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THE CONNERS ISLAND EXPERIENCE: A CASE STUDY
OF COLLABORATIVE RESOLUTION OF
ENVIRONMENTAL CONFLICT

A Thesis
Presented for The
Master of Science in Planning
Degree
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ABSTRACT

Environmental conflicts are disputes over actions which change the interaction between people and the environment. Because environmental conflicts are spreading in location and increasing in numbers and intensity, with consequent increases in delay and cost of proposed government and business actions, their resolution is increasingly important.

There are three types of resolution processes: collaboration, competition, and negotiation. Which of these an agency uses depends on the agency's goals, objectives, and authority and the relationship between the agency and the other parties. Competitive processes, which are the most used, have numerous drawbacks, so collaboration and negotiation have come to receive much more attention since about 1970. This thesis concentrates on collaborative processes, particularly a variant known as joint problem solving.

The joint problem solving process comprises nine specific steps: selecting a process guide; ensuring that all interest groups are adequately represented; confronting fundamentally different values and assumptions and identifying key issues; generating a sufficient number of alternatives; agreeing on the boundaries and time horizon for impact assessment; weighting, scaling, and amalgamating judgements about impacts; identifying possible compensatory actions; securing commitments; and holding the parties to their commitments.

In 1978 and 1979 the Tennessee Valley Authority (TVA), and eight other parties engaged in joint problem solving to resolve a

conflict generated by the City's request of TVA to give it some land along Guntersville Reservoir in the Conners Island area for industrial development. TVA hired a process guide, who assisted a Local Citizen Planning Team (LCPT) comprising representatives of all parties to reach a consensus on a Development Concept for the area in question. The concept included industrial development of a large part of the site with certain areas reserved for agriculture, and other areas preserved in their natural state as buffers to protect the nearby unincorporated community of Claysville. To ensure recruitment of only clean industry willing to follow the Development Concept, five Claysville residents were to be appointed to the Guntersville Industrial Development Board.

In general, though there were some flaws, the author concludes that the process used fits the theoretical model fairly well and that it was successful in that it resulted in a consensus to which the public agreed at a meeting afterwards. However, to date no industry has attempted to locate on the site, so evaluation remains incomplete. Also, the process was both expensive and long. Consequently, it appears that joint problem solving, while useful in some cases, is not a panacea. Because joint problem solving is very similar to the planning process, the author believes that planners could be trained to be excellent process guides.

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PART I
INTRODUCTION

CHAPTER I

INTRODUCTION

A. THE CAUSES OF SOCIAL CONFLICT

Conflict is inevitable in human society. Resources are limited but human desires are not, so conflict will develop over the allocation of resources (Kelso, 1972, pp. 291-292). There is a basic human need for drama (Boulding, 1963, p. 306). Personal ego development and personal and group self-actualization can occur only through conflict (Coser, 1956; Barbour, 1978, p. 62; Cormick, 1980, pp. 25-26; Creighton, 1980, pp. 119-120).

American society particularly encourages social conflict (Chase, 1951; Coser, 1956; Boulding, 1963; Coles, 1980; Cormick, 1980, pp. 25-26; Trusty, 1980). Our economic, political, and legal systems are all based on competition and conflict. We are basically a nation of organizations, which must compete with one another to grow and maintain influence. We have significant differences among races, ethnic groups, social classes, religions, and regions of the country, and these differences create tensions when different groups deal with one another. We passionately espouse progress through technology and change, but these changes can come only through challenging and overcoming existing institutions, which we also have a strong desire to maintain (Harris, 1981).

B. ENVIRONMENTAL CONFLICT--A SPECIAL CASE

Definition

One of the specific forms of conflict encouraged in America is environmental conflict,¹ disputes "due to actual or pending change in the interaction between people and the environment" (Conacher, 1980, p. 391) arising because the agent of the change has a sphere of influence too small to carry out the action without disturbing others who feel they should have an influence on the decision (Rickards, 1974, pp. 97-102). Environmental conflicts may arise over a wide variety of actual or pending changes in the environment. Although the literature has tended to concentrate on conflicts related to actions affecting the natural environment, several authors (notably Gladwin, 1980, and Popper, 1981) have stressed the importance of actions affecting the socio-economic environment in generating conflicts as well. Also, it is important to note that although the literature has also emphasized conflicts arising from environmentalists' objections to proposed developments or policies which would degrade the environment, conflicts often arise because of pro-development groups' objections to proposed actions which would restrict their activities.

¹Environmental conflict does not exist only in America. In fact, environmental conflict is also common in other countries, particularly Canada, Europe, Australia, and Japan. (For example, see O'Riordan, 1976; Teniere-Buchot, 1976; Abrams, 1979; Conacher, 1980; Hase, 1981; and Nelkin, 1981.) However this thesis only considers American efforts in resolution of environmental conflict partly because of space limitations, but also because international differences in cultures, laws, and politics make comparisons difficult between American and other conflict resolution processes.

The Features of Environmental Conflict

Environmental conflicts are generally extremely complex. They can concern the allocation of fixed resources such as land or a specific facility, policy priorities, or standards for environmental quality. They can involve numerous issues, which most often comprise expected impacts on the natural and socio-economic environments. These impacts, which are usually major causes of a conflict, depend on the characteristics of the action proposed, the characteristics of the affected environment, and the historical period when the conflict occurs. They can range in scope from local to international. They usually involve multiple parties, who may have conflicting values, motivations, and goals; who may have misperceptions of one another's motivations; and who may have positive or negative relationships with one another. Finally, environmental conflicts go through a wide range of intensity, from pre-emergent, often to impasse, and possibly to violence.

These features of environmental conflict are discussed in depth in Chapter II.

C. THE RESOLUTION OF ENVIRONMENTAL CONFLICT

The Need for Resolution

Although conflict serves important social functions, conflict without resolution is merely endless chaos. Environmental

conflicts, in particular, need resolution for three major reasons. First, conflict delays the particular action proposed. As Brooks (1976); Priest, Gruen, and others (1977); Eury and others (1979); Frieden (1979); Sansom and Violette (1979); and Choate (1980) have shown, delays result in increased costs and declining economic productivity.² If delay continues too long, projects may be cancelled. This may have been the goal of some parties in the conflict, but for other parties it represents loss of financial investment and failure to meet human needs. Second, a great deal of time and money which could have been put to more productive use are expended in conflict by developers, agency personnel, lawyers, and citizens. Third, failure to resolve a conflict may only cause its escalation, perhaps to the point of violence (Oberschall, 1973, pp. 285-291; Whipple, 1981a, 1981b).

The reasons given above apply to specific conflicts, but trends in environmental conflict (Gladwin, 1980) show that there are concerns on the national scale as well. First, environmental conflicts are spreading, both in location from the "Frostbelt" to the "Sunbelt" and to more types of proposed actions. Second, more conflicts are occurring as time passes. Third, the conflicts are growing in size, involving more issues and opponents. Finally, environmental conflicts are taking longer to resolve. Thus the

² This is not to say that some delay is not justified. On the contrary, if conflicts are to be satisfactorily resolved, some delay will probably occur. In such cases, however, the resolution will produce a better decision, for which people are willing to pay the cost. Undue delay produces costs without commensurate benefit.

potential cost of delay is rising throughout the action, so the resolution of environmental conflicts is becoming increasingly important.

The Process of Resolution

Effective resolution of environmental conflict by a governmental body;³ usually an agency, comprises four steps:

- Determining the agency's goals, objectives, and authority;
- Assessing the conflict;
- Designing a resolution process; and
- Carrying out the process.

There are nine basic types of resolution processes. Conflict anticipation, joint problem solving, and policy dialogues are collaborative processes. Administratively required planning, regulatory enforcement action, legislation, and litigation are competitive processes. Ad hoc bargaining and mediation are negotiating processes, midway between the poles of collaboration and competition. Traditionally, competitive processes have been used almost exclusively. Since about 1970, however, numerous authorities in conflict resolution have begun to note the inability of these adversarial methods to meet the increased demands for effective resolution and have proposed and used new collaborative and

³Most major environmental conflicts involve governmental bodies because the action causing the conflict is either carried out by a government or is regulated by government. Therefore, this thesis concentrates on the resolution process as carried out by governments. However, much of the theory developed in this thesis can be applied to conflicts not involving governments.

negotiating processes. This thesis concentrates on collaborative methods. The theory of resolution is discussed in detail in Chapter III.

D. THE RESEARCH PROJECT

General Goal

The goal of the research reported in this thesis was to evaluate the process and effect of the Connors Island Experience, a particular case of collaborative resolution of environmental conflict. In 1978 the City of Guntersville, Alabama, requested that the Tennessee Valley Authority (TVA) make available for industrial development some nearby TVA land along Guntersville Reservoir in the Connors Island Area (Figure 1). Because TVA recognized multiple TVA program interests in the reservoir property, acknowledged that any development would be likely to generate significant environmental impacts, and desired meaningful citizen participation in planning the use of the reservoir property, the agency recommended that it and the local people jointly evaluate options for developing the land in question. To do this, a Local Citizen Planning Team (LCPT) of persons representing developmental, environmental, governmental, and other interest groups was set up to develop a land use plan for the Connors Island Area with the assistance of a Core Team of technicians representing various TVA program interests. The process was guided by a facilitator, University of Alabama professor Dr. David Weaver, who chaired the nine meetings of the LCPT, ensured

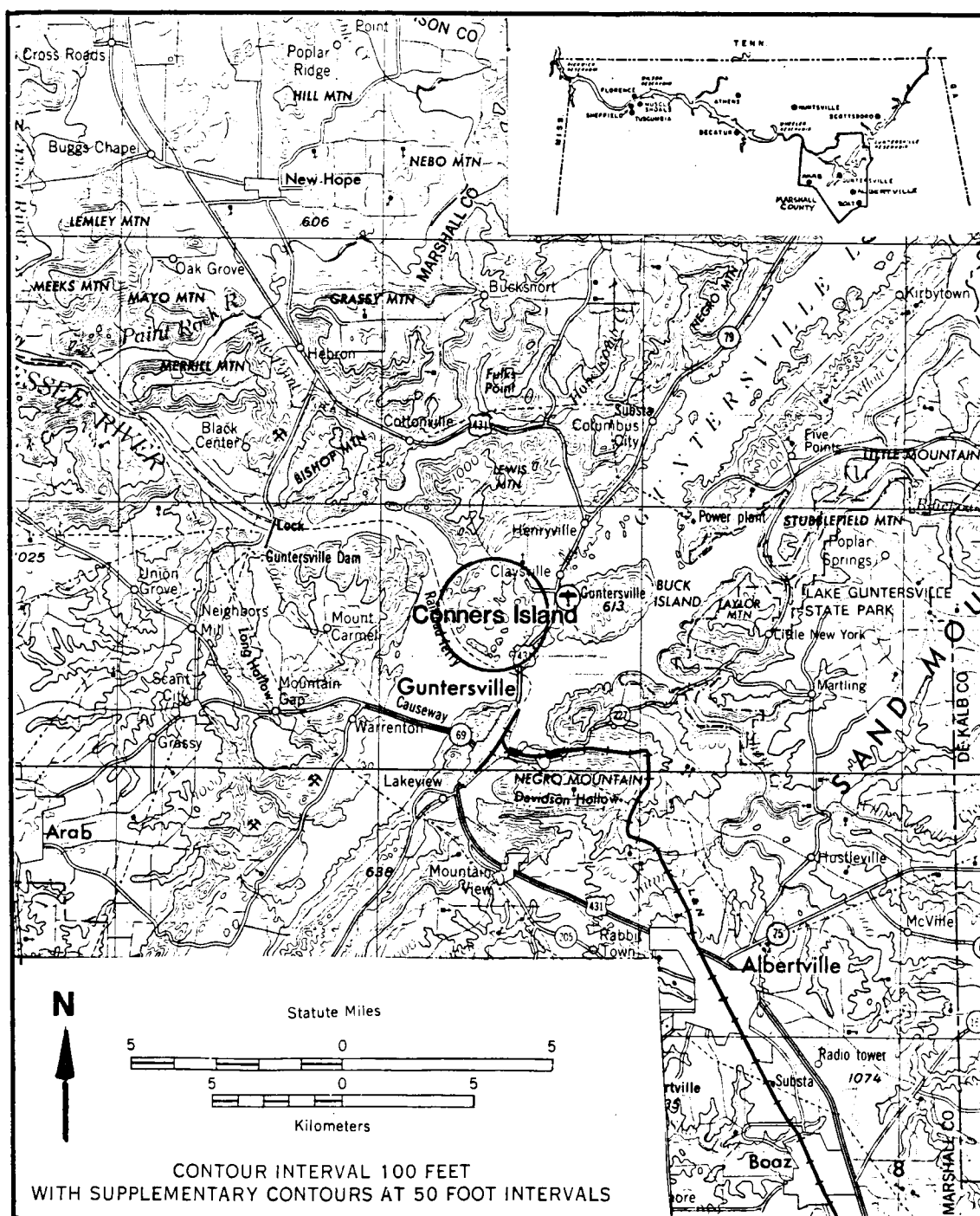


Figure 1. Connors Island Area.

Source: U.S. Geological Survey Gadsden TN-AL 2° Map (Inset Location Map: Adapted from Ginn and Wright, 1978, p. 5).

objective discussion of the issues, and mediated conflicts among the various members.

Importance of the Study

This example of conflict resolution is appropriate to study for three reasons. First, as noted above, new collaborative methods of conflict resolution are receiving national interest because of the disadvantages of traditional competitive methods in resolving increasingly dysfunctional amounts of environmental conflict, and each effort needs to be examined to understand the potentials and limitations of the new methods.

Second, TVA is developing plans for all of its land along the reservoir system. In some instances these plans will recommend industrial development, which will have negative environmental consequences creating conflicts. TVA needs to look critically at the Conners Island Experience to determine if it can serve as a model for these future resolutions of conflict.

Third, the Conners Island Experience is an excellent opportunity to examine the relationship between land use planning and case-by-case resolution of conflicts. Most resolution of environmental conflicts occurs in an ad hoc manner and is initiated only after the parties have reached an impasse. In many instances, however, as Bellman and others (1981) have shown, conflicts are more easily resolved if they are considered during or as part of an overall planning effort, before a specific development proposal has generated an intense controversy leading to an impasse. The Conners

Island Experience was just such a pre-impasse use of land use planning.

Specific Objectives

This research had the following specific objectives:

- To determine the genesis and nature of the conflict;
- To determine how the resolution was carried out, including how the conflict was assessed, how the particular method of resolution was designed, and what techniques of consensus-building were used;
- To evaluate the degree of success of the conflict resolution: how well it was planned, whether it was carried out as planned, and what effects it had; and
- To determine and recommend possible improvements of TVA's procedures for citizen participation in land use planning in particular, and environmental conflict resolution in general.

Research Method

The research comprised three components. The first component was a thorough search of the literature on resolution of environmental conflict.

The second component was an analysis of material in TVA files. These included internal memoranda, newspaper reports, the transcripts of the public meetings, the tapes of the LCPT meetings, the LCPT report (Appendix F) the moderator's evaluative report (Weaver, 1979), the report of the TVA technical staff (Wright,

1979); and the environmental assessment prepared by TVA on the action the agency proposed to take. (See Appendix G.) These documents were used to determine generally how the resolution process was planned and carried out, and what the impact of the process was.

As the third component of the research the author visited the Conners Island area and conducted numerous interviews to gain a deeper understanding of the issues at stake in the Conners Island conflict and obtain information not revealed in the literature search.

The author spent the first week of April 1981 in the Conners Island area. During this time he personally interviewed each member of the LCPT except one, who was out of town and had been interviewed by telephone beforehand. In addition, the author personally interviewed both the previous and present Mayors of Guntersville and several other local residents (who wish to remain anonymous) who were knowledgeable about the Conners Island Experience. These residents were selected in three ways. Some had made articulate comments at the two public meetings. Some were mentioned in interviews with the LCPT members. Some were recommended by TVA staff who had worked on the project and by one other TVA staff member who, in his previous position as Director of Planning for the Northwest Alabama Council of Local Governments, had served as a consultant to TVA to develop a public participation program. Most interviews lasted between one and two hours. The author was guided by a set of open-ended questions about the conflict and the LCPT's work which he had

drawn up based on the literature search, but the discussion was structured only loosely, and the interviewees were encouraged to talk about any topics they desired. All interviews were conducted according to protocols approved by The University of Tennessee Human Subjects Committee to ensure informed consent. The questions asked and the protocols are contained in Appendix A.

During his visit, the author was also given a several-hour tour of the Conners Island site by a member of the LCPT.

In addition to interviewing the members of the LCPT and local residents, the author interviewed over the telephone or in person nearly every TVA employee involved in the conflict resolution process. These included of every member of the TVA Core Team, the TVA coordinator of the process and his supervisor, and the TVA staff responsible for coordinating the review of the Mayor's request for the TVA land and preparing the environmental assessment (EA). Most of these interviews were shorter and focused on the author's specific concerns about details of the process, TVA review of the Mayor's request, and preparation of the EA. However, the author held several lengthy discussions with the TVA coordinator of the process about all aspects of the LCPT's and TVA's work, and the TVA coordinator reviewed an early draft of this thesis to check for errors of fact and misinterpretations.

The author also interviewed the process guide several times by telephone. (Though personal interviews would have been preferable, it was not practical to make a trip to Tuscaloosa.) As with the TVA interviews, no structured set of questions was asked, but the

process guide's evaluative report (Weaver, 1979) was used as a guide. The process guide reviewed an early draft of the author's thesis proposal, as well.

