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Title: PUBLIC POLICY COMPETITION IN WATER RESOURCE PLANNING: A CASE STUDY OF DAYS CREEK DAM

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The Corps of Engineers is in a position to dominate the formulation and implementation of public policy at a given local level. The position is based on the Corps' capability to influence the decision-making process through the exercise of force by means of eminent domain procedures, the assumption and demonstration of legitimacy, and by the control of information and manipulation of relationships at the local level.

The conflict over the proposed construction of a dam at Days Creek, Oregon, illustrates the organization of the Corps' position in the face of local citizen resistance to the construction. Study of the conflict indicates a need for substantial change in the Corps' position in order for local citizens participation in water-resources development to become demonstratively meaningful.

Public Policy Competition in Water Resource Planning: A Case Study of Days Creek Dam

by

Marvin Ivan Bartel

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PUBLIC POLICY COMPETITION IN WATER RESOURCE PLANNING: A CASE STUDY OF DAYS CREEK DAM

I INTRODUCTION

This paper examines the interactions of two groups attempting to achieve political goals by influencing public policy. The two groups involved are the United States Army Corps of Engineers and a local group of citizens near Days Creek, Oregon. Both employ various modes of support in competition for a desired goal; the goal is active participation and influence in decisions concerning the formulation and implementation of public policy relating to the construction of the Days Creek Dam.

Ultimately, the United States Congress is the agency that has the capacity to implement public policy decisions. These decisions, either directly or indirectly, affect members of the public. The decision concerning public policy, in this case, is whether Congress authorizes the construction of a water-resource project planned by the Corps of Engineers. This project is to be constructed a mile upstream from Days Creek.

Both the local public and the Corps of Engineers are involved in political action. Their actions imply an attempt to control or establish order to the behavior of others. This also means active

involvement and influence in decisions concerning resources that can be a base of subsequent power. Political action, as in this contest, can be present at both the local and national level. It can be present in unorganized groups and appear in situations least favorable to its emergence (Balandier, 1970:195). Issues or events can force local groups with no formal internal political structure to align in a manner to maximize their potential influence regarding decisions which affect them. This is what appears to occur within the local inhabitants of Days Creek.

Political involvement in the formulation and implementation of public policy implies a competition for power. This can occur between groups on the national level, groups on the local level, or both. Any group which is involved in the implementation of public policy presumes a potential for power, and the actual potential varies from group to group. Power stems from the ability to control resources, whether human or material, and the ability to influence decisions concerning allocation and distribution of these same resources. The greater the input of an agency or group into the decision-making process, and the greater its monopoly of information, the greater the possibility of its achieving its political goals.

> The study of politics . . . is the study of processes involved in determining and implementing public goals and the differential achievement and use of power by the members of the group concerned with those goals. (Swartz, Turner, Tuden, 1966:7)

Groups in competition for power will attempt to organize support to attain and hold their involvements in the administration of power. Support is any means which contributes to a group's power base and increases a group's ability to maintain its place within the decision-making process.

Support is generated in several different ways and people and institutions can be actively or passively involved in supportive or non-supportive behavior. A government official actively campaigns for public acceptance of a certain issue. A group or agency manipulates the flow of information and ideology to the public by achieving unlimited access to a certain resource, such as the mass media. The media need not be a base of support, only a neutral instrument utilized to release information with the intent of gaining support for a group's actions. Non-support of one group can lead to indirect support of another. A refusal to support one group can increase the possibility of another group achieving the desired goal. If a public official refuses to support a group or agency, and this is their primary mode of support, then another group can achieve its political goal by depending on other modes of support to generate public acceptance.

Any display of support must ultimately originate within the general public, the public being the only source on which to base support. To maintain support a group must gain compliance from

members of the public. The gaining of compliance is a capacity to secure obedience from the public affected by decisions concerning public policy. Three techniques are utilized to achieve support. These techniques are the threat of physical force, demonstration of legitimacy, and use of persuasion.

In any state-level political system, force is one means of achieving support. The threat of force involves the capacity to apply the police power of the state, if necessary. The state, here, is a polity which controls specific territory demarcated by actual physical boundaries.

The threat of physical force compels persons within the territory of the state to obey laws governing public policy. Any refusal to act in the proper manner leads to punitive measures being taken by persons or groups who possess the ability to apply force. Any person or group refusing to act in compliance with the laws of the state faces the threat of bodily harm or forced acquiescence to decisions. The claim of the state to paramountcy in the application of naked force to social problems is the very foundation on which the state is built (Fried, 1967:230).

If force is the only mode of support, political activity is limited; if the application of naked force does not allow a group to achieve its goals, there are no alternatives available. Over a period of time, the application of force must be supplemented by other

methods to justify a group's control. If a group can demonstrate the legitimacy of its actions to the public, it can attain acceptance and compliance for the policies it implements.

Demonstration of legitimacy, the second means of support, rests on the belief that persons who determine public policy and the public affected by their decisions share values and norms of conduct. The shared values are the expectations which each group presumably has in common. The group affected by decisions of public policy is compelled to obey these policies enacted by the group in power. The public affected by these decisions expects that their obedience will produce decisions in their best interest so long as the regime is legitimate. If the expectations of the public are not met by the person or group formulating public policy, then the public withdraws support of this group and legitimacy is lost.

Within our political system, the public selects certain individuals to fill positions of public office on both the local and the national level. These positions are officially-elected statuses. The formal functions devoted to each position are acknowledged by the public. Each position or status allows the individual operating in this capacity access to certain types of political activity including information, force, and legitimacy.

A person who occupies an officially-elected status implements decisions which affect the public. The public is obligated to abide by

the decisions enacted by their public leaders. The public officials are impelled to act according to the expectations of their constituency, the public who places them in office. If a leader's performance of duties while occupying an elected position does not conform to the expectations of the public, then the public can, by formal vote, elect another individual. The public hopes, that by allowing a different individual to determine matters affecting their welfare, their expectations will be realized.

Legitimacy necessitates the consensual agreement of the public to abide by the decisions of the group in power. This dyadic relationship is one based on mutual obligations. The government, in general, must perform as expected by the group consenting to its leadership. The public, in this sense, possesses the ability to choose leaders who will implement decisions favorable to the social well-being of the public.

If an individual, or group, does not accomplish this end, that individual or group can be replaced by another. Although each individual brings certain personal abilities and qualities to bear on the official status, there are certain intrinsic powers vested in that office. When an individual is elected to office he acquires the ability to implement public policy to the degree which that position is accessible to existing resources.

Persuasion is the third technique in gaining support. Due to

the nuances involved in persuasion, this technique is the least effective in achieving public acceptance to decisions. To persuade the public, a group must have a monopoly on the flow of information and the type of information reaching the public. Persuasion can bring about support by convincing the public to change or alter existing attitudes and beliefs. To effectively persuade a large group of people, the group in power must maintain a communicative device designed to disseminate information and ideology to the public. Control of the flow of information facilitates a change in thought patterns to acceptance of an issue. The mass media are a chief instrument in the process of persuasion because of control of the type of information reaching the public through the mass media.

A group or agency can monopolize the technical information concerning a certain issue. By monopolizing information the group releases to the public only information which advocates their position. Many members of the public will receive information only from this group or indirectly through the mass media. If this information is the only type reaching the public, then control of the flow of information can generate enough local response to obtain public acceptance to an issue or event.

The group or agency controlling the release of information must convince the public that its policies are in their best interest, i.e., legitimate. If a group influenced the thoughts and attitudes of

the public and can achieve support through this effort, then it need not demonstrate legitimacy. The group convinces the members of the public that they are getting what they want or that this policy is actually what they do want.

The techniques of force, establishment and maintenance of legitimacy, and exercise of persuasion are all methods utilized by groups attempting to obtain support and thereby maximize potential influence of their political activities. Any group commands different capabilities in the competition for and administration of public goals. These different capabilities are based on their variable exercise of these techniques of support acquisition and maintenance.

The Corps of Engineers and Public Policy Formulation

The Corps of Engineers utilizes the three techniques of a limited exercise of force, demonstration of legitimacy, and the use of persuasion in its attempts to influence decisions governing its ability to plan and construct water-resource projects. In different situations, a varying degree of each mode of support is exhibited, but, at one time or another, all three techniques are employed in establishing and maintaining its position.

The limited exercise of force by the Corps derives from its ability to apply the law of eminent domain to acquire private lands for its projects. The law of eminent domain is a legal right of the

government. Congress has passed legislation which allows the Corps to implement this legal sanction, if, and when, necessary. But even though it is the legal right of the government to appropriate for federal projects, an individual is likely to perceive that the Corps of Engineers, not the United States Government, is forcing this evacuation. Individuals tend to perceive that the exact procedures of the Corps in evacuating and relocating people are also governed and sanctioned by the laws of Congress.

In order for the Corps of Engineers to demonstrate its legitimacy to the public it must illustrate its link to a group which possesses sufficient legitimacy, in this case, the government and Congress.

The Corps of Engineers may be said to have originated in the Act of 16 March 1802 (2 Stat 137) establishing a new military organization. In 1852 Congress placed the construction and alteration of rivers and harbors under the jurisdiction of the Corps of Engineers, and in 1917, provided that laws relating to works of improvement of harbors and rivers also apply to works of flood control (39 Stat 950). The Flood Control Act of 1936, in its provisions, assigned flood control maintenance totally to the Army Corps of Engineers (49 Stat 1570).

Congress must authorize all projects for any federal agency, including the Corps of Engineers. Without authorization from

Congress the Corps cannot initiate construction on any specific project. In this manner Congress regulates the actions of the Corps because, without formal approval by Congress, the Corps cannot construct its projects, regardless of the amount of public support they can demonstrate.

The Corps of Engineers is an executive agency under the Executive branch of the government. In this structure the Corps of Engineers, as an agency, is under the administration of the President of the United States. The Army Corps of Engineers is also a civilian works branch of the military. In its performance of civil functions the agency is responsible to the Secretary of the Army. Its members are appointed by the military and hold these positions indefinitely. These positions are not officially-elected statuses chosen by members of the public.

Thus, the Corps is an executive agency under the President, subject to the laws of Congress, and a branch of the military, all contributing to the demonstration of its legitimacy. The question is not whether the Corps actually is a legitimate power but whether the agency can convince members of the public of its legitimacy. This task must be accomplished by the agency in order to establish and maintain public support for its policies.

The Corps of Engineers actively seeks out local political officials to publicly announce support of its plans. Local political

officials serve a two-fold purpose. First, because these local politicians are officially elected by the public, they are a source of legitimate power. By linking these local officials to their policies the Corps can increase its own demonstration of legitimacy to the public. Second, local officials can be an effective instrument in the exercise of persuasion. Local officials can attempt to influence members of the public into supporting the policies and actions of the agency.

Another means utilized by the Corps in persuading the local public is through the use of the mass media. The Corps of Engineers, like many federal agencies, has a monopoly of technical information regarding any of its proposed projects. The agency can control the type and flow of information which the public receives. By releasing information advocating the benefits from their projects the Corps can generate public acceptance.

Congress, as stated earlier, possesses the power to allocate and distribute resources for all federal agencies. Congress allocates funds and formally authorizes all federal projects. It also regulates and limits what and how many projects any federal agencies, including the Corps of Engineers, are allowed to undertake. The Corps of Engineers mitigates the power of Congress by its monopoly of information and by manipulation of the existing power arrangement between elected officials and the public.

Congressmen are elected to office by members of their local public. After electing a person to Congress the public is obligated to obey the decisions of this individual and his colleagues. A Congressman must partially meet the expectations of the public in determining public policy; his ability to do so in the long run is his measure of success. A Congressman will attempt to stay in a position proximal to resources by satisfying the requirements placed on his actions by the public. A balance thus is maintained between the users of power and the group affected by this power.

The Corps of Engineers is capable of maximizing this system of mutual obligations to its advantage by controlling the actions of each group. This alters the existing, functional relations involved in this dynamic interaction. The Corps has the ability to dispense, practically free-of-cost, federal water-resource projects to any region of the country. The Corps may arrange to place projects in the local districts of Congressmen who have the ability to limit the Corps' distribution of projects. Once the Corps grants the local constituents of a Congressman a project, the agency presumably may expect favorable treatment from that individual. If favorable actions are not forthcoming, the Corps may not plan future projects in the local district of a Congressman (for further discussion of the interaction of Corps and Congress, see Muddy Waters by Arthur Maas, or Pork Barrel Politics by John Ferejohn).

The ability to distribute resources to the public increases the prestige of a Congressman. By passing along resources to his constituencies, he can increase his chances for re-election. In this manner resources are bestowed on local constituents and benefits are transformed into a return investment for the Congressman. This returned investment is the acquisition of votes for re-election. The general public converts the resources into material benefits--increased employment, improved recreation, better water supplies, and increased economic growth.

