections to the draft plan. The agency could only moderately influence the media's utilization of

available information. By providing the news agencies
with updates, the staff attempted to maintain good
relations and encourage continuous coverage throughout the
planning effort. As with any mass media program, the
impact of its information dissemination is difficult to
quantify. The participants must take the initiative to
assimilate the information and act on their conclusions.
If the public is not motivated to act, the information is
disseminated but fails to generate any feedback.

Mailing lists should not be considered public
involvement mechanisms solely by the nature of their
existence. These lists only become significant when they
are utilized. The staff developed their mailing list
from a very specific audience. The agency utilized the
membership lists of APAC and TPCC as a basis for their
mailing list. In addition to these committees, the staff
utilized the existing agency mailing lists for commis-
sioners, elected officials and Citizens Advisory Council
members. The agency had initially established a key
participants list for the 208 planning program but failed
to maintain it throughout the program. By utilizing
existing lists and adding those persons specifically
identified by committee membership, the agency established
a mailing list of approximately one thousand persons. Not
all mailings were sent to each person on the list. The
agency managed these lists and distributed information to
participants on a selective basis. These lists were

utilized to disseminate information throughout the plan-
ning program. A variety of materials were distributed
using these lists. These materials included meeting
agendas and minutes, brochures, planning documents and
the Waterlog newsletter. None of the materials sent to
participants contained feedback mechanisms, so therefore,
the lists provided only one-way communication. Without
feedback mechanisms established within the materials,
participants could only input through other mechanisms.
While the agency did establish the lists, they demonstrated
only a moderate degree of initiative in their utilization
of these lists. These lists were not updated or evaluated
on a regular basis by the staff. Individuals once placed
on the list did not have to maintain their involvement to
receive materials. While such a distribution policy by
the agency is acceptable, it may not have been the best
utilization of limited resources. The organization of
these mailing lists, by established agency contacts,
limited their specific application to the 208 program.
Individuals received materials whether they wanted them
or not. In part, this technique of mailing materials to
established contacts was a promotion of the agency rather
than of the planning program.

Interviews undertaken by the agency staff with
opinion leaders of the region were not documented during
the planning program. The agency planned to identify and
interview individuals of the region to gain their input on

water quality problems and solutions. These interviews were to be "ongoing surveys to assess attitudes about major elements and proposals of TCRPC's 208 study."[85] Agency staff did conduct some interviews, of this type, with elected officials during the first stage of the planning program. These interviews, however, focused on the specific group of participants holding elected positions. Without documentation, the number of interviews held during that first stage of the planning process is uncertain. A staff member recalled that these interviews were conducted by various members of the staff independently of one another. The staff member estimated that over thirty interviews were held during this initial attempt.[86]

This limited thrust by the agency at the beginning of the planning program had a negligible impact on the entire program. Without a mechanism to incorporate the feedback obtained through these initial interviews, with other information and the program, the staff discontinued using the technique early in the planning program. The high degree of two-way communications inherent in the interview process demanded more time and attention from the staff than they had anticipated.[87]

---

[85]Tri-County Regional Planning Commission, 208 Areawide Waste Treatment Management Program Study Design, (Lansing, Michigan: August 1975), p. 67.

[86]Interview with Karna Hanna, Associate Planner, Public Participation Officer, Tri-County Regional Planning Commission staff member, Lansing, Michigan, 11 May 1978.

[87]Ibid.

The agency staff did not use the interview process at any other point in the planning program. Interviews could have assisted the agency in assessing participants' attitudes about the planning proposals if they had approached them in an organized and consistent fashion. If properly developed and conducted, interviews can provide valuable inputs to the planning program from individuals, regardless of their previous involvement. The agency, however, was not motivated to seek out this type of input during the planning program.

This review of the techniques, utilized by the agency, evaluates each technique's contribution to the entire program. This evaluation was based on the structure of the technique as it was executed during the planning program. The degree to which each technique supported the attributes is a function if its state of the arts application and its actual execution in the TCRPC 208 planning program. By reviewing the focus and contribution of each technique utilized by the agency and displayed in Table 5, the author has excluded some of the techniques from the second level of evaluation. This exclusion is based on the technique's contribution to the program, scope of participant involvement, and agency discretion in utilizing the technique. The public hearing and interim output meeting, although contributing little to public involvement and the planning program, have been included in the second level of evaluation because of the legal

requirement that they be included in the agency program.

Program Evaluation

The eleven techniques listed in Table 6 constituted
the basic program and thrust of the TCRPC's 208 public
involvement program. In this second level of evaluation,
the author will discuss each of the public participation
program objectives. References to specific techniques
will relate to the degree of attainment achieved.

The elements necessary for conflict resolution to
occur were absent from most of the techniques utilized by
the agency. Two elements which are essential to the con-
flict resolution process are the presentation of informa-
tion and interaction among participants. The agency
developed several information sources during the planning
program. These sources were structured with an emphasis
on information dissemination and they allowed very little
interaction. The two committees established by the agency
during the initial stages of the planning program, APAC and
TPCC, were the exception to this structure. These
committees provided the agency with long term opportunities
for information and interest interactions.

The agency intended to have the public hearing, river
basin meetings and governmental meetings function as
avenues of conflict resolution. Each of these techniques
were offered in the final stages of the program and
provided only a single opportunity for interaction with

TABLE 6

OBJECTIVE EVALUATION OF TCRPC's PUBLIC INVOLVEMENT PROGRAM

OBJECTIVES

	CONFLICT RESOLUTION	ACTIVE VS PASSIVE	DIVERSITY OF PUBLIC	TWO-WAY COMMUNICATION	CHANNELS FOR PUBLIC INPUT	ARTICULATION OF DESIRES	INFORMATION & EDUCATION	TEST OF ALTERNATIVES
APAC	X	X		X			X	X
TPCC	X	X		X			X	X
Newsletters		X					X	
Brochures			X				X	
Mail Lists			X					
Depositories			X					
Interim Outputs Meeting	X		X	X	X		X	
Public Hearing			X		X	X	X	X
River Basin Meeting	X	X	X	X	X	X	X	X
Government Meeting	X			X			X	X
News Media			X					

X indicates contribution to objectives

the specific group of participants. These meetings focused on the alternatives specified by the agency. Since the participants had not been involved in the planning program to that point, the agency dominated the majority of available time with information dissemination. This information was necessary for participants to specify their concerns. While some conflict resolution did take place at these meetings, the input was minimal and the agency found it difficult to incorporate this input into the planning program.

The sole contact approach these meetings provided with participants limited the amount of conflict resolution that could take place. The agency did not provide a continuous contact with these participants. The alternatives presented by the agency narrowed the range of responses participants could provide. The agency was, in fact, promoting specific alternatives during these meetings. The participants were, therefore, providing reactions rather than resolving conflicts.

The two previously mentioned committees consequently provided the agency with the best opportunity for conflict resolution. These committees, however, were limited in scope and involved a highly specified group of participants. Conflict resolution, therefore, was not incorporated into the program. While conflict resolution was considered by the agency to be a part of the program, the mechanisms used to facilitate it were not adequate.

The agency's involvement with participants during the planning program provides the basis for an active participation program. Many traditional public participation techniques such as public hearings, mailings and depositories provide information for the public. While these techniques address the legal requirement for public information, they lack the characteristics necessary to motivate the public. The agency must be aggressive in their recruitment of participants. The TCRPC focused their active participant contacts on established agency clients. Through the TPCC and APAC the agency demonstrated the characteristics necessary for an active program. By supporting these committees throughout the planning program the agency demonstrated a commitment to these participants. The agency's staff became actively involved with these committees in discussing the water problems of the region and developing alternative solutions. By meeting with these committees over a period of time the staff developed a working relationship. This relationship provided a foundation for the agency to advance through the phases of the planning program.

The agency's utilization of a newsletter program demonstrates another active participation mechanism. While the newsletter program did not realize its full potential, it did contribute to the overall program. The staff's decision to limit the distribution and publication of the newsletter detracted from its utility. The three issues

of Waterlog, produced by the agency, addressed the information generated during the preceding planning phase. This step by step approach used to present the information generated during the planning program could have been utilized to recruit and provide background knowledge to new participants.

The agency actively promoted and held six river basin meetings during the final months of the planning program. These meetings were the most active mechanism utilized by the agency for involving the general public. By addressing participants that were previously uninvolved in the process, the agency attempted to develop their interests and motivate them to participate. While they were successful in motivating new participants, the staff found it difficult to integrate their input into the program. With only a few months remaining before the final plan was to be completed these new participants were questioning the foundation upon which the alternatives were developed. This demonstrates the need for involving a diverse public throughout the planning program.

The diversity of participants is an important objective in developing participation programs. The tendency is for agencies to identify groups or representatives from established contacts. While such participants can provide the foundation for the program, the agency must seek out others affected by uninvolved interests to participate. The first step in this process is to identify

broad interest areas that will be affected by the planning program. The TCRPC staff did not develop such a framework. They approached the program with the assumption that it would affect all the people of the region and, therefore, no specification was necessary. Such a broad identification, however, was not sufficient to motivate participation. The agency staff took steps to encourage participation by specific groups through APAC and TPCC but ignored other water related interests within the region. Each of the techniques utilized by the staff to address the diverse interests were solitary and did not build upon one another or the program.

The agency should have varied the techniques used to address the public. The staff could have increased participation in the early stages of the process through workshops or discussion groups as opposed to relying solely on public hearing and public meeting formats. As documented, the techniques utilized by the agency during the first half of the planning program, emphasized information dissemination. Brochures, news articles and depositories provided the public with information but lacked feedback mechanisms necessary for participant involvement. Opportunities for the public to interact with the agency intensified during the final phase of the planning program and focused on the previously developed alternatives. Without an active part in developing the alternatives, these participants were expected to articulate their preferences

within the short time period of the meetings.

Two important aspects of the communication process, between participants and agency staff, were not recognized in this particular program. These aspects of the two-way communications process are critical to its utility. Two-way communications must take place with a range of participants and extend over the entire planning period. The agency engaged in two-way communications with the public through the interim output and river basin meetings. These meetings represented significant milestones in the planning program that required feedback. The agency, however, was not motivated to communicate with the public continuously during the planning program. The agency utilized two-way communications with the APAC and TPCC during the entire planning program. These committees maintained their interaction with the agency by holding regular meetings at which staff members and consultants were present. This commitment by the agency provided these committees with an opportunity to explore questions over an extended period of time. The agency attempted to develop two-way communications with the various governmental units of the region through a series of governmental meetings. These meetings, like the public meetings, found the participants unprepared to respond. The agency had not established a foundation with these participants through prior communications.

The agency neglected to establish mechanisms to encourage and gather input from participants throughout the planning program. While the major public meetings provided such channels, their focus and timing limited the public's contribution. Channels for public input must be established and supported by the agency. These channels must be maintained throughout the planning process. The agency concentrated their efforts on inputs received through APAC and TPCC. These committees provided a channel for established agency clients. These inputs were utilized by the agency to represent the broad interests of the region. However, such a broad representation did not exist on these committees and their input lacked the sentiments of those participants not represented. The agency did not evaluate their channels of communication at any time during the planning program. The majority of the program lacked any type of identifiable structure for incorporating public input into the process. Input from the formal meetings and hearings was documented in the final plan. This input, however, referred to the alternatives developed by the agency. Public input regarding problem identification was inappropriate at this stage of the planning program.

This articulation of concerns by the public during the final stages of the planning program caused the staff to display a defensive posture toward the plan. The public had not been involved in the planning program prior to

these final meetings. Since the agency presented the information at the meetings, participants often assumed that the staff had developed the plan. The participants did not identify with the representation of APAC or TPCC and therefore felt their viewpoints had not been incorporated into the written plan. The river basin meetings and public hearing did provide the public with an opportunity to articulate their desires. These inputs, however, could be characterized as reactionary rather than developmental. The agency recognized the need for govern-mental units of the region to express their desires in the early stages of the planning program. The general public, however, was neglected until the alternatives were developed. The problem identification and goal setting phases of the planning program were developed by only a segment of the participants. The agency assumed that the interests identified by the TPCC and APAC would represent the general public. In developing the public participation program, the agency neglected to identify the broader range of participants that existed and also neglected to provide them with mechanisms to articulate their desires.

An emphasis was placed on information dissemination throughout the planning program. The staff had experience in disseminating program information to its member units of government and the media of the region. The information effort for the 208 planning program was based on these

contacts and relied on techniques previously utilized by
the agency. The staff concentrated their efforts on
disseminating program information rather than developing
and delivering educational material. In a planning program
of this magnitude, the agency should have addressed the
educational and awareness requirements of the public within
the region. The complexity and scope of the 208 planning
program frustrated the staff in their attempts to work with
the governmental officials of the region. These officials
needed a better understanding of the program as did the
general public. The agency assumed that the traditional
media coverage was adequate to develop a level of public
understanding sufficient for their participation. Such
a level never materialized within the population of the
region. The agency attempted to enhance participant
understanding through newsletters and brochures. These
materials, however, were distributed to only a small seg-
ment of the region's population. The agency suggested, in
the final plan, that the newsletter be continued in the
future to inform citizens of progress on 208 plan imple-
mentation.[88] The agency did not evaluate the impact of
its newsletter during the initial planning period. As the
author has described it in a previous section of this
paper, the newsletter did not inform the public about the
plan but rather addressed established participants and

_____

[88]Tri-County Regional Planning Commission, 208
Water Quality Management Plan, vol. I, part 3, p. 141.

provided the agency with some exposure among its clients.
Since the agency did not develop a broad base of partici-
pants, the need for educational materials did not develop.
By working with the TPCC and APAC the staff was able to
support the committees' informational needs. This staff
support reinforced the committees' basic understanding
and encouraged their participation. Such support was not
extended to the Citizens Advisory Council during the
planning period. The agency staff responded to requests
for information but failed to address the need for an
educational program to enhance participation.