Finally, the author interviewed staff of the Alabama Highway Department, Planners and the Executive Director of the Top of Alabama Regional Council of Governments, and the Chairman of the Guntersville Planning Commission to determine their views of the process and its effect upon their plans and programs.

The author encountered several unavoidable difficulties in carrying out the research. First, none of the participants was familiar with the then embryonic field of environmental conflict resolution, so information simply did not exist exactly in the framework the author desired. Second, TVA had intended for the process guide to carry out only a limited evaluation of the process, so he did not document all the details of the process. Third, due to the long time since the Connors Island Experience, none of the interviewees remembered everything about it, and some documents had been discarded. However, by relying on both interviews and documentation the author believes he has obtained nearly complete information. In a few instances the author has had to rely upon personal knowledge obtained during his employment at TVA.

E. ORGANIZATION OF THESIS

This thesis is organized into four parts, each of which (except Part 1) contains two chapters. Part I, the introduction and Chapter I, has briefly discussed the features of environmental

conflict; why resolution of environmental conflicts is increasingly important; what resolution entails; and the goal, importance, objectives, and method of the author's research. Part II presents a theoretical analysis of environmental conflict (Chapter II) and its resolution (Chapter III) based on the author's review of the literature. Part III applies this theory to the Conners Island Conflict (Chapter IV) and the resolution process (Chapter V). Part IV evaluates the resolution process (Chapter VI) and presents the author's conclusions and recommendations (Chapter VII).

PART II

THE THEORY OF ENVIRONMENTAL CONFLICT

AND ITS RESOLUTION

CHAPTER II

THE FEATURES OF ENVIRONMENTAL CONFLICT

Environmental conflicts are usually extremely complex. They can be any of three types, have a wide variety of scopes, concern numerous issues, involve multiple parties, and exhibit a great range of intensity. Each of these features is discussed in this chapter.

A. TYPES OF CONFLICT

There are basically three types of environmental conflict (Susskind and others, 1978, pp. 7-16): conflict concerning the allocation of fixed [specific] resources, conflict regarding policy priorities, and conflict over standards for environmental quality. Allocating fixed resources probably generates the largest number of environmental conflicts, but this is simply because more actions of this type are carried out, with setting of policy and standards being less common. Well-known conflicts over all three types of actions have occurred, as noted below.

Conflicts Over the Allocation of Fixed Resources

Allocating fixed resources consists of deciding the use of a specific tract of land or establishing the location of a planned facility. Usually the decision is made either by a private landowner, if no permits are required, or by an administrative agency if governmental permits are needed. However, as in cases

involving rezonings or Congressional decisions on wilderness areas, legislative bodies may also be involved in making the decision. An example of conflict over the use of a specific tract of land was that generated over the proposal of the Rouse Corporation, developers of the New Town of Columbia, Maryland, to develop a planned community on Wye Island, in a rural area of Maryland's Eastern Shore (Gibbons, 1977). Numerous alternative plans were proposed but none were accepted by the County Commission, and the proposal was abandoned. A well-known example of conflict over the location of a specific facility was that over how Interstate 40 should go through Memphis (Ginn, 1970). Several alternatives to running the highway through Overton Park were proposed, but none were acceptable to all the parties, so that project, too, has never been completed.

Frequently conflict may involve both the type of action and the particular site. As in the two cases mentioned, alternative projects may require somewhat different amounts and configurations of land, and alternative locations may require changes in design of a project.

Conflicts Regarding Policy Priorities

These conflicts mainly concern administrative or legislative decisions of a more general nature not related to specific actions or facilities. However, the decisions will allow, disallow, promote, discourage, or regulate numerous future specific actions or facilities. Thus though policies are set more rarely than allocations of fixed resources are made, they generate intense conflict

because of the many allocations they affect. An example of a conflict regarding policy priorities is that over the national policy on radioactive waste management. Although some specific actions for disposing of or reprocessing the wastes have already been suggested, (for example, see Dorgan, 1980 and Roy, 1981) the debate is primarily about the general policy due to its implications for the resulting particular actions. A major effort, which has had some success, to resolve this conflict was undertaken by RESOLVE, the Center for Environmental Conflict Resolution, in 1979 and 1980 (RESOLVE, 1980a). However, the matter is not yet fully settled.

Conflicts Over Environmental Quality Standards

The third type of environmental conflict concerns standards set to protect the quality of the environment. These conflicts are similar to conflicts over policy priorities in dealing with general matters. However, they are different by not dealing with any particular types of actions at all but with the environmental impacts any actions should be permitted to have. For example, the battle over reauthorization of the Clean Air Act involves conflicts over the National Ambient Air Quality Standards and National Emission Standards (Odell, 1981 a, b).

The above-described categories of conflict are to some extent artificial, for they really overlap. Policy is often developed incrementally by taking specific actions, and the standards which are set often essentially dictate the kinds of specific facilities

which can be constructed. Nonetheless, the categories are general indicators of types of issues which may be involved.

B. ISSUES

The major issues of an environmental conflict are the social costs which would be imposed on the neighbors of the proposed action. (For a full discussion of the nature of social costs, see Kapp (1950), Coase (1960), Kelso (1972), Moore (1978); and Popper (1981)). Gladwin (1980, p. 251) has identified eight categories of issues:

- Air quality (pollution, visibility, odor);
- Water quality (degradable/nondegradable/persistent residuals);
- Land use (landscape, scenery, wilderness, erosion, solid waste);
- Biota (vegetation, wildlife, biological effects, ecological balance);
- Minerals (fuel, nonfuel);
- Human health and safety (disease, noise, radioactivity, accidents, genetic and reproductive effects);
- Social resources (recreation, residential areas, cultural features, lifestyle, congestion, boomtown effects); and
- Economic resources (property values, taxes, income, employment).

However, which issues are in dispute in any particular conflict depends on three factors: the characteristics of the action proposed, the natural and cultural character of the environment where a proposed action is to occur, and when the action is proposed.

Characteristics of the Action Proposed

The main determinant of issues is the action proposed, for certain land uses, facilities, policies, and standards affect the environment in certain ways. A coal-burning power plant will have different effects and raise different issues than will a county-wide policy to preserve farmland.

Several characteristics of actions affecting the environment are particularly prone to generate conflict. First, some actions may have consequences, such as extinction of species, which are irreversible (Lake, 1980, pp. 6-14). Second, compensation for impacts may be difficult because the impacts are distributed over time or widely over space (Kelso, 1972, pp. 290-291; Irland, 1975, p. 264). (This is particularly true of the actions of regional and national scope discussed below.) Third, compromise may be definitionally impossible--a smaller industry in a wilderness still is an industry (Brown, 1977). Finally, because of the complexity of the natural and social environments and the subtlety, cumulative nature, and diffuseness of environmental damages, it may be difficult to predict the impacts of an action or policy, or determine the cause of impacts (Levin, 1977, pp. ix-x, 43-45). Attempts at prediction may require major scientific investigations producing volumes of data, and conflicts often arise over the quality of the data and models used to predict impacts (Susskind and others, 1978, pp. 61-68; Straus, 1979, esp. pp. 661-662; 1981, esp. pp. 4-5; Straus and Clark, 1980, esp. p. 86).

Characteristics of the Natural and Socioeconomic Environments

The natural environment also is a determinant of issues. If any unique natural features such as endangered species or particularly scenic landscapes are present to be affected by an action, they are likely to become issues. Also if the natural environment has any particular vulnerable aspects, such as chronic shortages of water, any action affecting that aspect, such as using large quantities of water, is likely to generate conflict.

The socioeconomic environment is a determinant in a similar fashion. Unique features such as cohesive ethnic neighborhoods which could be affected will become issues, as would the availability of jobs in an area of chronic high unemployment.

When the Action is Proposed

When environmental conflicts are viewed over time, it becomes apparent that the issues have progressively changed (Gladwin, 1980, pp. 254-255).⁴ Whereas conflicts early in the 1970's tended to center on issues related to the natural environment, conflicts in the late 1970's tended to center on impacts to human health and safety, social and economic resources, and land use. That is, concern over direct impacts on human life is becoming primary, with impacts on air quality, water quality, and biota fading to secondary importance. Mernitz (1980, pp. 15-17) has also noted that the

⁴Actually, time has been an important factor in a more basic way. Though actions affecting the environment have always had social costs, environmental conflict has only been common since the 1960's. It took time for the cumulative negative impacts of

social and economic issues are more important than "ecological" ones.

This change is probably at least due partly to a general worsening in the economy since the start of the environmental movement. (Barton, 1980, pp. 1-2; Bosworth, 1980, p. 63); Denison, 1980, pp. 3-8; Thurow, 1980). Because the economy has stagnated, opposition to environmentalists has risen over the issue of economic and social costs of environmental protection (Evans, 1980, p. 77). The environmental movement also has broadened philosophically to reach people, especially the urban poor and labor, who have little concern for wilderness-type issues yet stand to gain from a cleaner environment (A.S. Miller, 1980; Tingling, 1980). Also, many who do not call themselves environmentalists oppose environmentally damaging actions on economic and social grounds (anonymous, 1981; Coan, 1981; Baldwin, 1981).

economic development to begin outweighing the benefits and for the "baby boom" cohort to reach an age ripe for protest activity. Only in the 1960's did Federal and State governments begin to pass numerous laws protecting the environment and increasing access of the new groups to the decision-making process and the courts (Sewell and O'Riordan, 1976, pp. 1-6; Andrews, 1980, pp. 230-233; Lake, 1980, pp. 6-14). Provisions for public notice, more liberal standing to sue, creation of Federal and state environmental agencies, and increased influence of environmental and developmental groups through lobbying have increased the power of all groups affected by actions dealing with the environment, so that now all groups effectively have veto power over proposed actions (Irland, 1975, p. 264). As Oberschall (1973, pp. 74-80) has noted, such reforms generally also tend to "whet the appetites" of opposition groups and lead them to increase their demands.

C. SCOPE

Based on the types of issues raised by a proposed action and the geographic extent they affect, the scope of the conflict can be identified. This scope can cover a wide range, from local to international.

Conflicts Over Site-Specific Actions

Certain conflicts may be only site-specific, having importance only for the immediate vicinity of the proposed action causing the conflict (Cormick, 1980, pp. 30-31). Generally these are small conflicts over the allocation of fixed resources, such as rezoning a small parcel of land.

Conflicts Over Site-Specific Actions With Major Secondary Impacts

Of a somewhat greater scope are conflicts over site-specific actions with a major secondary impact (Cormick, 1980, pp. 30-31). These types of conflicts tend to arise over larger allocations of fixed resources, such as the construction of a shopping center, which would affect part or even all of a city as well as the surrounding neighbors.

Conflicts Over Area-wide Actions With Public Policy Implications

Of even greater scope are conflicts over area-wide actions with public policy implications (Cormick, 1980, pp. 30-31). Such conflicts arise over the allocation of major amounts of fixed resources, such as for construction and operation of the 1982

World's Fair in Knoxville, which will affect all of Knoxville as well as the surrounding counties. However, such conflicts may also arise over the establishment of policy priorities by any policy-making body representing an area. (For purposes of this discussion an area is generally defined as having only one policy-making jurisdiction.) For example, conflict may arise over the implications for future specific actions if a county adopts a policy of farmland preservation.⁵

Conflicts Over Regional Policy Actions

Regional policy actions affect wide areas with numerous jurisdictions at several levels of government (Cormick, 1980, pp. 30-32). Such actions may consist of allocations of major amounts of fixed resources, such as construction of interstate highways or designation of large wilderness areas, which will have widely disseminated costs and benefits. Also, regional policy actions may include establishing sub-state, state, or multi-state (e.g. TVA) policies which have implications for multiple future actions. An example of a conflict over this second type of action would be the recent court battle over whether TVA should have to reduce the emissions from its power plants. This conflict concerned allocation of fixed resources--certain power plants were to be affected--but it also

⁵Cormick discussed only the first aspect considered here. The author has added the second aspect to this and the other three categories of scope discussed below.

concerned policy priorities--whether reducing air pollution should be given higher priority than producing power at lower costs.

Conflicts Over National Policy Actions With Limited Constituencies

Beyond regional actions come national policy actions of importance to limited constituencies (Cormick, 1980, pp. 30, 32). The breadth of the action or policy proposed requires attention at the national level, but the action or policy affects only a small constituency. Cormick cites the conflict over the management of wild horses in the western states as an example of such a conflict active at the national level but really involving only certain groups. In this case, as with the regional actions mentioned, there are elements of allocation of fixed resources (specific horses in specific areas) but the large number of horses and their wide range required that the debate concern treatment of horses in general.

Conflicts Over National Policy Actions

Some policy actions are of general national importance, affecting most of the American public in some fashion (Cormick, 1980, pp. 30, 32). The above-mentioned conflict now before Congress over the Clean Air Act involves such national policy actions.

Conflicts Over International Actions

Finally, as Stein (1980) and Levin (1977) point out, some environmental conflicts are international in scope. For example, Canada has recently come into conflict with the United States over

acid rain falling in Canada but believed to be caused by combustion of fossil fuels in the United States (Stein, 1980). The air quality issue would be a general one, but some international conflicts, such as that over international whaling, have only limited constituency.

As in the typology of conflicts discussed above, the category of the scope of issues is somewhat artificial. The imprecise boundary between policy and action is again present, but there is also overlap among the levels of scope. For example, a given facility such as a power plant may involve primarily area-wide issues of traffic and induced urban development, but there may be some issues of importance at the national or international level as well, such as acid rain generated hundreds of miles away.

D. THE PARTIES

Environmental conflicts are characterized by a multiplicity of parties. As Carpenter and Kennedy note (1980, pp. 69-70) it is essential to identify them and also to learn their values, motivations, goals, perceptions of one another, and what their relationships with one another have been.

The Parties' Identities

There are four general categories of parties to an environmental conflict: proposers of the action generating the conflict, supporters of the action, opposers of the action, and the decision-makers responsible for approving or disapproving the action. These categories can be subdivided into governmental vs. non-governmental

Kelso, 1972, pp. 285-289; Gladwin, 1980, p. 255), local vs. non-local (Gladwin, 1980, p. 255), individuals vs. groups (Kelso, 1972, pp. 285-289), and those directly affected as being potential users of the resources being affected vs. those non-users who for esthetic or moral reasons wish to see the affected resources used in certain ways (Linacre, 1979, pp. 1-2; Conacher, 1980, p. 393). Possible specific parties might thus include (adapted from Gladwin, 1980, p. 255):

- Residents of the area affected;
- Local, regional, national, and international, social and political action groups;
- Local, regional, national, and multinational industries and developers;
- Local, regional, national, and international environmental groups; and
- Local, state, national, and foreign governments.

Which parties exist depends on the specific issues involved in the conflict and its scope. In general, an environmental conflict will involve numerous parties at several geographic scales because of the variety of issues at stake, and because some issues may be only local whereas others are of larger scale. Some parties may have only limited interest, while others may be strongly involved.

The Parties' Values

Differences among values are major causes of environmental conflict. Many authors (for example Leopold, 1966, pp. 237-295;

Strong, 1970, 1975; White, 1972; Smith, 1974; Reilly, 1977; Gibbons, 1977; Brown, 1977; Pringle, 1978; Susskind and others, 1978; Cahn, 1978; Barbour, 1980; Boyle, 1980; Copeland, 1980; and Mitchell, 1980) have discussed differences in attitudes toward such matters as environmental protection; economic, population and urban growth; free enterprise and private property versus government regulation; large corporations versus small business; the value of preserving rare species; aesthetics; the legacy the present generation leaves for future generations; and the rights and needs of people versus the rights and needs of nature. When a proposed action opposes strongly held values, intense conflict is extremely likely (Boulding, 1963, pp. 295-296), and many values related to the environment are held strongly. Also, there is an increasing trend toward hard-line single issue politics due to an increasing emphasis on issues important to people due to personal values (Coles, 1980, p. 140; Fiorina, 1980, pp. 25-45; Staub, 1980, pp. 161-66; Smith, 1981). Therefore, environmental conflict over values is even more likely.

One particular value often entering environmental conflict is attitude about risktaking. Because the data generated to assess the characteristics of a proposed action can never be complete or unambiguous, decisions must ultimately contain an element of risk. Not only do different people calculate risks differently, they also vary widely in opinion as to acceptable risk. (For good discussions of risk see La Porte and Metlay, 1975; Susskind and others, 1978, pp. 3-7; Harriss and others, 1978; Fischhoff and others, 1978, 1979;

Wildavsky, 1979; Slovic and others, 1979, 1980; La Brecque, 1980; D.T. Miller, 1980; Okrent, 1980; Starr and Whipple, 1980; and Tversky and Kahneman, 1981.)

Finally, the greater the heterogeneity of local or regional values, the larger will be the number of parties involved in a conflict.

The Parties' Motivations

Whether a party is motivated to propose, support, or oppose an action depends largely on that party's needs. Often the motivations relate to general social or ecological needs-- that the community needs jobs, a scenic environment to preserve a pleasant way of life, or clean water for people's health, for example. However, parties usually have personal motivations as well, based on their own needs. A bureaucrat's or executive's career may depend on a particular project's being carried out. A local businessman may desire new housing or industry to increase his market. The leader of an environmental group may enter a conflict to keep his organization active. Some people may get involved to have a personal role in a major community issue. Unemployed individuals, those whose livelihoods would be reduced, or those whose neighborhoods would be harmed also are likely to be parties to an environmental conflict. Often these personal motivations are left unstated, with debate being only about general community issues (Wellman, 1977, p. 642). Perhaps the most common personal motivation in an environmental conflict is that of those saying "Not In My Back Yard" (O'Hare, 1977; Bellman, 1980;

Eskey, 1980). Such parties (known as NIMBY's) recognize that an undesirable action may be needed, but they do not want to be personally affected.