The agency's projects are an impetus to economic growth for any area. Because of the need for a large expanse of land, rural areas are generally picked as proposed sites for these projects. Many of these rural areas happen to be underdeveloped areas of the country. To be designated underdeveloped an area must have a lower economic level than other parts of the country. According to Oregon and national standards, the Days Creek area, and Douglas County in general, are below the economic level of other parts of the country and could be termed poverty areas. The following chapter will explain how the relative historical isolation of the area and its presently declining economy provide a receptive attitude from many local officials and the public for any improvement to the economic sector of the county.

Members of the public perceive Congress to be regulating and

controlling the actions of the Corps by its ability to limit the agency's distribution of resources. The public regulates the actions of Congress because of its vested power to remove public leaders from office while the members of Congress are generally obligated to their local public. The public therefore has no directly effective control over the actions of the Corps. These groups, if this is the case, are aligned in the following manner:

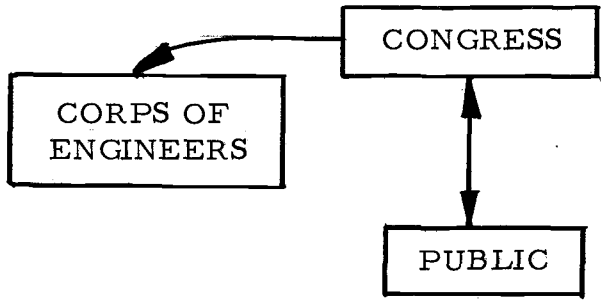


Figure 1. Interactional arrangement.

The superficial structural relations imply this type of interactional arrangement. Congress controls the actions of the Corps by its power of authorization. All actions of Congress affect the public in some manner and the public limits Congress by its vested power to remove individuals from office.

A conventional structural analysis of this type would ignore fundamental situational qualities. Dynamic processes which do not appear on the surface underlie this interaction. The underlying

dynamics, the Corps' mitigation of the regulatory power of Congress and its utilization of modes of support influencing public opinion, destroy the state of equilibrium which apparently exists. This dynamic process results in the acquisition of power by one group which appeared vested in another. This process is capable of transferring a degree of power to the Corps. This process adds the following dimensions to the power interaction.

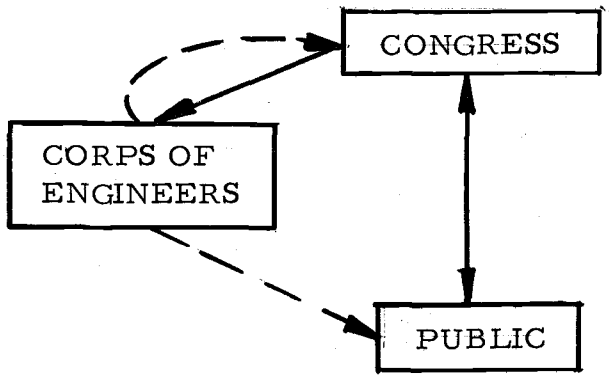


Figure 2. Interactional arrangement -- Additional dimensions

This added dimension increases the Corps' base of power. The Corps lobbies directly for appropriations by Congress. The Corps mitigates the power of Congress by building or promising to build projects in the various states and districts of Congressmen who implement decisions affecting the Corps' distribution of resources. The Corps also persuades local publics to bring pressure to bear upon their Congressmen for approval of the Corps'

actions.

The foregoing considerations lead me to a number of propositions concerning the Corps of Engineers and its actions in the planning for the construction of the Days Creek Dam.

First, the Corps of Engineers is a politically active, power-oriented agency. The Corps of Engineers attempts to maximize its potential influence in order to achieve its goals. Actions of this agency are goal-oriented and directed toward achieving a desired result, the distribution and construction of its water-resource projects in various regions of the country.

Second, the Corps of Engineers is involved in a competition for power. On a national level, the Corps, like all other federal agencies, must compete for funds allocated by Congress. All agencies compete for funds under the assumption that all resources are finite; there is never enough for all agencies to satisfy all needs and desires.

On the local level the Corps must compete with local groups of citizens opposed to their projects. Each group attempts to persuade the local public that their course of action is in the best interest of the public. Both groups attempt to gain public acceptance for their actions.

Third, the Corps of Engineers will attempt to maximize all modes of support in their quest for involvement. The Corps will

attempt to illustrate its capacity to apply force, demonstrate its legitimacy, or exercise persuasion in gaining public support for its actions. Any attempts at persuasion involve the control and monopoly of information pertinent to the issue.

My effort to bring data to bear on these propositions consists of a description and analysis of the actions of the Corps of Engineers in the South Umpqua River Basin. The following chapters treat, in turn, a description of my own research activities, a description of the study area, and an analysis of interaction between the Corps of Engineers and members of the local public in the South Umpqua area. Conclusions are then offered as a test of the original propositions and the paper is finalized with a discussion of the implications of its findings.

II RESEARCH DESIGN AND STUDY METHODS

Personal Prelude to Study

When this study was initiated its first goal was to study how people might adapt to the possibility of relocation. While conducting interviews among relocatees I found that almost all individuals in the local area were totally opposed to the dam, regardless of the proposed benefits the dam would provide for the area in general. I assumed that this opposition resulted from each individual's vested self-interest in the project. This self-interest stemmed from the loss of land and apprehension over relocation. After a short period of time, however, I realized that there were other factors underlying this dissatisfaction with the planned project. Many informants felt powerless to attempt any action to stop construction of the dam and they were affected by a host of forces over which they had little control.

Some residents, because of their personal opposition, have taken the head-in-the-sand approach. They feel that the dam will never be constructed and some have totally ignored the possibility of forced removal from their present place of residence. This "planned ignorance" mitigates apprehensions and tensions which might arise because of the prospect of forced relocation.

Many residents in the local area expressed the belief that residents further downstream were unaware of the implications and consequences of the dam. They explained that the local group possessed no devices or means of communicating their side of the issue to members of the local public. Informants mentioned instances of the local mass media refusing to allow local inhabitants to publish their alternative solutions to the issue. While this could not actually be demonstrated a survey of all news stories regarding the planned project since 1971 showed that very few printed articles were opposed to the project. During this period, approximately 500 articles were printed in the local daily newspaper relating to or involving the possibility of the dam.

Other informants also spoke of actual biases occurring at the public hearings held concerning the project. They argued that they either were not given opportunities to be heard or that the hearings were held in pro-dam Roseburg.

Based on these perceptions I became interested in how the local group could influence the public attitudes toward the project. Precisely what communicative or other devices could be employed by this local group in order to reach a large proportion of the public, perhaps not to change public opinion, but to allow members of the public access to information corresponding to both sides of the issue.

While I was in the field, activity was initiated by a few

members of the local group to organize the loose aggregate of individuals into a unit for implementing a course of action. This was accomplished in order to maximize any potential influence that the group might possess. I determined that this competition for public support by the local group in opposition to the Corps of Engineers would be of interest. This was especially true because of the two levels of socio-cultural integration operating in reference to the situation.

I thus chose to investigate how these two different systems, one highly organized and the other just starting, were actually competing in public policy formulation. Critical to me was the matter of these respective supports and how they employed them in this competition.

Research Design

> "There are two levels of socio-cultural integration. First, those that function and must be studied on a national level; second those that pertain to subcultural segments or subgroups of the population. The former includes the structured often institutionalized features such as government, legal systems, military organization and others. These institutions are national in scope and must be understood apart from the behavior of individuals connected with them. . . .
>
> ". . . The subcultural segments or subgroups of subgroups of individuals are amenable to methods of direct observation such as localized groups . . . ." (emphasis added) (Steward, 1956:47)

Two levels of socio-cultural integration are revealed in the competition for political involvement between the Corps of Engineers and the local group of citizens in Days Creek. The Army Corps of Engineers is involved mainly on the national level, operating as an organization and not as individuals. Regardless of which individuals occupy positions within this organization the power of the group remains relatively constant over time. The Corps can be analyzed as an organization apart from the individuals who occupy positions in the organization.

The second level of socio-cultural integration involves the Corps of Engineers with subgroups of the population. The local group at Days Creek is a subcultural element of the population and operates chiefly as individuals, not as a specifically defined organization.

It should be acknowledged that each group has a degree of activity on both the national and local levels. The Corps of Engineers operates chiefly on the national level. The Corps also operates locally with the actual people who are employed in the Portland District Office and by means of its use of local media and the conduct of public hearings. Locally, real personalities can have a direct input to their degree of success.

The local group operates almost entirely on the local level. To be sure, the local group would like to operate on the national

level, as well in order to maximize their potential influence, but their ability to do so is limited.

Both groups, then, operate chiefly on one level, the Corps of Engineers on the national level; the local group or subgroup at Days Creek on the local level. The Corps also has a degree of involvement on the local level; the local group a minor involvement on the national level. The three techniques of support adumbrated in the previous chapter are also operational in these levels of interactions. The research design, therefore, can be structured in the following way, detailing the levels of interaction and modes of support utilized in this interaction.

Political Involvements	Levels of Socio-Cultural Integration	
	National	Local
Political action (goal-oriented behavior)		
Competition for public policy formulation		
Support mechanisms:		
Force		
Legitimacy		
Persuasion		

Figure 3. Political involvements and socio-cultural integration

The research design allows for the analysis of political involvements at both the local and national level of integration. To be able to understand at what levels both groups have a degree of political involvement, one has to construct the political interaction at both the local and national level. The areas where both groups attempt to influence the decision-making process is exactly where the public policy competition occurs between the Corps of Engineers and the local group of citizens at Days Creek.

The case study method is utilized to analyze data obtained in the research. It allows for the observation of the socio-cultural contexts in which interaction occurs and provides a basis for an understanding of that interaction. Case studies are relevant for the study of systems which involve relating parts to parts or parts to the whole. By using the case study method one can demonstrate the interrelationships among structural elements involved and specify how this arrangement of elements is necessary for a group's attainment of goals in a given system, or show how the parts are related to the whole.

Sjoberg and Nett (1968) state that although the scientist may utilize certain generalizing concepts in his analysis, the case, whether a society, a social movement, or a large-scale bureaucracy, is still the unit of analysis. Only through in-depth study are the relationships among parts of the system, and between the parts

and the whole, explicated. A description of human actions within a certain socio-cultural context can demonstrate the relationships of elements in a system, both to one another and to the broader whole.

The basic weakness of the case study method, as noted by Naroll (1968), is the lack of any assurance that the case selected is really typical. Even if in fact a case is actually typical, confidence in its typicality can be shaken by producing a certain case inconsistent with the case study analysis.

Enumerative data are utilized to depict the general characteristics of the people and area under consideration. In this manner, other researchers may be cognizant of the socio-cultural context in which this interaction occurs. The numerical data aided as a descriptive device in presenting the context of interaction and the kinds and types of groups involved in this interaction. Numerical data were utilized to describe the groups involved in and the types of interaction. The case study method was used to discern the processes or causal factors involved in this interaction between groups.