The staff could identify with the participants of
APAC and TPCC. These committees provided the agency
with feedback on a variety of planning alternatives. Each
committee concentrated their evaluations on specific areas
of concern. APAC, as representatives of governmental
groups, articulated their preferences for management and
funding strategies. TPCC's inputs centered around the
technical opportunities that the planning program provided.
While both these committees reviewed the alternatives as
presented in the final plan, they lacked the comprehensive
approach a broader representation of participants could
have provided. As the primary indicators of planning
direction and alternative selection, these committees were
not representative of the identifiable interests within the
region.

176

The agency began to collect information from a broader range of participants after the alternatives had been developed. Feedback received through the river basin meetings and public hearings indicated preferences for specific alternatives presented by the agency. Comments from some participants at these meetings indicated their desire to pursue options not identified as alternatives in the plan. The staff's response to these inquiries was that this plan was a first attempt and it could be updated after initial approval. This approach to new inputs was due in part to the time limitation imposed for the plan's approval. The opportunities for alternative modification were minimal. These inputs did, however, provide the agency with an indication of alternative preference and an indication of the participants' perceptions of the entire plan.

Discussion of Rationale for The TCRPC's Program

A review of the techniques utilized in the planning program using the objectives identified by the author highlight two significant aspects of the agency's effort. The first significant factor was the emphasis that agency staff placed on interacting with TPCC and APAC. These two groups represented specific identifiable interests of the region. They, however, did not represent all the identifiable interests of the region and lacked representation from the general public. The EPA made specific

reference to including representatives of the general
public on the policy advisory committees in their guide-
lines for planning programs. TCRPC's program lacked this
general public representation during the first twenty-four
months of the planning program.

The second factor relates to the agency's timing
and delivery of the river basin meetings. This meeting
format had the potential of involving a broad range of
participants in the planning process. The agency, however,
delayed these meetings until the alternatives had been
developed. While the meetings did contribute to the
fulfillment of the objectives, their potential as a
mechanism for involving participants in the initial phases
of the planning program was not recognized by the agency.

The author noted at the beginning of this section
that events of the planning program could be reconstructed
through program documentation but the staff's motivations
could only be speculated. Reflecting on the total program,
including contacts with participants, review of program
documents, staff interviews and personal observations,
the author offers the following discussion of "agency"
rationale.

The staff began the planning program without
previous experience in developing public participation
programs. The EPA had developed requirements for minimum
participation standards and specific guidelines for
addressing program elements. These elements identified

various aspects of the planning and implementation program. Access to information, consultation, enforcement efforts, legal proceedings and rule making activities are examples of the program elements. The EPA notified the planning agencies of these requirements in the Federal Register, dated August 23, 1973.[89] Approximately four years later, in June of 1976, the EPA published a Public Participation Handbook for Water Quality Management. The preface of the handbook begins with "This handbook is one of a series designed to provide States and areawide agencies with assistance in carrying out water quality planning."[90] TCRPC had been engaged in its planning program for fifteen months when this document was distributed. This delay typified the support offered by EPA to those agencies designated in 1974 and 1975. Without practical experience or EPA guidance, the staff began the public participation program. The 208 planning staff was comprised of persons with urban planning, natural resources and sanitary engineering backgrounds. The information officer was a journalism graduate and had demonstrated an ability to function effectively with media representatives.

Without the advice of someone in the social science field to consider the public's needs, the staff began to

[89]U.S., Environmental Protection Agency, Water Programs, "Public Participation in Water Pollution Control," pp. 22756-8.

[90]U.S., Environmental Protection Agency, Water Planning Division, Public Participation Handbook for Water Quality Management, p. i.

develop their program. Logically, they began with the identified interests of the agency, local units of government and the technical interests of the region that had been involved in previous agency activity. These interests became identified as APAC and TPCC respectfully.

The program documentation during the first sixteen months of the planning program except for the material documented in the work program, lacked any reference to a public participation plan. This leads the author to conclude that the staff did not feel a need for such a plan. This conclusion is reinforced by the agency's failure to develop a public participation log or evaluation criteria as outlined in their work program.[91] The author found no evidence to indicate that the staff deliberately subverted or neglected any attempts by the public to participate. They simply did not recognize the opportunities for the public to participate. The individual designated as the agency's public participation coordinator had additional responsibilities that superseded her role as public participation coordinator. There were identified technical tasks to complete and the staff placed a higher priority on them than on the public participation program. Without pressure from the EPA or the public for more participation opportunities the staff was content to

---

[91]Tri-County Regional Planning Commission, 208 Areawide Waste Treatment Management Program: Work Program, pp. 34, 60.

continue the planning program without modifying their approach to public involvement.

Potential for Continued Participation

The potential for public involvement in the continuing planning process within the region as required by sections 208 and 303 of 92-500 [92] and specifed in the Federal Register[93] is not promising. In the final plan, the agency recommended a structure for implementation and continued planning that acknowledged public participation in the following manner:

> In order to continue the opportunity for the public to give advice and opinions on water quality matters, it is recommended that a Citizens Clean Water Committee (CCWC) be formed for each WQMB. The role of the committee would be to advise the WQMB on issues coming before it for consideration and to alert it to new areas of concern. The chairperson of the respective WQMB, who is a member elected from the WQMB, would also sit on the CCWC to coordinate activity among the three groups.

> To encourage citizen input at the regional level, it is recommended that a Water Quality Subcommittee of the Citizens Advisory Council be established to give input to TCRPC. It is further recommended that a member from each of the CCWCs form the nucleus of the Water Quality Subcommittee. A person from TCRPC would provide technical assistance to the CAC and CCWCs.

---

[92] U.S., Congress, Federal Water Pollution Control Act Amendments of 1972, pp. 839, 846.

[93] U.S., Environmental Protection Agency, "Policies and Procedures for Continuing Planning Process, p. 55349, Sec. 131.22, part c.

The recommended structure is depicted in
Figure 1-2 (see Figure 9). It is important
to note that each functional category has its
own special set of functions. There is no
top or bottom per se in the chart.[94]

In this recommended structure, the agency delegates

the majority of responsibility to the Water Quality Manage-

ment Board for organizing and encouraging public

participation. The agency's role of providing technical

assistance to the Citizens Advisory Council and Citizens

Clean Water Committees is not sufficient to insure

participation. The agency failed to establish a meaningful

relationship with the Citizens Advisory Committee and

failed to organize a Water Quality Subcommittee during the

initial planning program. To presume the interaction

between the CAC and agency staff would change during

the continued planning process is serendipitous.

To encourage the public within the region to

participate, the agency would have to undergo a radical

change in their approach to and understanding of public

participation. This author does not foresee any forces

from within the region, state or EPA regional office that

would cause the agency to change. If, in fact, the 208

plan is to be updated or modified, an alternative strategy

for public involvement could be established and funded.

Agencies and organized groups within the region such as

the Cooperative Extension Service, United Conservation

---

[94]Tri-County Regional Planning Commission, 208
Water Quality Management Plan, vol. I, part 1, pp. 22-4.

FIGURE 9

WATER QUALITY MANAGEMENT SYSTEM FOR TCRPC
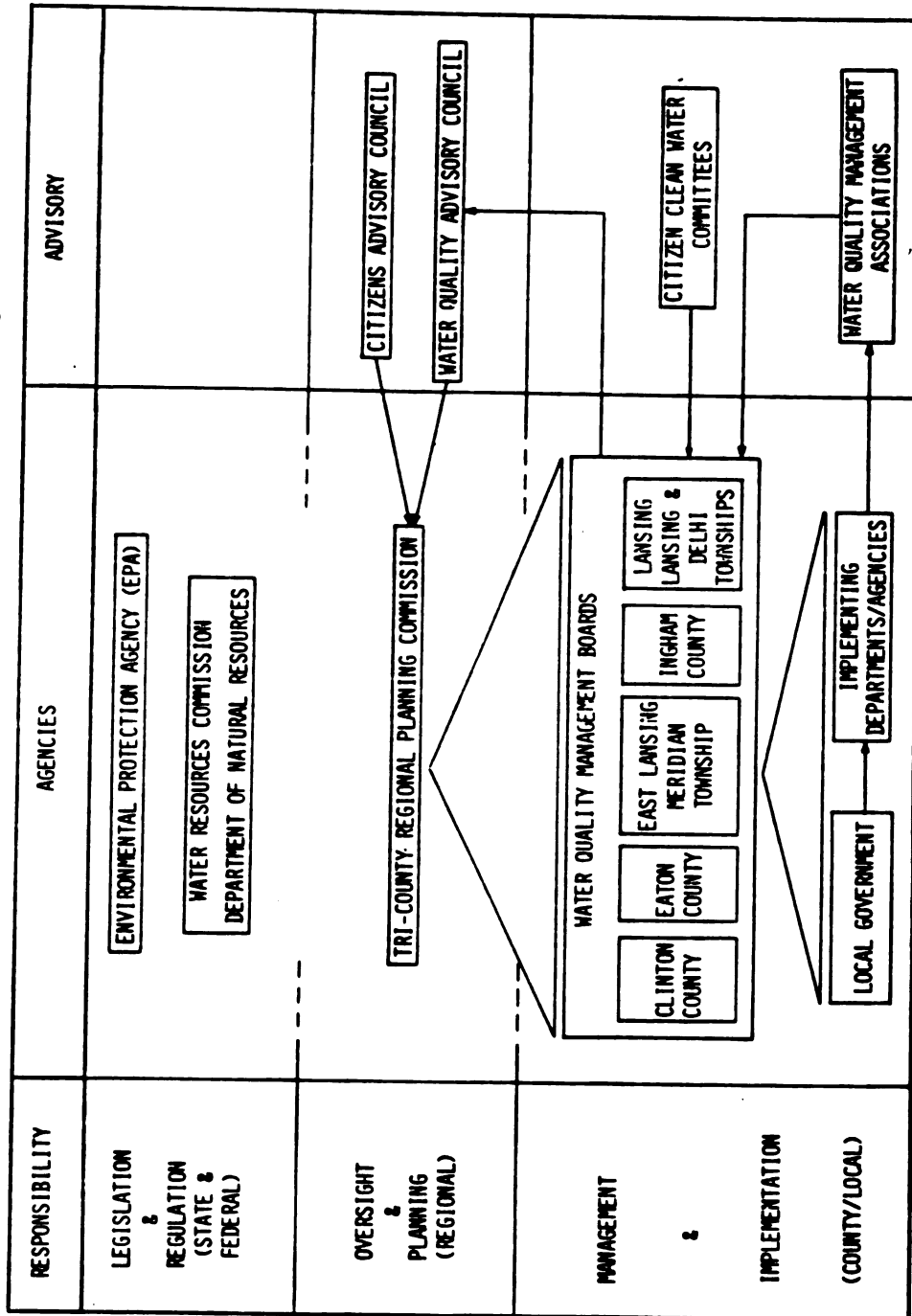
SOURCE: Tri-County Regional Planning Commission. 208 Water Quality
Management Plan.vol. I, (Lansing, MI: 1977), xi.

Clubs, Sierra Club, Audubon Society and civic groups could be encouraged to take a more active role. This approach could be utilized in all of the designated areas and within the state and could also contribute to the Department of Natural Resources' attempts to develop a basin plan for the State. The EPA, as administrator of the act, must take a more active role in establishing meaningful participation programs rather than establishing minimum guidelines. These guidelines provide the program administrators with an inadequate criteria upon which to establish a public participation program.

CHAPTER IV

THE CONTINUING ROLE OF PUBLIC PARTICIPATION

Findings

The future of public participation in resource
planning will be a function of the public's increasing
awareness of resource management and the statutory
requirements that compel agencies to incorporate public
sentiment into their decision-making processes. However,
if public participation is to become a functional compo-
nent of an agency's program, the agency must go beyond
minimum standards and address participant needs. Efforts
to improve public participation can be enhanced if the
implementing agency addresses several essential elements
and program delivery considerations when they develop their
programs. Additional effort must be placed at a national
level to improve the understanding and delivery of
participation programming. As a result of this study
several recommendations for public participation program
delivery can be articulated. These recommendations and
specific suggestions for the TCRPC conclude this section
of the study.

Essential Elements

This study identified a number of elements that will be critical in assessing the agencies' ability to meet the expanding need for public participation. The first critical area is that agency personnel must become more aware of various techniques for incorporating input into the planning process. While these techniques are available in the literature, their application has not been widespread. Many of the techniques identified in this study have not become operational due in part to their restricted dissemination. The mechanism for incorporating communication and sociological research into the planning field is not well developed. Many of the techniques that have been identified in this study were developed through communication programming and studies of social interaction. The planner, communication specialist and sociologist must work as members of a team in order to address the needs of the public to participate in the decision-making process. Agency personnel must become more aware of the techniques available to them and their proper application. A segment of this awareness must come from the granting agency. In the case of 92-500, the EPA should have taken a more active role, early in the planning process, to help agencies identify opportunities for the public to become involved. This assistance by the granting agency should be established at the onset of the program and not after the program has begun.

The sponsoring agency must also establish funding
for the development and implementation of public partici-
pation programs. Such funding is critical in the develop-
ment of each agency's participation program. While
agencies may realize a shortage of funds during planning
programs, such shortages do not justify neglecting the
public participation program as an essential element of
the planning effort. A key factor in assuring funding
for participation programs is the development of a
realistic budget during the initial stages of the planning
process.

The public participation program must have an
identifiable structure in which to incorporate the input to
the planning program. An emphasis should be placed on
utilizing existing structure to accomplish this goal. The
agency can work through existing community, social and
education establishments to accomplish such a structure.
The public and other identifiable interests must be able to
identify and utilize the channels of communications which
the agency establishes. In establishing this structure,
the agency must also develop a plan to implement a range
of participation activities. Such a plan for implementa-
tion should include the timing necessary for utilization
of the technique and any additional agency support that
would be necessary to complete the task. As with any
plan however, there must be an opportunity for change
and modification. The agency must be responsive to

changes in its program delivery and incorporate mechanisms for such a change in their original planning. These changes may occur during milestones in the planning program but are not limited to those specific times.

Program Delivery

Once the agency has accepted the essential elements of a public participation program it must then incorporate these elements into a total package which represents the public participation program. This program then must be delivered in a dynamic fashion with sufficient opportunities and avenues for public input. The program should build upon strength developed in the early stages of the planning process. The need for flexibility can become very apparent as the study progresses and the agency becomes more aware of participant needs. The agency should take advantage of opportunities in the planning program where direct participation is not required to improve the public's understanding of the planning program and agency effort.