The motivation of a party also depends on that party's role. For example, corporations are in business to provide the greatest possible profit for their stockholders, so they are motivated to propose and support actions doing that and oppose other actions. Environmentalists have adopted the role of protecting the environment, so they are motivated to propose and support actions doing that and oppose actions harming the environment.

Governments have three basic relevant roles (Cormick, 1980, pp. 32-33; Friedman, 1979, pp. 27-33). They are intended to resolve political disputes, promote economic development, and also protect the environment. They may therefore be motivated to propose or support specific actions which may harm the environment in pursuit of development, propose or support other actions which may limit development by preserving the environment, or resolve disputes among conflicting parties. Thus, whereas the motivations of non-governmental parties are fairly predictable, the motivations of governmental legislators, executives, or multiple-mission agencies such as TVA are not. Single-mission administrative agencies tend to be an exception. Most of these agencies have specific roles to develop or preserve the environment, so their motivations may be predictable.

The Parties' Goals

Goals are largely outgrowths of motivations. For example, some parties opposing actions have the goal of the stopping them totally, but others may only desire negative impacts to be reduced as much as possible. On the other hand, some supporters or proposers may have a goal of carrying out a particular proposal exactly as planned if they have sunk major expenses into the planning, but others may be willing to support any action which achieves basically the same objectives.

The Parties' Perceptions of One Another

Parties' perceptions of one another strongly affect how they deal with one another. A common problem is stereotyping. Governmental and private proposers of actions often believe that they alone are technically trained or given a mandate to make decisions on environmental matters (Irland, 1975, p. 263; Wilkinson, 1976, pp. 132-133), and that the public (environmentalists in particular) is ignorant, unimportant, impractical, radical, or elitist (Carpenter and Kennedy, 1980a, pp. 69-70; 1980c, pp. 8-12). For their part, environmentalists and the public often perceive bureaucrats and corporations as arrogant and untrustworthy (Wilkinson, 1976, pp. 132-133; Boyte, 1980). Thus information is often withheld by all parties, and underhanded or confrontational tactics are used. Also, many parties have been unwilling to view others' values, needs, motivations, and goals as legitimate.

The Parties' Relationships With One Another

The perceptions parties have of one another are caused by the relationships they have with one another. Elements of these relationships include the types of power the parties have used against each other, the substance and style of their communication with one another, how aware the parties are of problems and conflicts, and whether and how the parties have dealt with one another to resolve conflicts in the past (Carpenter and Kennedy, 1980a, p. 70).

In general, power has been unequally distributed. Smith (1974, pp. 1-2) and Brown (1977) have discussed environmental groups' historical lack of power and legitimacy. However the recent changes in administrative law noted above have greatly increased these groups' legitimacy and power through access to the decision-making system.

Communication among opposing parties has usually been poor. Governments and corporations have usually provided as little information as late as possible, and have done so through very restrictive formats such as perfunctory public hearings (Carpenter and Kennedy, 1980c, pp. 3-8). In response, environmental groups have usually only responded in crisis situations and with confrontational rhetoric. However, changes in administrative law such as the Freedom of Information Act and requirements for Environmental Impact Statements have increased the flow of information, if not real communication.

Awareness of problems and conflicts has also been low. Governmental bodies and corporations tend to ignore problems and

hope they will go away, rather than openly confronting them early in the decision-making process (Carpenter and Kennedy, 1980c, pp. 12-15). Environmentalists, on the other hand, have had little funding or staff to identify problems and little foreknowledge of proposed actions to guide a search for problems. The recent modification of the EIS process to include "scoping meetings" at which potential problems are aired, is a step toward improving early awareness of problems and conflicts (Marcus, 1981).

Finally, as Carpenter and Kennedy (1980c, pp. 12-15) have noted, efforts to resolve conflicts too often have either been minimal, when governments and developers have ignored opposition hoping it will go away, or confrontational, as discussed in Chapter III. However, parties are developing more positive attitudes toward up-front collaborative and negotiated resolution processes, also discussed in Chapter III.

E. INTENSITY

Environmental conflict passes through a series of stages (in the ideal case). First is a phase of pre-emergent conflict, in which the potential parties realize that conflict is possible (Cormick, 1980, pp. 30-31). This stage might occur, for example, when a county announces that in the near future it will be planning for the development of a new park, and the persons and groups concerned about the use of land in the area realize that they may soon come into conflict over the plan's proposals. The actual start of the planning process would begin the conflict proper by being what

Wehr (Creighton, 1980, pp. 121-122) calls a "precipitating event." Following this event comes a period of emergence, transformation, and proliferation of issues as further concerns become apparent and groups try to gain adherants by generating new arguments (Wehr, quoted in Creighton, 1980, pp. 121-122). The parties become polarized (Oberschall, 1973, pp. 285-291; Wehr, quoted in Creighton, 1980, pp. 121-122), build their influence, and perhaps engage in some verbal statements or physical demonstrations to show their power (Cormick, 1980, pp. 30-31). The next stage consists of reciprocal ideological escalation characterized by hostility and the use of demagogic tactics, such as stereotyping and mirror-imaging (Oberschall, 1973, pp. 285-291; Wehr, quoted in Creighton, 1980, pp. 121-122). In this stage, the conflict moves from what Boles (1979, pp. 8-21) calls "interest group conflict" characterized by honest disagreement, to "community conflict" characterized by hard-ball politics of whatever kind are needed. In the final stage, radical "conflict sects" (Oberschall, 1973, pp. 285-291) single-mindedly dedicated to their view of the conflicts may form and begin to engage in acts of civil disobedience and violence.

Fortunately a real environmental conflict rarely proceeds through all four stages. The civil disobedience at the Seabrook Nuclear Plant and the "ecotage" (environmental sabotage) by a radical group known as "Earth First!" (Whipple, 1981a, 1981b) are rare examples. Usually a stalemate is reached somewhere in the stage of ideological escalation, at which point the parties opposed to an

action stop the action by threatening to go to court, to have a law passed or defeated, or to vote legislators out of office.

The intensity of the conflict is a particularly important factor in developing a workable resolution process. As Trusty (1980) has pointed out, resolution of conflict takes time, energy, and (in many cases) money. Thus, unless the costs of continued conflict are greater than the costs of resolution to all of the parties (or at least to the most powerful one), it is more efficient to allow the conflict to continue. Resolution attempted before this point will fail because the parties do not need it.

CHAPTER III

THE RESOLUTION OF ENVIRONMENTAL CONFLICT

As noted above, at some point during the course of an environmental conflict it becomes clear to the parties involved (or at least to the governmental jurisdiction responsible for maintaining social harmony) that the mounting monetary and other costs of continuing the conflict have become greater than the costs of the effort of resolution.

Effective resolution requires four steps (adapted from Susskind and others, 1978; Clark and Cummings, 1981; and Marcus, 1981) by the governmental body undertaking the resolution:⁶

- Determining its goals, objectives, and authority;
- Assessing the conflict;
- Designing a resolution process meeting the constraints and exploiting the opportunities identified in the first two steps; and
- Carrying out the process.

Each of these steps is examined in this chapter. Figure 2 shows the relation between them.

⁶ This thesis and most of the published literature on choosing methods of resolution of environmental conflict are concerned with how a Federal agency manages conflict. Thus most of the discussion in this chapter views the process from the perspective of a governmental agency. A similar process of analysis, choice, design, and carrying out would be followed by any party considering resolution but the results might be very different.

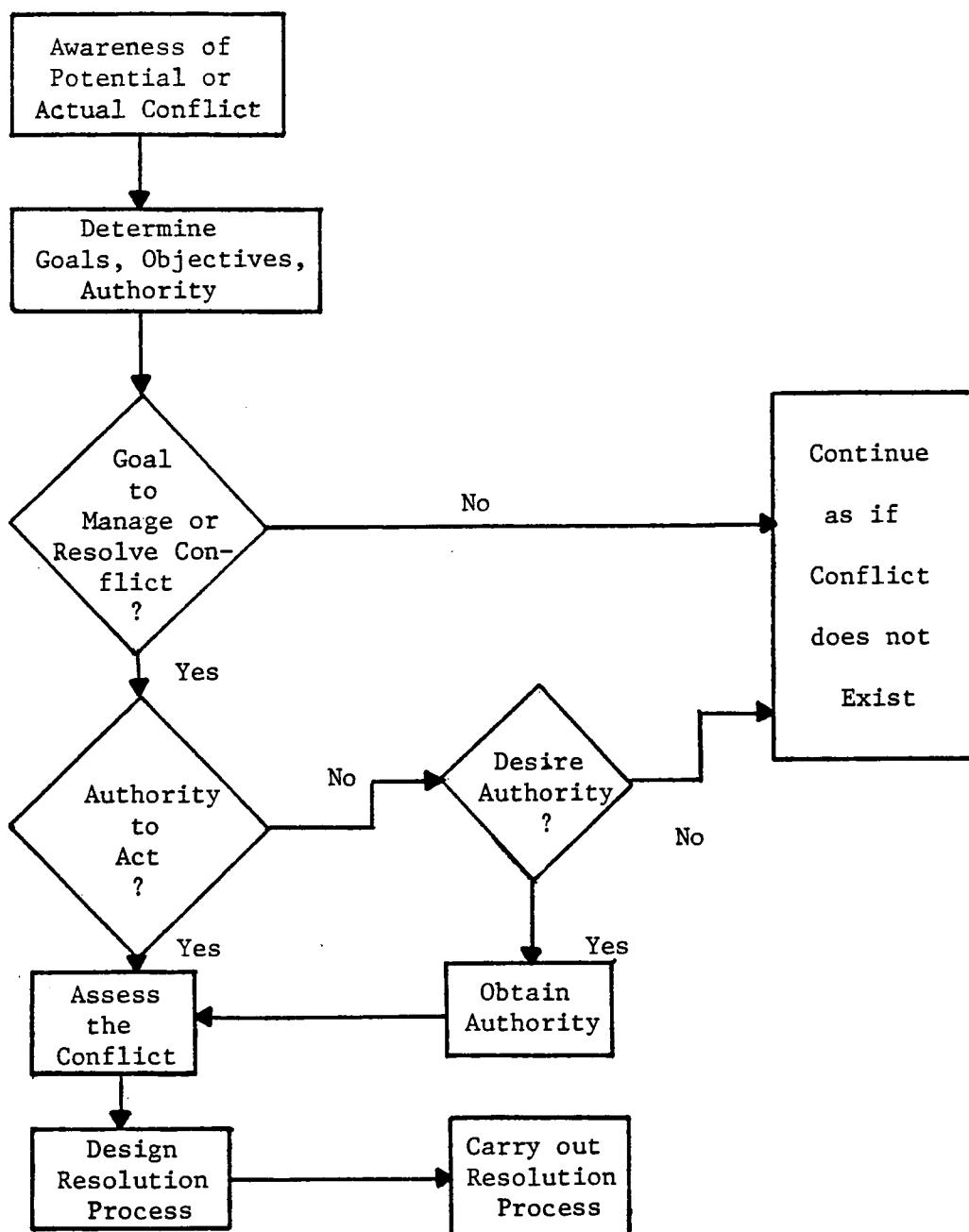


Figure 2. The General Process for an Agency's Resolution of Environmental Conflict.

Source: Adapted from Clark and Cummings, 1981.

A. DETERMINING THE GOALS, OBJECTIVES, AND AUTHORITY
OF THE GOVERNMENTAL AGENCY RESPONSIBLE
FOR MANAGING THE CONFLICT

Once a governmental agency⁷ becomes aware of an actual or potential environmental conflict, for example by proposing an action generating opposition or being asked to approve or disapprove a private action likely to generate opposition, it must establish its own position on the conflict--what it wants to accomplish and its authority to act.

Goals and Objectives

An agency has two basic goals regarding conflict: to manage conflict (Clark and Cummings, 1981, p. 11) and to make wise decisions (Carpenter and Kennedy, 1980b, p. 1). That is, it attempts to keep conflict at a workable level so that it can go about its routine administrative business, but in principle, at least, it also tries to resolve each conflict to the best interest of all the affected parties, and not just have temporary peace. Thus when any particular conflict arises the agency may adopt either of these goals depending on the importance of the conflict. A small conflict may be managed in the most expeditious manner to get it out of the way; a major conflict on an important subject will more likely be dealt with in a manner attempting to reach a wise decision. Though most agencies probably would prefer to reach wise decisions every

⁷ Usually conflicts are dealt with by an administrative agency. However, conflicts which agencies have been unable to resolve may eventually require consideration by legislative bodies.

time, there is never enough time or money to do this, so the less important conflicts must merely be managed.

In attempting to reach the adopted goal, an agency may have one or more (that is, one preferred and others as fallback positions) of five objectives, depending on "the degree to which the agency perceives that its own concerns and those of other parties, respectively, would be satisfied by a given outcome" (Clark and Cummings, 1981, p. 13). A "win/win" objective satisfies the essential concerns of all parties. "Impasse" satisfies none of the concerns. "Win" satisfies the agency but not the other parties, and "lose," vice versa. "Compromise" partially satisfies all of the parties. These objectives are graphed in Figure 3.

Which objective an agency chooses depends on two basic factors: the agency's assertiveness in attaining its desired outcome, and how cooperative the agency wishes to be with the other parties (Clark and Cummings, 1981, pp. 15-16, 19-22). Assertiveness is a direct function of the power of the agency, and the stakes, or importance of the action in question. How cooperative the agency wishes to be is a direct function of the degree to which the agency and the other parties have interdependent interests and of how positive is the relationship among them. How these factors affect the objectives is graphed in Figure 4.

Authority

Agencies may discover that their legal authorities are quite constrained, depending on enabling legislation (Clark and Emrich,

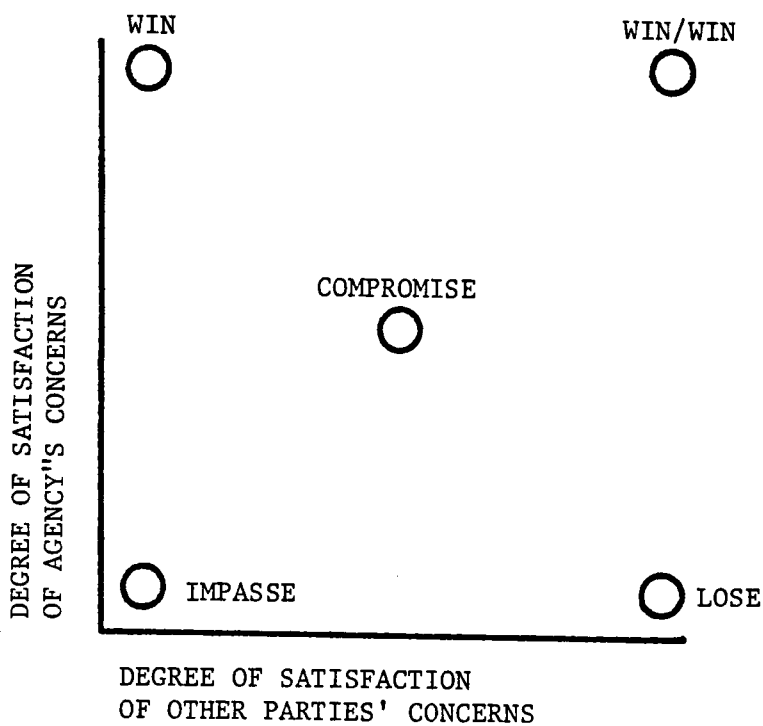


Figure 3. Possible Objectives of an Agency in Resolving an Environmental Conflict.

Source: Clark and Cummings, 1981, p. 14.

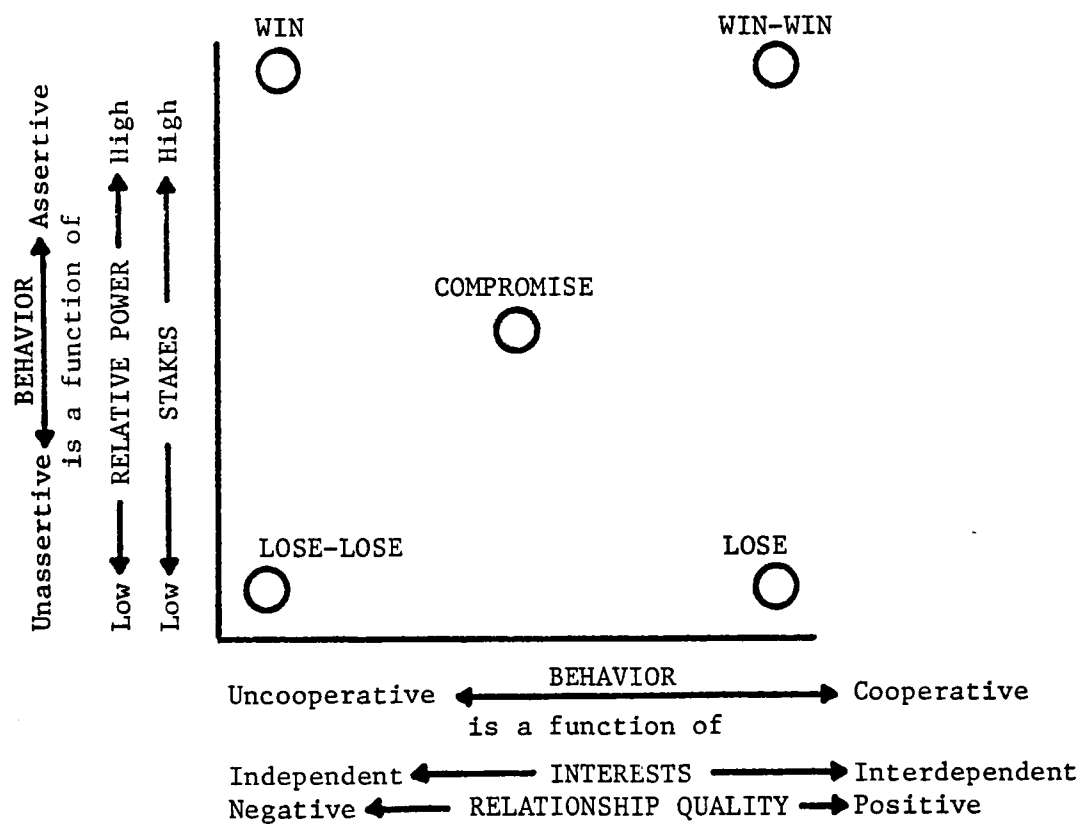


Figure 4. Factors Affecting the Objectives of an Agency in Resolving an Environmental Conflict.