According to Steward's model and that of the research design, the interactions at Days Creek can be analyzed respective to individuals or groups operating in the local area or on the national level. The salient features of the local group's internal social

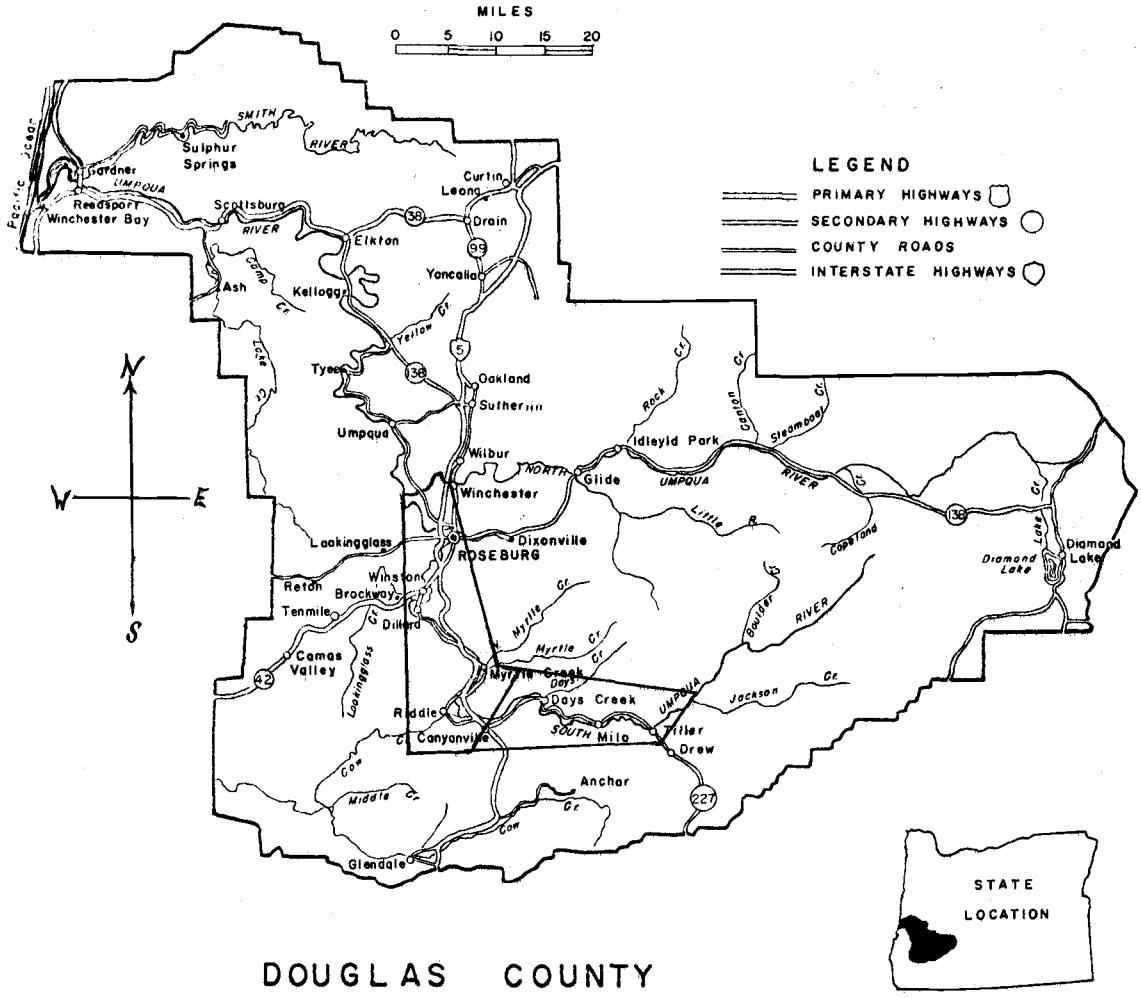
structure are conducive to empirical analysis. Direct personal observations can lead to the discovery of on-going interactional processes among and between groups. To understand the composition of the local group of citizens, the individuals who are involved in this group must be described. In order to give a better understanding of the internal dynamics of this group, field work was conducted in the region.

Field Methods

Problems encountered in the incipient stage of this investigation involve the manner and type of information which needed to be collected. I had to determine what would be the quickest and most efficient means of obtaining information necessary for an understanding of the social setting. A questionnaire was utilized as a primary research instrument and was supplemented by standard anthropological field techniques of participant observation, open-ended interviews, and the utilization of key informants.

The study area was quite extensive. All persons residing in the study area would be forced to relocate if the Days Creek Dam were built. This encompassed approximately 17 miles of land adjacent to the river from a site above the town of Days Creek to a location just below the community of Tiller. The mountainous terrain in this region provides a degree of isolation for all the

DAYS CREEK DAM IMPACT AREAS



DOUGLAS COUNTY

(Impact areas outlined)

After Douglas County Resource Atlas
Oregon State University Extension
Service, May 1973

inhabitants. Individual personal interviews were the only feasible method of obtaining responses from a general cross-section of inhabitants in the area.

The Corps of Engineers provided a list of homeowners in the area who would be forced to migrate because the dam, and its accompanying reservoir, would flood their lands. The list consisted of 112 households. Fifty names were chosen at random from the list for purposes of selecting personal interviews. Because of the time factor and the population density and distribution, 50 personal interviews were conducted. This would allow for a partially satisfying appraisal of the behavioral and attitudinal orientations of the area's inhabitants. The selection of names was accomplished by utilizing a random number for beginning and a standard skip interval throughout the selection procedure.

Upon reaching the field I determined that the list of homeowners provided by the Corps was hopelessly outdated. Many persons were deceased and an increase in in-out migration had significantly altered the population of the area. A recent increase in housing construction activity had increased the number of homeowners residing within the study area. According to Days Creek Postmaster estimates, there are currently over 200 homeowners that might be relocated.

Wherever possible, homeowners listed in the original sample

were contacted for interviews. When this was not possible, homeowners were selected randomly according to geographic distribution. This method insured a variation of respondents throughout the region. A higher number of interviews were conducted near Days Creek than upstream toward Tiller due to slightly higher population density downstream. Interviews were conducted in all parts of the study area.

As mentioned, the questionnaire was a research instrument utilized to collect systematic data while in the field. Data collected from the questionnaire included demographic information for all respondents in addition to data concerning general behavioral and attitudinal orientations of the local inhabitants. Questions elicited informant responses concerning their perception of their current social situation and attitudes toward change, both physical and social. Respondents were also asked about their attitudes toward water-resource projects and their attitude toward the possibility of the proposed dam. They were asked how they perceived the prospect of relocation and what processes they envisioned taking place if this relocation occurred.

There was a very small amount of respondent attrition to the use of the research instrument. This most likely is due to the personal interest of each person in his attitude toward the issue. The issue is also of general public interest and many respondents were

extremely happy to present their personal views on the subject.

Upon returning from the field, all structured responses were coded and open-ended responses were post-coded in order to analyze data. Computer analysis was accomplished to obtain mean responses and frequency distributions. Statistical methods were utilized to analyze data in order to explicate any trends which appeared in the data obtained from the interviews. These methods allowed for a general understanding of the biographical background and corresponding attitudes and values of the local inhabitants. A portion of these findings are presented in the following chapters.

Standard anthropological field techniques were utilized to supplement data collected from the questionnaire. These field techniques included open-ended interviews, utilization of certain key informants who possessed a broad understanding of the social situation in the area, and participatory observations.

Participatory observation consisted of attendance and active participation in certain local social activities. Evenings were spent frequenting local taverns, work settings, or homes for the purpose of interacting with various individuals who, because of my short period of time in the field, would not otherwise be interviewed. This aided me in obtaining an understanding of the various subcultures within the study area.

I also participated in a nostalgic event held every early

autumn. This is referred to as a 'Shoot-N-Fest' and features various rifle and pistol shooting contests. The guns used in these contests are generally of an antique nature and excellent marksmanship is at a premium. This event is the main social gathering of the year for most local inhabitants, particularly males.

Before entering the field I conducted library research to gain a general knowledge of the studies accomplished on the process of relocation, including studies of small types of communities. I also consulted periodicals, newspapers, and other sources to understand the physical and social characteristics of the study area.

The initial field work consisted of a two week's stay in the study area. During this period, interviews were conducted and data was collected. Three subsequent trips were made into the field principally to gather more information and converse with certain local inhabitants. A final trip into the field was accomplished to observe a local meeting held at Days Creek High School. The meeting was designed to organize residents into a coalition and to initiate action in opposition to the proposed dam. This action was aimed at generating local opposition to the Days Creek project.

III THE SOUTH UMPQUA STUDY AREA

Ecological and Social Situations

The South Umpqua River Basin is a tributary system of the Umpqua main stem in Douglas County, Oregon. The South Umpqua has its headwaters in the high Cascades Mountains and moves rapidly in a westwardly direction out of the mountains, then meanders northwesterly through the central valley of Douglas County. The river basin has sustained populations of American Indians for many centuries and has supported a growing white population for the past 125 years.

This setting is receiving planning impetus for the construction of the Days Creek Dam in its upper basin reaches. The dam, and its reservoir, would flood some 5, 000 acres of presently agricultural land and would take nearly another 2, 000 acres from the traditional cultural domain of the area's present inhabitants. It would also require the relocation of nearly 20% of the upper basin's inhabitants, causing them to seek adaptation elsewhere and probably under different conditions.

This chapter describes the setting by looking first at some of the historical trends in its human ecology, second, at the region's general economic situation, and third, at the social circumstances

of the area and people to be physically affected by the proposed dam.

Historical Trends in Human Ecology of the South Umpqua

Aboriginal Indians have resided in the South Umpqua river basin for probably over 10, 000 years. Artifacts collected from numerous excavations suggest an antiquity of at least 10, 000 years. The chronology of tribal occupations in the area is still uncertain but numerous tribes, including various sub-stocks of each, have resided in the area with differential duration of occupations.

When early explorers came to the Umpqua River Basin, they noted the presence of a group of aboriginal peoples called the Umpquas. Tribes that had previously inhabited the region undoubtedly affected the culture of the Umpquas through marriage alliances, warfare, trading, and syncretism of rituals. Accounts of the Umpqua reflect a distinct Athapascan dialect associated with the tribe. Jacobs suggests longevity of residence because of an archaic form of dialect (Jacobs, 1937:59-60). This hypothesis cannot be fully substantiated because recent research illustrates that archaic forms of a dialect or culture trait do not necessarily imply its longevity.

The Handbook of North American Indians (cf. Hodge, 1907) states that the Umpqua Indians derived subsistence principally from the rivers. The abundant wildlife and flora and fauna in the area acted as a supplementary, if not, major subsistence base for survival.

Throughout history homo sapiens have settled on or near transportation lines of the South Umpqua. This was true of the permanent Euro-American settlements in the Umpqua River Basin, just as it was the Indians before them. The emergence of the Euro-American population fostered competition for resources with the Indians. If the Indians derived primary subsistence from the rivers, white settlements established along the rivers would have more rapidly increased the extinction of the Indian culture in the area.

Early hunters and trappers had a profound effect on the early settlement of the Umpqua River Valley. Many of these hunters were from the Columbia Basin region and the general route through the Willamette Valley ultimately led to exploration of the Umpqua and Rogue River Valleys. In 1826, the Hudson Bay Company, due to trappers' reports of abundant wildlife, dispatched expeditions to the Umpqua to exploit the wildlife potential and to establish trading relations with the Indians (Winther, 1950:69). It is unclear how much exploration of the valley was accomplished by trappers, but they helped initiate investigations and induced other whites to explore the territory. The Hudson Bay Company established the first Euro-American settlement near the coast in the Umpqua Basin (Hogg and Honey, 1976).

Two factors contributed to the settlement of the Umpqua Valley. By 1846 the Willamette Valley lands were already claimed

by white settlers and this facilitated access to the Umpqua Valley, allowing many persons to migrate south and establish land claims. This migratory pattern was greatly advanced by establishment of a road along this southerly route in 1850. Another major factor contributing to the settlement of the valley was the California Gold Rush of the 1850's (Herman, 1918). The mining in southern Oregon and California established the need for resources provided by other regions. Levi Scott, by establishing Scottsburg in 1848, organized a supply center for distribution of goods to the mining districts in the south. With the decline of mining in the late 1850's, the geographic importance of Scottsburg as the loci of distribution became reduced and caused a slight decline in economic growth and prosperity in the Umpqua Basin.

Commercial farming has never been a lucrative enterprise in the Umpqua Valley. Jesse Applegate spoke of the rich soils of the valley but related that the topography was different than most envisioned. The valleys were generally narrow with steep sloped mountains on both sides. Because of climactic fluctuations, vegetable exploitation was for subsistence only. A need for irrigation, owing to summer droughts, and lack of technological implements utilized by farmers, were primary factors hindering any increase in agricultural output. The area did offer excellent opportunities for grazing of livestock and this was a chief occupation of farmers

in the region (Applegate, 1931:135-144).

Applegate also noted that the Umpqua River Basin was heavily forested with varieties of fir, pine, and cedar (Applegate, op. cit.). This abundant natural resource was to become the main attraction for future industrial exploitation of the Umpqua River Basin.

In the 1850's Euro-American population began to increase rapidly with numerous towns being established. The community of Days Creek was started in 1851 when Patrick and George Day established a homesite near the confluence of Days Creek and the South Umpqua River. Tiller was named for its first settler, Aaron Tiller, and served as a center for logging activities in the area. Logging has always been the principal activity of this region (cf. Walling, 1884).

In order to ensure the continued economic growth of the valley, and to overcome its geographic isolation, transportation routes were developed and expanded. The Old South Road, surveyed by Levi Scott and Jesse Applegate, was the initial transportation line which provided ease of access for settlers and exportation of goods. The rough terrain and the accompanying hardships of the overland route were time consuming, and were not economically justifiable to generate the types of activity needed for development.

Levi Scott, in 1848, began to express interest in attempting to navigate the South Umpqua for purposes of increased trade. The exploitation of the river as a source of transportation had a

significant role in the economic development of the Umpqua. During the 1850's all rivers in the Northwest were developed for increasing trade (Wright, 1961:432) and the Umpqua, although not as prolific as others, was no exception. Navigation of the South Umpqua went only as far as Scottsburg, and all other attempts to travel upstream to Roseburg met with no success and were finally deemed unfeasible (cf. Walling, 1884).