The agency can address all levels of participants during the planning program by identifying participants' needs and evaluating various methods to meet those needs. The agency should encourage participation during all phases of the planning program. Since many planning programs span over several years it is likely that the agency will continue to encounter new participants, with

varied understanding and viewpoints of the planning pro-
gram. In referring to the specific stages of the planning
process the agency should be aware of the educational needs
of participants to insure their involvement during all the
stages of the planning process. An understanding of the
impact that the planning objectives will have on the
participants is a prerequisite to achieving meaningful
participant involvement. The agency must incorporate
the full range of participants during each stage of the
planning process.

The agency must look upon the participants as a
group of individuals with a variety of needs. While the
agency is ultimately working toward the development of a
plan it must also address the participants' immediate
needs for education and channels for input. Each parti-
cipant will have a different understanding of the program
and its effects upon the community. The agency must
address these points in some organized fashion in order
to reach the large number of participants involved with
any regional planning effort.

Evaluation of technique performance and program
effectiveness must be an on-going part of any agency's
public participation program. Without evaluation, the
agency may continue with a public participation program
that is not meeting the needs of its participants. Evalu-
ation, as it is outlined in this study, must occur at
both the program and the technique level. While this

evaluation is best accomplished by the agency as part of an effort to improve their program, sponsoring agencies such as the EPA should take a more active role in evaluation efforts. If the evaluation identifies specific needs, the agency should address those needs before continuing the planning program. Agency staff may find it helpful to seek the advice or review from persons not directly involved in the planning program in order to gain a different perspective on their technique selection and program delivery.

Needs Assessment

Identification

While a great deal of work has been done in the development of techniques for public participation little effort has been placed on the packaging or incorporating of these techniques into actual planning programs. A gap exists between the body of knowledge and the application of new techniques to meet agency and participants' needs. Agencies do not have the staff or time to develop techniques on their own. While each agency may have a unique set of circumstances, the general framework of these techniques could be incorporated into the agency's effort.

Mandates for public participation must be based on something more than minimum standards if they are to result in meaningful public participation programs. While

the minimum standards do provide a base line to
evaluate participation programs, they simply address
the delivery of the technique and not the input gained.
Minimum standards must address the impact participant input
has on the planning program if they are to become an
effective tool in public participation. The agency must
also seek ways of educating both staff persons and the
general public about the specific planning effort and
importance of public participation to accomplish their
goal. The education process is a two-way street for the
agency. While participants provide the agency with infor-
mation and an understanding of community needs the agency
can reciprocate by providing participants with alternatives
to meet those needs and their associated costs.

Attainment

Since planning programs cannot be isolated from
ongoing activities in resource management, efforts to
integrate the various planning/management agencies should
be pursued. The multitude of agencies at the federal and
state level complicate the public's attempts to transfer
information to the appropriate agency. Section 304 (J) of
92-500 specified that EPA, as administrator of the act,
was to enter into agreements with the Secretaries of the
Army, Agriculture and Interior for the purpose of
achieving and maintaining water quality through appropriate

implementation of plans approved under section 208 of the Act.[95]

While the agreements were executed, they were not funded or operationalized at the local level. Participation at the local level was limited to membership on advisory committees and did not represent these agencies' potential role in developing the plan. Each agency must consider the function of public participation within their own programs and develop mechanisms for integrating them with other agencies' efforts.

In conjunction with each agencies' review of public participation, a national evaluation of existing programs and their results should be undertaken. This evaluation would provide a basis upon which to restructure the requirements for delivery of these programs. To date, each agency has developed their programs independent of one another. This development has occurred for the most part because of legislative mandates and not because of the input they can provide. Agencies that have developed and implemented a public participation program based upon EPA guidelines for 208 planning would provide an excellent illustration of the utility of such directives. While each agency must consider their specific audiences and tailor the program to address them, an overall framework is necessary to provide continuity between agencies.

---

[95]U.S., Congress, Federal Water Pollution Control Act Amendments of 1972, pp. 853.

The public will continue to seek access to the decision-making process. As the awareness level of the general public increases, their involvement will require agencies and institutions to approach the decision-making process with a different perspective. Public participation is not a substitute for technical evaluation or the political process. Agencies should consider the inputs derived through a participation program in all phases of their programs. Participation programs will contribute to better decisions if they are incorporated into the effort and not simply a function of it.

Recommendations

Participation programming

Requirements for public participation programs will continue to be developed and adopted by the EPA and other management agencies. These agencies should strive to incorporate evaluation standards into the requirements and review their effectiveness. The specifics of each program, however, must be under the direct control of the implementing agency. The need for better information and training at the agency level is critical. Agency staff must become familiar with the techniques for public participation and how to implement them. This knowledge could have an impact on the entire range of agency activities and improve the publics' understanding of the agency.

Agencies need to address their public participation programs from an educational perspective rather than as a compaign for public relations. The communications link between the public and agency must be strong enough to endure the delays and frustrations involved in the planning effort. Too much emphasis has been placed on public involvement in narrowly defined programs that demand a high degree of participant commitment with little or no tangible results. The agency must anticipate its needs and utilize existing structures to accomplish participation. To evolve another specialized layer of agency responsibility for each planning program defeats the objective of achieving a diverse source of input. The ultimate goal is to improve the final product and create a plan that meets the needs of the community. Although many people today are unsure how far public participation should go, it is clear that the benefits of involving the public outweigh the frustration and difficulty inherent in the effort.

Five areas that agencies must consider when establishing participation programs have become evident as a result of this study. While these areas are not all inclusive, they can provide the agency with a basis upon which to explore the range of public involvement opportunities.

The first requirement is that appropriate staff be added or training for existing staff be implemented.

The complexity of dealing with individual values and opinions can overwhelm a person not experienced in dealing with a diverse client group. This role should not be delegated to a part-time or temporary person, it must be assumed by a staff member of equal rank. This recommendation leads to the second area of consideration, that of funding. Each program will vary in the type and amount of funds required to implement a program. Some agencies may have established publication and communication channels while others may have to develop them. The guidelines for dealing with fund requests and utilization should be to undertake as comprehensive of a program as possible while keeping in mind that it is important to complete all that is undertaken. This will enhance the agency's credibility and potential for receiving additional support.

The third area involves setting some type of goal for the program. By establishing a goal, participants and the granting agency will be in a better position to contribute to the implementing agency's needs. This goal must be specific enough to support evaluation of the agency's efforts but it does not have to be terminal. As the program progresses, this goal may have to be modified and communicated to all parties involved.

The fourth and fifth areas of consideration are much broader than the others. Encompassing the agency's expanded planning horizons within their participation

programs is the fourth area of consideration. The resource
allocation and utilization problems facing our country are
not limited to a single planning period or area. These
concerns are broad and demand a comprehensive approach.
The time frame for involving the public should be expanded
beyond any one project to encompass the full range of
agency responsibility.

The final area concerns the participants' need for
information spanning the social, political and economic
impacts that the decision will effect. By addressing this
full range of impacts, participants will have a better
understanding of the complexity and importance of the
planning program.

TCRPC

Prior to the TCRPC initiating any new water planning
programs the staff should thoroughly review their efforts
to date. This review will help establish a common basis
between staff members that were involved in the planning
program and those that have joined the staff since 1977.
After the review is completed a realistic plan for public
involvement should be developed. Since the contacts with
participants, active during the initial planning program,
have not been maintained, a program of interest and parti-
cipant identification should be undertaken. This could be
accomplished with assistance from some of the established
agencies within the region. The staff could encourage a

more active participation from the Cooperative Extension Service, United States Soil Conservation Service, Michigan United Conservation Clubs, League of Women Voters and educational institutions. Many of these organizations have educational staffs that could contribute to the agency efforts. An advisory group composed of representatives from several of these organizations could provide TCRPC with the inputs necessary to restructure their participation programs.

This advisory group could provide counsel to the staff in technique selection and audience identification. By evaluating the resources available and specifying the planning objectives, the TCRPC could utilize the advisory group's recommendations and commit itself to a realistic program that was developed from a perspective broader than the agency itself. The TCRPC must, however, establish a person within their staff to coordinate their participation efforts. This coordinator would assist the agency in developing participation programs in other planning areas.

The TCRPC must establish their credibility within the community, especially among those persons and organizations that can influence the publics' attitudes. The TCRPC could support this confidence among participants by following through on all the tasks they initiate. When techniques are only partially implemented their impact is significantly diminished.

Two recommendations that are specifically focused on the structure proposed by TCRPC for continued planning should be reviewed and considered by the agency. First, the make-up of the Water Quality Management Associations, Water Quality Management Boards and Water Quality Advisory Council should be diversified to include representatives of the public. Currently these boards and councils represent only the technical and political interests of the region.

The second recommendation involves modifying the development of proposed Citizens Clean Water Committees for each of the five Water Quality Management Boards and recognizing the potential of the Citizens Advisory Council to become a significant source of information of the TCRPC. The CAC did not provide a significant contact during the initial planning program and without modification, the CAC will not influence the continued planning process. To expect each Water Quality Management Board to develop a citizens committee is unrealistic. The difficulties encountered by the TCRPC to organize this type of committee would simply be transferred to the boards, who have fewer contacts and resources to draw upon. While each of the recommended boards need some type of public advisement, they cannot be expected to develop the comprehensive program necessary to address the public involvement needs on a regional basis.

198

Summary

Review of Objectives

The objectives of this study provided a framework for evaluating the role of public participation in the planning process. A basis for public participation has been demonstrated by the influence exerted on agencies to consider options and viewpoints not represented by traditional evaluations. Impact assessment requirements have provided non-technical participants with an understanding of the impacts associated with alternatives. As the impact of various decisions are brought to the public's awareness, they will continue to demand meaningful opportunities to input into the decision-making process.

The public's role in resource planning is based on their historical involvement through the political system. Political pressure on individuals or program funding will continue to influence planning and management activities. Beyond this traditional role, the knowledge held by members of the public is another significant reason for their involvement. Local participants can provide planners with information unattainable through historical records or field surveys.

The six basic stages of the planning process, identified in this study, provide a foundation for participation. Identification of goals and objectives, data collection, alternative development, alternative evaluation, preliminary plan development, and implementation

provides specific opportunities for the public to participate. While not all decisions made by agencies are examined in a similar manner or continued over extended periods of time, the basic stages exist and can be utilized to structure an involvement process.

The range of techniques available to agencies for developing and implementing public participation programs is limited only by their imagination and resources. There exists a variety of techniques in addition to the traditional public hearing and notice formats, that have been used to educate, inform and incorporate participants into the decision-making process. These techniques can be applied over the entire planning period and may have specific utility at critical points in the process. While the techniques for facilitating public participation exist, there must be an effort by the agency to utilize them. Guidelines and mandates for participation programs only establish the fact that a program exists.

Historically, evaluation of participation programs have been based on the number of participants and the degree of dissension surrounding the final outcome. This form of evaluation does not address the goal of participation programs. Today's participation programs must aid public education, create a plan sensitive to local needs and values, and build support for plan implementation. These elements must be considered by the sponsoring agency

in developing the public participation program and
incorporated into any objective evaluation of it.

Effort Evaluation

By breaking down the planning process into the six
stages, identified in this study, a manageable approach to
public involvement can be undertaken. The needs of the
public and agency will vary with each stage. By examining
those needs and evaluating various mechanisms to address
them, the agency can develop their public participation
program. This staged format can also be applied to the
administrative decision-making process. While the length
of time or specificity of detail are not equivalent, the
structure is parallel and can highlight opportunities
for the agency to incorporate the public into the process.

The public participation techniques identified and
discussed in this study represent an extensive literature
search of the field. This collection of techniques
represents the current range of participation activities
available to agencies. Their application, however, is
dependent upon the agency's staff, funding and desire to
develop a meaningful participation program. To support
the techniques documented in this study there are a
variety of tools and approaches that can be incorporated
into their delivery. Computer graphics is an example of
such a tool. These tools were not addressed in this
study. They do, however, have widespread applications in

public programming and communication efforts. The specific application of these tools can only be addressed after the techniques for participation are established.

The two level approach to evaluation presented in this study recognizes the function that each technique should address the significance of establishing an overall strategy for participation. This approach is necessary because good planning does not insure implementation. In public participation programs the emphasis must be placed on what is done and not on what could have been done. This study has evaluated the efforts of the 208 planning staff in establishing and implementing their public participation program. The social and legal basis for public participation in resource planning dictates that agencies establish programs to educate, consult and consider the public in their decision-making process. This process can be identified and structured to incorporate a broad range of interests and activities. Sufficient mechanisms exist to accomplish this incorporation if the agency is committed to the program and has allocated the appropriate resources. Agencies should undertake evaluations of their programs and utilize the results to improve technique delivery and program implementation.

Conclusions

The objectives identified at the onset of this study and the criteria developed to evaluate the program have allowed the author to examine the various aspects and accomplishments of the TCRPC's 208 public participation program. In comparison to the current body of knowledge about public participation and the techniques to accomplish it, the TCRPC effort was limited in scope. This limited scope reduced the potential of informing the public about the planning program and incorporating their opinions into the plan. As noted previously in this study, the author does not believe that the staff subverted any public participation activities; they simply did not recognize the opportunities or techniques for encouraging it.

The results of this study describe the role public participation can play in the decision-making process. It must be recognized that any program for public partici-pation will overlook some opportunities for involvement and that resources may not be sufficient to implement some potential activities. The responsibility remains with the agency to determine and implement the most effective means of involving the public.

APPENDICES

APPENDIX A

APPENDIX A

HISTORICAL BACKGROUND OF WATER RESOURCE
PLANNING IN THE UNITED STATES

In the historical development of water projects, the
justification has been in the "nation's interest" and
therefore, as citizens of this nation, it was in the
citizen's interest. When the Corps of Engineers was created
by the Congress in the early 1800's, its major responsibil-
ity was the improvement of navigation. The Corps' role
expanded into flood control and other types of public works
projects with the justification and goal to enhance the
national growth and economic expansion of our country.
These were times of rapid growth and as our nation ushered
in the twentieth century, increasing demands for the devel-
opment of our western lands contributed to our nation's
growing pains. With this development, came an increasing
need for the development of water resources. Reservoirs
were proposed and developed. Massive amounts of federal
funds were channelled into these projects and this develop-
mental philosophy promoted the creation of reservoirs to
supply irrigation projects, hydroelectric power generation
and flood control. These developments came at the sacrifice
of natural areas and individual families. The general mood
of the country was toward development and little attention
was directed toward the consequences of such development.