Source: Clark and Cummings, 1981, p. 15.

1980, pp. 10-13; Emrich, 1980, pp. 26-31; Carnduff, 1981, pp. 51-55). Agencies responsible for granting standards may have little authority to negotiate or require actions beyond the minimum. "Sunshine" laws prohibit some closed meetings, and the Freedom of Information Act prohibits some confidential records. Single-mission agencies such as Departments of Transportation may have no jurisdiction over matters such as land use, delegated to other agencies but which may seriously exacerbate controversies with which they must deal. The Administrative Procedures Act forbids confidential off-the-record conflict resolution once an agency has officially begun formal rule-making proceedings. Binding arbitration is forbidden to Federal agencies. Local governments are forbidden, according to Dillon's Rule, to take any actions not expressly delegated by the state; nor may a local government bind its successors through negotiating techniques such as contract zoning. Finally, there are the general constitutional requirements of due process and equal protection, which hinder case-by-case negotiation and mediation.

On the the other hand, agencies often have considerable discretionary authority. (Clark, and Emrich, 1980, pp. 10-13; Emrich, 1980, pp. 26-31; Carnduff, 1981, pp. 51-55). For example, inability to negotiate is often only due to agency policy, not law. The Federal Open Meetings Act (Sunshine law) does not apply to heads of single-headed agencies but only to Boards heading collegial ones (such as the Nuclear Regulatory Commission and TVA), and a recent court case, Adler vs. Adams, (Emrich, 1980, p. 27) has shown that mediation sessions and records can be kept confidential. Federal

agencies are entitled to spend public funds for outside services in resolving conflicts. Discretionary practices of floating zones and conditional zoning are common at the local level, and negotiations are often carried out in the reviews of planned unit developments and by design review boards. State siting authorities also may extract compensation and concessions from developers (Susskind and O'Hare, 1977, especially pp. 15-17).⁸

B. ASSESSING THE CONFLICT

If an agency desires to resolve or manage the conflict and has proper authority, the second step in the resolution process is assessing the conflict.

Definitions

A conflict assessment is an investigation of an environmental conflict to reveal information about the features described in Chapter II -- its type, issues, scope, parties, and intensity. Carpenter and Kennedy (quoted in Marcus, 1981, p. 35) note that it "does not offer a solution to the dispute ... but ... does offer a new perspective on the conflict from which the disputants can fashion their own solution."

According to Marcus (1981, p. 36), a conflict assessment:

1. Provides data on the stakeholders in an actual or potential dispute and their perception of the issues. In that

⁸If a private third party proposes to intervene in a conflict between private parties the determination of goals and authority is quite different. The goal is by definition resolution in a manner

regard, it may show opposing parties that their basic interests are more compatible than they originally thought.

2. Uncovers early indications of what alternatives, mitigation measures, or compensation may be acceptable to the parties.
3. Investigates the dynamics of the conflict relationship and suggests procedures which the parties may themselves use to restructure an unpeaceful situation into one where their needs can be met.

In sum, it should produce a diagnosis of the conflict and an understanding of the parties' willingness to participate in a resolution effort (Clark and Cummings, 1981, p. 27).

Carrying Out An Assessment

Marcus (1981, pp. 36-37) has discussed the proper procedures for carrying out an assessment. The first step is for the agency to obtain an assessor who will be perceived by all the parties as neutral, with nothing to gain or lose by the resolution of the conflict. This perception of neutrality is critical in inducing the parties to be fully candid in their discussion. If they withhold information for fear the assessor will use it against them, the resolution effort will be seriously hampered. If a governmental agency must make the final decisions on resolution of an environmental conflict, Marcus believes that the criterion of neutrality rules out the decision-maker or his staff, though an employee from a part of the agency not concerned with the decision could be used. An employee of another agency not involved with the conflict could

acceptable to all parties, the authority is anything the parties allow (conciliation, fact-finding, mediation, or arbitration).

also be used, but an individual with no ties either to governmental agencies or interest groups would be preferable.

The second step (Marcus, 1981, p. 36) is for the assessor to identify the parties to the conflict -- those who make, are affected by, or can block the final decision. This search can be made through a variety of methods depending on the scope of the conflict and time and budget available (Susskind and others, 1978, p. 26-27, 77-83):

- Identifying parties to similar past conflicts;
- Contacting local political leaders and agency representatives;
- Questionnaires and "snowball" samples (Wehr (1980) has discussed a particular process called a "values survey");
- Holding public meetings;
- Monitoring the mass media;
- Creating a community "listening post";
- Mapping social, political, and environmental data; and
- Becoming a participant observer.

Care should be taken to insure the list is complete, perhaps by using more than one method. Also, for complex or "hot" disputes it is important to spread the responsibility of identifying parties, perhaps by using a "nominating" committee of influential and vocal local persons already representing a variety of interests. This way more parties are likely to be identified and no single party can be blamed for trying to exclude others.

Though the initial list of parties should be reviewed carefully to insure no groups are inadvertently omitted, it is always

possible to include later any new parties which express interest. However, conditions need to be set by the process guide and parties already involved. How the late-comers will be brought up to speed must be decided, they must be informed of and accept the terms of participation as defined by the group, and they must accept a group decision on whether items settled earlier may be reopened to discussion.

Any party which expresses interest should be allowed to participate, for excluded parties are likely to disrupt the process by blocking its implementation. Also, it may be that parties will not participate throughout the process but only in areas of particular concern to them.

Once the parties have been identified, the third step of learning their views can be undertaken. While all of the above-listed techniques of identifying parties will also elicit some information on their positions, Marcus (1981, pp. 36-37) recommends that the assessor also interview a representative or spokesperson for each interest group. This will establish rapport and provide a more structured opportunity to gain information. By being approached personally and individually, the parties are likely to be more candid.

In carrying out the interview, according Marcus, the assessor needs to be empathetic, listen actively, and not evaluate the representative's position or motives. Though the interview should be kept low-key and not too directed, the interviewer should know what he or she needs to find out. Eight sample questions to guide an interviewer to cover all important topics are listed in Figure 5.

1. What are the problems you're concerned about? Why is this issue important to your group?
2. What is the background to this situation? What kind of decision is to be made? What agencies are involved in the decision? What are the important stages in this controversy?
3. How would you like to see this resolved? What essential conditions do you need satisfied?
4. Do some of the problems in this dispute concern data or technical analyses? Are different groups using different data or technical analyses to support their positions?
5. What other groups are involved in this issue? What are their positions? What do they think of your position? Is that accurate?
6. In what situation do you communicate with other stakeholders? What do you say? Do you think you have any interests or concerns in common?
7. Do you feel you'll be heard and that your concerns will be addressed during the decision-making process? What would make it more open and fair?
8. What do you think is necessary to avoid or resolve this dispute? Are you willing to work with the other stakeholders on this?

Figure 5. Sample Questions for an Environmental Conflict Assessment Interview.

Source: Marcus, 1981, p. 37.

If the conflict has not developed to the stage at which parties are unwilling to talk in one another's presence, it might be possible to use a public meeting for both identifying the parties and learning their viewpoints.

C. DESIGNING A RESOLUTION PROCESS

Once the agency has determined its authority and goals and performed (or had performed for it) a conflict assessment, it can design a process for resolving the conflict, based on its objectives and the information the conflict assessment produced on interest interdependence and compatibility (parties' values, motives, and goals), relationship quality, relative power, stakes in the dispute, and the willingness of all parties to participate in a resolution process (Clark and Cummings, 1981, pp. 10-27). The possible general approaches to resolution are collaboration, avoidance, competition, accommodation, and negotiation, and each of these has several variants.

Collaboration

By comparing Figures 4 (above) and 6 (next page), the reader will note that collaboration is the approach consistent with a win-win objective (Clark and Cummings, 1981, pp. 11-12, 15-18). The parties cooperate in a voluntary process to identify alternatives which might meet all of their essential objectives. The process requires a great deal of open sharing of information and many joint meetings and is usually best carried out with the aid of a trained facilitator. In essence, the collaboration is really a form of

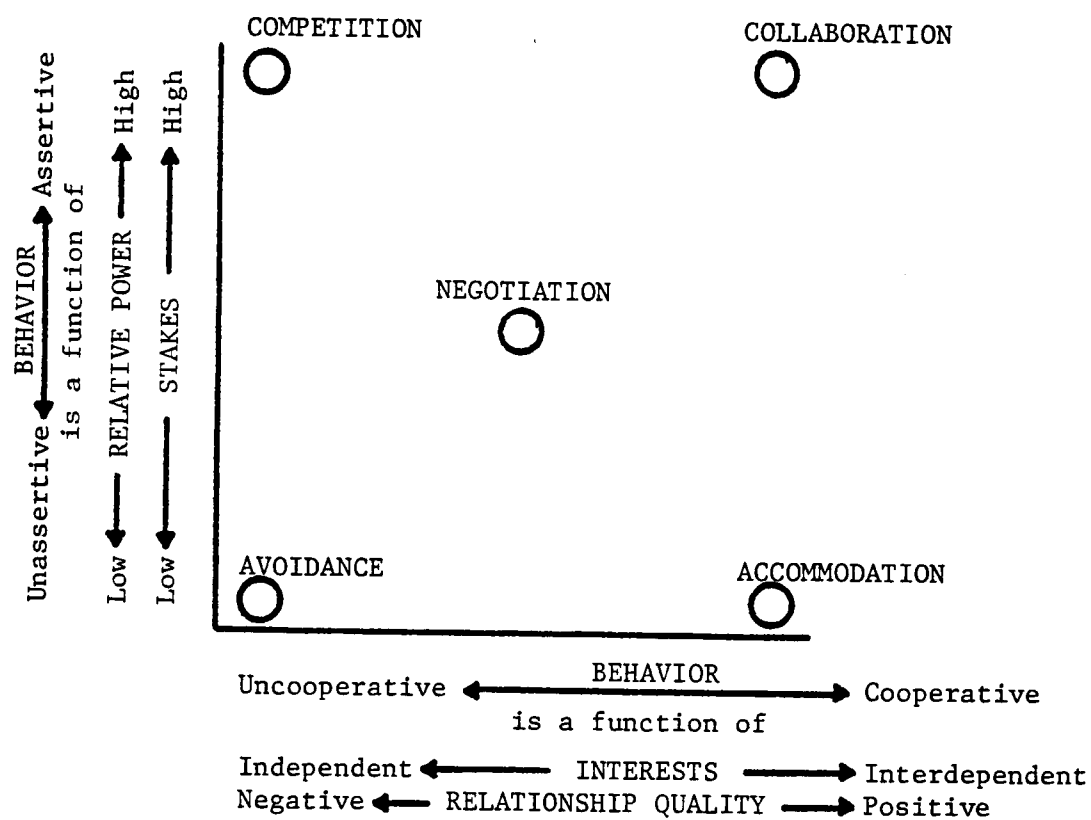


Figure 6. Factors Affecting an Agency's Design of a Resolution Process.

Source: Clark and Cummings, 1981, p. 5.

collaborative problem-solving in which the parties work with one another in a non-adversarial fashion.

Collaboration is appropriate under the following five conditions (Clark and Cummings, 1981, pp. 19-22). First, the interests of all parties must be substantially interdependent and compatible. That is, no single party can attain its goals without the help of other parties, and the parties must all be trying to accomplish similar goals. Where parties share common goals but differ on the means for achieving them, collaboration can be used to identify mutually satisfactory alternatives.

Second, the parties must desire and be able to achieve or already have good relationships with each other. If good relations do not already exist they may have to be built through negotiation so that collaboration even can be begun, but successful collaboration can improve relationships and make later collaboration more likely.

Third, each party's stakes must be high in that certain essential objectives must be accomplished. However, there should also be a considerable number of less essential objectives which need to be accomplished.

Fourth, each party must have high enough power relative to that of the other parties that it will be treated as an equal, not be

taken advantage of, and not feel threatened by the effective sharing of power which must occur if collaboration is to be real.^{9,10}

Finally, all parties must be willing to use collaboration. If any parties do not participate but instead decide to rely on competition, the collaboration will be useless.

There are three specific types of collaboration (Bellman and others, 1981): conflict anticipation, joint problem solving, and policy dialogues. All of them are similar in three basic ways. They are all applied prior to the point at which a conflict reaches impasse. They all involve a series of group meetings guided by a neutral process guide who insures that all parties are heard and makes suggestions about the process but does not offer opinions on substantive issues. They all attempt to reach consensus on issues rather than bargain. However there are differences.

Conflict anticipation.

[Conflict anticipation] encompasses a range of techniques used at very early stages in the development of a conflict . . . to identify potential disputes before opposing sides are fully defined. The objectives are to enable interested parties to work together before intense feelings have developed and before social and economic disruptions have occurred, and to encourage

⁹Such power includes not only the legal authority to carry out actions. It also includes being able to provide or withhold information, having superior analytical capacity, having good management, or administering important natural resources. (This last applies only to an agency.)

¹⁰It is important to note that even if a agency's power is so great that collaboration is unnecessary to accomplish its objectives, it may prefer to collaborate anyway. Using the power probably would destroy good relations with the other parties and cause them to resort to similar "power play" tactics such as lawsuits, which would negate that power or at least slow the agency down.

parties to identify the widest range of options for solving a problem sufficiently early that unnecessary conflicts are avoided (Bellman and others, 1981, p. 4).

Essentially, conflict anticipation is simply a form of planning, but carried out with the specific intent of involving all interest groups, so that the conflict which often occurs over plans not involving the community is avoided. The types of conflicts it can help avoid are those over allocation of specific resources and over the establishment of policy priorities. The scope of conflicts best avoided is that of conflicts over area-wide actions with public policy implications, such as community plans. These general actions require considerable advance planning, affect a wide variety of parties, and can accommodate different objectives, yet they cover a limited enough range of area and interests that the process remains workable. Generally the process is advisory rather than used for making decisions, though its results may carry a great deal of weight.

Two examples of area-wide conflict anticipation processes are those facilitated by ROMCOE, Center for Environmental Problem Solving, to help Delta County, Colorado, deal with the problems of expanded coal development (Carpenter and Kennedy, 1980a, pp. 73-74; 1980b, pp. 4-6) and to help three Colorado communities develop energy plans (Bellman and others, 1981, p. 4).

Joint problem solving.

[Joint problem solving] is a process used to clarify and resolve differences among groups at many points in a decision-making process, usually after a conflict has clearly emerged

and the interested parties can be identified but before positions become so polarized that formal negotiations are required (Bellman and others, 1981, pp. 4-5).

Whereas conflict anticipation is a form of general planning, joint problem solving is planning which deals with site specific actions. It therefore is best used for conflicts over the allocation of fixed resources, though related development policies may also be considered. Because the focus is more specific, the scope of joint problem solving is also more restricted, generally to conflicts over site-specific actions and site-specific actions with major secondary impacts. Also, whereas conflict anticipation usually involves an agency either as one of the parties or as the body responsible for the comprehensive planning undertaken, joint problem solving may be undertaken by private parties alone. In most cases the process is used to make decisions rather than to be merely advisory, though legally binding commitments are not always made.¹¹

There are a number of examples of joint problem solving in the literature. San Mateo and San Francisco Counties and local citizens were assisted by FORUM on Community and the Environment to develop plans for the operation of the San Francisco International Airport (Bellman and others, 1981, p. 5; Ball and others, 1980, pp. 44-47). ROMCOE worked with citizens and the officials of Plateau Resources, Ltd. to explore issues related to a proposed uranium mine and mill in Utah (Carpenter and Kennedy, 1980a, pp. 72-73; 1980b, p. 5).

¹¹The author has classified the Connors Island Experience, the subject of this thesis, as an example of joint problem solving. Therefore, the design of the process is described at length in a later section of this chapter.

Lawrence Susskind (1978) moderated a joint problem solving process in which four governmental agencies and numerous environmental and citizens' groups developed plans for the extension of a subway into the Alewife area northwest of Boston, Massachusetts. RESOLVE assisted the United States Forest Service (USFS) and the citizens of Colorado in a partially successful effort to reach a statewide consensus on what areas the recent USFS RARE II (Second Roadless Area Review and Evaluation) should allocate for wilderness, non-wilderness, or further planning (Livermore and others, 1979). The consulting firm of Wilsey & Ham assisted federal, state, and local officials develop consensus on Special Area Management Plans for certain estuaries in Washington and Oregon (Davis, 1980).