Later attempts in 1870 to navigate the South Umpqua to Roseburg again proved unsuccessful and attempts to improve the river for navigation were finally abandoned. The establishment of the California and Oregon Railroad in 1872 (Walling 1884:31), which made Roseburg the southern terminous, decreased serious attempts at further navigating the river. On occasion, however, investigations still are initiated to again determine the feasibility of navigating the South Umpqua. A Congressional resolution, adopted 18 November 1937 reads as follows:

> Resolved by the Committee on Commerce of the United States Senate, that the Board of Engineers for Rivers and Harbors, created under Section 3 of the River and Harbor Act, approved 13 June 1902, be and is hereby requested to review the report on the Umpqua River from Scottsburg to Roseburg, Oregon, submitted in House Document No. 276, sixty-second congress, second session, to determine whether or not the stream could be made navigable either by open channel work or by construction of locks and dams at this time. (Interim Report South Umpqua River, Vol. 1, Main Report, U.S. Army Corps of Engineers, December 1971)

If the Days Creek Dam is constructed, discussion of the possibility of navigation of the South Umpqua River will most likely once again be initiated.

The completion of the railroad in 1882 alleviated the geographic isolation of the Umpqua River Basin and afforded a cheap means of transportation other than the South Umpqua River. The railroad expedited the economic expansion and economic growth of the whole area. Goods and materials produced in the area could be more easily distributed to other parts of the county and the railroad provided an efficient means of obtaining resources needed to support the inhabitants of the region.

The advent of the railroad, in contrast to the rest of the region, increased the seclusion of the inhabitants of Days Creek and Tiller. When the Old South Road was the main transportation route the stage coach passed through Canyonville, eight miles downstream from Days Creek. This overland route, despite rough terrain, served as a major outlet for transportation and communication. The railroad bypass of Canyonville led to the economic decline of this region of the Umpqua Valley. In the 1870's there were two sawmills operating in the vicinity of Days Creek but there are no records of what became of these mills.

The utilization of the railroad as a chief means of transporting goods forced the shipping of goods and products from Days Creek

to greater distances than previously were required. It is possible that the change in transportation routes to accommodate the railroad forced the extinction of sawmills in the region of Days Creek. Transporting lumber required a greater distance than previously by the South Road. Logs could be floated down river or drawn by horses but wood processing in the area became mostly extinct and remains so today.

The railroads provided the impetus for industrialization in the river valley as a whole, but this process led to economic decline in Canyonville, which had been dependent on trade obtained from the overland route. The economic decline of Canyonville presumably had the same effect on the towns of Days Creek and Tiller, upstream from Canyonville on the South Umpqua River.

Economy

Today the lumber and wood products industry is by far the largest industry in Douglas County, providing employment for over 50% of the labor force in the county (Douglas County Planning Commission, 1968). Until 1940, agriculture was the chief occupation in the area. According to one informant, full-scale logging activity was initiated, in part, to provide support for the war effort and it was practiced with little regard for damage to the streams. From 1940 to present, and by recent projections until 2025, logging will

remain the chief industry in the region. Recreation and tourism, agriculture, and mining are other major industries in Douglas County. According to recent economic forecasts, both agriculture and mining are expected to decrease in economic output in the future (Gruen and Gruen, 1975).

Due to the national trend of increased mechanization of labor and incorporation of farm land, small private farming in the United States is becoming less practical and profitable. This trend will most likely continue and force a decrease in the number and productivity of farms in the Umpqua River Valley. Most farms in the area are individually owned and there is an apparent lack of application of modern agricultural technology because the cost of machinery is too expensive for small landowners.

Mining consists of the excavation of nickel, mercury, gold, silver, copper, lead, and quicksilver. Hanna Nickel Company, located near Riddle, is the only commercial nickel mining operation in the United States. Economic forecasts estimate that mining will decline with Hanna Nickel Mine decreasing production and decreasing employment in the coming years.

With the rapid development of the logging industry, Douglas County has developed a very specialized economy. Although logging will continue to be a chief source of revenue, the million board feet produced annually is steadily declining to a predicted sustained

yield of only one billion board feet per year by 1985 (Douglas County Planning Commission, 1968:22). If the clear-cutting ban is passed by Congress it would produce a significant change in logging practices in the area. Any decrease in production by prohibiting clear cutting would again create a loss of employment for many persons affiliated with logging companies.

The other major industries in the area are chiefly tourism and recreation, both of which hope to improve if the dam is constructed. Wood products and recreation are viewed as equally important to the economic development of Douglas County. Recreation and tourism, and its intrinsic potential of attracting business, are hoped to provide a stimulus to the county's economy. Plans for increased tourism are consistent with the general attitudinal orientations of many persons in Oregon. County planners would like an influx of visitors who are a source of cash income. Tourists, who do not settle in the state, provide benefits in terms of income to the county while generating few costs:

> "As a county possessed of vast forested areas, lakes, mountains and streams, and ocean front, Douglas County has great attraction for the motorist, the vacationer, and the sportsman. To properly benefit from this growing host of annual and seasonal visitors, it is highly important that every means be taken to protect and improve the abundant natural recreational advantages the county possesses" (Douglas County Planning Commission, 1968:76).

Logging practices are one factor leading to water quality

and quantity problems in the South Umpqua. The destruction of forest cover, construction of roads, farming, and logging have led to erosion of banks and additional amounts of silt and debris carried downstream (Hogg and Honey, 1976). Logging practices have contributed to the need for water control while the decline of the logging industry has created the need to improve other industries in the area.

Due to a declining logging industry, the county is underdeveloped according to national standards and respective to other counties in Oregon. Since tourism and recreation are seen as viable alternatives the county and its inhabitants are receptive to the prospect of a technological innovation, such as the dam, which might provide an economic impetus to the region as a whole.

Social Circumstances of the Study Area

All or parts of these communities will be inundated by the waters of the proposed dam: Days Creek, Milo, and Tiller. The community of Days Creek, located just below the dam site, is situated at the confluence of Days Creek and the South Umpqua River. There is a small store, the post office, and a high school, with most social activities centering around the high school.

Milo, seven miles upstream from Days Creek, is located on the south bank of the South Umpqua. This community is a Seventh-Day Adventist Academy for religious and educational instruction.

Besides the school and church, there is a wood-chips industry designed in hope of increasing the economic prospects of the academy.

Tiller, situated on the west bank of the South Umpqua River, is 16 miles upstream from Days Creek and 10 miles upstream from Milo. Tiller has a population of 414 including the Jackson Creek area and the Tiller Ranger Station. Besides the ranger station, there is an elementary school, a store, two churches, and a tavern. The tavern is a center of social activity for loggers in the late afternoons and is frequented by younger in inhabitants at night.

There is no public water or sewage for any of the communities nor is there any local law enforcement. Protection is provided by the Douglas County Sheriff Department for the entire area. Milo has a school administrator and head of the academy, but none of the three communities has a mayor, city manager, or chamber of commerce.

Partly due to this shortage of services, all three communities are politically acephalous. That is, there is no formally organized political structure and no locally elected officials. Political action is a wide-open field but few residents initiate activity in the area due to the relative isolation of the region's inhabitants.

This isolation restricts social interaction as well. The social organization for the region as a whole is diffuse. The mountainous environment exists as a geographical barrier to social solidarity

in the region. Social integration occurs within social groups but not for the area as a whole. There are no planned social activities or organizations which bring the various inhabitants together for purposes of social interaction. The diverse behavioral and attitudinal orientations of the region's inhabitants are a hindrance to a high degree of social cohesion.

General Social Characteristics of the People

The biographical characteristics of the area's inhabitants illustrate why social cohesion is not occurring in the area. There is a steady influx of immigrants from diverse cultural backgrounds migrating to the area for various reasons.

Many migrants come to the area for the beauty of the valley, for the desire to escape from urban life, or for other personal reasons such as employment or retirement. The following shows the high percentage of newcomers to the South Umpqua:

	Stayer	Relocatee
Newcomer	43.6%	53.7%
Native	13.7%	9.1%

(Stayers are persons in the immediate area who will not be forced to leave their homes if the dam is constructed. Relocatees are those persons forced to evacuate because of the dam.)

Newcomers comprise a significant element of population in the area. The short length of residence of many individuals has

prohibited the development of a high degree of social integration.

Table 1. Sample and Length of Residence

	Stayer	Relocatee
Less than 1 year	10.7	3.6
1-5 years	33.6	49.1
6-10 years	11.5	20.0
11-20 years	6.1	5.5
21 or more years	21.4	10.9
Native	13.7	9.1

Individuals in the area came from various areas of the country. Many came from other rural areas, others came from large metropolitan centers. The following table illustrates the diverse origins of the area's present inhabitants.

Table 2. Stayer and Relocatee Provenience: Regional Origin, Percentage of Sample

	Stayer	Relocatee
South Umpqua native	19.1	10.5
Other Oregon	13.7	12.3
Other Northwest U.S.	10.7	14.5
Southwest U.S.	19.1	26.3
Midwest Plains	19.8	17.5
Other U.S.	19.8	14.0
Foreign	.8	.8

There is regional variations of individuals' residence before migrating to the South Umpqua. Besides regional variation, there are various reasons persons have migrated to the area. Although escapement of urban lifestyle and the natural beauty of the valley

are two primary factors motivating persons moving to the region, many inhabitants migrated to the area for purposes of retirement. The high percentage of older residents in the area, compared to county and state percentages, exhibits this pattern.

Table 3. Age of Respondents

Age group	Stayer	Relocatee	County	State
24 and under	22.1	7.3	45.6	44.6
25-29	13.7	5.5	5.9	6.6
30-39	16.8	27.3	11.8	10.7
40-49	13.0	16.4	11.7	11.5
50-59	9.1	18.1	11.9	11.0
60-64	8.4	7.3	7.7	4.5
65 and over	16.8	18.2	5.5	10.7

There are many newcomers to the local area. These migrants have resided in the area a short period of time and have not established permanent relationships with other individuals in the area. There is a large degree of regional variation of origin for the inhabitants of the area in addition to the multiplicity of reasons persons have migrated to the region. Many young persons moved to the area to escape city life, older people to retire, others for employment, and still others because of the natural beauty of the valley.

All these factors contribute to the great variety of persons who reside in the upper parts of the valley. This variation is one factor impeding the development of social solidarity of persons in the area. Persons tend to align in groups which they perceive as

holding similar values to their own. While groups maintain internal cohesion there is no social articulation of groups as a whole.

Relocatee Subculture

After administering the questionnaire, conversing with key informants, and observing behavioral orientations in the study area, I determined that there were four major groups composing the culture of the region solely inhabited by persons to be relocated. The groups are not geographically distributed but certain specific attitudinal and behavioral orientations which separate them from other persons in the area are exhibited within each group.

The four sub-cultures in the area are California youth, retired, long-time inhabitants, and Seventh-Day Adventists. Decision of assigning persons to specific groups was based on biographical background and observed behavioral orientations of persons within the cultural setting.

The initial relocatee sample consisted of 50 individuals but two individuals were deleted from the study. Both persons were employed by the Forest Service and resided within the housing compound. Both hoped to get transferred in the future and had little knowledge of or involvement with other local inhabitants. The final sample consisted of the following groupings:

Table 4. Relocatee Sample

	Number of respondents
California youth	11
Long-time inhabitants	16
Retired	9
Seventh-Day Adventists	12
Total	48

All categories are mutually exclusive, no one individual being placed in more than one sub-group. Within a cultural system it is quite possible for a person to be a member of more than one sub-group. A retired person could be a long-time inhabitant and also a Seventh-Day Adventist. To account for this, persons were assigned to their primary reference group based on the biases of this researcher. If a person had worked in the area a number of years and subsequently retired, the person was denoted a long-time inhabitant. If a person was retired before moving to the area, emigrated to the area for that specific reason, then the respondent was categorized a "retired person". Any person affiliated with Milo Academy, whether long-time inhabitant, California youth, or retired, was assigned to the Seventh-Day Adventist category. The religious orientation predominates members' actions in all areas of life, as will be exhibited in their refusal to join in opposition to the water-resource project.

California youth are individuals who migrated to the South Umpqua Valley specifically to escape the urban lifestyle in California. Average age of this group is 34 years and mean length of residence is 4 years. People in this group are generally unemployed or self-employed and almost all engage in subsistence gardening. Long-time inhabitants are persons who have lived in the area most or all of their lives. The average length of residence is 27 years and the mean age is 49 years. Chief occupation for members of this group is the logging industry.

Persons in the "retired" category migrated to the area for that purpose. The mean age is 60 years and the average length of residence is 5 years. Many persons engage in subsistence gardening to supplement their fixed incomes.