In contrast with the early involvement of the Corps

in manipulating the physical distribution of water, the federal government had very little to do with the quality of water. The pioneering effort in a comprehensive river basin assessment did not develop until 1934. This survey was done by the Mississippi Valley Committee of the Public Works Administration under Title II of the National Industrial Recovery Act of 1933. The committee was to become the Water Planning Committee of the Natural Resources board in the following year. Data included in this study dealt with water supply and sanitation, erosion control, reforestation, wildlife and recreation as well as the established "Federal concerns" of navigation, irrigation, flood control and water power.[96] The nation's waters were being polluted at an increasing rate. Demands for more services in the urban areas were beyond the capabilities of these areas to provide. Recognition of the problem nationally, in the form of specific legislation, did not develop until the passage of the Water Pollution Control Act of 1948. This Act called for planning and development of adequate waste treatment and water supply systems to insure the public health.[97]

This first legislative effort in water quality management, although directed at public health, acted as the

---

[96]U.S., Department of Agriculture, Economic Research Service, A History of Federal Water Resources Programs, 1800-1960, Misc. Publication No. 1233, June 1972, p. 14.

[97]Ibid., p. 30

base for this nation's present programs in pollution abatement. Administered by the Public Health Service, the Act authorized the Surgeon General to cooperate with federal, state, interstate, and local agencies in preparing comprehensive pollution control plans for interstate rivers. The collection and dissemination of information and provisions for technical aid to states and localities was also stipulated in the Act. A modest grant program was authorized under the Act to provide research and planning monies to states, municipalities, and interstate agencies.[98]

This Act was clearly directed toward the "Federal interests" regarding interstate consequences of water quality and supply. The Act made no provision for enforcement action without the consent of the state in which the pollution originated. Loans and grants for the construction of sewage treatment works were authorized under the 1948 Act, yet funds were never appropriated for such a program.

Amendments to the 1948 Act in 1956 recognized some of the weaknesses of the original act. A grant program with a thirty percent federal cost sharing for municipal waste treatment plant construction stimulated the construction of new facilities under the 1956 Amendments. During this same period, however, "the number of persons served by sewers continued to increase more rapidly than the number of

_____

[98]Ibid.

persons served by sewage treatment works."[99] Industrial pollution was also increasing beyond the capabilities of municipal facilities. The Act did provide for the Surgeon General to bring action against polluters without the consent of the state in which the pollution originated. This represented a change toward the "federal interest" in water quality within each state.

States had been encouraged to enact uniform laws and compacts for pollution control. Grants under the 1948 Act had stimulated the states' interest in such an approach but failed to be comprehensive enough to satisfy the changing "federal interests". Responsibility for administration of the Water Pollution Control Act was transferred from the Surgeon General, of the Public Health Service, to the Secretary of the Department of Health, Education and Welfare in 1961.

The Congress, in 1965, took additional steps in specifying the states' role and responsibility in water pollution control. The purpose of the Act, Congress said:

> . . .is to enhance the quality and value of
> our water resources and to establish a national
> policy for the prevention, control and abate-
> ment of water pollution.[100]

---

[99] U.S., Congress, Senate, Committee on Public Works, A Study of Pollution-Water, 88th Cong., 1st sess. (Washington, D.C.: Government Printing Office, 1963), no. 99670, p. 23.

[100] U.S., Congress, Water Resources Planning Act of 1965, P.L. 89-80, 22 July 1965, 79 Stat. 244, 42 USCA 1962, p. 1.

With the passage of the Water Resources Planning Act
of 1965, the Congress set out a policy "to encourage the
conservation, development and utilization of water and
related land resources of the United States on a comprehen-
sive and coordinated basis. . ."[101] The Act was to function
as a vehicle to bring together the various aspects of water
resource development and planning throughout each river
basin. This Act also established the Water Resources
Council with the significant statutory duties of preparing
national assessments of water supply and demand, as well as
developing principles, standards and procedures for project
formulation and evaluation.[102]

The national assessment along with the principles
and standards was to provide a basis for and a specification
of the "federal interest" in water resources. This interest
was to be considered in developing the basin plans that were
specified under the Water Resources Planning Act. The
concept was that by encouraging and assisting local and
state governments to do a better job of building effective
planning organizations and thereby achieving better local
management of their water and related land resources, the
"federal interests" would likewise be advanced.[103]

---

[101]Ibid.

[102]U.S., National Water Commission, Water Policies
for the Future, p. 400.

[103]Ibid., p. 369.

The responsibility for administering the Water Pollution Control Act was transferred to the Department of the Interior in 1966. The trend was toward the federal government assuming a greater responsibility for water pollution control. By aiding the states, interstate agencies and municipalities through direct grants and technical assistance, the federal government became directly involved in overseeing the nation's water quality.

The federal government's role in managing the environment was developing into a public policy issue.[104] The delays in establishing some uniform and cooperative techniques and procedures among the various federal and state agencies working in environmental management led to new demands. These demands came from individual citizens and more significantly from the growing numbers of environmental interest groups. These groups began to use the courts, as well as the legislative systems, to promote their interests.

Action by the Water Resources Council was very slow. The Council's task was monumental; funding and staff were limited, coordination between various federal and state programs was not developed and the Council found a great deal of resentment to such coordination. As the environmental

---

[104]U.S., Environmental Protection Agency, Environmental Studies Division, Managing the Environment, Project Officer - Alan Neuschatz, Washington Environmental Research Center (Washington, D.C.: Government Printing Office, EPA-600/5-73-010, 1973), p. xi.

consciousness of the country began to rise, the Congress

began to question the direction of various water resource

projects and their relationship to the yet undefined

"federal interest". A National Water Commission was

established by the Congress and approved by the President

on September 26, 1968. Within a five year time frame, this

Commission was to:

1. review present and anticipated national
   water resource problems
2. consider economic and social consequences
   of water resource development
3. advise the President and Water Resources
   Council on specific water resource matters
   which they referred to the Commission.[105]

Action on other resource areas was also being

considered and in 1969, the National Environmental Policy

Act (NEPA) was enacted which created the President's Council

on Environmental Quality (CEQ). By executive order the

U.S. Environmental Protection Agency (EPA) was created and

set out with Congressional mandates, regulations and

guidelines, to become the "watchdog" for the national

environment. Armed with NEPA and later the Clean Air Act

of 1970, the agency set out to coordinate and enforce the

environmental protection function of the federal government.

This environmental protection function was the result of

over a decade of continued pressure at local, state and

federal levels for positive results in the battle to

---

[105]U.S., National Water Commission, Water Policies
for the Future, p. x.

preserve and enhance environmental quality.[106]

Specific requirements were built into the legislation
in response to an increased pressure from various publics to
be considered in agency decision-making. Environmental
impact statements and public hearings became mechanisms to
counteract the thrust of public opinion against the federal
government's role in environmental protection. While the
impact statements specified the consequences of various
actions, they also focused attention on the agency or group
proposing the action. Agencies found their decision-making
processes under criticism from groups that felt under-
represented or unrepresented.[107]

Preliminary reports of the National Water Commission
were drawing attention to the inadequacies in the nation's
approach to its water resources. In response to the
Commission's preliminary reports, strong demands from
environmental groups and a need by EPA for more direction
in the water resource area, Congress developed and passed
amendments, 92-500 of 1972, to the Water Pollution Control
Act.

These amendments, often referred to as the "Clean
Water Act", were to become the basis for the most compre-
hensive water planning and grant programs in our nation's

----

[106]U.S., Environmental Protection Agency, Managing
the Environment, p. xi.

[107]Field, Barron, and Long, Water and Community
Development: Social and Economic Perspectives, p. 126.

history. The Act contained the strongest language ever incorporated into environmental legislation. One of the objectives of the legislation was to "restore and maintain the chemical, physical and biological integrity of the Nation's waters."[108] National goals of pollutant discharge elimination by 1985, wherever attainable, with an interim goal of water quality in 1983 (that has come to be known as "Fishable and Swimable") were also contained in the Act. The Act also specified that 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.[109] Administration of the Act was to be the responsibility of the Administrator of the EPA.

Congress addressed public participation directly in the Act by stating:

> Public participation in the development, revision and enforcement of any regulation, standard, effluent limitation, plan or program established by the Administrator or any State under this Act shall be provided for, encouraged and assisted by the Administrator and the States. The Administrator in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such a process.[110]

In publishing the guidelines for public

[108]U.S., Congress, Federal Water Pollution Control Act Amendments of 1972, p. 816.

[109]Ibid.

[110]Ibid., p. 817.

participation, EPA has concentrated on section 208 of the
Act. Section 208 calls for the development and implementa-
tion of the Areawide Waste Treatment Management Plans.
These plans have been looked upon by EPA and Congress to be
the public's main opportunity to participate in determining
the management, enhancement and protection of the nation's
waters.

Plans developed under section 208 "will ultimately
serve as the basis for implementation of essentially all
programs under the Act."[111] With the call for increased
participation, came the questions of how can agencies
accomplish such a goal, how will participation be evaluated
and how much is enough. Agencies were faced with responding
to requirements without a sufficient knowledge base to
develop and implement such programs.

The EPA, as the administrator of the Act, published
guidelines that established minimum requirements for
participation.[112] The transformation of these guidelines
into the actual programs then became the responsibility of
the various planning agencies. Agencies were designated by
the governor of each state to undertake the development of
the Areawide Water Quality Management Plans. Under the
original guidelines, the states were directed to designate

[111]U.S., Environmental Protection Agency, "Policies
and Procedures for Continuing Planning Process," p. 55335.

[112]U.S., Environmental Protection Agency, "Public
Participation in Water Pollution Control," p. 22756-8.

areas that "as a result of urban-industrial concentrations of other factors, have substantial water quality control problems."[113] Several states began to question the creation of such areas. They insisted the Act was limited in scope to only metropolitan areas having serious urban-industrial problems. "Governors of several key states chose to exercise their right to prohibit the creation of any 208 designated areas within their states."[114] In October of 1974, suit was filed by the Natural Resources Defense Council (NRDC) to compel EPA to carry out its statutory responsibility and implement section 208 planning on a statewide basis and to do so in a timely fashion. The federal district court upheld the NRDC's suit in June of 1975 and directed the EPA to "promulgate regulations mandating the states to carry out 208 planning in all areas not designated for areawide programs."[115]

In Michigan, Governor Milliken had originally designated ten of the Regional Planning and Development Commissions, previously established in the state, to undertake areawide planning. The TCRPC was one of these originally designated areas. On July 1, 1975, the TCRPC began their planning program with a grant of $704,000 from the EPA.

---

[113]U.S., Environmental Protection Agency, "Policies and Procedures for Continuing Planning Process," p. 55339.

[114]Elaine Moss, ed., Land Use Controls in the United States, p. 74.

[115]Ibid.

APPENDIX B

APPENDIX B

DESCRIPTION OF TECHNIQUES USED BY TCRPC

TCRPC's Workshop

Date: October 19, 1977.

Public Served: The workshop was for the TCRPC staff and
        consultants. The public and members of the various
        water quality committees were allowed to attend but
        notices of the meeting were only sent to the
        commissioners.

Staff Involved: The 208 planning staff had been reduced
        because of funding cutbacks and the transfer of staff
        to other planning programs. The project coordinator
        and two other staff members were present. Repre-
        sentatives of the consulting firms associated with the
        plan were present and participated in the workshop.

Purpose: The workshop was intended to provide up-to-date
        information about the plan and present staff and
        committee recommendations on alternatives to modify
        the draft into a final plan.

Format: The format was not that of a typical workshop.
        Since there were specific topics to cover the staff
        directed the session like a meeting, allowing dis-
        cussion and consensus to develop on each issue.

Material Generated: Although no written materials were
        developed at the workshop the input received was the
        basis upon which the staff developed the final plan.

Results/Input to Study: A final plan that the staff could
        recommend to the TCRPC.

Waterwagon Workshop - Save Our Streams

Date: April 11, 1977.

Public Served: The workshop was directed at the general
public. Announcements were sent to over 1,000
neighborhood groups, local officials, civic organi-
zations, schools, environmental groups, service clubs
and business and industry representatives. Actual
attendance at the workshop was very light. Only about
thirty people attended the entire program.

Staff Involved: Several members of the TCRPC staff were
involved in the workshop. Since the program was
predetermined the staff members were helpful in
translating the general information to local conditions.
TCRPC's public information officer was actively
involved with the workshop because the staff had
recruited a considerable amount of media coverage for
the workshop.

Purpose: The program was developed by the Issac Walton
League (IWL) to translate clean water planning into
an experiential awareness and motivate the public to
participate. The Waterwagon Streamside Workshops were
part of a national effort by IWL called "Save Our
Streams - Adopt One" that was designed to educate the
public about water pollution and the need for water
quality planning.

Format: The workshop began with a streamside visit and
the collection of water samples that were then tested
using water quality parameters. The afternoon session
consisted of a series of role playing and group
activities. The emphasis of the afternoon session was
to point out that everybody had an interest in water
quality and they can become involved in the planning
program.

Materials Generated: There were no content materials
developed from the workshop. The workshop announce-
ment and press-releases, however, received widespread
distribution and created some secondary inquiries about
the planning program.

Results/Input to Study: Since the program was not focused
specifically at the Tri-County area there was little
information or input generated that could be applied
to the planning effort.

208 Workshop-"Cooperation for Clean Water"

Date: April 7, 1976

Public Served: The workshop was aimed primarily at elected officials. Some industries and interest groups were sent notices. A total of 138 participants were registered at the workshop.

Staff Involved: The entire 208 staff (six persons) were involved in some aspect of the workshop.

Purpose: To provide participants with information about the work of the TCRPC and provide an opportunity for participant views to be heard early in the planning process.