Policy dialogues

[Policy dialogues] have been convened . . . to resolve differences concerning state and national legislation and/or regulations . . . The objective . . . is to contribute to the formulation of . . . policies by increasing communication, clarifying issues, sharing or making additional information available . . . and reaching agreements where possible (Bellman and others, 1981, p. 6).

Policy dialogues deal with conflicts over policy priorities and environmental quality standards. They tend to be used at the State and National levels (regional and national policy actions) because those are the governmental levels at which most environmental legislation is passed. Because the participants represent themselves as individuals and not as officials or representatives of constituencies, and because there are specific responsibilities and procedures which must be followed in passing legislation and

adopting regulations, policy dialogues are only advisory. They have been very influential, though.

Several policy dialogues have been carried out in recent years. One of the best-known and most influential was the National Coal Policy Project, a series of meetings among environmentalists and the coal industry in 1976 and 1977 which produced a number of consensus recommendations on coal use, air quality, and mining regulations for the Carter Administration (Carter, 1977). Others include the Conservation Foundation's dialogue on toxic substances regulations (Bellman and others, 1981, p. 7), RESOLVE's extensive policy dialogue on nuclear waste management (RESOLVE, 1980a), the State of South Dakota's process for establishing goals on water use and conservation (Koehler, 1980), and the study by the New England River Basins Commission and the Resource Planning Analysis Office of the United States Geological Survey in 1980 of the process for considering water and related land resources in power plan siting.

Avoidance

The polar opposite of collaboration is avoidance, which corresponds to the objective of impasse (Clark and Cummings, 1981, pp. 13-16) (See Figures 4 and 6 above). In avoidance none of the parties reaches its objectives. The parties avoid conflict by dropping their proposed plans if objections arise, but they do not instead carry out the wishes of the objecting parties; they ignore the matter and do something else. This would occur when parties have few interests in common and poor relationships, their stakes in

the matter are low, and they have little power to achieve their objectives independently.^{12,13} Also, none of the parties has an interest in attempting to resolve the conflict.

Competition

Comparing Figures 4 and 6 above, the reader will note that competition is the agency approach consistent with a win objective (Clark and Cummings, 1981, pp. 11, 15, 24-25). In this case the agency determines that it cannot work with other parties but must treat them as adversaries. Whereas collaboration is a "positive-sum" process in which all parties benefit, competition is essentially "zero-sum" or "either-or": the agency's objectives are incompatible with those of the opposing parties and can be obtained only at the other parties' expense.

Competition is probably appropriate under the following conditions (Clark and Cummings, 1981, pp. 24-25). First, the interests

¹²Avoidance as an approach to environmental conflict is actually by definition quite rare. Usually much of the opposition to a particular action affecting the environment is not due to preference for another action. It is instead due to preference for no action. Thus if the proposing party decides not to act then it is really adopting an approach of accommodation (discussed below) to those desiring no action. Because avoidance is so rare, it will not be discussed further.

¹³The lower left-hand corner of Figures 4 and 6 also represents a different kind of lose-lose situation discussed in Chapter II--the temporary impasse reached when the opposition to an action goes from demonstrations to threats of a lawsuit and the proposer refrains from acting while he decides whether to compete in court or negotiate. Thus impasse is not an outcome but only a stage, and it may not be reached at all if a party decides in advance how to react to escalated opposition or collaborates or accommodates from the start.

of all parties are not interdependent and compatible. Not only the specific means of accomplishing an objective but the objectives themselves are totally different. For example, an agency may want to build a dam wiping out an endangered species whose preservation is supported by others. In such a case no compromise is possible--either the dam is built or the species is preserved.¹⁴

Second, the agency is willing to accept considerably worse relationships with the other parties or believes that any negative reaction will be short-lived or limited to the specific conflict.

Third, the agency's stakes are high and it is unwilling for any of its objectives not to be met. Such a situation might occur in matters of principle, such as enforcing minimum non-negotiable pollution standards.

Fourth, the agency's power (or legal case) is strong enough that a win solution is likely. However, the party must also believe that other parties will be cowed by the threat and not try themselves for win solutions through adversarial tactics such as lawsuits.

Finally, the agency may choose competition if any of the other parties also intends to rely on competition, because it will have to compete anyway regardless of whatever other approaches it would prefer.

¹⁴Actually, even in this case compromise may be possible--the dam may be sited elsewhere or the species may be transferred. This points out one of the major disadvantages of a competitive approach. If adopted peremptorily it may preclude otherwise possible collaboration.

There are four specific types of competition: administratively required planning, regulatory enforcement action, legislation, and litigation. Each is progressively a more intense form of competition and requires more resources and effort to carry out but is potentially more effective. All of these procedures are commonly used and well understood and so will be discussed only briefly.

Administratively required planning.

[Administratively required planning is] agency planning procedures outlined by regulations and administrative practices, relying heavily on formal public input such as public hearings, and depending on competition backed by litigation for enforcement (Clark and Cummings, 1981, p. 28).

Administratively required planning is "business as usual" for an agency. It is concerned primarily with the agency's view of how a proposed agency project should be carried out, though limited public input is sought. When negative public input is received the agency may consider it, but in the event of disagreeing with the public, the agency simply completes its plan as desired.

Administratively required planning is a competitive tactic employed very early in the conflict resolution process. It is used for allocating fixed resources, but similar administrative procedures are used for developing policy and setting environmental quality standards. It may be used at any scope from site specific to national policy actions, depending on the responsibility and jurisdiction of the agency.

In one sense administratively required planning is not a process for resolving conflict at all but is undertaken with complete disregard for possible conflict. The agency relies on opposing

parties' not having the time and resources to take effective action and on having followed the letter of the law in its procedures.¹⁵ As discussed in Chapter II, this failure to be aware of conflict and include opposing parties is often a cause of conflict.

Regulatory enforcement action. Regulatory enforcement action is used to resolve conflicts over private actions which are regulated by an agency or over one agency's action which must be regulated by another agency (Clark and Cummings, 1981, p. 29). Generally the process consists of rulings by administrative panels or heads of agencies on the basis of public hearings and analysis of documents such as environmental impact statements, but each type of regulatory action has a specific process established by law or other regulations. Private actions regulated may include land use, facility construction and operation, or product manufacture. Agency actions may include construction of public works, land management, policy formulation, and setting of environmental quality standards.

Thus regulatory enforcement can be used for resolving all three types of conflicts -- conflicts over allocation of fixed resources,

¹⁵Recent regulations promulgated by the Council on Environmental Quality (1978) have made administratively required planning involving the preparation of an Environmental Impact Statement (EIS) more effective for resolving conflict and more akin to collaboration. First, they mandate that "scoping" meetings be held to identify possible alternatives and impacts. Such scoping meetings can and should be run as collaborative conflict resolution sessions. (Also see Marcus, 1981.) Second, EIS's must explicitly state how adverse impacts will be mitigated, and this would help resolve conflicts in a sort of accommodation.

conflicts over policy priorities, and conflicts over environmental quality standards. Conflicts of all scopes except international (for which there is no regulatory body with authority) are frequently resolved by regulatory action, from zoning boards' approval or denial of site-specific rezonings to United States Environmental Protection Agency (EPA) approval of air quality standards. Generally the regulatory action takes place well into a conflict but before an impasse has been reached.

Very often resolution by regulatory action is the culmination of a conflict involving administrative planning. For example, TVA's Columbia Dam was opposed during the process of administratively required planning, but the agency decided to build it anyway. Opposition shifted to the regulatory process in an attempt to have the State of Tennessee deny TVA a water quality permit and the United States Corps of Engineers deny TVA a 404 permit required to interfere with the flow of a navigable stream. However, the State and the Corps granted the permits and thus the dam could be built.

Legislation. Legislation is a major competitive weapon for resolving environmental conflicts--a law is passed to settle the matter. Generally legislation deals only with conflicts over policy priorities, for which it may often be needed--policy is really a political decision. This leaves allocation of fixed resources and setting of standards to agencies. However, local legislation in the form of zoning ordinances is used to deal directly with fixed resources (sites and buildings) and standards (such as traffic and industrial performance standards), and Federal bills such as the

Clean Air Act also set standards. Also, budget bills and bills regarding government-owned property (such as parks) deal directly with fixed resources.

Legislation also can be used for all scopes of conflict except international, where no legislative body (the United Nations is not really an exception) has jurisdiction.

The effort and time needed to pass legislation make it a last resort. (According to Nash (1964) it took ten years to pass the Wilderness Act, for example.) Most environmental conflicts except those due to proposed local zoning changes are too small and the legislative process too slow for it to be expedient. However, conflicts over policy matters and environmental quality standards govern so many specific allocations the legislative process may often be appropriate.

Because of its scope and the political battles required to pass it, legislation when used to resolve environmental conflicts can easily become the subject of epic tales. For example, Nash's classic Wilderness and the American Mind (1964) details the story of the aforementioned Wilderness Act, and Shoenbaum's The New River Controversy (1979) tells how Federal legislation was finally passed, after several court suits failed, to prevent the construction of a dam across the New River in Virginia.

Litigation. Litigation is perhaps the most competitive process. It can be used to resolve all types of conflicts at all scopes. In fact, it may be the only effective tool (and not always effective, at that) short of economic actions or war for resolving

international environmental disputes if the parties refuse to collaborate or negotiate. Due to its expense and the length of time required, generally it is not used until other remedies have been tried, late in the history of a conflict. Threatening litigation may cause an impasse and lead to negotiation or mediation, so sometimes the best use of litigation is simply to use it as a threat.

Litigation has a number of particular advantages (Lake, 1980a, pp. 14-23; 1980b, pp. 32-53; Andrews, 1980, p. 232; Mernitz, 1980, pp. 46-47). In our litigious society, to win a court suit is the emblem of power needed for an environmental group to demonstrate credibility. Court rulings are among the strongest legal, enforceable demands. A court ruling may be needed to set a legal precedent for similar cases, expand legal doctrine, or correct omissions or ambiguities in the regulatory, administrative, and legislative processes. Through preliminary injunctions and the immediate enforceability of a decision, legal action can produce rapid relief. The notoriety of a court suit increases public awareness of the issue. The trial process allows cross-examination, fact-finding, and appeals of faulty rulings. The costs of lawsuits mean that only strong cases are pressed, and pretrial negotiated or mediated settlements are made if possible. Finally, the process is (theoretically) impartial, with the presiding judge being independent.

Just as regulatory enforcement may need to follow administrative planning, so may litigation follow regulatory action. A suit had to be filed in the United States Supreme Court to enforce the Endangered Species Act and stop construction of the Tellico Dam

after TVA had decided to finish the dam even though it would destroy the last known population of snail darters.¹⁶

Ginn (1970) reports another example of litigation, by which environmentalists were able to defeat a proposed extension of interstate 40 through Overton Park in Memphis, and Sax (1971) and Caldwell and others (1972) discuss the use of litigation generally in environmental conflicts.

Accommodation

Accommodation, which is the approach to achieve the objective of losing, is simply the polar opposite of competition and requires little discussion (Clark and Cummings, 1981, pp. 13, 15). Instead of the proposing agency's winning, its opponents win. (Compare Figures 4 and 6 above.) Accommodation could come about in two ways. First, according to the model in Figure 6, the agency might give in to opposing parties without competing with them if its power and stakes were low and the other parties simply had suggested better means for achieving objectives which both they and the agency shared. (Actually this is a variation of collaboration in which the agency has little stake or power.)

Second, however, accommodation could be the result of the agency's losing in competition. For example, the agency might decide to act, but be enjoined by a lawsuit brought by opposing parties.

¹⁶In this case, subsequent legislation voided the court's ruling by amending the Endangered Species Act.

Negotiation

Comparing Figures 4 and 6 above, the reader will note that negotiation is the approach consistent with a compromise objective (Clark and Cummings, 1981, pp. 11, 15, 22-24). In a sense it is a middle approach between competition, accommodation, and collaboration. It is more cooperative than competition and accommodation because the parties voluntarily attempt to reach a mutually acceptable solution. It is less of a win-win approach than collaboration because usually some of the desired objectives of each party are not met and because the parties approach each other as adversaries. However, if negotiation is carried out properly, which may require the assistance of a neutral intervenor (in which case it becomes mediation) it helps the parties identify additional mutually acceptable alternatives achieving more of everyone's objectives (Nierenberg, 1973, esp. pp. 20-30).¹⁷

Negotiation is probably appropriate under the following conditions (Clark and Cummings, 1981, pp. 15, 22-24). First, and perhaps most important, power is relatively equal among all parties. (This equality may have to be made apparent through an impasse due to serious threats of a lawsuit or similar action by opposing parties. Cormick (1980, pp. 25, 27-29) has pointed out that parties to a conflict are rarely altruistic: negotiations will not occur unless they are required.)

¹⁷So actually negotiation does not occupy only the dot in the center of Figure 6. More properly it occupies all of the space within the square outlined by the corner dots.

Second, the parties are willing to talk with one another but do not have a good enough relationship with one another to reveal enough information to make collaboration possible.

Third, it is not clear that interests are compatible. In fact there may be a large element of "zero-sum" conflict, in which the negotiations only determine how to divide up limited satisfactions.

Fourth, the stakes of the parties are only moderately high, so that not achieving all of their objectives is acceptable.

Finally, as with collaboration, all of the parties must be willing to abide by the results of the negotiation and not continue with the threatened competitive action which produced the impasse.

There are two basic types of negotiation: ad hoc bargaining (Cormick, 1980, pp. 27-28; Clark and Cummings, 1981, p. 28) and mediation (Clark and Cummings, 1981, p. 29; Bellman and others, 1981, pp. 5-6; Cormick, 1980, p. 27). Both are similar in that they take place after impasse, or at least at a point at which all the parties realize that each has sufficient power to impede others' unilateral action, and thus all must be involved as equals in the decision-making process. All must also share a sense of urgency--that action must be taken (Cormick, 1980, p. 28). Both methods also are similar in being suitable for dealing with all three types of conflict and in the scope of conflict at which they are useable. Any scope at which a workable number of responsible representatives of interest groups who can make binding commitments can be identified is suitable for negotiation. (This is most difficult for

conflicts of regional and national scope, though it can be done more easily for international conflicts if only governments need to be involved.) They are also similar in usually producing a legally binding statement of the bargains struck. Their main difference is in the process itself.

Ad hoc bargaining.

[Ad hoc bargaining is a process in which the] parties meet face-to-face to settle issues in which there is a disagreement. There is a mutual commitment by the parties to seek a mutually acceptable solution by which they will be bound (Cormick, 1980, p. 27).

Because it generally is informal and often confidential ad hoc bargaining is poorly documented in the literature. Nonetheless, it is a common form of resolution, particularly within the legislative process (Landsberg, 1980, esp. p. 84). It is also increasingly common as a means for settling small conflicts (site-specific and site-specific with major secondary impacts) between developers or agencies and citizens. For example, Rivkin (1977, pp. 7-14) has discussed the negotiated development of a shopping mall in Maryland. Packard (1971) has analyzed the negotiations between the state of New Hampshire and environmental groups over the construction of a highway through scenic Franconia Notch. The author has been a member of a group advising environmentalists negotiating a railroad relocation.

Mediation. Mediation is negotiation facilitated by a neutral intervenor, the mediator. Cormick (1980, p. 27) and Bellman and others (1981, pp. 5-6) note that like bargaining, mediation is

voluntary. The mediator has no authority to impose a settlement and the dispute is settled when the parties themselves decide they have reached a workable solution.

The mediator may have a wide range of functions. In general, his or her role is to open up the negotiating process to help the parties discover new ways they can all get more satisfactory action. That is, he or she helps to move the negotiations away from distributive bargaining to integrative collaboration (Clark and Cummings, 1981, pp. 16-18; Mernitz, 1980, pp. 58-59), or in terms of Figure 4, above, to move from compromise toward win/win. Particular duties include enhancing communication among the parties, structuring meetings, suggesting alternatives, and assisting communication with those not actively negotiating (Cormick, 1980, p. 27). The mediator may even play the primary part in establishing a negotiating relationship, unlike a labor mediator, who only enters after negotiations break down (Cormick, 1980, p. 27; Bellman and others, 1981, p. 6).

Mediation is an increasingly common form of resolution. Because it is a formal process and results not just in advice but in written and sometimes legally binding commitments used to make decisions it is also well documented in the literature. The Office of Environmental Mediation in Seattle, Washington, has successfully mediated several conflicts, among them a dispute over a dam proposed for the Snoqualmie River near Seattle (Cormick and Patton, 1970, pp. 84-90; Dembart and Kwartler, 1980), and a dispute over how to extend Interstate 90 across Lake Washington into Seattle (Cormick

and Patton, 1980, pp. 90-96). Just recently Russell Train, former administrator of EPA, successfully completed the mediation of one of the oldest outstanding environmental conflicts: the dispute over the Storm King pumped storage power plant proposed for the Hudson River by the Consolidated Edison Company (Hine, 1981, pp. 1-2). Mernitz (1980, p. 70) has reported the successful mediation of a dispute over the construction of a barley malting plant in Minnesota, resulting in the withdrawal of a lawsuit.