Seventh-Day Adventist church members, whether retired or long-time inhabitants, strongly identify with other church members in the area. Many of the retired persons within this category have kin affiliated with the church. The mean age of this group is 50 years and average length of residence is 10 years. Many persons within this group are professional type workers, as reflected by their higher average educational level.

Table 5. Level of Education

Group	Education (No. of years)
California youth	12
Long-time inhabitants	11
Retired	11
Seventh-Day Adventist	14

The sub-culture of the church members is socially cohesive as a group but non-articulative within the larger social structure of the area. The entrance to the Academy is denoted by a covered bridge, signifying an entrance into a separate or identifiable entity. This geographic isolation of the Academy is reflected in the behavioral patterns of its members whether living within or near the school grounds.

One example of non-integration with other individuals in the area is the degree of organizational membership. A high percentage of organizational membership would imply a high degree of community or areal involvement. This operational definition is questionable as an explanatory device because an incremental increase in organizational membership or involvement is viewed as a qualitative change in community cohesion. Community cohesion is graded only according to organizational involvement, exclusive of other intangible factors correlating with cohesiveness. This is a familiar tautology--the function of something is to do what it does.

It is possible that organizational membership does not have a necessary impact on community cohesion but is only one factor which can produce a higher degree of community involvement for individuals associated with such organizations.

Table 6. Membership in Voluntary Organizations

Group	Percent of organization involvement
California youth	27
Long-time inhabitants	50
Retired	22
Seventh-Day Adventists	17 (excluding church)

(Seventh-Day Adventists including church = 100%)

From the above table we see the Seventh-Day Adventists have the lowest degree of organizational membership within the community as a whole of all the groups in the area. This lack of involvement is typical of its member's orientation to other persons in the area.

Contentment with the existing natural environment is reflected by the inhabitants, by and large, not wanting to alter the present condition of the South Umpqua, regardless of low water flow in summer.

Table 7. Response to Question -- How Should South Umpqua be Developed?

Response	Percent
The river should be developed for recreational and industrial purposes	4
We should enhance the present recreational resources only	12
The river should be carefully and selectively developed	25
The river should be left entirely alone	48

The inhabitants want the river and surrounding natural environment left alone with as few alterations as possible. The isolation and natural beauty which the area affords its inhabitants is directly related to the inhabitants' perception of their high quality-of-life. The planned construction of a dam is a direct threat to the present isolation and natural environment.

This threat has united the members of all four sub-cultures into a coalition to stop the proposed dam. This alignment transcends the diverse attitudinal orientations of each group because the dam is a threat to the few values which all groups share. These values are the isolation and natural beauty which their present residence allows the group.

The Seventh-Day Adventist Church group is taking a wait-and-see attitude toward the dam and relocation. The head of the Academy has formally stated that if the benefits from the dam will be as

expected then the group will not stand in the way of progress (Interim Report, South Umpqua River, Transcripts at Public Hearings, 1971:88).

While individuals within the Seventh-Day Adventist group are against the dam, they have not joined the coalition designed to stop the project. The principal reason for their abstaining from this activity is the group leader's passive acceptance of the project. If relocation becomes a reality, individuals wish to relocate with the entire group so they amenably are following the course of action determined by the head administrator.

There is one factor which serves as an agent in unifying all members of all sub-groups of the local population. All inhabitants of the area associate their present quality-of-life with two basic perceptions; one is their relative isolation in the area and the other is the natural beauty of the environment.

The members of all four sub-groups perceive their present quality-of-life directly related to these two beliefs. Any alteration of the natural environment or change in their isolated life will produce, in their opinion, a deterioration in their present lifestyle. The population, as a whole, is very happy with its present lifestyle.

Table 8. Response to Statement--Right Now I am Living the Life-style Best for Me

Response	Percent
Strongly agree	63.5
Partially agree	26.9
Partially disagree	5.8
Strongly disagree	3.8

The South Umpqua River in this area, due to low flow in summer and a small amount of pollution, is not the most attractive of rivers. Yet most residents feel the river is attractive. This attitude toward the attractiveness of the river reflects their perception of the beauty of their natural environment.

Table 9. Attractiveness of South Umpqua River

Response	Percent
Very attractive	57.7
Somewhat attractive	34.6
Average	3.8
Somewhat unattractive	1.9
Very unattractive	1.9

IV PUBLIC POLICY COMPETITION IN THE SOUTH UMPQUA

The interaction of the Corps of Engineers with people of the South Umpqua has resulted in many different actions and reactions, both in terms of behavior and attitudes.

In general, most of the people (60%) in the South Umpqua favor the construction of the Days Creek Dam but at the same time have significant reservations about its effect on environment. Favoritism of the dam tends to wane as people become more directly associated with its probable consequences. Of those persons in the upper basin who will not be relocated, only 46% favor the project. A large majority (78%) of the relocatees are strongly in disfavor of the project. Moreover, people's sentiments toward the dam tend to crystallize according to their physical proximity to the project. While only 69% of the downstream population expressed an opinion, only 12% of those upstream had no definite opinion.

The Corps of Engineers has had different degrees and kinds of contact with the people of the region. Relocatees have the most direct interest and concern with the project and therefore have more information on the project. Still, only 40% of the relocatees indicate that they have been directly involved with the Corps. This involvement is primarily members of the group's attendance at the

public hearing held in Roseburg.

The focus of this chapter's discussion is the public policy competition that has emerged between the Corps of Engineers and some of the people, mainly relocatees, in the South Umpqua. Possible relocation bears heavily upon this competition. So, too, does the Corps of Engineers exercise of legal prerogatives on and in eminent domain. Prior to a discussion of the interactions in the South Umpqua, it is necessary to examine the process of relocation and the Corps of Engineers' legal prerogatives.

Relocation and Its Key Components

Sociologists have studied the effects of relocation on relocatees and discovered that relocation has a differential impact on persons. Researchers have attempted to explicate what factors contribute to this differential impact. Ludtke and Burdge (1970) have defined this type of migration in which people are forced to relocate as free-compelled migration. Free-compelled migration is defined as migration in which a person can exercise choice with respect to moving to new location but not with respect to the question of moving. Drucker (1974:5) revised this model of migration to compelled-free migration because a person is initially forced to leave his home and then is free to choose a new place of residence anywhere he wishes.

The major problem of relocation studies is the contradictory

nature of the findings as reported by various investigators. The conflict occurs in terms of which factors contribute to favorable attitudes toward relocation. Knowledge of water-resource programs, participation in programs, ownership of land directly affected by programs, experience of flood damage, age, socio-economic status, and place of residence are variables variously tested to determine attitude toward relocation.

In river basin development in Utah, Andrews (1967) found that age was not significantly related to attitudes. Based on results of a study on watershed management programs in Mississippi, Dasgupta (1968) concluded that age was insignificant in determining attitudes. In a study on reservoir construction in Ohio, Ludtke and Burdge (op. cit.) found that age was not significantly related to attitudes toward the reservoir. John T. Photiades' (1960) findings showed just the opposite. He discovered an inverse relationship between age and favorable attitudes toward water-resource development programs in South Dakota. That is, the younger a person is the more favorable his attitude to water-resource projects. In a study of reservoir construction in a Kentucky county, Robert Smith (1970) found that older people tend to express greater opposition toward reservoir construction than younger residents.

While these three studies demonstrate that age is an insignificant factor, two other studies show that age and favorable attitudes

toward water-resource programs are related. The Days Creek project, in terms of people to be relocated, exhibits a positive correlation with younger residents more opposed to the dam than older residents. An intervening factor in this relationship is the belief of many older residents that they will be deceased before the dam is ever completed and this belief lessens apprehension and opposition to the project.

Photiades (op. cit.) found that townspeople hold more favorable attitudes toward water-resource programs than rural residents. Jones and Love (1969) found that a greater proportion of urban than rural residents were favorably disposed toward water-resource development. Carl F. Kraenzel (1957) reported that rural inhabitants possess more negative attitudes toward river basin development programs than urban residents. Robert Smith concluded that rural residents were more likely to oppose a specific reservoir construction program while businessmen and townspeople support these projects (1970).

None of these studies attempt to explain factors underlying the attitudinal difference between rural and urban residents toward water-resource projects. It has been suggested that rural residents, in most circumstances, absorb the social and personal economic costs of these water-resource programs. Relocation, appropriation of lands, and alteration of natural environment are all costs borne

by rural inhabitants. Sentimental attachment to land, probably a universal homo sapiens trait, is an additional factor producing rural resident's negative attitudes toward water-resource development.

Benefits generated by water-resource development, primarily business and recreational opportunities, and increased economic growth, accrue to businesses and residents in urban areas and adjacent towns. Urban residents are recipients of many benefits while absorbing few of the social and economic costs from the project.

If a person gains benefits from a project while absorbing few costs, then a person will most likely develop a favorable attitude toward a water-resource project. Urban residents gain access to resources such as recreational opportunities and economic potential, while rural residents perceive the alteration or loss of land, a highly-prized resource. The problem, then, is not the type of residence a person has but whether or not a person internalizes benefits or costs from the project.

Within the area of Days Creek, migrants from urban areas tend to have more negative attitudes toward the project than other residents. Other findings would lead to the opposite conclusion, that is, according to many studies, persons from urban backgrounds should have more positive attitudes toward the project. Yet these persons from urban areas who migrated to the rural area of the South Umpqua are more opposed to the project than persons with

totally rural orientations. Even though they have urban backgrounds, the persons who migrated to the region indicate opposition to the project because of the economic and social costs it will mean, in addition to the possible destruction of their present natural environment.

Since most sociological investigations of relocation are conducted principally within the rural American subculture, it is highly questionable that such varied local response patterns could be produced in very similar situational circumstances. Quite possibly there are subcultural differences in operation. Also, operational variables developed for conceptual models by the researchers could produce error. Utilization of a questionnaire as an investigatory instrument can produce errors through administering the research instrument, interpretations of responses by various interviewers, coding of responses, and errors occurring as a result of coding and computer programming must also be taken into consideration. Smith (1973) lists 12 possible sources of error in analyses of data obtained from questionnaires.

Many sociological investigations attempt to quantify some non-quantifiable data. Certain aspects of human life are qualitative in nature. Ordinal measures and numerical tables can describe attitudes and behaviors but description is not explanation. Quantifiable data can produce trends but it is quite another task to explicate the

causal factors contributing to the relationships found to exist.

One example of the problems inherent in quantifying non-quantifiable data is the numerous attempts by sociologists, government officials, and federal agencies to quantify quality-of-life. For lack of any set criterion, the Corps of Engineers defines quality of social well-being as the maximization of national income. The greater the stimulus for growth in the economy, the better off everybody is. This perception of social well-being by government agencies may be different than that of the public's perception of their own quality-of-life.

In the Days Creek area, the inhabitants associate quality-of-life chiefly with the natural beauty of their rural environment and their happiness in it. Most individuals are happy with their present place of residence and social situation.

The inhabitants themselves do not consider their region to be underdeveloped and they feel that an increase in economic opportunity would most likely adversely affect many individuals in the area because many persons are retired, unemployed, or self-employed, and living on a marginal income. While a federal agency perceives that increasing economic growth results in an increase in social well-being in any region, the economic increase can decrease the quality-of-life for individuals forced to leave their present residence (cf. Smith, 1973).

The Corps of Engineers and Eminent Domain

Congress has granted the privilege of allowing the Corps of Engineers to impose the law of eminent domain on persons forced to evacuate regions because of water-resource projects. Persons within the territorial boundaries of this country, or state in the larger sense of the word, are forced to vacate dwellings if the state wishes to appropriate the land. If an individual refuses to leave, the state can summon its police power to forcefully remove the individual. This act of forced removal is employed where necessary by the Corps of Engineers in the process of acquiring land for their water-resource projects, once they are approved by Congress.

This law of eminent domain states that the federal government or state can acquire lands for projects by forcing the landowner to sell his property. If a landowner refuses to sell, the state can initiate condemnation proceedings in a court of law. The land in question is condemned and the landowner is paid, in case, the appraised value of his property, as judged by the court (ER 405-1460, 25 April 1972, 8-1).

Under the provisions of the Rivers and Harbors Acts approved 29 June 1906 (33 USC 542) and 8 August 1917 (33 USC 593) and the Flood Control Acts approved 1 March 1917 (39 Stat 948) and 18 August 1941 (33 USC 701-02), respectively, the Secretary of the

Defense may initiate proceedings instituted in the name of the state for acquisition by condemnation of lands, easements, or right-of-ways which local interests undertake to furnish free-of-cost to the state. Requests for the institution of such proceedings are addressed by the local parties to the Secretary of the Defense and submitted to the Division of District Engineer of the Corps (ER 405-1-640 25 April 80-1).