Format: A general session began the workshop with speakers addressing different facets of the 208 legislation and its application to the Tri-County area. After the general session participants selected one of five discussion groups in which they developed proposals to address an aspect of the planning program. A state representative addressed the group during lunch. The discussion groups reconvened in the afternoon and developed consensus reports to present to the entire group. The workshop ended with remarks by the Executive Director of the TCRPC.

Materials Generated: A report was compiled by the Lansing Area League of Women Voters. The League organized the workshop and encouraged participation. The report contained summaries of the discussion groups and specific recommendations for TCRPC to include in the planning effort.

Results/Input to Study: While the information presented by TCRPC was general in nature, exemplary rather than factual, the participants voiced their interest and desire to be involved with the actual planning effort. The participants expressed their need for specific factual information on problems and alternatives. The workshop comments highlighted the need for clarification of the citizen's role in the established program and opportunities for a broad range of interests to participate. The conclusions also called for another workshop before the planning was completed.

Public Hearing - Final Plan

Date: September 21, 1977.

Public Served: As the official public hearing for the 208 Water Quality Plan, it was open to the entire regional population. The total recorded attendance was 159 persons. Of these, forty-four were TCRPC members or staff and consultants. Local and federal agency representatives, local and state elected officials, media representatives and citizens made up the remainder of the audience.

Staff Involved: Twenty of the twenty-three TCRPC members were present at the hearing and all but one of the staff and consultant groups were present. Although only a small portion of the staff and commission actually spoke, their presence was noted and made part of the official record.

Purpose: To give interested citizens and elected officials an opportunity to comment on the Draft 208 Water Quality Management Plan as submitted to the public and as it would be sent to the TCRPC for approval. Through this legally required hearing, citizens and other interested parties could present information and suggestions regarding the plan and expect them to be considered.

Format: The hearing consisted of three distinct parts. A TCRPC member called the hearing to order, welcomed participants, and introduced the 208 staff and con- sultants. An information program was presented by staff members highlighting the entire program and draft plan. The next segment of the hearing was a question and answer period where participants could ask questions of the commissioners, staff and consultants. The final segment of the hearing was the formal testimonies of participants which were recorded and are part of the official hearing record. These testimonies were taken without response as is the normal procedure in a hearing.

Materials Generated: Several handouts were prepared by the TCRPC staff and distributed to each participant at the hearing. These handouts summarized the planning effort and selected alternatives. In addition to the official transcript of the hearing, the TCRPC staff prepared a summary of public comments and the staff's response to them. This response was developed by the staff after the hearing was held. Another document was generated by the TCRPC staff after the written comments were reviewed. This document dated

October 19, 1977 summarized the written comments for
the commission members.

Results/Input to Study: The comments received during the
hearing cannot be pointed to as the only reasons for
changes in the Draft Plan. Some of the changes in
the Draft Plan presented to the Commission were
addressed at the hearing. In general, however, the
comments received during the review period were
opposed to some part of the plan. This caused a great
deal of concern on the part of the TCRPC. The
commission, only after considerable debate and pressure
to adopt a plan, narrowly approved the plan as
presented.

EPA - TCRPC Brochures

Date: Brochures were distributed at various times during the final year of the planning program, September 1976 to September 1977.

Public Served: The brochures were distributed to the clean water committees, libraries, schools, civic groups and they were available in the TCRPC office. The staff also distributed the brochures at the governmental and basin meetings.

Staff Involved: These brochures were provided by the EPA or reprinted by the TCRPC. The text and graphics were prepared by EPA staff for the designated agencies to use as they developed their information programs.

Purpose: To provide basic information to the public about water quality and the 208 program.

Format: The format of the brochures varied. They typically contained facts about water quality and information about the intent of and direction that 208 planning was to take.

Material Generated: Three brochures were used by the TCRPC staff. These brochures were all designed to stimulate interest in the planning effort and were used by other regions in Michigan. C'mon in...The Water's Going to be Fine, Some Little Considerations That Could Make A Considerable Difference, and It's Time - Speak Up! were available through the EPA Region V office.

Results/Input to Study: The brochures were helpful to the agency because they provided basic information to the public about the planning effort. The timing of these publications, however, was not in line with the agency's timetable.

Public Meeting Brochure

<u>Date</u>: Distribution was in April and May of 1977.

<u>Public Served</u>: The brochure was developed for the general public and elected officials of the Tri-County Region.

<u>Staff Involved</u>: The information officer prepared the brochure and the entire staff assisted in distribution.

<u>Purpose</u>: The brochure was developed to inform the public of upcoming meetings and motivate them to attend those meetings in their area.

<u>Format</u>: The brochure was a tri-fold 8 1/2 x 11 inch publication that could be sent through the mail or stuffed into an envelope with a cover letter. The text began with some general comments about water pollution and ended with an invitation to attend a public meeting to do something about the pollution problem. A list of meeting dates and locations was also included in the text.

<u>Material Generated</u>: Twenty-one thousand brochures were printed by the agency. Approximately half of those were mailed out to elected officials, citizen groups, realtors, local and state agencies, schools, public commissions, news media representatives, service organizations, League of Women Voters, agricultural agencies and farmers in the regional area. The other brochures were distributed at meetings and sent to public information areas such as city halls, libraries and public offices.

<u>Results/Input to Study</u>: The brochure itself did not provide any direct input to the study. The brochure announced the meeting times and places without requesting the public's feedback or comments.

208 Areawide Planning Advisory Council - (APAC)

Date: The first meeting of APAC was held on November 19,
1975. A total of twelve meetings were held by the
group between November 1975 and September 1977.

Public Served: APAC was composed of representatives from
the units of government who signed a Resolution of
Intent to join the planning process and representatives
of the Soil Conservation Service, the Army Corps of
Engineers, the Michigan Department of Natural Resources,
the Grand River Watershed Council, members of the
Technical Planning Coordinating Committee and repre-
sentatives of the TCRPC.

Staff Involved: These meetings were usually well attended
by staff persons. The project coordinator and staff
members provided information and participated at most
meetings. Their role was to articulate the problems
and alternatives to the APAC.

Purpose: To advise the TCRPC and staff in the development
and selection of alternatives that would ultimately
make up the final 208 Water Quality Plan. APAC also
fulfills the federal requirement that a Policy Advisory
Committee be established to advise the agency during the
development and implementation of the plan.

Format: Meetings were conducted in a very formal order.
The APAC had operational guidelines that included
voting and presentation procedures. The format always
included an opportunity for public input.

Materials Generated: As an advisory council the group did
not generate material. They simply made recommendations
to the TCRPC and staff regarding material presented at
the APAC meetings. During the final stage of the
planning process, the APAC did develop written recom-
mendations on the planning alternatives. These recom-
mendations were submitted to the TCRPC for their
consideration in approving the final plan.

Results/Input to Study: As representatives of the
governmental units in the region, the APAC acted as a
feedback mechanism to the TCRPC. The APAC was used to
review organizational structures that might be necessary
to implement the plan. In doing so, the TCRPC believed
that local units of government would be likely to
approve the final plan. APAC's input did influence the
development and selection of planning alternatives that
were included in the final plan. As the official policy
group for the planning program, the APAC's actions
significantly influenced the plan's development.

Technical Planning Coordinating Committees
(TPCC)

Date: The first meeting of the TPCC was held in
        November 1975. The committee was active during the
        entire twenty-three months of the planning program.
        The group functioned through subcommittees that did
        not record meeting dates or activities.

Public Served: The core group of TPCC was composed of
        area engineers, drain commissioners, planners, health
        officials, road and public service engineers and other
        technically oriented persons. This group was supple-
        mented by consultants hired by TCRPC to handle
        specific aspects of the plan's development.

Staff Involved: The technical planning staff worked very
        closely with the subcommittees of TPCC. Since many
        of the tasks involved unrelated aspects of the plan,
        the staff persons identified themselves with certain
        subcommittees and concentrated their efforts on
        developing an aspect of the total plan.

Purpose: To advise the 208 staff and consultants on all
        phases of the planning effort. Recommendations from
        TPCC were sent to the APAC for their consideration
        and approval. This group was to provide the
        technical review and input from the region's agencies
        involved in water related activities.

Format: The Technical Planning Coordinating Committee
        consisted of seven technical subcommittees: Land Use,
        Solid Waste, Water Quality and Supply, Point Source,
        Agriculture and Non-Point Source, Management and
        Economic Development, and Environmental. These
        subcommittees met on various occasions with the con-
        sultants and staff to generate ideas and review parts
        of the plan as they were developed. As parts of the
        technical material were developed by the subcommittees,
        they were brought before the entire TPCC and then
        forwarded to APAC and TCRPC staff for inclusion into
        the final plan.

Materials Generated: Several reports were generated by
        the TCRPC staff and consultants with assistance from
        TPCC members. While these reports were not developed
        directly by TPCC participants, they did have the
        opportunity to review and suggest changes in them
        before they were presented to APAC for approval. The
        TPCC did not generate any materials independently.
        They did generate minutes of their meetings when the

subcommittees met as a whole to discuss completed
studies.

Results/Input to Study: As a result of their input,
the TPCC influenced the final plan in it's early
stages. Since the TPCC was organized around seven
technical areas, the participants had specific
reasons for selecting the subcommittee that they
served on. As professionals working in related
fields, these participants had a direct interest
in the development of the plan and it's implementa-
tion. Attendance records for TPCC meetings, however,
show only a small percentage of those persons
identified with the committee actually attended
meetings. Meeting records do demonstrate interaction
between staff and participants. These records,
however, do not indicate how such input was utilized
by the staff in the planning process.

Local Government Meetings

Dates: A total of eleven meetings were held between March and June of 1977.

Public Served: These meetings were directed at the elected officials. Some members of the public were present at various times but were not addressed by the TCRPC staff.

Staff Involved: The 208 coordinator and one additional staff member usually presented the information. Other members of the staff participated in a few of the meetings.

Purpose: To encourage the elected officials to become involved in the planning program and to promote the basin meetings that would be forthcoming.

Format: The staff presented a slide presentation and timetable for plan review and approval. The staff persons then answered questions from the elected officials regarding the planning effort.

Materials Generated: The slide presentation was the only material generated by these meetings. The staff did not summarize the meetings or the questions generated at them. The staff did report to the planning committees that they were meeting with elected officials.

Results/Input to Study: The meetings were intended to inform the elected officials of the planning program and to encourage their support. The impact of these meetings cannot be evaluated independently and can only be considered as a part of the entire effort. Without some evaluation of each meeting, the only conclusion that can be made is that the elected officials were made aware of the program.

Waterlog - TCRPC's Newsletter

Dates: Newsletters were produced for the months of
November 1976, December 1976 and June of 1977.
Distribution occurred in December 1976, January 1977
and June of 1977 respectively.

Public Served: The newsletters were distributed to
elected officials, planning commissioners, libraries,
citizen and environmental groups, civic organizations,
schools, clean water committee members, builders and
realtors. Additional copies of the newsletters were
placed in public areas of major governmental and public
service buildings. These newsletters were developed
to provide information to the general public.

Staff Involved: Articles were suggested by all of the
TCRPC's clean water staff and were written or edited
by the information officer. The information officer
had the overall responsibility for the development,
printing and distribution of the newsletters.

Purpose: The newsletters were to keep the public informed
about what was happening in the clean water project.
The agency had planned to publish the newsletter bi-
monthly during the period of September 1976 to August
1977.

Format: The newsletter was a single fold 11 x 16 inch
publication that contained pictures and drawings to
supplement the text. The text was a mixture of
informational pieces and some descriptive articles
about facilities and programs within the region. The
newsletter also contained a Clean Water Calendar for
the current month.

Material Generated: Three issues of Waterlog were printed
and distributed to the public.

Results/Input to Study: Provided a mechanism to
disseminate information to the public about the planning
effort. The agency did not analyze the distribution
of the newsletters or collect any information on their
effectiveness.

Citizens Advisory Council (CAC)

Date: The Citizens Advisory Council was formed in April
    1975. The Council held periodic meetings until April
    1977.

Public Served: The Council was developed from repre-
    sentatives of various public service and interest groups.
    These representatives could then interact with their
    groups to provide information.

Staff Involved: Various TCRPC staff persons participated
    in the Council's meetings. The Council had a staff
    coordinator when it was formed. This person was phased
    out after a year because of funding cutbacks and
    organization changes in the TCRPC.

Purpose: The Council was "as an educational and
    communication forum whereby representatives of interested
    groups may have the opportunity to become knowledgeable
    about TCRPC plans and programs and also to comment on
    the potential impacts of these efforts on neighborhood
    or organizational objectives."[116]

Format: The Council was set up to have bi-monthly meetings
    and an executive committee that could meet as the need
    arose. Task forces were organized at the onset to meet
    the needs of TCRPC. Requirements for public input on
    various projects were in part satisfied by the formation
    of these task forces.

Materials Generated: The output of the Council was
    primarily in a verbal form. The written material
    generated by the Council was in the form of meeting
    minutes and evaluations. The Council had the authority
    to issue reports to the TCRPC but never did so. The
    Council meetings functioned as workshops and provided
    little input to the agency staff.

Results/Input to Study: Since the Council was formed to
    serve the entire planning spectrum of the TCRPC, its
    input to the water planning program was minimal. A
    Water Quality Task Force was formed from active Council
    members in December of 1975. The group, however, never
    fully materialized and failed to hold any meetings.
    The TCRPC staff did meet with the Council to bring them
    up-to-date on the planning program. This effort on the

---

[116]Tri-County Regional Planning Commission, Minutes
of Citizens Advisory Council Meetings, Lansing, Michigan,
March 1975-April 1977, (Typewritten.), p. 17.

part of the staff was more symbolic than functional
because it was so infrequent and superficial.

Public Meeting - Interim Outputs Report

Date: August 24, 1976

Public Served: The meeting was sponsored by the TCRPC
"to talk to residents about river conditions, major
pollution sources, and future sanitary sewer
locations."[117]

Staff Involved: The entire 208 planning staff was involved
in the preparation and presentation of the meeting.

Purpose: To provide the public with information generated
by the research and sampling work TCRPC had begun nine
months earlier. The meeting was to develop the public's
interest in the planning effort.