Why Competitive Processes are Often Used

If each process has advantages, why is competition by far the most common process? Gladwin (1980, p. 262-267) has noted that competitive resolution mechanisms--autocratic governmental decisions (30%), litigation (46%), legislation (10%), and voting (6%)--were used in 92% of 366 environmental conflicts involving the chemical processing industry from January, 1970, through June 1978. Collaborative and negotiated mechanisms--arbitration/mediation (1%), bargaining/negotiation (13%), and joint problem solving (14%) were used in only 28% of conflicts.¹⁸ Litigation, perhaps the most competitive of all processes, was the most common of all processes, (However, the autocratic governmental decisions steadily increased during the study period from 25% to 41% whereas litigation decreased from 55% to 36%.)

¹⁸ Gladwin notes that his sample may not be representative of all environmental conflicts (1980, p. 246). He also notes that in a number of conflicts more than one type of resolution was used (1980, p. 263). (This distinction is not made in his table 5 (1980,

Part of the reason for such frequent use of competitive resolution mechanisms is that conditions (particularly relationships among the parties and parties' values and goals) usually favor them. As noted earlier, environmentalists often do not wish to collaborate on a mutually beneficial project resulting in development but prefer to have no project at all, and thus, only litigation or regulation is acceptable to them. Also environmentalists may need to engage in litigation several times to build the recognition and power needed to be welcomed to the negotiating table. Agencies and developers, on the other hand, have long been skeptical of involving the public in decisions and feel that technical solutions can be devised to prevent all problems. Moreover, developers are accustomed to competitive ways of doing business, as are lawyers, whether they work for development, environmentalists, or agencies.

There are also institutional barriers to use of collaborative and negotiated solutions (Emrich, 1980, pp. 18-34). These include lack of information about the processes, concern that they mean additional work and risk of losing power, uncertainty about when they are appropriate and whether they are legal, agencies' not knowing how to integrate them into agency policy and other decision-making practices, and the difficulties of identifying suitable

p. 265); thus the percentages above add to more than 100%.) Therefore, these figures are not definitive, only suggestive of the situation.

neutral intervenors and paying for the process without prejudicing the results.¹⁹

Disadvantages of Excessive Competition

Unfortunately, there are many disadvantages to excessive use of competition when collaboration or negotiation would be appropriate. In general, the win/lose format means that losers lose everything, so they tend to fight harder the next time, escalating the conflict. In many cases win-win outcomes may be possible, but once a competitive approach is taken the parties may be unwilling to work together in a collaborative or negotiated process (Clark and Cummings, 1981, p. 24).

Each specific competitive process has its own set of problems. Administratively required planning sometimes postpones difficult issues to avoid early stalemates, but this postponement can be a hindrance in the long run because these issues must be faced later when parties are less flexible (Clark and Emrich, 1980, p. 12). Thus the polarization among the parties is increased. Public input may be limited because the technical experts believe that they know all the answers, how to act in the public interest (Andrews, 1980, p. 232), and that the public is ignorant (Irland, 1975, p. 263). Conflict is exacerbated because the process defers public input until after plans are proposed, a point at which it is difficult to change them (Sherman, 1980, p. 5). The administrative process is

¹⁹ These difficulties are discussed farther in the section on designing a specific process.

often drawn-out, expensive, and confusing because most agency reviews are sequential rather than joint, and different agencies have different objectives (Sherman, 1980, p. 5).

Legislation has several well-known deficiencies (Susskind, 1980). It is subject to influence by special interest groups. Legislators often view matters from the perspective of their voters rather than the public as a whole and do not have the time to become adequately informed or act on numerous highly technical environmental issues. Though a lawmaker's and his voters' positions on issues may have been known when he was elected, issues and positions change over time, so accurate representation is not always certain. Elected legislators frequently look no farther into the future than the next election. Finally, laws can be declared unconstitutional by the courts or overturned by succeeding legislation.

Litigation is the most competitive method and thus has the most disadvantages (Wessel, 1976; pp. 2-19; Andrews, 1980, p. 232; Lake, 1980, pp. 14-23, 32-53; Clark and Emrich, 1980, p. 13; Mernitz, 1980, pp. 46-47). These include high cost, lengthy delay of resolution, and lack of training of judges in technical matters so that they tend to defer to technical experts. A win-at-all-costs approach by lawyers and a rule-by-precedent tendency for judges result in decisions often being made on extraneous or procedural points rather than the merits of the case. Lawsuits deal in "right and wrong," rather than the "shades of grey" characteristic of environmental disputes, in which all parties have at least somewhat legitimate interests. Finally litigation cannot represent those

parties too poor to afford a lawyer or who do not have standing to sue (such as future generations or those without a clear property interest at stake), even though these parties may have the most to lose.

D. CARRYING OUT A RESOLUTION PROCESS

The fourth step in resolution of environmental conflict is to carry out the designed process. As noted above, the Connors Island Experience is an example of collaborative joint problem solving, so this section describes how that type of process is carried out. However, the general format and many of the specific tools discussed also can be used readily in conflict anticipation and mediation, with some application to policy dialogues. They can also be used as part of administratively required planning, in which case that process becomes essentially equivalent to joint problem or conflict anticipation.

Joint problem solving comprises nine steps, shown in Figure 7, which is adapted from Susskind and others (1978, p. 25). Ideally, they are carried out in the sequence shown in Figure 7. However, the process may well be cyclic to some extent, as denoted by the feedback arrows. For example, when issues are identified it may become apparent that additional parties should be represented. Also, it may be that "later" steps can be carried out before "earlier" steps, as denoted by the "feed forward" arrows. For example, compensation for negative impacts may be the basis for some of the alternatives generated. Also, preliminary information on

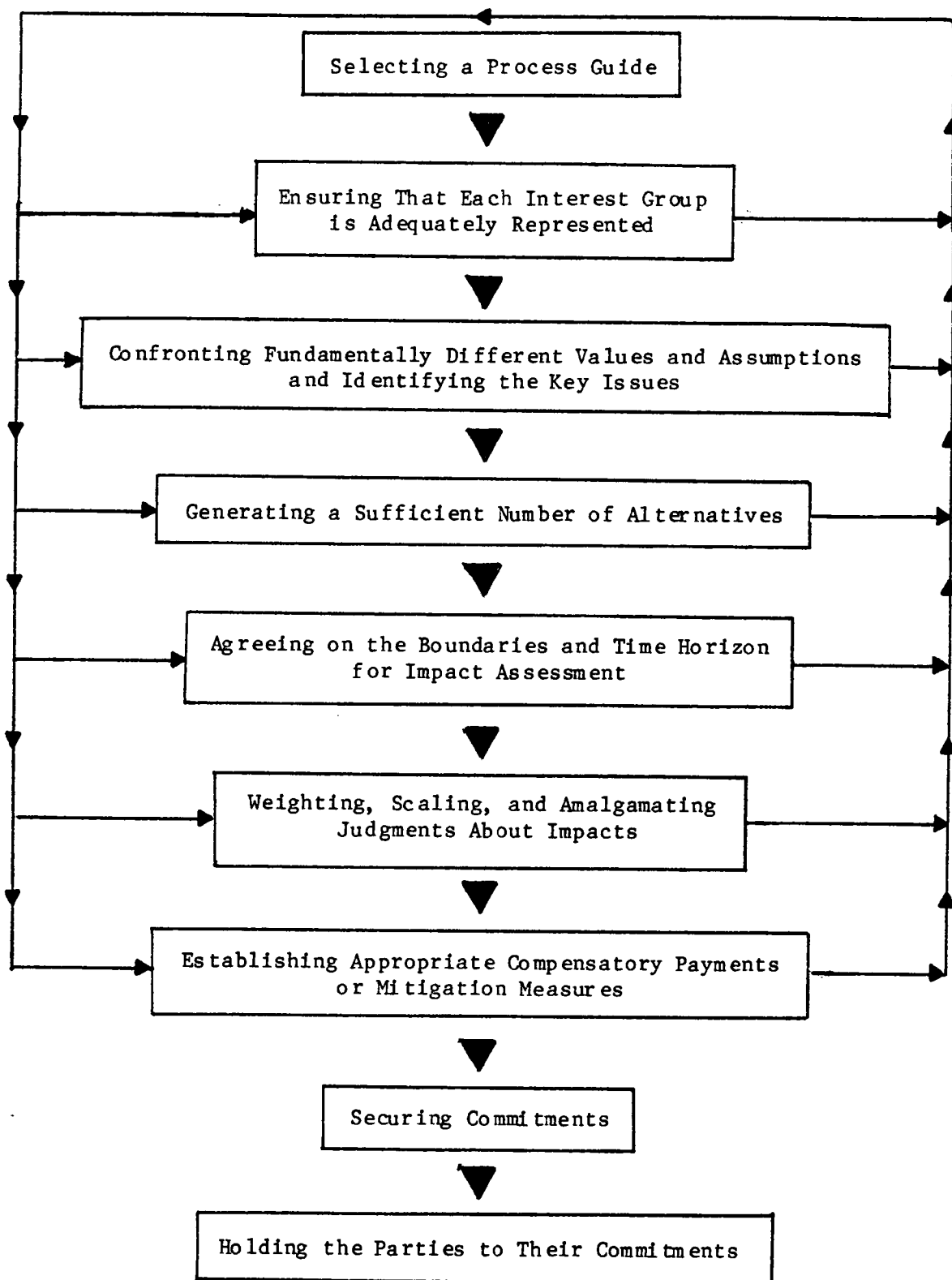


Figure 7. The Nine Steps of the Joint Problem Solving Process.

Source: Adapted from Susskind and others, 1978, p. 25.

ways to carry out all of the steps should have been obtained during the conflict assesement. (However, this preliminary information should not lead the agency to assume it knows all the answers.)

There is a wide variety of specific techniques for carrying out the process, and more are being developed, so some technique is probably useable in any conflict. Susskind and others (1978, pp. 76-77) point out, however, that all techniques are not equally appropriate due to such factors as cost, length of time required, necessity for parties to "suspend disbelief" about others' motives, whether one of the parties must make the final decision, how urgent the situation is, and the need for a permanent organization to carry out ongoing planning or implementation. Also, they note that many of the techniques produce information about a problem but do not specifically facilitate resolving conflicts over that information²⁰ and that usually a variety of techniques will be required due to the complexity of an environmental conflict.

Selecting a Process Guide

The first step in the process is to select a person or team to guide it. This is probably the critical step in the entire process, for unless the process guide is competent, and, more important, perceived by all parties as neutral, the process will degenerate into competition.

²⁰ One of the problems with traditional administratively required planning and its public input is that they stop at the point of providing this information. This not only does not resolve conflicts, it probably increases them by making the issues more understandable.

The process guide must have a number of interpersonal and process skills. Interpersonal skills include active listening, empathy, tactfulness, trust (with healthy skepticism), getting members of the group to trust one another, ability to take risks, being cool under attack, being able to communicate with people on their own levels, stimulating involvement from all people at meetings and dealing with "difficult" members, and creativity (Chase, 1951; Doyle and Straus, 1976, esp. pp. 88-123; Barker and others, 1979; Trusty, 1980). Process skills basically mean being able to guide the steps of the resolution process--setting up group meetings, organizing idea-generating and evaluation activities such as brainstorming, charrettes, and delphi, and coordinating presentation of technical information. Generally the process guide aids the parties to reach a solution and may suggest possible approaches, but he or she does not advocate any particular outcome.

Opinions differ as to how much technical knowledge relevant to the dispute the process guide needs. Cormick (1980, p. 29) believes that technical expertise tends to make the process guide unsuitable because he or she tends to rely on personal knowledge rather than on what is revealed in the process, focuses on facts rather than on the more important values and perceptions of the parties, and leads the parties toward a solution rather than let them discover their own. On the other hand, Busterud (1980, p. 37) notes that some highly skilled process guides also have technical expertise, and Trusty (1980) concurs that expertise is useful. It would appear that at least some technical knowledge is needed to ensure that the group

knows what additional information is needed and uses that information properly.

Neutrality of the process guide is absolutely essential to the success of collaboration (Cormick, 1980, p. 29; Susskind and others, 1978, pp. 114-115; Busterud, 1980, p. 39). He or she must not be perceived as "in the pocket" of any of the parties. This means that any party or even employee of an organization or agency which is a party to the conflict cannot be the process guide except perhaps in rare cases.

A number of private consultants and several university professors act as process guides (RESOLVE, 1980b). However, even these persons may have problems being neutral. Consultants depend on success for future contracts. Professors are subject to University administration politics, especially if major corporate funding of the university is a concern. If they are tenured, though, professors have a considerable degree of independence.

If an independent process guide can be identified, funding is still a problem. If any one party funds the process guide, he or she might be more sensitive to that party's needs in hopes of receiving funding later, and even if he or she remained neutral, non-funding parties would probably not trust the process completely. However, most environmental conflicts involve parties who cannot afford to pay an equal share. Thus funds should be obtained from other sources if possible. Foundations have provided considerable funding in the past. There have also been proposals for using revolving funds, insurance, and federal grants (Busterud, 1980,

p. 39). Funding through Federal Regional Councils, rewriting existing environmental legislation to explicitly authorize appropriations for conflict resolution, using the Federal Mediation and Conciliation Service, and establishing a new Federally funded but private "Environmental Dispute Services Corporation" have also been suggested (Emrich, 1980, pp. 33, 45-52).

Ensuring That Each Interest Group is Adequately Represented

The second step is to determine how the interest groups should be represented (Susskind and others, 1978, pp. 27-29, 80-83). This involves two aspects--who will be the representatives, and how they will be selected.

Because of the group interaction required of a representative, only certain types of persons are suitable (Barker and others, 1979, pp. 96-103, 114-115; Chase, 1951, p. 118; Doyle and Strauss, 1976, pp. 143-147). They need to work well in group situations, accept conflict as constructive, treat one another as equals, and consider that all opinions on an issue are legitimate. They also should be able to keep an open mind, be willing to continue to work with the group if their own ideas are not preferred, be positive, and listen actively to the other members. They need to be willing to participate actively for as long as they are needed. They should be articulate and forthright. Also, because the group must analyze information, representatives need to be able to separate facts from inferences and values and be constructively critical (Barker and others, 1979, pp. 108-130). Finally, the number of representatives

must be kept small, preferably less than 15, for effective participation, or else the group will have to be divided into small subgroups (Doyle and Straus, 1976, pp. 180-186).

Although the group must be kept small, each interest group and decision-making body, including governments, must be represented. Similar parties might agree to select a joint representative. So that the group can make decision, each representative must be able to speak for his or her constituency or governmental body (Susskind and others, 1978, pp. 80-81).

Representatives can be chosen in several ways (Susskind and others, 1978, pp. 81-82). The process guide can choose existing spokespersons and elected leaders from the inventory of interest groups identified. The process guide can ask governmental officials or the nominating committee which identified parties to select credible spokesman for each interest group. Meetings and ad hoc elections can be used to select representatives. Possibly more than one technique will be needed, for selection of adequate representation is important to avoid later disputes over the integrity of the representatives (Susskind and others, 1978, pp. 28-29).

It is important to realize that representation may change over time (Susskind and others, 1978, pp. 28-29). Having differing knowledgeable representatives for each phase of a problem is preferable to having permanent but disinterested titular representatives. Also, delegates need to check periodically with their constituencies to validate their positions and should be replaced if they no longer are suitable to those constituents. If

many meetings are required no representative may have time to participate throughout the process, so perhaps alternates should be designated (Weaver, 1979, p. 20). However, any new or replacement representatives should have to be approved by the preexisting group.

Confronting Fundamentally Different
Values and Assumptions and Identifying the Key Issues

As noted above, parties will take different positions on a conflict because of different assumptions and values (Susskind and others, 1978, pp. 30-31). For example, some parties may assume air pollution kills and thus value clean air highly, whereas others may only assume air pollution is an inconvenience and thus not value clean air so highly. These conflicts between values and assumptions must be exposed so that they can be addressed. Technical solutions which do not consider these differing values and assumptions will probably not be sufficient to resolve the conflict (Carpenter and Kennedy, 1980c, pp. 15-20).

Differences in values and assumptions may be difficult to express verbally or to discuss in a group setting. Creighton (1980, p. 126) suggests that each participant discuss what he or she thinks others wish to accomplish and how others view him or her, and Susskind and others (1978, pp. 83-87) have identified four structured techniques for helping group members confront their different values and assumptions. Computer-aided simulations can allow participants to compare their assumptions about natural processes. Judgment analysis, a related computer-assisted method, consists of a simulation exercise in which participants define impacts of a proposed

action and numerically rate the desirability of the impacts. Then they judge how other participants would rate the impacts. These ratings are mathematically analyzed and displayed graphically for all to compare. Interpretive structural modeling and policy capturing are similar processes of computer-aided questioning which sort out critical elements of each person's position.

Of course, these techniques only reveal differences and do not resolve them. In some cases the information provided to assess issues will also resolve these differences by showing that some assumptions are erroneous or that particularly valued features of the environment are not endangered. Often, though, fundamental value differences may remain, and the information may be too general to correct definitely some assumptions. The facilitator may need to have the group engage in forms of sensitivity training or role-playing (Barker and others, 1979, pp. 266-276) to help them confront and really understand the differences in values. Even this may not resolve the differences but at least they may be made more legitimate so that they are accommodated in later steps of the process.

The issues will have been somewhat defined during the conflict assessment and the step of identifying parties to the conflict. However, additional techniques for clarifying key issues may be needed (Susskind and others, 1978, pp. 29-30). Group discussion is one of the most direct ways to clarify issues. Doyle and Straus (1976, p. 218) suggest simply having all group members state their opinions. They also point out that additional information on the proposed action and existing environment may be important (1976,

p. 228). This may require presentations by experts, but the group must decide what information is needed (1976, p. 226). To decide, the group should use what Straus (1979, 1980) has called "data mediation," a method of deciding what data are needed and then determining whether they are adequate. Doyle and Straus (1976, pp. 256-268) and Barker and others (1979, pp. 115, 138-142, 249-254) have discussed how technical information should be presented and analyzed.