The law of eminent domain gives the state the authority to appropriate lands in its behalf. Authority is the right to impose sanctions and obligations upon the members of the public through methods of legitimate coercion. This access to a natural resource, land, is a weapon of the state and the Corps of Engineers has been granted jurisdiction over the privileged application of this law. Members of the public generally perceive the ability to utilize physical force as residing with the organization of the Corps, not through the state. This adds somewhat to the legitimacy of the Corps of Engineers but it need not do so.

Condemnation is the final action taken by the Corps of Engineers in attempting to acquire land. After appraising property, the Corps attempts to acquire land through purchase in cash rather than going through the lengthy and expensive process of condemnation. Negotiators of federal agencies, in this case the Corps of Engineers, purchase land at a price equivalent to the fair market value of

the property. Fair market value is defined as the amount which would pass between a willing, but not obligated owner selling to a person, willing but not obligated to buy (Committee on Public Works: 59). The government is not held responsible for considerations such as loss of business potential, personal or sentimental attachment to land, or any aesthetic considerations.

The appraisal estimate is reviewed by the real estate division of the Corps of Engineers. If approved, the estimate is released to the negotiator who utilizes the estimate as the basis for reaching agreement with the property owner. This appraisal is only a guide in making offers and is not always the initial proposed offer.

At the Green River Project in Kentucky, real estate records at the Louisville District Office revealed that the initial offer of the Corps of Engineers negotiation was frequently 10-15% below the estimated appraisal (Drucker 1974:33). Corps officials justify this procedure by determining the initial low offer establishes a bargaining position with the property owner. This procedure was strongly condemned by the sub-committee on Real Property Acquisition (Committee on Public Works, p. 47, 19, Public Law 91-646, 91st Congress, 1970) which prohibits this procedure.

These laws specify that the government should not appropriate private property without just compensation. A government official, after observing the real estate division of the Corps of Engineers

acquire land through threats and intimidation, recognized that the law of "just compensation" did nothing to protect the landowner of the country (state):

> "I observed that the government is out to take and take by threats and by using its great power in the courts if necessary." (Lemke--House of Representatives floor, July 5, 1949)

The threat of physical force is a necessary component in the acquisition of private lands for the state. The state has the legal authority to acquire lands through the threat of physical force; this guarantees the acquiescence of the public in accepting the inalienable right of the state.

Through the application of the law of eminent domain the Corps of Engineers has appropriated Indian lands guaranteed in perpetuity by treaty. The Indians were considered private landowners against whom the state had authority. Compensation by way of money was considered to be the equivalent of ethnic identity. Nation states can seize lands within their territory by applying this law to lands under ownership by another group, such as the Indians.

Public Policy Competition

The Corps of Engineers prefers to interact solely with public leaders. When interaction with the public occurs, the flow of communication is normally one way; from the Corps of Engineers to

the public. This is reflected by the occurrence of public hearings on projects which are conducted by the Corps and the distribution of information through a mass media instrument, such as a daily newspaper. When results cannot be produced through the use of public leaders or the mass media, then the Corps is forced to interact directly with members of the public. This situation is not considered the most favorable alternative and runs a greater risk of failure to gain approval of a specific project. Recent research shows that public participation in decisions concerning issues such as fluoridation of water and public school bonding has led to the defeat of these issues (Bultena, et al., 1973).

This section examines the Corps' attempt to utilize different modes of support in achieving public acceptance for their actions. The modes of support include the demonstration of legitimacy by physically illustrating the public officials' support of their actions and the persuasion of the public by utilization of the mass media. The section will also examine the attempts of the local group of citizens in Days Creek to influence public opinion by their exercise of a single mode of support, that of persuasion. This section also details the problems the local group has experienced in attempting to achieve their goal, which is direct involvement in decisions affecting their personal welfare.

To generate public approval of the Days Creek Dam, the

Corps of Engineers invited then-Governor Tom McCall to appear at a public hearing held 28 October 1971 in Roseburg, Oregon. McCall was formally approached by the state legislators representing the area to attend an Oregon legislative meeting held in Salem, Oregon. The Corps of Engineers officials and persons from Days Creek in favor of the dam spoke at this meeting in Salem. State and Corps' officials speculated that public appearance of the Governor to support the project would increase public sentiment for it. Governor McCall agreed to appear at the meeting and since the appearance of the Governor was of genuine local interest, it was widely covered by the local newspaper (cf. ROSEBURG NEWS REVIEW, Oct. 27 and 28, 1971, for coverage).

The Days Creek project was described as providing economic benefits free-of-charge to the State of Oregon. The potential boost in the economy and flood control benefits were apparently enough to convince the Governor to favor construction of the project. McCall's actual appearance did increase public interest and encouraged support of local citizens convinced of the potential economic and recreational opportunities afforded by the project.

The public hearings are held to formally gauge public opinion toward the project. These public hearings are an opportunity for individuals to verbalize their attitudes toward the project. The public hearing becomes a matter of public record and the official

manuscripts are presented to Congress. The document is presumed to reflect public attitudinal orientations toward the proposed technological innovation. It is the chief method by which Congress judges public opinion to be regarding the project. Another measure of opinion in the report comes in terms of the attitudes of members of Congress from Oregon and other local and state officials' statements regarding the project. All Oregon Congressmen, incidentally, sent letters of support for the project to become a matter of record in the hearings.

The public hearing in Roseburg was geographically some distance downstream from the proposed construction site. Because of the distance to travel, many residents in the Days Creek area were unable to attend the meeting. Some of them are employed and could not leave their place of employment. Many retired persons had not the desire nor the energy to attend the meeting. The location of the hearing, therefore, encouraged a disproportionate number of supporters, versus antagonists, to attend the meeting.

According to most calculations, more benefits, and fewer costs, will accrue downstream near Roseburg. The dam will offer flood control, recreational opportunities, and increased business to residents of Roseburg and many individuals in the town therefore favor the dam. The possibility that these benefits would occur produced vociferous acceptance of audience members from the

community of Roseburg.

The Corps of Engineers' report on public participation is expressed quantitatively. An ordinal measure is assigned to the number of individuals expressing verbal or written approval and a numerical score given to persons opposing the project. Nowhere in the report is there a conceptual model of public acceptance, only statements to the effect that local interests are in favor of the project.

The Corps of Engineers reports that 90% of the people voicing opinions at the meeting favored the dam. Many opponents stated that the Corps allowed supporters of the dam to speak first and persons opposing the project were forced to speak at the end of the meeting. Many respondents reiterated this fact but this problem was not actually substantiated by all sources.

The following tallies were recorded for the meeting:

1) Speakers at meeting: 79 favor; 12 opposed.

2) Letters presented at meeting: 542 favor; 11 opposed.

3) Notations on attendance cards for meetings: 696 favor; 44 opposed, 434 no opinion indicated.

> These tallies indicate the proportion of people favoring and opposing the proposed plan. Nearly all opposition to the tentative plan came from people who would be displaced by the construction of the project, or who live near the project and would suffer disruption of their present way of life. (Interim Report, South Umpqua River, Vol. 1, Main Report, 1971:111)

The findings of the Corps differed significantly from results

taken from a random sample of persons in the region. Downstreamers are persons who can expect more benefits and fewer costs from the project. The stayer population is composed of persons within the primary impact area who would not have to relocate but might suffer a disruption of life style. The third group consists of the persons forced to relocate because of the project. The following table reveals each group's sentiments.

Do You Favor the Construction of the Days Creek Dam?

	Downstreamers %	Stayers %	Relocatees %
Favor	60	46	11
Oppose	9	42	78
No opinion	31	12	12

This contrast in findings as reported at the Corps of Engineers' hearings can be attributed to:

a) a change in public opinion during the four-year interval between public hearings and this study;

b) lack of randomness of persons attending the public hearing;

c) lack of randomness of the sample.

The random sample for interviewing in the Days Creek study was drawn utilizing statistical techniques to insure this end. Thus, the sample populations most likely correspond to public opinion in the area rather than persons attending the public hearing, who tend to have a vested interest in their support or opposition to the project.

One commonly voiced complaint of many persons attending the public hearing was that the Environmental Impact Statement prepared by the Corps was not available to the public at the time of the hearing (ROSEBURG NEWS REVIEW, Feb. 16, 1972). Thus, the public was still not aware of the possible implications or consequences of the proposed dam. At a public hearing meeting on a proposed dam near Ames, Iowa, the Corps of Engineers also failed to make public the Environmental Impact Statement concerning the reservoir before the hearings (Bultena, Rogers, Webb, 1973). If the public is denied access to this information, then the public is denied a chance to fully consider the proposed costs and benefits of construction. The Corps of Engineers therefore was the only group possessing the technical information pertaining to the project.

Shortly after the public hearing was held in Roseburg, Governor McCall was approached by water-quality engineers employed by the State Water Resources Board. This agency had conducted an investigation into the possible environmental impact of the dam. Their findings indicated that the problem of turbidity could force the deterioration of the reservoir before full benefits could be realized from the project. The reports of the state engineers slightly contradicted earlier investigations of the Corps of Engineers which presumed that the turbidity problem could be regulated.

Governor McCall arranged a meeting between State Water

Resources Board officials and Corps officials. Discussion was to focus on the potential environmental hazards of the project. The Corps of Engineers agreed that the turbidity problem posed a real threat to the full life expectancy of the project. The Corps expounded on the fact that the Days Creek Dam would be the largest man-made lake in Oregon. Appropriation of funds for this water-resource project would receive high priority in Congress when expenditures were allotted for authorized projects.

Normally, if a project is given high priority, funds can be forthcoming in a few years or less. Since the Corps of Engineers always has more projects planned than can ever be authorized, the Corps picks certain projects and presents this package of projects to Congress for authorization (Maass, 1951). In this manner, the Corps can determine what projects are presented to Congress for authorization. Congress has the power to omit and/or include projects not included in the original request by the Corps (Ferejohn, 1974). If the Corps of Engineers were largely in favor of construction of a certain project, then the agency would attempt to receive authorization from Congress for that specific project. It was clear that if McCall withdrew support, the Corps would give any alternative projects low priority. Also it is clear that the actions of McCall possibly could have influenced the political actions of members of Congress not to allot funds for the project.

The Corps argued that the study of alternative solutions for the area would not be an expedient future course of action. If other possible sites were studied, the Corps of Engineers is obligated to conduct environmental impact investigations for each proposed site. This type of activity would increase the length of time and the cost before possible construction of any project. If smaller dams were built and were under 5, 000 acres in size, then the Corps would not be directly responsible for their actual construction. The construction of smaller dams would be accomplished through the use of state or county funds and the Corps of Engineers would be involved only in the capacity of technical advisors.

The probable risks associated with the turbidity problem would mean that the environmental effect of the dam could have serious consequences. Still, the Corps of Engineers convinced Governor McCall to remain in favor of the project (former assistant to Tom McCall, personal communication).

Eventually Congress did not authorize funds for construction of the Days Creek Dam in 1973 because of the potential danger of turbidity. The position taken by the Corps of Engineers was that turbidity studies should be done after the dam project was authorized by Congress (ROSEBURG NEWS REVIEW, Sept. 14, 1973). The risk was that once the Corps of Engineers obtained authorization from Congress, the dam could be built no matter what the possible

consequences in this problem area. By refusing to authorize the project, Congress acknowledged the risk.

The Corps of Engineers is viewed by the public in the same manner as other public agencies within our society. Just as persons are inclined to accept the findings of doctors, so too, they accept the technical expertise of Corps personnel. It is assumed that members of the Corps are knowledgeable of the technical aspects of a water-resource project. Their opinions are generally accepted as factual because persons cannot dispute the authenticity of these findings. If the public does not possess the same amount of information as the Corps, the public cannot, through its own observations, analyze the possible benefits and consequences of the project in a technically acceptable way.

When the Corps of Engineers publishes reports on the feasibility of a project the report is usually couched in technical jargon so as to render it incomprehensible to the average reader. The Corps, oftimes, is quite willing to provide technical information concerning its projects. It can disseminate such a great amount of information that a person cannot realistically separate data to determine the actual feasibility of a project. Since most of us fit into this category of naive outsider, we have a propensity to accept the findings. The Corps is composed of professional engineers and certain levels of performance are expected by all such persons

within our culture. Their conclusions are a priori legitimate.

While the Corps of Engineers is a civilian works branch of Army, whenever appearing before members of the public, its military members are dressed in appropriate uniforms. The appearance in uniform tends to augment the myth of professionalism and authority attributed to the Corps of Engineers. The public is generally cognizant of the power of the military, and the physical force inherent in its internal structure. The appearance in uniform also conveys a degree of patriotic zeal. Under certain circumstances, the threat of physical force is capable of intimidating an acceptance to change.