Format: The planners used visually descriptive slides to
highlight pollution problems and possible corrective
measures. A discussion about the 208 effort and the
legislation that mandated it was led by TCRPC staff.
The staff then "pointed out how people could help
prevent water pollution in their daily activities."[118]
The staff then accepted questions about their effort
and the 208 program.

Material Generated: The TCRPC staff did not generate
any other information concerning the meeting. A
questionnaire was distributed at the end of the meeting
which questioned participants about the meeting's format
and convenience but no summary was developed by the
staff. The meeting did stimulate the newspaper media
to develop a story about the planning program and the
actual meeting was noted on television and radio news
programs.

Results/Impact to Study: There was little or no documented
input generated from the meeting itself. The studies
that TCRPC had conducted to date were highlighted at
the meeting but this information was not generated
specifically for the public meeting. In a summary state-
ment included in the final plan the staff used the

---

[117]Tri-County Regional Planning Commission, _208
Water Quality Management Plan_, vol. I, part 3, p. 135.

[118]Ibid., p. 136.

following language: "The session proved to be fairly successful. Many questions were asked and the session was well covered by the media. About forty persons attended, which is well above average for a summer meeting."[119]

---

[119] Ibid.

Media Activities

Date: The media had been provided with information through-
out the planning process. The specific dates of such
coverage are not significant.

Public Served: The media contacts maintained by the
information officer covered the entire Mid-Michigan
area. Over thirty newspapers, radio and television
stations were contacted on a regular basis as part of
the TCRPC's news-release program.

Staff Involved: The information officer was TCRPC's primary
contact with media representatives. As requests for
information came to the agency the public information
officer would prepare a response with counsel from
appropriate staff members. The information officer also
facilitated personal interviews with staff members and
commissioners when media representatives requested it.

Purpose: To maintain contact with the news media and
obtain consistent coverage of the planning programs.

Format: News-releases, public service announcements,
calendar announcements, meeting agendas and personal
phone calls were all used to inform the media of planning
activities. In addition to these regular activities, the
staff participated in the production of three broadcasts
aired by a local public television station.

Materials Generated: While the exact number of media
contacts was not documented, the information officer
estimated that twenty news-releases and thirteen public
service spots were issued to media representatives during
the planning program.[120] In addition "hundreds of news
articles have appeared in local newspapers and numerous
interviews have been aired on radio and television
stations."[121]

Results/Inputs to Study: The impact of media contacts
on the planning progarm cannot be quantitatively
expressed. These contacts did provide a direct link
between information generated by the TCRPC staff and
the general public. The quality and effectiveness of
such media contacts would have to be assessed on an
individual basis and is beyond the scope of this study.

---

[120]Ibid., p. 135.

[121]Ibid.

River Basin Meetings

Dates: May 12, 1977; May 26, 1977; June 2, 1977;
June 9, 1977; June 16, 1977; July 7, 1977.

Public Served: The meetings were to serve the general
public in each of the six river basins within the region.
Meeting attendance varied from a low of twenty-eight to
a maximum of ninety-four persons, excluding staff and
consultants. The total recorded attendance for the
basin meetings was 336 persons.

Staff Involved: The entire 208 staff was involved in
preparing the information for the meetings and most of
them participated in the question and answer sessions.
In addition to the TCRPC staff, representatives of the
consultant firms involved in the programs were present.

Purpose: "Their purpose was to get people involved by
seeing, hearing, and talking about technical and
management options that can be used to clean up and
maintain the region's waters."[122] These meetings were
held after alternatives were developed for the water
quality problems within the region. The meetings were
to provide feedback to the TCRPC about the proposed
alternatives not to develop them.

Format: Each of the six meetings followed the same format.
Some of the TCRPC staff were usually seated on the stage.
The 208 program coordinator narrated a thirty to forty
minute slide presentation about the reason for 208
planning and its congressional mandate, the effort that
the TCRPC had made to date and the local, social and
financial impacts that are associated with the planning
alternatives. The slide presentation was followed by a
discussion of the planning alternatives which the
participants could follow in a handout. After a short
break the discussion was opened up for questions and
answers which usually lasted about forty minutes to one
hour. Participants were asked to fill out a question-
naire regarding the planning alternatives, water quality
interests and motivation for attending the meeting.

Materials Generated: In addition to the meeting
announcements and press-releases generated prior to the
meetings, the TCRPC staff prepared summaries for each
meeting. These summaries were often taken directly from
the transcripts and were little more than a presentation
of the questions generated at the meeting. The

---

[122]Ibid., p. 137.

questionnaires were summarized but no written material was generated regarding them.

Results/Input to Study: It is impossible to trace any individual public input and its incorporation into the planning program since no formal mechanism was utilized to collect public input and feed it back into the planning structure. Some discussion among the planning and advisory committees did center on questions raised during the meetings. These discussions were often led by someone that was present at the meeting. The TCRPC 208 staff were usually present at each of the meetings and may have internally discussed and evaluated the input among themselves.

APPENDIX C

APPENDIX C

PARTICIPANT QUESTIONNAIRES USED AT THE
RIVER BASIN MEETINGS

Water Quality Public Information
Meeting Questionnaire

Your responses to the following questions will help
us plan and improve our public information meetings.
Check or fill in the blanks as necessary. Please turn
your questionnaire in when you leave. Thank you.

1. How did you learn about today's meeting?

_____ television

_____ radio

_____ newspaper

_____ memo

_____ other, please specify _____

2. Were the meeting's purpose and procedures stated
    clearly?

_____ yes

_____ no   If no, please explain _____

         _____

3. Could the flip charts be easily read?

_____ yes

_____ no   If no, please explain _____

         _____

4. Did the slides help to explain the concepts being
    discussed?

_____ yes

_____ no   If no, please explain _____

         _____

5. Were you able to express all your thoughts on the subject of tonight's meeting?

   _____ yes

   _____ no   If no, please use this space and the back of the page to express them.

6. Did you feel the length of the meeting was

   _____ too long

   _____ adequate

   _____ too short

7. If you have any suggestions for the structure of future meetings, please list them below.

- -

Please fill out the following if you would like to know more about the Water Quality Program

___I would like to be added to the Water Quality mailing list.

___Please mail me future reports of Water Quality Project accomplishments.

___I would like to arrange a presentation for my group.

___Other _____

     Name _____

     Address _____

     Name of Group _____

     Phone: _____

Sycamore Creek - Red Cedar River Basin
Evaluation Questionnaire

Your response to the following questions will help us prepare the Clean Water Plan for the Tri-County region. Check or fill in the blanks as necessary. Please turn your questionnaire in when you leave at the back of the room. Thank you.

1. How did you learn about tonight's meeting?

   A. ___Mailing from the Tri-County Regional Planning Commission

   B. ___News media

   C. ___Word of mouth

   D. ___Other (please specify)

   _____

2. Are you a resident of the Sycamore Creek or Red Cedar River Basins?

   A. ___Sycamore Creek Basin

   B. ___Red Cedar River Basin

   C. ___Neither

3. Was the written program for tonight's meeting

   A. ___Easy to understand

   B. ___Too complicated (please explain) _____

   _____

4. Was the slide presentation

   A. ___Too short

   B. ___About the right length

   C. ___Too long

5. Was the slide presentation

   A. ___Easy to understand

   B. ___Too complicated (please explain) _____

   _____

6. Did you feel that tonight's meeting was worthwhile to you personally?

   A. ___Yes (please explain) _____

   _____

   B. ___No (please explain) _____

   _____

7. Do you agree that Sycamore Creek and the Red Cedar River should be fishable and swimmable by 1983?

   A. ___Yes

   B. ___It would be good to obtain these, but it's impossible by 1983

   C. ___No

8. To obtain clean water in the region, would you prefer to have more regulations or pay more for structural controls?

   A. ___Prefer more regulations

   B. ___Prefer paying more

   C. ___Don't know

9. As outlined in the presentation, is treatment of storm water runoff a reasonable approach to improve water quality?

   A. ___Yes

   B. ___No

   C. ___Don't know

10. Should farmers be given a period of voluntary compliance to abate water pollution before regulations are required?

    A. ___Yes (If "yes", how long should the period of voluntary compliance be? ____years)

    B. ___Depends on how severe the problems are

    C. ___No

    D. ___Don't know

11. Should land use controls be used to promote water quality?

    A. ___Yes

    B. ___No

    C. ___Don't know

12. What do you think is the biggest water quality problem in the

A. Sycamore Creek Basin _____

_____

B. Red Cedar Basin _____

_____

13. Reduction of phosphorus during all types of weather conditions will be costly but necessary to achieve water quality guidelines. In addition to the phosphorus removal under current planning efforts (201 waste water treatment plants) are you willing to pay more for additional cleanup?

A. ___Yes

B. ___Some

C. ___No

D. ___Don't know

14. Are you willing to pay for the reduction of suspended solids (dirt) in Sycamore Creek and the Red Cedar River during all types of weather conditions to achieve water quality guidelines?

A. ___Yes

B. ___Some

C. ___No

D. ___Don't know

15. Please rank the following management schemes on a scale of 1 to 6. One (1) is the most acceptable - six (6) the least acceptable.

___Existing water quality management systems

*Maintain the status quo

___Areawide management and operating authority

*Establish one clean water management agency for the Tri-County region

___Urban and three-county management and operating authority

*Create one management agency for the metro Lansing area and one for each county

___Areawide planning - local action

*Continue areawide planning with implementation by local governments

___Sub-state management agency

       *Let the state do it

___Urban management centers

       *Expand the water quality jurisdiction of
        local governments to implement the plan

16. Why did you attend this meeting? Check all that apply.

A. ___General interest

B. ___Curious about how the plan may affect me

C. ___Concerned about the environment

D. ___Curious about the effects the plan will have on my local government

E. ___Other (please specify) _____

_____

17. I would like to be put on the Clean Water Plan mailing list.

    Name: _____

    Address: _____

             _____

Please use the back of this questionnaire for any additional comments on tonight's presentation or things you would like to have in the final plan.

BIBLIOGRAPHY

BIBLIOGRAPHY

Arnstein, Sherry R. "A Ladder of Citizen Participation."
    AIP Journal 35(4) (July 1969): 216-24.

Baskin, D. American Pluralist Democracy. New York: Van
    Nostrand Rienhold, 1971.

Bishop, A. Bruce. Public Participation in Water
    Resources Planning. U.S. Army Corps of Engineers,
    Institute for Water Resources, Alexandria,
    Virginia: December 1970.

Bolan, Richard S. "Emerging Views of Planning." Journal
    of the American Institute of Planners 33(4)
    (July 1967): 233-45.

Bonner, Patricia, and Shimizu, Ronald, eds. "Proceedings
    of a Workshop on Public Participation." Held in
    Ann Arbor on June 23-24, 1975. Great Lakes Research
    Advisory Board, International Joint Commission,
    June 1975.

Borton, Thomas E.; Warner, Katherine P.; and Wenrich, J.
    William. The Susquehanna Communication-Participation
    Study. A report submitted to the U.S. Army Engineer
    Institute for Water Resources. Springfield,
    Virginia: Clearinghouse for Federal Scientific and
    Technical Information, December 1970.

Burch, William R., Jr.; Cheek, Neil H., Jr.; and Taylor,
    Lee. Social Behavior, Natural Resources, and the
    Environment. New York: Harper & Row, Publishers,
    1972.

Burch, William R., Jr. "Who Participates: A Sociological
    Interpretation of Natural Resources Decisions."
    Natural Resources Journal 16(1) (January 1976):
    41-54.

Clark, Roger N., and Stankey, George H. "Analyzing Public
    Input to Resource Decisions: Criteria, Principles
    and Case Examples of the CODINVOLVE System." Natural
    Resources Journal 16(1) (January 1976): 213-36.

239

Davis, Adam Clarke. <u>Public Participation in Water Pollution Control Policy and Decision Making</u>. Raleigh, North Carolina: Water Resources Institute, 1973.

Field, Donald R.; Barron, James C.; and Long, Burl F. <u>Water and Community Development: Social and Economic Perspectives</u>. Man, His Community and Natural Resources, no. 1. Ann Arbor: Ann Arbor Science Publishers Inc., 1974.

Frauenglass, Harvey. "Environmental Policy: Public Participation and the Open Information System." <u>Natural Resources Journal</u> 2 (July 1971): 489-96.

Friedrich, Carl J., ed. <u>The Public Interest</u>. Nomos, no. 5. New York: Atherton Press, 1967.

Grand, Jon. "The Educational Telephone Network: Its Use in Public Participation." Wisconsin Water Quality Program. Summary Report, Prepared by: Water Quality Planning Section, Wisconsin Department of Natural Resources, February 1977.

Hanna, Karna. Associate Planner, Public Participation Officer, Tri-County Regional Planning Commission staff member, Lansing, Michigan. Interview, 11 May 1978.

Heberlein, Thomas A. "Principles of Public Involvement." Staff paper series in rural and community development, Cooperative Extension Programs, University of Wisconsin, Madison, Wisconsin, 5 April 1976.

Heid, Virginia. <u>The Public Interest and Individual Interests</u>. New York: Basic Books, 1970.

Ingram, Helen. "Patterns of Politics in Water Resources Development." <u>Natural Resources Journal</u> 11(1) (January 1971): 102-18.

League of Women Voters, Lansing Chapter, Workshop Report and Proceedings, "Cooperation for Clean Water." Held at Kellogg Center, East Lansing, Michigan, 7 April 1976.

Moss, Elaine, ed. <u>Land Use Controls in the United States</u>. New York: The Dial Press/James Wade, 1977.

Ogden, Daniel M., Jr. "Environmental Values and Water Project Planning." Paper presented to Arkansas-White-Red Basins Inter-Agency Committee and the Missouri Basin Inter-Agency Committee, Fort Collins, Colorado, 8-9 July 1970.

Ragen, James F., Jr. Guide 1: Effective Public Meetings. This report was prepared for the U.S. Environmental Protection Agency. Washington, D.C.: May 1977.

Redford, Emmette S. Democracy in the Administrative State. New York: Oxford University Press, 1969.

Rosenbaum, Walter A. The Politics of Environmental Concern, Second Edition. New York: Praeger Publishers, 1977.