Generating a Sufficient Number of Alternatives

The key to resolving the conflict is to identify alternative actions each party can support, so that these can be integrated into a consensus solution (Susskind and others, 1978, pp. 32, 97-90). These alternatives can be devised through general group discussion, but there are some excellent techniques for structuring the discussion and making the group more creative. Such techniques include brainstorming (Rickards, 1974, pp. 59-77; Doyle and Straus, 1976, pp. 231-235; Jordan and others, 1976, p. 107); restructuring techniques such as relevance trees, attribute listing, and morphological analysis (Rickards, 1974, pp. 22-36; Doyle and Straus, 1976, pp. 235-236); and synectics (Rickards, 1974, pp. 78-96; Jordan and others, 1976, p. 109; Susskind and others, 1978, pp. 88-89).

In addition to discussion, three other techniques can be used. In short intensive "design-in" sessions the group roughly designs the proposals (Susskind and others, 1978, p. 90; Jordan and others, 1976, pp. 79-85). A charrette is a very intensive several

day session in which the group does a more complete job of design, as well as trying to narrow the alternatives somewhat (Riddick, 1971; Jordan and others, 1976, pp. 14-19; Susskind and others, 1978, pp. 90, 95). The group can also interview key people or experts for suggestions on options (Susskind and others, 1978, p. 90).

Agreeing on The Boundaries and Time Horizon for Impact Assessment

This step in the process begins the phase of evaluating the alternatives and reaching consensus on what action to take. Essentially, this step sets the limits for the evaluation--the spatial area of concern and how long a time period to consider (Susskind and others, pp. 22-34; 91-94). In some cases the group might wish to concentrate on certain aspects of an action, as well.

Most actions affecting the environment appear to have self-evident boundaries. For example, resolving a conflict over an industry affecting water quality should require assessing impacts within the affected watershed. However, every action will have other effects, such as the aforementioned industry's inducing additional population growth in the region outside the watershed, which spill over the apparent boundary. Also, if induced effects are considered, the time period must be increased as well. Thus, as Susskind and others point out (1978, pp. 33-34), the boundaries and time horizon must be open to group decision by negotiation because they are issues in conflict in their own right. An important consideration is the degree to which the group and the actors who will

implement the group's decision have jurisdiction over the area and aspects of the environment affected.

A number of techniques can be used to reach consensus on the boundaries for assessment. One of the better ones is the delphi technique (Dalkey and others, 1972; Jordan and others, 1976, pp. 188-212; Susskind and others, 1978, pp. 91-93). Others include reviews of similar actions, either through the literature or visits to the site, simulations or gaming; and advice from technical experts (Jordan and others, 1976, pp. 64-73, 97-103; Susskind and others, 1978, pp. 93-94).

Weighting, Scaling, and Amalgamating Judgements About Impacts

The center of an environmental conflict is the impacts of the proposed action. Once the boundary for analysis of alternatives has been decided, the process of weighting the importance of the possible impacts of each alternative, scaling the degree of impact likely, and amalgamating the diverse impacts of a particular alternative into one overall rating must be undertaken. Essentially this is the evaluation of these alternatives and the choice of the best through the use of some form of environmental impact assessment.^{21,22}

²¹Environmental impact assessment is a major field in its own right and will not be discussed in detail. The reader is referred to any of the many texts on the subject.

²²Some of this information may have been provided already if the group has obtained technical information to identify key issues. (If information had not been previously obtained, the information obtained in this step may well identify new issues).

Two types of conflicts may need to be resolved in this assessment process (Susskind and others, 1978, pp. 34-36). Parties may disagree first of all over the data describing the present environment. Second, they may disagree with one another's predictions of the type and amount of impacts of the proposed actions. These two types of conflict can be resolved through further use of data mediation, sharing data, acquiring common data, sharing computer models, or even developing a common computer model (Straus, 1980; Susskind and others, 1978, pp. 34-36).

Unfortunately, as already noted in Chapter II, conflicts over the facts and predictions can never be completely resolved (Susskind and others, 1978, p. 36). Budgets and time for acquiring data and developing predictive models are always limited. Also, the methods of data acquisition and impact prediction are imperfect, and some effects probably are random and hence unpredictable, so some element of probability or risk must always be present. These residual conflicts will have to be dealt with by compensation or perhaps indemnification against the risks (see Holding Parties to Their Commitments, below).

Conflicts may also occur over the weight of particular impacts. These can be handled by a delphi process in which each member weights the significance of possible impacts from a checklist such as that developed by Leopold and others (1971) and group averages are developed (Rau, 1980, pp. 8-18 to 8-19; Tilford, 1978; Louiviere and Baker, 1979; Ervin, 1974, pp. 17-19). (If possible this should be done prior to gathering data on the impacts. If the group agrees

certain impacts are of little or no importance, then fewer data need be collected.)

Conflicts over the scaling of particular impacts can be handled in a similar fashion, in which a delphi procedure can be used to compute a "value function" for each type of impact (Rau, 1980, pp. 8-19 to 8-21).

When all the data have been collected and predictions made, so that the group has a collection of impacts for each alternative, the process of amalgamation and evaluation can begin. Tilford (1978) and Rau (1980, pp. 8-20 to 8-25) have discussed multiplying the weight of each impact by its scaled value and simply summing each of these impact scores for each alternative. A number of other techniques which are being or have been developed for this purpose have been evaluated by Nichols and Hyman (1980). These include:

- McHarg's Overlay Technique,
- METLAND,
- The Goals-Achievement Matrix,
- Surrogate Worth Tradeoff,
- Decision Analysis,
- The Environmental Evaluation System for Water Resource Planning,
- Environmental Quality Assessment,
- Environmental Quality Evaluation Procedure,
- Water Resources Assessment Methodology,
- The WETLAND Evaluation System,
- Sorenson Network,

- Adaptive Environmental Assessment,
- Habitat Evaluation Procedure, and
- The Kane Simulation Model.

Susskind and others (1978, pp. 98-99) also discuss Cost-Benefit Analysis and the Planning Balance Sheet. McAllister (1980, pp. 227-234), in addition to examining a number of the methods above, has described use of the Judgmental Impact Matrix. Kylstra (1976) has described Energy Analysis. Mumphrey and others (1971) have developed a Decision Model For Locating Controversial Facilities. Davos (1977) has developed, and Lake (1980c) has used, a Priority Tradeoff-Scanning Approach. Holmes (1973) has developed an ordinal method of evaluation.

Not all of these techniques are equally useable at the present time. Some are not fully developed, some are only theoretical, many are very complex and require assistance from expert computer programmers. Some may inappropriately attempt to add "apples to oranges" to get a single number for each alternative (Odell, 1980; Elliot, 1981).

A simpler non-quantitative, non-aggregated technique (Doyle and Straus, 1976, pp. 237-248; Herson, 1977) may be appropriate, especially for smaller problems. The group sets criteria or goals, uses straw voting to eliminate the alternatives having the most opposition and directs further effort to reach consensus by fine-tuning alternatives which are most acceptable.

Establishing Appropriate Compensatory
Payments or Mitigation Measures

When the group is close to agreement on an action but even the best alternative still receives opposition from some parties, it becomes necessary to identify explicit ways in which those parties could be compensated or the negative impacts of the action mitigated to make the alternative acceptable (Susskind and others, 1978, pp. 37-38, 99-103). Essentially this is a repeat process of identifying and evaluating alternatives but with the scope narrowed. In some cases, such as displacement of homeowners by a new highway, money may be acceptable. However, non-monetary actions such as in-kind trades of land, transferral of endangered species, or enactment of development standards may be more appropriate due to the inability to pay or philosophical opposition to trades of money for losses of environmental quality. Mitigation measures are increasingly being adopted by electric utilities and energy companies to reduce the negative impacts of development of energy production facilities (Pattison and Marcus, 1979; Susskind and O'Hare, 1977; Metz, 1980; Scharre, 1980). O'Hare (1977, pp. 438-456) and Susskind and others (1978, pp. 99-102) also discuss the possibility of holding auctions at which communities would place bids as to the compensation required for them to accept undesirable facilities.

Securing Commitments²³

When all of the values and assumptions have been confronted, issues identified, alternatives generated and evaluated, and compensation established, the representatives must decide what actions should be taken. This should be done through consensus because the entire process has used consensus to identify mutually acceptable alternatives either meeting each party's interest or compensating that party. Voting, especially at this penultimate step when the issue is whether one set of actions should or should not be taken, could polarize the parties.

Holding the Parties To Their Commitments

To ensure implementation, the parties must be bound legally to carry out their parts of the bargain (Susskind and others, 1978, pp. 39, 105-110). In fact, without some assurance that commitments will be met, parties are unlikely to enter into joint problem solving. Several means are available for enforcing compliance.

A select committee approved by the problem-solving group can serve as a monitoring committee (Susskind and others, 1978, pp. 103-105). This committee would comprise community leaders,

²³The process as developed by Susskind and others (1978) did not include this step explicitly. However, the author takes the position that from a logical or formal standpoint such a step is needed to emphasize the point that the group must finally reach an explicit decision of what should be done and that this decision should be reached by consensus. Also, this step has been added because the Connors Island Experience almost foundered when voting was attempted to make the final decisions.

agency staff, technical advisors, and some of the problem solving group. It would generate publicity in the media if implementation lags and educate the public to build a wider constituency for implementation. It might also carry out research to see whether the predicted impacts do in fact occur and how well mitigation was proceeding. This research would be an independent check on any monitoring the parties agreeing to mitigation would carry out. However, the committee essentially relies on public pressure and goodwill, which may not be sufficient to induce recalcitrant parties to carry out their duties.

More effective measures would be contracts, performance bonds, indemnification agreements, judicial supervision, and insurance. All of these are legally binding and thus can theoretically force the agreements to be carried out. However, as Skinner (1980) has noted, all of these measures still have problems. For example, an actor might prefer to forfeit a bond rather than try to avoid pollution which cannot be easily cleaned up, or a company may go bankrupt and be unable to make good on an indemnity.

This concludes Part II of the thesis, the theoretical treatment of the resolution of environmental conflict. Part III, the application of this theory to the Connors Island Experience, begins with Chapter IV, which discusses the Connors Island conflict.

PART III
THE CONNERS ISLAND CONFLICT
AND ITS RESOLUTION

CHAPTER IV

THE CONNERS ISLAND CONFLICT

In this chapter the Connors Island conflict is examined within the framework of the features of environmental conflict established in Chapter II. Discussed are the type of conflict, the issue, the scope, the parties, and the intensity.²⁴

A. TYPE OF CONFLICT

The Connors Island Conflict was primarily a conflict over the allocation of fixed resources: deciding the use of specific tracts of land along Guntersville Reservoir across the river from the City of Guntersville. Guntersville's mayor, Robert L. Hembree, had requested in a March 28, 1978, letter to TVA Chairman Aubrey Wagner that TVA make a 22-acre and a 48-acre tract of vacant riverfront land available to the City. (See Appendix B). This would give an adjacent lightly-used 250-acre farm owned by State Senator Albert McDonald barge access and thus make it a possible industrial site. However, other local parties and several programs within TVA desired different uses. Some believed the land should be left vacant and useable for hunting and fishing as well as being a buffer for the adjacent unincorporated residential community of Claysville. Others

²⁴ Most of the statements in this chapter are the author's composite interpretations from his interviews with TVA staff, the LCPT, the facilitator, and others; unpublished TVA technical presentations to the LCPT; and the audio tapes and transcripts of the LCPT meetings, and transcripts of the public meetings. Where a specific individual source exists it is cited.

thought the farm should be reactivated for commercial agriculture. Still others wanted to see the tracts used for a major recreational resort, golf course, or amusement park.

However, policy priorities and environmental quality standards also entered into the conflict to some extent. To some parties the use of the particular site was seen partly as an example of the growth-versus-no-growth debate and the debate over whether jobs were more important than environmental protection. Also, policies guiding development of the area were eventually adopted by the group engaged in the joint problem solving effort. Environmental quality standards were the prime concern of some parties who had little objection to the industrial use of the land so long as the industry was a clean one.

B. ISSUES

The Connors Island Conflict revolved around a number of issues due to the characteristics of the action proposed and of the natural and socio-economic environments.²⁵

Characteristics of the Action Proposed

The action proposed, industrial development, could have the full range of effects noted by Gladwin (1980, p. 251) and discussed in Chapter II. Air quality might be harmed by emission of odors or

²⁵All these characteristics were initially only suspected by the locals and TVA, but the author's study of the technical information presented by TVA and his visit to the area indicates that they were characteristics in fact, also.

smoke. Water quality could be lowered by sewage, liquid industrial wastes, and spills of chemicals. Land use impacts would include the building's effect on the scenery, loss of potentially productive farmland, erosion caused by construction, and solid waste generated by construction and operation. Both terrestrial and aquatic vegetation and animals, fish, and birds would probably be killed or driven away by loss of habitat during construction (particularly dredging), water pollution, and increased human activity in the area. Human health and safety could be harmed by the pollution and accidents caused by increased vehicle traffic. Negative impacts on social resources might include loss of a local recreational area, nuisance effects on the adjacent residential community of Claysville, loss of a rural area and lifestyle, and increased traffic congestion. Negative economic impacts might include lowered residential property values in the vicinity of an industry, and higher taxes to provide utilities and highway access to the site. Positive economic impacts might be increased value of vacant land and increased numbers of local high-wage jobs. This would also be a positive social impact because it would allow the area's young people to remain in the area rather than having to leave to take employment elsewhere.

Characteristics of the Natural and Socio-Economic Environments

The natural and socio-economic environments had several salient characteristics which gave a number of issues special importance. Two features of the natural environment were important. One major

characteristic was the reservoir. It had clean water. It was used extensively for waterbased recreation, due to its wide expanse, and The Conners Island area was recognized as one of the best fishing spots on the reservoir because the islands, shallow water, and wetlands were good spawning grounds. Thus possible impacts to water quality and waterbased recreation, with consequent losses of both environmental quality and tourist dollars, were major issues.

The quality of the land base was the other major feature of the natural environment. Because most of the flat land around Guntersville had been inundated by the impoundment of Guntersville Reservoir in 1939, waterfront land suitable for industrial development was very limited. The McDonald farm was one of the best of those few sites due to its large size, single ownership, gentle topography, and good foundation conditions (if the TVA land could be obtained). However, the farm also had high value for land-based recreation and moderate value for farmland and hunting. There were also a number of wetlands which had moderate value for waterfowl habitat, and for which protection was required by Federal Executive Order 11990.

The socio-economic environment was important in four ways. One important aspect was the languishing local economy, as revealed by data compiled by TVA (unpublished notes in Jeff Deardorff's files). Unemployment in Marshall County in January, 1979 (during the conflict resolution process), was 9.0%, contrasted with a statewide rate of 7.3% and a rate for the Huntsville Standard Metropolitan Statistical Area (which included Marshall County) of 6.6%.

Guntersville in particular was in difficult straits. In August, 1978, its average unemployment rate was estimated at 12%, compared to rates of about 6% in other Marshall County cities. Per capita income in the county in 1975 was 96% of that of the Tennessee Valley Authority (which was about 75% of that of the nation). Many people had to commute outside the county to get jobs (5038 in 1970). From 1960 to 1970 there was a net outmigration of young adults 20 to 29 years old. Many people were concerned that Guntersville was losing its youth because few local high-paying jobs were available, and they wanted local development to keep their children in the area.

A second aspect was the slow growth of Guntersville's population. Unpublished data in Deardorff's files show that from 1970 to 1975 it had grown much slower than the population of the county as a whole (3.1% versus 8.7%) and slower than the City of Arab. Also, Guntersville was second in population to the city of Albertville (6,491 persons to 9,963 persons in 1970). Some persons, particularly the Mayor and developers, wanted to see Guntersville grow faster. However, there were many who were happy with the slowness of change.

Third, as shown in Figure 1 above, northeast of the potential industrial site was the small, unincorporated, primarily residential community of Claysville. The access roads to the site ran through the community, as did the major road in the vicinity, U.S. 431. Truck traffic already was heavy on U.S. 431. Increases in it and commuter traffic due to any industry could create further

congestion, cause accidents, and perhaps lower the value of residential property along the heavily travelled roads.²⁶ In addition, any development of the site would probably cause further residential, industrial, and commercial growth, irrevocably ruining the previously rural lifestyle.

When The Action Was Proposed

The Conners Island Conflict occurred toward the end of the 1970's. In common with most conflicts arising in that time period, the major issues were impacts on human lives major rather than on the environment itself (Gladwin, 1980, p. 254-255; see Chapter II above)--impacts on Claysville, jobs, and recreation (including hunting and fishing). Impacts on the environment were relevant to most of the parties only if human lives would be affected thereby.

C. SCOPE

From the above discussion, it is clear that the Conners Island Conflict was basically a conflict over a site-specific action with major secondary impacts. The proposed industrial facility would primarily affect a specific site, but there might be major impacts on the surrounding areas. Economic and traffic impacts could affect a wide area, perhaps over several counties, depending on how many

²⁶The State of Alabama was proposing to improve U.S. 431, either by widening its present alignment or rerouting the highway to the west closer to Conners Island. Either alternative would have major positive and negative impacts on Claysville.

jobs would be generated and who would get them. Also, if the proposed industry generated toxic waste, transport and disposal of this waste could cause impacts over a wide area. Similarly, air and water pollution could affect wider areas than just the immediate surrounding.