Local Opposition

Political expression, besides being limited in opportunities, is limited by time and energy. Within the population to be relocated, persons most involved in attempting to stop the project are young, unemployed or self-employed, individuals. These individuals, who are informally considered the group leaders, are individuals with urban backgrounds who migrated to the area principally because of the physical attractiveness of the rural environment. Although these individuals have resided in the area less than five years, many of them have become socially involved in the area. Lacking employment, they have been able to devote time and energy

toward formulating methods to stop the dam. Of these so-called group leaders, one individual is a lawyer who presumably has the legal expertise necessary to understand the legal implications of the Corps' actions.

Local group leaders have attempted to organize public opposition into a coalition to stop the Days Creek project. All residents in the area were mailed a letter which requested that they appear at a local meeting held in Days Creek on 24 January 1976. Most inhabitants were informed of the date and location of the local meeting. The meeting was organized for the discussion of ways to effectively convey local opposition to county, state, and federal officials, as well as to the general public.

This local meeting allowed the organizers to determine the amount of local opposition to the project. Most persons to be relocated attended the meeting. In addition to the relocatees, many members of the stayer population attended the meeting. Stayers would not have to be relocated but some members of them appeared to perceive a major disruption in their lifestyle.

It has been said that little things divide men and big things bring them together. All persons attending the meeting, regardless of individual behavioral orientations, were unanimous in their opposition to the project. Persons acknowledged that there were various reasons underlying each individual's opposition. Various methods

of opposition were discussed by members of the audience in order to determine what action the group should initiate. The decision at the meeting was that the group should utilize the single mode of support it possessed, the exercise of persuasion. All persons agreed they must convince members of the public to alter its existing favorable stance toward the project. The persons present at the meeting also discussed how to influence the decisions of local and government officials. This course of action, i.e., attempting to alter the public's attitudes and beliefs, and influencing Congressmen and other local public leaders, was agreed upon by all individuals present at the meeting.

The local leaders were able to gain compliance of the group by persuading them that it was in their best interest to oppose the project. The leaders obtained acquiescence through their efforts to solely convince the public because they had neither the ability to demonstrate legitimacy nor the capacity to exercise coercion. The exercise of persuasion is the same method they must utilize in attempting to alter public opinion.

Presently, the meeting has been the only one held by the local group. This meeting was covered by the local daily newspaper (cf. ROSEBURG NEWS REVIEW, Jan. 29, 1976). The meeting had no great impact on the general public other than informing the public that there was local opposition to the project. The reporting of the

meeting by the newspaper did increase membership in the organization because persons downstream, upon reading of it, sent letters or personally informed the leaders of their support.

With respect to the relocatee population, all subcultures in the area were represented at the meeting except one major sub-group. This sub-group was the Seventh-Day Adventist Church members. Although individually opposed to the project, Adventists had agreed that they could not interfere or impair the progress of the dam (Interim Report, South Umpqua River, Transcripts of Public Hearings 1972:88). They accepted leadership within their own social and religious structure and when the leader of the group decided not to attempt to stop the dam members of the faith followed his policy.

The Seventh-Day Adventist group is socially integrated internally but is socially disintegrated in terms of the larger structure of the area. Adventist compliance, with a wait-and-see policy, was based on the legitimacy of the head of the Board of Governors, an appointed official who heads the ruling body of the organization. If the ruling official considers passive opposition and general acceptance the appropriate course of action, then group members abide by this decision.

When an individual in the local area favors the project, other members of the population assume that acceptance of the project is

correlated to the individual's vested common interest. Vested economic interest is a person's expectations of economic benefits from the project. This perception of economic benefits can come in terms of the ownership of speculative lands or the possibility of alleviating personal financial debt by selling the property to the Corps. Speculative lands are those on the perimeter of the planned reservoir. These lands are presently utilized for agriculture and livestock grazing.

The mechanization of farming and increased technology and costs have led to the demise of small-scale farming. There are a few persons in the area with large farms. Other inhabitants were convinced that large landowners were in financial debt because of the costs involved in keeping a farm active. According to certain informants, these large landowners are hoping that the Corps of Engineers will purchase their land. This will allow them to quit the farming enterprise and also allow the payment of any outstanding debts.

Some local persons who reside within the area to be inundated by the dam have strong family ties and ancestry that goes back over a century in the area. A few of these individuals are in favor of the project. Other inhabitants' response to this favorable attitude was that individuals were in financial debt because of non-productive farm land they had owned.

Another instance of this cognitive orientation was brought out when I personally attended the local meeting to stop the project. Previously I had interviewed a person who had accomplished independent research in hopes of stopping the project. Many local inhabitants, at one time, sought guidance and leadership from this individual primarily because he was a very well-known professionally-oriented person. Upon observing the conspicuous absence of this individual, I inquired as to why he had chosen not to appear. My informants responded that he was losing money raising animals too expensive to feed and he was unable to sell. Because of recent economic loss the local group perceived that the landowner wanted the Corps of Engineers to purchase his land to rescue him from a greater financial loss.

It is irrelevant whether the underlying reasons for these two individuals' favorableness to the project are actually the same as those envisioned by other local persons. The point is that this perception of local persons causes conflict with these individuals because of an apparent conflict in the sharing of values.

Foster's model of limited good (1962:35) could explain this type of behavior. Foster's model is based on the cognitive orientations of individuals who perceive their socio-economic and natural environments to constitute a closed system. The natural and human resources of this system are insufficient to meet the needs of all

members. Persons within this system realize that there are resources outside the system not normally accessible to them and by symbolic or overt behavior persons are discouraged from attempting major changes in their economic status.

Local inhabitants attribute a person's favorableness to the project as an attempt to increase one's economic status. In the view of many residents, a person supporting the dam increases his economic situation at the expense of others. Many persons in the area are retired, self-employed, or unemployed, and consider displacement an economic hardship to be avoided if possible. The cognitive orientation that another local person's economic gain is their loss can lead to strained relations and animosity toward persons they perceive as benefitting at the expense of others.

Political Actions Initiated by Local Opposition

Besides the actions of the relocatee group, individuals in the area have initiated personal actions toward stopping the project. At the meeting, many persons agreed to try to inform the public of the possible consequences of the dam. Letters were mailed to residents downstream to acquaint these persons with the pros and cons of the issue.

One group leader is attempting to analyze what legal means are possible to allow further delaying the decision on the issue and

what are the exact legal implications of the Corps' actions, that is, has the Corps followed all procedures established by Congress? If any Corps' actions are not in agreement with laws imposed by Congress for the purposes of regulating their actions then possible legal steps can be initiated.

Other members of the local group are attempting to utilize their technical expertise with respect to various aspects of the proposed dam. One person with a background in geology was conducting an investigation into the possible turbidity problems that might be encountered if the dam is constructed. Another member is taking aerial photographs of the South Umpqua watershed to determine the various degrees of water levels and trying to determine the best means of providing flood control and augmenting low summer flows. Others are constructing rainfall charts for the area in determining where the largest water storage is located and what methods would serve to provide the best protection.

All these investigations are being conducted to counter the Corps of Engineers' technical assertions concerning the project. Besides illustrating the misconceptions in the Corps' studies, these individuals are attempting to offer the public alternative solutions. These alternative solutions, presumably, would provide a better method of utilizing the river as a resource without drastic alteration of the natural environment.

One individual went so far as to fly to Washington, D. C. to personally meet with Oregon Congressmen. He did arrange a meeting with one Congressman and voiced his disapproval of the planned project. This was an attempt at political action on the national level. The individual tried to lobby directly on the national level by attempting to influence the actions of Congressmen who are the public leaders. This personal appeal did not have a major impact but was an attempt from the local group to achieve political involvement in the formulation of public policy on the national level.

Many individuals within the local group have written letters to Congressmen and other local officials in attempts to gain public leaders' support for their cause. These personal communications are an example of persuading public leaders to alter their stance and support the actions of the local group. The letters to Congressmen and the actions of the individual who personally went to Washington, D. C., are attempts to exercise persuasion upon elected officials so as to begin to influence decisions on the national sociocultural level of integration.

In order to effectively persuade the public, the local leaders have attempted to gain access to the local mass media. Until recently, this access has been limited and has impeded the progress of the local group in gaining public support.

Utilization of Mass Media for Gaining Public Acceptance

On the local level of socio-cultural integration the local leaders' only form of support is the ability to persuade others to oppose the dam. Force and coercion, and the intrinsic effectiveness of these methods are not within their power base. The positions occupied by these group leaders are not officially-elected statuses. The local leaders lack consensual power; they cannot assure others in the area that they can satisfy the group's expectations. If leadership is granted to these individuals, the group has no assurance their demands of stopping the project will be met. Thus they also lack legitimacy.

The only technique the leaders and the group have for gaining compliance of the public is the exercise of persuasion. The informal local leaders must convince others that their proposed course of action is the most viable approach for changing public policy. Exercise of personal influence, one form of persuasion, involves convincing members of the public that compliance to the local leaders' actions will produce the realization of the desired goal.

Persuasion produces compliance by precipitating changes in attitudes and beliefs. The mass media are an effective instrument in reaching this goal. If local leaders are denied access to the local mass media there is little possibility of reaching a large number

of the public in order to alter existing beliefs.

The ROSEBURG NEWS REVIEW has become an active agent in persuading local persons of the need for the project. This active support includes an editorial stating the wholehearted endorsement of the project by the publishers of the newspaper (ROSEBURG NEWS REVIEW, October 26, 1971). It should be noted that this public announcement of support of the project by the newspaper came just two days before the planned public hearing.

Active support by the media increases the potential of the Corps in achieving local acceptance for their projects. The media can influence persons to favor the project and bring pressure to bear upon their elected leaders to authorize the project.

During an election in Illinois, the Lindsey-Schwab newspaper chain, which owned the only Decatur and one of the two Champaign-Urbana newspapers, was strongly in favor of a proposed Corps project. A director of the committee on the dam said that the newspaper chain would certainly make an issue of Oakley Dam in Decatur if one of the candidates for election failed to endorse it (Ferejohn, 1974:60).

Many thought-control functions previously attributed to the church have been taken over by other institutions, including the mass media. The mass media of print, radio, and television have proven to be the quickest and most efficient means of getting

messages to a large number of people.

The ROSEBURG NEWS REVIEW has the largest circulation of any daily newspaper in the local area. The NEWS REVIEW has 60% of its subscribers residing on all reaches of the South Umpqua Basin from Tiller and Days Creek and all the way to the Coast (Corps Transcripts of Public Hearings, 1971, Exhibit #58). Charles V. Stanton, editor emeritus of the newspaper, authored 13 articles advocating the need of the project. These articles were published by the NEWS REVIEW between October, 1967 and February, 1971.

The Corps of Engineers must illustrate that there is positive public response to its projects. The mass media have become a major factor in their attempts to achieve public acceptance. All Corps proposals are inclined to be in the public interest, regardless of the public's opposition or support to the proposal. Since their projects are of public interest, few problems are encountered in getting news releases published. A public relations official of the Corps could not recall a single instance in which a news release was not printed that pertained to the project at Days Creek (personal communication).

The Corps cannot actually control what is printed in the media regarding any project. The Corps appears, though, to have unlimited access for the publication of its news releases and related stories. If access is limited and sought after by other

members of the public, then access to this resource can be viewed as a form of control. Unlimited access produces the ability to control the flow of information and this control of the type of information reaching the public is a base of power.

The ROSEBURG NEWS REVIEW has rejected nearly all attempts by persons wishing to utilize the newspaper to obtain a device to express their personal views against the dam. This has greatly hindered any attempts by local relocatee leaders to producing negative response to the project from local persons. Since the exercise of persuasion is the only means of support for the local group, the lack of access to the media hinders any efforts toward gaining general public acceptance for the actions of the local group. The public does not have access to the type and degree of information possessed by the local group and this lack of information restricts the basis for public judgment on its acceptance or rejection of the project.

The Corps generally releases information advocating the potential benefits of its projects. Unless it actively seeks additional sources of information, the local public remains ignorant of the full range of possible implications and consequences of a project. The Corps planned no meetings to distribute information to the public outside of the public hearings held on the project and release of information through the media.

A local television station has recently shown interest in the attitudes of persons to be relocated and granted air time to the local leaders of the coalition against the project. A television spokesman expressed interest in organizing a televised debate between Corps officials and project opponents. This debate, if held, is to be aired a few days before the next planned public hearing in May.