Sax, Joseph L. Defending the Environment: A Handbook for Citizen Action. New York: Vintage Books, 1970.

Schubert, Glendon. The Public Interest. Glencoe, Illinois: The Free Press, 1960.

Spiegel, Hans B.C. Citizen Participation in Urban Development, Volume I. "Concepts and Issues." NTL Institute for Applied Behavioral Science. Associated with the National Education Association, 1201 Sixteenth Street, N.W., Washington, D.C. 20036, 1968.

Synergy. Citizen Participation/Public Involvement Skills Workbook. Cupertino, California: Synergy Consultation Services, 1972.

Transportation Research Board. "Application of Interactive Graphics in Citizen Participation." Transportation Research Record #553, National Research Council, Washington, D.C.: 1975.

Tri-County Regional Planning Commission. 208 Areawide Waste Treatment Management Program Study Design. Lansing, Michigan: August 1975.

_____. 208 Areawide Waste Treatment Management Program: Work Program. Lansing, Michigan: March 1976.

_____. 208 Water Quality Management Plan. Interim Outputs - Technical Appendices. Lansing, Michigan: August 1976.

_____. 208 Water Quality Management Plan, Volume I. Parts 1, 3, 4, 5. Lansing, Michigan: August 1977.

_____. Citizens Advisory Council Handbook and
Guidelines: Policy for Participation and Operating
Procedures. Lansing, Michigan: 4 February 1975.

_____. "Designation Package for 208 Planning."
Appendix H. Lansing, Michigan: May 1975.

_____. Minutes of Citizens Advisory Council Meetings.
Lansing, Michigan, March 1975-April 1977.
(Typewritten.)

_____. Report submitted by the Information Officer to
the Commission regarding 208 programming. Lansing,
Michigan: September 1977.

U.S. Congress. Federal Water Pollution Control Act
Amendments of 1972. 92nd Cong., 2nd sess., 1972.
18 October 1972.

_____. Senate. Committee on Public Works. A Legislative
History of the Water Pollution Control Act
Amendments of 1972, Vols. 1 and 2. Washington, D.C.:
Government Printing Office, 1973.

_____. Senate. Committee on Public Works. A Study of
Pollution-Water. 88th Cong., 1st sess., #99670.
Washington, D.C.: Government Printing Office, 1963.

_____. Water Resources Planning Act of 1965. P.L. 89-80,
22 July 1965, 79 Stat. 244, 42 USCA 1962.

U.S. Department of Agriculture, Economic Research Service.
A History of Federal Water Resources Programs,
1800-1969. Misc. Publication No. 1233, June 1972.

U.S. Environmental Protection Agency. A Statement of Policy
for Implementing the Requirements of the Federal
Water Pollution Control Act as Amended and Certain
Requirements of the Marine Protection Research and
Sanctuaries Act. Washington, D.C.: 18 August 1975.

_____. Environmental Studies Division. Managing the
Environment. Project Officer - Alan Newschatz,
Washington Environmental Research Center. Washington,
D.C.: Government Printing Office, EPA-600/5-73-010,
1973.

_____. Grants and other Assistance. "Policies and
Procedures for Continuing Planning Process." Federal
Register 40, no. 230 part 130 and 131, 28 November
1975, 55321-49.

_____. Guidelines for State and Areawide Water Quality Management Program Development. Washington, D.C.: November 1976.

_____. Proposed Guidelines for Public Participation in Region V. Chicago: 8 February 1977.

_____. Water Planning Division. Public Participation Handbook for Water Quality Management. Washington, D.C.: June 1976.

_____. Water Programs. "Public Participation in Water Pollution Control." Federal Register 38, no. 163 part III, August 1973, 22756-8.

U.S. National Water Commission. Water Policies for the Future. Washington, D.C.: Government Printing Office, 1973.

Wagner, Thomas P., and Ortolano, Leonard. "Analysis of New Techniques for Public Involvement in Water Planning." Water Resources Bulletin 2(2) (April 1975): 329-44.

Wandesforde-Smith, Geoffrey. "The Bureaucratic Response to Environmental Politics." Natural Resources Journal 2 (July 1971): 479-88.

Warner, Katherine P. Public Participation in the Water Resources Planning Process. PB-204 245. Report prepared for the National Water Commission. Springfield, Virginia: National Technical Information Service, July 1971.

Wohlwill, Joachim F., and Carson, Daniel H., eds. Environment and the Social Sciences: Perspectives and Applications. Washington, D.C.: American Psychological Association, Inc., 1972.

GENERAL REFERENCES

Althoff, Philip, and Greig, William H. "ENVIRONMENTAL
    POLLUTION CONTROL POLICY-MAKING: An Analysis of
    Elite Perceptions and Preferences." Environment
    and Behavior 6(3) (September 1974): 259-88.

Andrews, Wade H.; Riley, J. Paul; and Masteller, Malcolm
    B. "Mathematical Modeling of a Sociological and
    Hydrologic Decision System." Institute for Social
    Science Research on Natural Resources and the
    Utah Water Research Laboratory, Utah State
    University, Logan, Utah, October 1977.

Barlowe, Raleigh. "Implications of Land and Water Use
    Developments in Michigan for Future Public Water
    Resource Policy." Report submitted to Michigan
    Water Resources Commission, WRC-PL 8; Prepared
    by: Department of Resource Development, Michigan
    State University, East Lansing, Michigan, n.d.

_____. "The Politics of Water: Local Opportunities and
    Responsibilities." Paper presented at Seminar on
    the Management of Water Resources sponsored by
    Western Michigan University, 19 October 1964 at
    South Haven, Michigan.

Beatty, Kathleen M., and Pierce, John C. "Representation
    and Public Involvement in Water Resource Politics:
    A Comparison of Six Participant Types." Water
    Resources Bulletin 12(5) (October 1976): 1005-17.

Berger, Bernard B., and Dworsky, Leonard B. "Water
    Pollution Control." Transactions 58(1) (January
    1977): 16-28.

Bigier, Alexander B., and Koeizer, Victor A. Policies
    and Organizations for Urban Water Management.
    Fort Collins: Water Resources Publications, 1975.

Bish, Robert L., and Ostrom, Vincent. Understanding Urban
    Government. Washington, D.C.: American Enterprise
    Institute for Public Policy Research, 1973.

Biswas, Asit K., and Durie, Robert W. "Sociological Aspects of Water Development." Water Resources Bulletin 7(6) (December 1971): 1137-43.

Bolle, Arnold W. "Public Participation and Environmental Quality." Natural Resources Journal 2(3) (July 1971): 497-505.

Booher, David E. CITIZEN PARTICIPATION IN PLANNING: Selected Interdisciplinary Bibliography. Council of Planning Libraries, Exchange Bibliography, #718. P.O. Box 229, Monticello, Illinois, 61856. January 1975.

Borton, Thomas E., and Warner, Katherine P. "Involving Citizens in Water Resource Planning: The Communication-Participation Experiment in the Susquehanna River Basin." Environment and Behavior 3(3) (September 1971): 284-306.

Burke, Edmund M. "Citizen Participation Strategies." AIP Journal 34 (September 1968): 273-94.

Caulfield, Henry P., Jr.; Steele, Harry A.; and Johnson, Sam H., III, eds. Manual for Training in the Application of the Principles and Standards of the Water Resources Council. Environmental Resources Center, Colorado State University, Fort Collins, Colorado: December 1974.

Checkoway, Barry.; Crawford, Janet.; Dimit, Mary.; Elkus, Martha.; Finke, John.; Kahn, Beth.; Katsaros, Elizabeth.; Kurtz, Kenneth.; Martin, Marabeth.; Neibling, Mary.; Rice, Bobbi.; and Shane, Donald. Citizen Participation Technology. Council of Planning Librarians Exchange Bibliography, #1329. P.O. Box 229, Monticello, Illinois, 61856. August 1977.

Connor, Desmond M. Citizens, Participate: An Action Guide for Public Issues. Oakville, Ontario: Development Press, September 1974.

Cooke, T.J., and Males, R.M. Communications for Urban Water Resources Management -- A Review and Annotated Bibliography. National Technical Information Service. #PB-233 332. 5285 Port Royal Road, Springfield, Virginia. February 1974.

Costantini, Edmond., and Hanf, Kenneth. "Environmental Concern and Lake Tahoe: A Study of Elite Perceptions, Backgrounds, and Attitudes." Environment and Behavior 4(2) (June 1972): 209-42.

Curran, Terence P. "Water Resources Management in the Public Interest." Water Resources Bulletin 7(1) (February 1971): 33-9.

Cutler, M. Rupert. New Role for Government Information and Education Personnel. Wildlife Management Institute. Washington, D.C.: 1974.

Dasgupta, Satadal. "Local Attitudes and Water Resources Development: A Canadian Case Study." Water Resources Bulletin 12(1) (February 1976): 27-37.

Davis, Adam Clarke.; Anderson, Jill.; and Gough, Richard I. Alternative Information and Interaction Approaches to Public Participation in Water Resources Decision-Making: A State-Of-The-Arts Report. Water Resources Research Institute. Raleigh, North Carolina: 1975.

Delli Priscoli, Jerry. "Citizen Advisory Groups and Conflict Resolution in Regional Water Resources Planning." Water Resources Bulletin 11(6) (December 1975): 1233-43.

Dick, Ronald E.; McKee, David T.; and Wagar, J. Alan. "A Summary and Annotated Bibliography of Communications Principles." The Journal of Environmental Education 5(4) (Summer 1974): 8-13.

Doran, Rodney L.; Guerin, Robert O.; and Sarnowski, Alfred A., Jr. "Assessing Students Awareness of Environmental Problems." The Journal of Environmental Education 5(4) (Summer 1974): 14-8.

Draper, Diane. Public Participation in Environmental Decision-Making. Council of Planning Librarians Exchange Bibliography, #396. P.O. Box 229, Monticello, Illinois, 61856. May 1973.

Easton, David. Systems Analysis of Political Life. New York: John Wiley and Sons, Inc., 1965.

Erickson, David L., and Davis, Adam Clarke. "Public Land Policy: An Evaluation of Decision and Citizen Involvement Systems." Journal of Environmental Management 5(4) (Fall 1977): 365-77.

Ertel, Madge O. The Role of Citizen Advisory Groups in Water Resources Planning. Water Resources Research Center, University of Massachusetts, Amherst, Massachusetts. Publication No. 43, 1974.

Ertel, Madge O., and Koch, Stuart G. Citizen Participation in Comprehensive Water Resources Planning. Water Resources Research Center, University of Massachusetts, Amherst, Massachusetts. Publication No. 77, 1976.

Everitt, Jack. "People, Politics, Policy, and Pollution." The Journal of Environmental Education 5(4) (Summer 1974): 19-20.

Farris, Martin T. "Economics and Federal Water Projects." Water Resources Bulletin 7(6) (December 1971): 1128-36.

Fellman, Cordon., and Brandt, Barbara. "Working Class Protest Against an Urban Highway: Some Meanings, Limits and Problems." Environment and Behavior 3(1) (March 1971): 61-79.

Fennessey, Gail M.; Livingston, Samuel A.; Edwards, Keith J.; Kidder, Steven J.; and Nafziger, Alyce W. "Simulation, Gaming, and Conventional Instruction in the Teaching of Ecology." The Journal of Environmental Education 5(4) (Summer 1974): 21-4.

Graham, Frank, Jr. Disaster by Default: Politics and Water Pollution. New York: M. Evans and Company, Inc., 1966.

Greenhalgh, Richard. Improving Public Involvement in USDA Natural Resource Planning. Working Paper Number 15. Natural Resource Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C.: October 1976.

Hahn, Alan J. "Citizens in Local Politics: Nonparticipation and 'Unrepresentation'." Journal of Community Development Society 1(2) (Fall 1970): 63-73.

Hanchey, James R. Public Involvement in the Corps of Engineers Planning Process. U.S. Army Corps of Engineers. Institute for Water Resources, Fort Belvoir, Virginia. IWR Report 75-R4, October 1975.

Heberlein, A. Thomas, "An Analysis of Public Involvement in the 208 Planning Process in Wisconsin." Report prepared for Environmental Protection Agency Region V. 31 August 1976.

_____. "Public Opinion for Policy Decisions: Comparing Self-Selected Participants in Hearings With Representative Samples." Paper presented at NCRS-2. Chicago, Illinois, 6 April 1978.

_____. "Some Observations on Alternative Mechanisms for Public Involvement: The Hearing, Public Opinion Poll, the Workshop and the Quasi-Experiment." Natural Resources Journal 16(1) (January 1976): 197-212.

Howard, John A., and Hulbert, James. Advertising and the Public Interest. Chicago: Crain Communications, Inc., 1973.

Howards, Irving, and Kaynor, Edward R. "Limits on the Institutional Frame of Reference in Water Resource Decision-Making." Water Resources Bulletin 7(6) (December 1971): 1117-27.

Hulchanski, John David. Citizen Participation in Urban and Regional Planning: A Comprehensive Bibliography. Council of Planning Librarians, Exchange Bibliography, #1297. Monticello, Illinois, 61856. June 1977.

Kimball, William J.; Thullen, Manfred; Kirk, Alan R.; and Doozan, Christopher J. "Community Needs and Priorities as Revealed by Michigan Public Opinion Survey." Summary of Results for Lansing's Tri-County (Region 6). Prepared by: Department of Resource Development; Cooperative Extension Service; and Agricultural Experiment Station. Michigan State University East Lansing, Michigan. March 1977.

League of Women Voters Education Fund. The Big Water Fight. Brattleboro, Vermont: The Stephen Greene Press, 1966.

Libby, Lawrence W. "208 Planning: The Slumbering Giant in Land and Water Policy." Staff Paper No. 77-36. Discussion paper prepared for workshop on waste-water treatment in rural regions, Pittsburgh, Pennsylvania, 4-5 May 1977.

_____. "More on Public Participation." Proceedings, Symposium on Social and Economic Aspects of Water Development. M-2 Discussant Report. Ithaca, New York, 1972.

Lieber, Harvey, and Rosinoff, Bruce. Federalism and
    Clean Waters. Lexington, Massachusetts: D.C. Heath
    and Company, 1975.

Lingwood, David A. "Environmental Education Through
    Information-Seeking: The Case of an 'Environmental
    Teach-In'." Environment and Behavior 3 (September
    1971): 230-62.

Lucas, Alastair R. "Legal Foundations for Public
    Participation in Environmental Decision-Making."
    Natural Resources Journal 16(1) (January 1976):
    73-102.

Meyer, William J. Public Good and Political Authority.
    London: Kennikat Press, 1975.

Meyers, William, and Rinard, Park. Making Activism Work.
    New York: Gordon and Breach, 1972.

Michigan. Department of Conservation. Recreation Resource
    Planning Section. Guidelines for Local Participation
    in Michigan. Lansing, Michigan. April 1965.

_____. Department of Management and Budget and The
    Office of Intergovernmental Relations. Michigan
    Director of Regional Planning and Development
    Commissions. Lansing, Michigan. March 1976.

_____. Department of Natural Resources. Bureau of Water
    Management, Water Resources Commission. A Survey
    of Background Water Quality in Michigan Streams.
    Lansing, Michigan. November 1970.

_____. Department of Natural Resources. Water Quality
    Division. Guidelines for an Approvable 208 Plan.
    8 April 1977.

_____. Department of State Highways and Transportation.
    State of Michigan Action Plan. Prepared by the
    Michigan Department of State Highways and Transpor-
    tation in accordance with the Federal Highway
    Administration Policy and Procedure Memorandum
    90-4. Lansing, Michigan. 26 June 1974.

_____. Legislative Service Bureau. Michigan Water
    Resources Commission Act. Act 245, Public Acts of
    1929, as amended, Sections 323.1-323.13 of the
    Michigan Compiled Laws.

_____. Legislative Service Bureau. Natural Rivers Act of 1970. (Act 231, 1970, p. 622; Eff. Apr. 1, 1971.) Reprinted from the Michigan Compiled Laws, February 1975.

_____. State of. "Governor's 208 Task Force." Minutes of meetings and notes from these meetings. Lansing, Michigan. January 1976-October 1977.

Mitchell, Bruce. "Behavioral Aspects of Water Management: A Paradigm and a Case Study." Environment and Behavior 3(2) (June 1971): 135-53.

Myers, Paul B. "Regional Energy Development and Public Participation: The Case of the Western North Dakota Environmental Assessment." Paper presented at the Fifth National Conference on Energy and the Environment, Cincinnati, Ohio. 3 November 1977.

_____. "Structured Sociological Involvement in Natural Resources Planning and Management." Paper presented at the Annual Meetings, Rural Sociological Society. Madison, Wisconsin. 4 September 1977.

McKenzie, Leon. "Simulation Games and Adult Education." Adult Leadership 22(9) (March 1974): 293-5.

McPartland, Edward J. "Institutional Behavior Concerning River Basin Management." Doane College, Crete, Nebraska. 1975. (Typewritten.)

National Academy of Public Administration. "Water Quality and the Interior Department: An Aborted Experiment." Washington, D.C., February 1971. (Mimeographed.)

National Academy of Sciences. Decision-Making in the Environmental Protection Agency. Volume 2. A report to the U.S. Environmental Protection Agency from the Committee on Environmental Decision-Making of the Commission on Natural Resources - National Research Council. Washington, D.C.: 1977.

National Wildlife Federation. Setting the Course for Clean Water. Bulletin prepared by Diane L. Donley. Washington, D.C.: October 1977.

Nothdurft, William Eric. "The Role and Effectiveness of Information and Education Programs for Public Participation in Federal Water Resources Planning." M.A. Thesis, Pennsylvania State University, 1977.

251

O'Riordan, Jon. "The Public Involvement Program in the
    Okanagan Basin Study." Natural Resources Journal
    16(1) (January 1976): 177-96.

O'Riordan, Timothy. "Policy Making and Environmental
    Management: Some Thoughts on Processes and Research
    Issues." Natural Resources Journal 16(1) (January
    1976): 55-72.

_____. "Public Opinion and Environmental Quality: A
    Reappraisal. Environment and Behavior 3 (June 1971):
    191-214.

Ortolano, Leonard. Water Resources Decision Making on the
    Basis of the Public Interest. National Technical
    Information Service, #AD-A010-402. Springfield,
    Virginia: February 1975.

Osgood, Mary H.; Thomson, Joan S.; and Martin, Kenneth M.
    "Citizens' and Officials' Perceptions of Local
    Problems: Are They the Same?" This review draft was
    presented at the Rural Sociological Society Meetings.
    Madison, Wisconsin. 1-4 September 1977.

Pierce, John C., and Doerksen, Harvey R. Water Politics
    and Public Involvement. Ann Arbor: Ann Arbor Science
    Publishers, Inc., 1976.

Powell, Mel D.; Winter, William C.; and Bodwitch,
    William P. Community Action Guidebook for Soil
    Erosion and Sediment Control. Washington, D.C.:
    National Association of Counties Research Foundation
    (NACORF), March 1970.

Sawyer, R.M., and Harbaugh, T.E. "A Methodology for the
    Construction of Attitude Measuring Instruments."
    Water Resources Bulletin 6(3) (May-June 1970): 401-7.

Sellers, Leonard, and Jones, David W., Jr. "Environment
    and the Mass Media." The Journal of Environmental
    Education 5(1) (Fall 1973): 51-7.

Sewell, W.R. Derrick. "Environmental Perceptions and
    Attitudes of Engineers and Public Health Officials."
    Environment and Behavior 3 (March 1971): 23-59.

Sewell, W.R. Derrick., and O'Riordan, Timothy. "The
    Culture of Participation in Environmental Decision-
    Making." Natural Resources Journal 16(1) (January
    1976): 1-22.

252

Shore, William B. Public Participation in Regional
    Planning. Regional Planning Association, New York:
    October 1967.

Smith, Bruce L.R., and Hague, D.C., ed. The Dilemma of
    Accountability in Modern Government: Independence
    versus Control. London: Macmillan & Company, Limited,
    1971.

Stankey, George H.; Hendee, John C.; and Clark, Roger N.
    "Commentary: Applied Social Research Can Improve
    Public Participation in Resource Decision Making."
    The Journal of Rural Sociology 40(1) (Spring 1975):
    67-74.

Stewart, James M., and Howells, David H. Perception of
    Water Resource Information Sources and Educational
    Needs by Local Officials and Special Interest
    Groups. Report No. 47. Water Resources Institute
    of the University of North Carolina. Raleigh, North
    Carolina: January 1971.

Stewart, James M., ed. Proceedings Conference on Public
    Participation in Water Resources Planning and
    Management. Report No. 95. Water Resources Research
    Institute of University of North Carolina. Raleigh,
    North Carolina: 19-20 June 1974.

Strong, Ann L. Private Property and the Public Interest:
    The Brandywine Experience. Baltimore: The Johns
    Hopkins University Press, 1975.

Synergy. Public Participation Training Workbook. Workshop
    materials provided by Synergy Consultations Services,
    Cupertino, California. For public participation
    training under the state and areawide Water Quality
    Management Program of the Environmental Protection
    Agency. Held in Lansing Michigan on 19 February
    1976.

Teniere-Buchot, P.F. "The Role of the Public In Water
    Management Decisions in France." Natural Resources
    Journal 16(1) (January 1976): 159-76.

Tognacci, Louis N.; Weigel, Russell H.; Wideen, Marvin F.;
    and Vernon, David T.A. "Environmental Quality: How
    Universal is Public Concern?" Environment and
    Behavior 4(1) (March 1972): 73-86.

Tri-County Regional Planning Commission. 208 Water Quality
        Management Plan. Environmental Impact Assessment.
        Volume III, Part 4. Lansing, Michigan: August 1977.

_____. 208 Water Quality Management Plan. Institutional
and Financial Framework 208 Water Quality Management.
Lansing, Michigan: March 1977.

_____. 208 Water Quality Management Plan. Interim
Outputs. Lansing, Michigan: August 1976.

_____. 208 Water Quality Management Plan. Lansing,
Michigan: November 1977.

_____. 208 Water Quality Management Plan. Public and
Local Government Review of Draft 208 Water Quality
Management Plan. Appendix R. Lansing, Michigan:
November 1977.

_____. 208 Water Quality Management Plan. State-Wide
Legal Analysis. Lansing, Michigan: October 1976.

_____. 208 Water Quality Management Plan. Urban
Stormwater Pollution Control and Reduction Alter-
natives. Lansing, Michigan: February 1977.

_____. 208 Water Quality Management Plan. Water Quality
Problems, Projections and Sources. Volume II, Part 2.
Lansing, Michigan: August 1977.

_____. 208 Workshop Agenda. Lansing, Michigan:
October 1977.

_____. An application to the U.S. Environmental
Protection Agency for "Continuing Areawide Water
Quality Management Planning." Lansing, Michigan:
1 May 1978.

_____. "Application for an Areawide Waste Treatment
Management Planning Grant under Section 208 of
P.L. 92-500 to the U.S. Environmental Protection
Agency, Region V, Chicago, Illinois." Lansing,
Michigan: April 1975.

_____. Minutes of Meetings of the Technical Planning
Coordinating Committee and Areawide Planning
Advisory Council. Lansing, Michigan, 1976-1978.
(Typewritten.)

_____. Public Hearing Comments, from September 21, 1977 meeting to consider the Draft 208 Water Quality Management Plan, compiled by TCRPC staff. Lansing, Michigan: October 1977. (Typewritten.)

_____. River Basin Meeting Agendas and Handouts for the six Tri-County basins. Lansing, Michigan. January 1977-September 1977. (Typewritten.)

Twight, Ben W. and Catton, William R., Jr. "The Politics of Images: Forest Managers vs. Recreation Publics." Natural Resources Journal 15(2) (April 1975): 297-306.

Twight, B.W., and Paterson, John J. "Measuring the Effectiveness of Public Participation." Paper was prepared for presentation at the 1977 meeting of the Rural Sociological Society, September 1977.

U.S. Department of Agriculture. USDA Procedures for Planning Water and Related Land Resources in Programs Administered by the Soil Conservation Service. March 1974.

U.S. Department of Interior, Bureau of Land Management. "Public Involvement in Coal Leasing Activities." Brochure describes the results of public meetings held 9-11 August 1977 in Ashland, Forsyth and Billings, Montana.

U.S. Department of Transportation. Federal Highway Administration. Office of Environmental Policy. "Public Involvement Techniques Outlined in Highway Agency Action Plan, Volume 1, Analysis of Participatory Techniques." Prepared by: William M. Wood, April 1977.

U.S. Environmental Protection Agency. Area and Agency Designation Handbook for Section 208 Areawide Waste Treatment Management Planning. Washington, D.C.: December 1974.

_____. Cost Analysis Handbook for Section 208 Areawide Waste Treatment Management Planning Federal Assistance Applications. Washington, D.C.: May 1975.

_____. Executive Summary of Section 208 Program for Designated Areas. Washington, D.C.: October 1974.

255

_____. "Program Guidance Memorandum: SAM-27." This memorandum was issued by Eckardt C. Beck, Deputy Assistant Administrator for Water Planning and Standards (WH-551). Washington, D.C.: 8 August 1977.

_____. "Public Participation Guidelines in 208 Water Pollution Control." Memorandum issued by William A. van Eck of the Non-point Sources Branch, Water Planning Division (WH-544) to Selected Cooperative Extension Service Staff and Specialists.

_____. Revised Grant Application and Work Plan Handbook for Section 208 Areawide Water Quality Management. Washington, D.C.: December 1975.

_____. State Continuing Planning Process Handbook. Washington, D.C.: December 1975.

_____. Water Planning Division and the Old Colony Planning Council. Citizen Involvement in OCPC 208 Planning: A Progress Report. Washington, D.C.: 1976.

_____. Water Planning Division. Annotated Bibliography for Water Quality Management. 4th edition. Washington, D.C.: May 1977.

Warner, Kate; Borton, Thomas E.; Parks, Cendra; and Wenrich, William. Summary Training Report. Prepared by the Environmental and Urban Planning Services, Ann Arbor, Michigan. Report prepared for the Public Involvement Workshop in the Midwest Region of the National Park Service held on 21-22 April 1975.

Watkins, George A. "Developing a 'Water Concern' Scale." The Journal of Environmental Education 5(4) (Summer 1974): 54-8.

Wengert, Norman. "Public Participation in Water Planning: A Critique of Theory, Doctrine, and Practice." Water Resources Bulletin 7(1) (February 1971): 26-32.

_____. "Citizen Participation: Practice in Search of a Theory." Natural Resources Journal 16(1) (January 1976): 23-40.

Wenrich, J. William; Borton, Thomas; Havlick, Spenser; and Warner, Katherine. "Community Education for Participation in Water Resource Planning." Adult Leadership 18(6) (December 1969): 17-92.

Weston, Roy F.; Trelease, Frank J.; Dworsky, Leonard B.; and Oeming, Loring F. "Water Quality Management - Legal, Technical, and Administrative Aspects." Journal Water Pollution Control Federation 36(9) (September 1964): 1082-1106.

Whipple, William, Jr. "Strategy of Water Pollution Control. Water Resources Bulletin 12(5) (October 1976): 1019-28.

White, James T., Jr. "Current Federal Participation in Comprehensive Water Resource Planning Programs." Paper presented during 1968 Farmer's Week Conference sponsored by Michigan State University, Department of Resource Development, 31 January 1968.

Widditsch, Ann. Guide 2: Working Effectively with Advisory Committees. This report was prepared for the U.S. Environmental Protection Agency. Washington, D.C.: May 1977.

Wilkinson, Paul. "Public Participation in Environmental Management: A Case Study." Natural Resources Journal 16(1) (January 1976): 117-36.

Witt, William. "Communication Concepts for Science and Environmental Communications." The Journal of Environmental Education 5(1) (Fall 1973): 58-62.

Wolpert, Julian. "Regressive Siting of Public Facilities." Natural Resources Journal 16(1) (January 1976): 103-16.

Wood, Colin J.B. "Conflict in Resource Management and the Use of Threat: The Goldstream Controversy." Natural Resources Journal 16(1) (January 1976): 137-58.