A televised debate can possibly be detrimental to the Corps' chances of gaining public approval of its project. In newspapers, the flow of communication is one way, from the Corps to the public. In a televised debate, the communication is two-way between two groups. On television the Corps cannot effectively control what information is disseminated to the public. The local group opposing the dam now possesses technical information which, if it is made available to the members of the public could alter public opinion with regard to the project. This information includes the probability of turbidity, and other possible solutions to current existing water-related problems. The public thus could receive another source of information concerning the actual consequences of the project. In the battle over relocation of the community of North Bonneville, Washington, the Corps' televised debate with project opponents was a chief factor leading to the town's forcing the Corps of Engineers to relocate the entire community, not solely individuals.

Because of a lack of access to the media, the local group, until recently, has been ineffective in attempting to influence public opinion. Because of the information the local group now possesses, and a knowledge of the legal proceedings which they can initiate, they are beginning to formulate effective actions against the project. If the recent access to communicative devices such as television increases, then the local group might possibly increase its involvement in the decision of whether or not the dam is constructed. The exercise of persuasion is the only technique now presently available but this mode of support can possibly allow the local group to gain public support and increase its involvement in decisions governing public policy.

Summary

Recent studies on relocation show that certain social variables react differently under different circumstances. One consistent variable is whether a person assumes the role of beneficiary or not. A person expecting to benefit from water-resource development will tend to be in favor of the project regardless of place of residence or other social factors, while an individual personally forced to bear social and economic costs will generally oppose a project.

The Corps has legal prerogatives to force people to locate because of its projects flooding private lands. This legal

prerogative rests on eminent domain, the legal right of the government to appropriate lands for federal projects. Since Congress has granted the legal sanction of this law to the Corps it increases the Corps' demonstration of its legitimacy.

In public policy competition the Corps utilizes all major techniques of support. The limited exercise of force allows the agency to appropriate lands for its projects. Public leaders and Congressmen's support of the Corps' projects increases the legitimacy of its actions to members of the general public. The Corps' monopoly of technical information at public hearings and its limited access to the media are two methods by which the Corps persuades the public to support its policies.

The local group of citizens at Days Creek exercises persuasion in attempting to generate public support for its actions. The mass media are one set of instruments utilized in this exercise of persuasion. Certain members of the local group are trying to convince public leaders and members of Congress to support their group. Other members of the local group are attempting to illustrate the legal basis for their actions while others are gathering technical information which justifies their actions opposing the project. By showing a scientific basis for their actions the group can counter the Corps' statements that the group's actions are solely an emotional commitment. If the local group can convince a Congressional

representative or public official to support their actions, the group can exhibit a sense of legitimacy on the basis of this support.

V CONCLUSIONS

The Corps of Engineers is a politically-active, goal-oriented agency. Its goal is to attempt to influence decisions which affect its ability to distribute water-resource projects throughout the country. Since Congress is the body which authorizes projects, the Corps attempts to influence actions at the national level of socio-cultural integration. If the Corps wishes to influence decisions on public policy, it must justify its actions to members of Congress.

The relocatee group is also a politically-active group because it, too, is trying to influence decisions regarding the implementation and formulation of public policy. This group operates chiefly on the local level with a very minimal involvement on the national level.

The Corps of Engineers is involved in public policy competition; major involvement in competition occurs at the national level. Since the appropriation of funds by Congress in its annual budget is always finite, the Corps of Engineers must compete on the national level with other federal agencies for its share of funds allotted by Congress.

The Corps competes on the local level as does the local group since both groups are attempting to achieve public support for their political actions. The local group wishes to compete on the national level but does not possess the resources necessary for involvement

at the national level.

The Corps utilizes all three modes of support to achieve involvement in decisions of public policy. The Corps has no ability to exercise force on the national level but exercises force on the local level through its power to appropriate private lands for its projects. Congress has passed laws which allow the Corps the vested power of eminent domain. The Corps demonstrates to the public the legitimacy of its actions by illustrating its ties to Congress and its scientific expertise. The Corps, through its relation to Congress, demonstrates legitimacy on both the local and national levels. The Corps exercises persuasion on both levels; by persuading Congressmen to authorize its projects on the national level and by utilizing its public hearings, monopoly of technical information, and access to media to persuade members of the public on the local level.

The local group has absolutely no ability to apply force and, unless it can gain a Congressman's support, has no claim of legitimacy on either the local or the national level. It also has no direct involvement in persuasion on the national level of socio-cultural integration. The chief mode of support the local group possesses is the ability to persuade members of the local public to support its actions.

With an understanding of each group's involvements on the

local and national levels of socio-cultural integration the research paradism prescribed in Chapter II takes on the following characteristics:

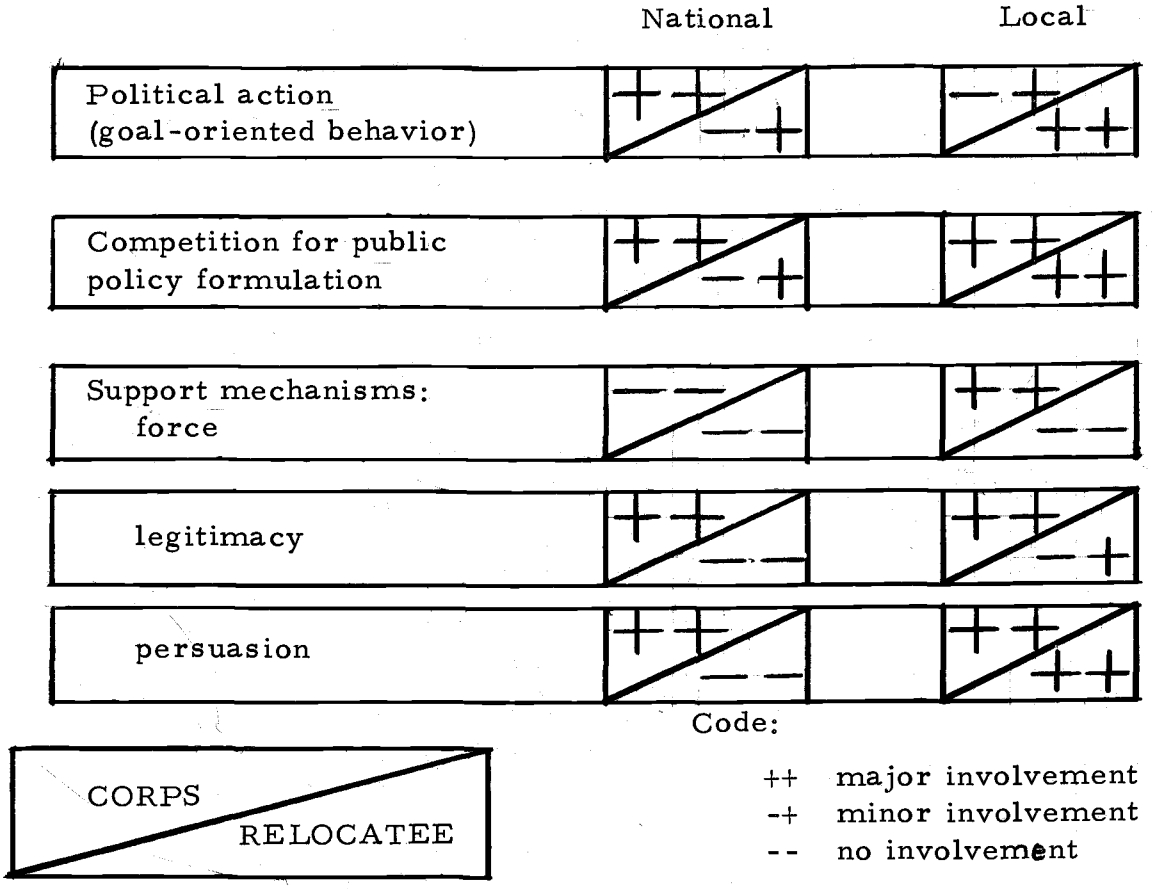


Figure 4. Corps of Engineers and relocatee group -- stages of political involvement

The Corps of Engineers and the local group of relocatees can possibly interact on only two dimensions of the model. Both groups compete to gain public acceptance for their actions in order to attain a greater degree of influence in decisions concerning public

policy. One mode of support which both groups employ in gaining public support is the exercise of persuasion.

The Corps has tremendous a priori advantages in this competition on the local level. The Corps can exhibit national support for its actions on the local level by its demonstration of legitimacy respective to Congress. The Corps also has what appears to be unlimited access to the mass media, a major device in the exercise of persuasion. The local group must utilize only persuasion in its attempts at political involvement.

Since the competition for public support on the local level is the only place where both groups directly interact, the Corps of Engineers is at a clear advantage in public policy formulation. Outside of legally required action, the Corps volunteers little information to acquaint the public with the full range of pros and cons of a project except those which the Corps itself defines. It generally advocates the benefits the project will provide and many members of the public accept in good faith the recommendations of the Corps of Engineers. Unless the public seeks out additional information, most of its members never become aware of all the contested ecological and social implications of the Corps' proposals.

Other than the holding of the public hearings which are necessary before a project is authorized by Congress, the Corps planned no local meetings to communicate information to the public. The

Corps has been selective in its communication activities on other water-resource projects (Stamm and Bowes, 1972:49-55). According to recent research it has published (Bishop, 1970), the Corps is concerned with achieving improved public involvement in planning projects. But the Corps would appear to be reluctant to encourage public involvement for fear of stimulating local opposition to planned programs. By avoiding interaction at the local level, the Corps can refuse to compete with other local groups for achieving public support and restrict its competition to the national level of socio-cultural integration.

What makes this avoidance possible is the Corps' ability to influence decisions on the national level. Direct communication with the public is avoided because Congress is the body which authorizes projects of the Corps of Engineers. If the Corps can effectively influence the decision makers to implement public policies favorable to their agency, then there is no need to generate a high degree of local public support for its action.

The exercise of influence upon Congressional members' actions and decisions has led to the Corps indirect but strong involvement in the implementation of water-resource policies in this country. Most members of the public assume that Congress regulates and limits the activities of the Corps and, therefore, persons assume the Corps' actions are sanctioned by Congress.

The Corps is thus able to demonstrate substantial legitimacy to the public.

Congressmen and other public leaders are aware that a misinterpretation of public attitudes toward an issue can affect their chances for re-election. Congressmen are constantly attempting to gain insights into the attitude of the public toward certain issues. Because of the many problems in gauging public opinion, public leaders are often influenced by certain agencies or groups with a vested interest in the issue. The chief method by which members of Congress determine public support for the Corps' projects is by analyzing records of the local public hearings. Opinions expressed at these meetings are presumed to reflect local attitudes toward the project. In the case of Days Creek Dam, the amount of positive opinions at the meetings was considerably higher than that expressed in findings obtained from a random sample survey of persons in the area.

The Corps can directly influence public leaders to implement decisions on their behalf. If the Corps is not successful at this, but they usually are, they must attempt to gain public support for their projects. The public is the last group approached by the Corps in its attempt to achieve involvement in decisions regarding public policy.

In order for the group of relocatees to achieve involvement in decisions of public policy, the group must influence members of the public. The public, in turn, must convince the public leaders to implement decisions in the best interest of the public. This is what the relocatee group must accomplish in order to achieve its desired goal of stopping the Days Creek Dam.

The net result is that although the public is ultimately the only source of support for any group the public is a last resort of the Corps' attempts to achieve involvement in public policy decisions. Conversely, the public is a starting point for the relocatee group's attempts to achieve influence in decisions concerning public policy.

Implications

A primary factor in general public acceptance of water-resource projects is the fact that most persons play the role of beneficiaries of the projects. Most benefits accrue in urban areas where population density is much larger than in rural areas. Rural residents usually bear the major social and economic costs of the projects.

Most persons still appear willing to trade the aesthetic beauty of the natural environment for the prospect of economic benefit. Persons in rural areas are not quite as willing to alter the natural environment for purposes of economic growth, nor are people with

previous urban experience.

Because of the Corps' avoidance of public policy competition on the local level there is inadequate citizen participation in water-resource development. The public hearings are the only local meetings designed for public participation in planning public policy. Public participation appears to occur too late for involvement in the decision-making process and there is little actual public involvement on decisions concerning public policy.

Recommendations

Information obtained from this study suggest that to increase public participation in the water-resource development planning process:

1) Policies must be implemented to equalize levels of interaction. It is unlikely that local groups can achieve involvement on the national level which implies that the Corps must be forced to operate on the local level of socio-cultural integration.
2) There is a need for more stages within the socio-cultural levels of integration in which interaction between the Corps of Engineers and the local public will occur.
3) The Corps should distribute the Environmental Impact Statement before public hearings are held for a project.

In this way, members of the public can acquaint themselves with technical information concerning the project before the public hearings. This would facilitate the flow of communication between the Corps and the public and the public would become more aware of all the possible benefits and costs of a project.

4) The public should receive this information directly from the Corps rather than through informal channels of communication because information can become distorted by the time members of the public receive information through other networks of communication.

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