D. THE PARTIES

The Parties' Identities

Because the conflict was of fairly limited scope, there was a fairly limited number of parties. They included generally:²⁷

- Residents of Claysville, Guntersville, and Marshall County;
- Owners of second homes in the area and other tourists;
- Local and area-wide social and political action groups
(including community and property-owners associations);
- Local and area-wide business owners, industrialists, and developers;
- Local and area-wide environmental groups; and
- Local, regional, and statewide governments and governmental agencies, including TVA.

²⁷ The specific parties are identified in lists compiled by TVA of those who should be invited to and those who did attend the public meetings.

Not all of these parties, particularly individual residents, needed or wanted to be involved in the conflict resolution process to the same degree. However, several parties were connected with the issues of major concern--the reservoir, jobs, impacts on Claysville, and recreation--and needed to have major involvement in some form. In addition, the decisionmakers--local governments and TVA--had to be involved.

In conducting the conflict assesement (discussed in Chapter V), TVA's Regional Planning Staff (RPS), the City, and Dr. Weaver (the process guide) identified ten interest groups, or general classes of parties, which needed to be involved heavily in the joint problem solving process undertaken: Guntersville, Claysville, Marshall County, Industry, Agriculture, Sportsman Conversation [hunters and fishermen], Natural Systems Preservation, [Commercial] Recreation, [Racial] Minority Interests,²⁸ and TVA. A particular person who could have been a party, State Senator McDonald, openly expressed in the first public meeting and to the author his willingness to abide by the community's desire and that though he wanted to keep the land he would give it up for the good of the community.

²⁸ Racial minorities (primarily blacks) constituted less than 3% of the population of Guntersville and almost none of the county, but because of the traditional disenfranchisement and lower economic status of this group, RPS and Weaver believed that they deserved representation.

The Parties' Values²⁹

There were few radical positions or extremely strong value differences among parties in the Connors Island Conflict. All parties basically valued an attractive environment to keep the area a pleasant place to live and the economically important tourist industry thriving. All parties basically valued jobs and Guntersville's remaining a viable city. In general, the area was racially and socially fairly homogeneous, which made values somewhat the same throughout the population.

There was only one major value difference, which was exhibited best by the difference between Guntersville and Claysville. Guntersville basically valued growth of the city and an expanded high-wage economy. In past years economic development had been less important, but Mayor Hembree had been elected on a platform including growth and economic development planks. Marshall County, Minority Interests, and Industry shared these values.

On the other hand, the Claysville Community chiefly valued its rural way of life. Some residents were part-time farmers but most had blue-collar jobs in the area, so they were not especially an agricultural community but one composed of people who preferred quiet rural life and the countryside to the city. This preference

²⁹The author's information in this section comes from his reviews of transcripts of the public meetings, tapes of the LCPT meetings, and interviews with the TVA staff and members of the LCPT. Thus, the values, motivations and goals discussed are actually those of the representatives of the interest groups as well as the groups themselves.

for limited urban growth was shared by Agriculture, Natural Systems Preservation, Recreation, and Sportsman Conservation.

Within TVA, individual program staff members certainly had different values. Staff in the Division of Forestry, Fisheries, and Wildlife (FF&WD) generally valued preservation of natural areas. Staff in the Division of Navigation Development and Regional Studies (ND&RS) generally valued a stronger valley industrial economy. Staff in the Division Agricultural Development (AGR DV) generally valued a stronger valley agricultural economy. Staff of the agency as a whole valued a balance between preservation and development, and most also valued the process of determining a use through consensus among the parties.³⁰

The Parties' Motivations

Based on their values, the parties had a variety of motivations, both public-spirited and private. The City of Gunterville, the County, Industry, and Minority Interests were concerned about the lagging economy, the need for an increased tax base to fund government services, and the needs of the citizens. However, during the first public meeting the Mayor stated that he also wanted the City to grow so that it could compete with the other more rapidly growing cities in the county. The City's representative on the LCPT was personally motivated by having had for some time the idea for an industrial park or a major resort on Connors Island.

³⁰ Not all of the parties valued this process. Gunterville and Industry, particularly, felt it was a waste of time.

Claysville residents stated that they were motivated by the understandable concern that their community not be harmed needlessly by poorly planned industrial development. However, the author believes that there was a considerable element of the NIMBY syndrome, as well--they were happy where they were and did not want to be bothered.

The Industry party, in addition to desire to serve community needs and provide jobs for the town's youth, was of course motivated by profit and the ego satisfaction so important to those successful in business (Louis, 1981). Also, the representative of Industry on the LCPT, in addition to being the Chairman of the Guntersville Industrial Development Board, was one of the area's leading realtors. By being in on the planning process, he would have an opportunity to gain additional knowledge about development and real estate opportunities.³¹

The Agriculture interest group, particularly the LCPT representative, was primarily motivated by concern for preserving farmland for future generations and feeding the poor. Of course, preserving local farmland was also of importance to them personally in allowing them to keep farming, and the LCPT Agriculture representative had been born and raised on Connors Island and had farmed it.

³¹The author hastens to add that he believes, based on the research for this thesis, that the representative did not attempt at all to influence unfairly the LCPT's work to create real estate opportunities for himself. In fact, he could not do this because all realtors and developers could take advantage of the plan.

The Sportsman Conservation interest group was essentially self-motivated. Many people in the area liked to fish and hunt there and did not want to be restricted from the activity. There was little interest in preserving habitat for purely ecological reasons.

Those favoring Natural Systems Preservation did so partly out of concern for the natural environment for its own sake. However, there was also a considerable element of enlightened self-interest--a realization that human survival depended on a healthy natural environment, that the amenities that drew them to the region would be lost if urbanization and industrialization continued unchecked, and that urban growth often cost the public more than the tax benefits it returned. To some extent, though, the environmentalist position was elitist and part of the NIMBY syndrome. The only vocal environmental group, the Alabama Conservancy, had no members from Marshall County. Most of its members came from the Alabama metropolitan areas such as Huntsville and Birmingham. They enjoyed the reservoir for recreation, and perhaps had vacation homes near Guntersville, but their jobs did not directly depend on use of the reservoir near Guntersville by industry.

The Recreation interest, those persons who ran campgrounds, motels, and marinas for tourists, also were motivated primarily by self-interest. Water pollution, heavy barge traffic, and development of a popular area could hurt their business. Moreover, one of the larger marinas was in Claysville, almost adjacent to Connors Island, and another smaller one was nearby. (Of course, at least

some owners of these facilities were long-time residents of the area, as were the fishermen and hunters, and did not wish to see it harmed). On the other hand, one of the suggestions for Conners Island was its development as a major recreational resort. Should this happen, business of the established marinas, motels, campgrounds, and Guntersville State Park could be damaged. The facility owners might well oppose such a development, especially since the market for commercial recreation was essentially saturated.

Minority Interests were also motivated by self-interest. Though there were few blacks in the area, they generally had low-paying jobs, a high unemployment rate, and were concentrated in one of the run-down areas of Guntersville. Thus they supported additional high-paying jobs. If they could not get the new jobs, they could at least get the not-quite-so-high-paying local jobs vacated by people taking the new jobs. (For details on this trickle-down process, see Merrill and others, 1968, pp. 38-39).

Three factors motivated TVA to take a neutral position on the conflict. First, TVA's mission as mandated by the TVA Act was balanced regional development, the best use of the region's resources given all of the needs of the region. Thus, TVA was not automatically in favor of the proposal but wanted to consider alternatives.

Second, there was no single agency viewpoint expressed by the staff members active in the resolution effort. Staff of three different Divisions (Navigation Development and Regional Studies

(ND&RS), Forestry, Fisheries, and Wildlife (FF&WD), and Agricultural Development (AGR DV)) were involved, and as noted above these staffs had different values. Also, during the process the responsibility for coordinating the planning for the use of TVA lands shifted from ND&RS, which had become part of the new Office of Community Development (OCD) to FF&WD, which had become part of the New Office of Natural Resources (ONR).

Third, TVA's policy had always been to solicit public input on its proposals and where possible to let the public make decisions, so it was committed to take a neutral position.

It is important to note that although many of the motivations were based on personal interests and not the good of the public at large, this is not necessarily bad or wrong. As discussed in Chapter III, the premises of resolving conflict through joint problem solving are that each party has a legitimate self-interest; that a way can be found to meet most of each party's self-interest and still meet most of the other parties' interests; and that if all parties are involved, then a consensus solution should be an adequate representation of the general public interest.

The Parties' Goals

The goals of each party relative to use of the site (that is, industry, preservation, or agriculture) are evident based on the discussion of motivations and will not be belabored. However, the

three governmental parties also had goals, as discussed in Chapter III, of managing conflict or making wise decisions. In the case of Conners Island, it appears that Guntersville was more interested in managing the conflict than in reaching a decision seen as wise by all the parties. They knew what they wanted and considered the conflict resolution process a necessary burden (according to interviews with city personnel). Marshall County, on the other hand, appeared to the author to be involved more in an ex officio capacity (because Conners Island was in the County), did not have a strong goal of any particular use of the site, and so could work for a wise decision. (However, the county government did favor industrial use of Conners Island.)

TVA's goal was making a wise decision acceptable to all parties. TVA was, however, concerned with effective conflict management. The agency had been experiencing delays in carrying out actions due to unexpected intense public opposition, so it hoped that early public involvement in the Conners Island conflict would reduce later public opposition and speed any development planned for the site. Also, involving the public would help satisfy the different Offices within TVA of the validity of the final decision and reduce intra-agency conflict.

The Parties' Perceptions of One Another

The problem of misperceptions and suspicions discussed in Chapter II was well demonstrated by the Conners Island conflict. Claysville perceived Guntersville as rapacious and greedy for new

tax revenue. Guntersville perceived Claysville as stubborn and parochial. Industry and Guntersville perceived Sportsman Conservation and Natural Systems Preservation as elitist, and the environmentalists perceived Industry and Guntersville as insensitive. Everyone (except TVA) perceived the environmentalists as busy-body outsiders. (The representative of Natural Systems Preservation was from Huntsville.) Perhaps the most incorrect perceptions were held about TVA. Guntersville, Industry, and Marshall County suspected TVA of being anti-industry, and Sportsman Conservation, Natural Systems Preservation, Claysville, and Agriculture suspected them of being pro-industry. Everyone suspected TVA of using the joint problem solving process only as a public relations ploy: either TVA had already made its decision, or else the decisions would be made on the basis of politics, so pressure tactics or back-room dealings were the best ways to influence it.

The Parties' Relationships With One Another

Previous relationships among the parties were important in setting the stage for the Connors Island Conflict and its resolution. Some important general social relationships are inherent in the way TVA has dealt with the public and in the small town/rural environment of Guntersville. Specific relationships included those between TVA and Guntersville, Guntersville and Claysville, developers and environmentalists in Guntersville, and internal TVA relationships. In addition, TVA had been involved in a number of environmental

conflicts in north Alabama. How the agency handled these led to the joint problem solving over Conners Island.

General social relationships. Process guide Michael Appleby (personal communication) has pointed out that rural areas and small towns usually have a "softer" style of dealing with social conflict than that used in larger urban areas. Because most of the parties to conflict are long-time residents and because the population is small, everyone knows everyone else and knows they will have to continue living and working together after the conflict is resolved. Also, people have fixed social roles and status. All of these factors tend to keep emotions low, prevent radical tactics, and reduce the demands made by negotiators, instead favoring collaboration. However, these factors also may cause exclusion of legitimate parties who are too outspoken and keep other less-respected parties from participating fully, in deference to known community leaders, thus ignoring or glossing over important issues.

TVA and the public. TVA has always had a policy of working with local people to solve their community development problems and letting them make decision where possible. Chase (1951, pp. 172-185); Gray (1948, pp. 6-12); Selznick (1966); Brown and Weber (1969); and Price and others (1981) have discussed how TVA has helped set up and work with voluntary organizations and state and local planning boards, worked with farmers to set up demonstration programs, and assisted industrial developers and private business to develop the Valley economy. To the extent possible the approach has been one of

technical assistance and education upon request rather than regulation or direct action.³²

TVA and Guntersville. TVA and Guntersville had long had a close relationship, though it had not always been amicable. In 1939, the impoundment of Guntersville Reservoir had flooded nearby farmland on which the City had depended in its role as a rural trading center (Gray, 1948, p. 11). TVA had worked with the City before and after impoundment to plan and develop the city and its economy to take advantage of the reservoir (Gray, 1948, pp. 11-12), but the city had remained short of developable land. Twice since 1939 the City had asked for additional land for industrial development, and TVA had granted the requests.³³ However, in one case the land had been used for housing instead. At the other site some land was still available but the city would not allow an

³²Selznick (1966, especially pp. 59-64) has noted the ambiguities in the vague term "local people." It includes special interest groups and organized institutions as well as the public. Very often, as noted by Price and others (1981, p. 8) and by the author in his experience with the agency, TVA has just worked with these entrenched power structures in Valley communities rather than develop a real "grass roots" approach. In fairness to the agency, though, Selznick (1966, p. 61) points out that regardless of agency desires TVA has had to adapt itself to existing institutions to be able to get anything done rapidly. Also, existing institutions, particularly local governments, have been assumed to represent the people, according to a theory of representative democracy. (See also Price and others, 1981, p. 8).

³³According to TVA personnel, one of the reasons Guntersville disliked the joint problem solving process was that in the past TVA had given the land without any similar requirements for public involvement or planning.

existing firm to use the land for expansion. Because of this apparent renegeing by the City on its commitments, TVA was reluctant to grant unconditionally the request for Conners Island.

Claysville and Guntersville. Guntersville and Claysville had a poor relationship. The 1974 Guntersville Comprehensive Plan identified Claysville as an area of future residential and industrial growth, and the City had expressed interest several times in annexing Claysville, which the Claysville residents did not desire. (See for example, in addition to the transcripts of the public meetings the March 27, 1978, and May 4, 1978, issues of the Guntersville newspaper, The Advertiser-Glean, which reported on a City Council meeting and a public hearing to discuss possible annexation.) Moreover, the author was informed that at one of the public hearings on an annexation proposal in 1977 Mayor Hembree had inadvertently referred to Claysville as "Slab City," a local derogatory term, which aroused further opposition. Because annexation in Alabama requires either a petition by the residents of the area to be annexed or an act of the State Legislature, so far Claysville had been able to resist annexation. They feared that the Mayor's request for TVA land would establish a beachhead on the north side of the river from which the City could then annex the McDonald estate and gradually the rest of Claysville. The recent moving of the Guntersville City Limits sign from the middle of the US 431 bridge across the river to the north side of the river had only agitated them further. (See the May 4, 1978 article in The Advertiser-

Gleam mentioned above.) The City, of course, felt that Claysville was worried about a tempest in a teapot, that they would only be annexed if they wished it.

Developers and environmentalists in Guntersville. According to a retired TVA staff member who had long lived near Guntersville, twice in recent years local environmentalists had shown that they had significant influence. In the 1950's local residents rose up en masse and, by threatening to sue, forced an end to Governor Folsom's illegal logging of Guntersville State Park. In the 1970's local residents and the City government pressed EPA to crack down on a local chicken processing plant which had been seriously polluting the reservoir.

Internal TVA conflicts. TVA is a comprehensive resource-development agency organized into five Offices with different program areas. Each Office is independent from the others, and all are under the authority of a General Manager and the Board of Directors. In a way, the agency is really five agencies, all competing for budgets and attempting to influence the others. This leads to considerable organizational conflict.

These conflicts were encouraged by the land use forecasting process (Ginn and Wright, 1978, p. 1-2; Nelson and others, 1980, p. 6-7), previously TVA's main process for determining the use of its lands. In this process, certain programs within the Agency identified tracts suitable for their use. When a program desired to use the tract, all programs having designated the tract as suitable for

their uses would have the opportunity to review and oppose or consent to the proposal.

However, the conflicts persisted even when TVA attempted to carry out comprehensive plans for individual reservoirs. For example, according to one TVA staff member, during the planning for Nickajack Reservoir the recreation program and industrial development program were at loggerheads, and both criticized the Regional Planning Staff (RPS), which coordinated the project.

An additional example of internal conflict which surfaced during the Conners Island conflict, was the long-standing ideological difference between the Division of Agricultural Development (AGR DV) and the rest of the agency, particularly the Office of Power and the Division of Navigation Development and Regional Studies (ND&RS) (Selznick, 1966, pp. 181-213). AGR DV had always felt rural and agricultural interests were being short-changed in the regional development process by a general TVA bias toward industrial development. Throughout the Conners Island joint problem solving process the representatives from AGR DV felt (wrongly) that the process was rigged by RPS in favor of industry.

TVA and environmental conflicts in north Alabama. Since the late 1960's TVA had been actively trying to resolve environmental conflicts in north Alabama through collaborative land use planning (Wright, 1978, pp. 6-7; Ginn, personal communication). TVA had originally prepared master plans for its reservoir lands in north Alabama, but the area was rapidly becoming more urbanized, the land

was suitable for a wide variety of uses, and there were many new Federal, State, and local programs promoting such competing activities as wildlife management and industrial development. Consequently, numerous environmental conflicts were arising, much to TVA's concern.

The first conflict resolution effort was a cooperative planning process, essentially a form of conflict anticipation, by TVA, other Federal agencies, the State of Alabama, two Regional Councils of Government, and local planners. Each party identified reservoir lands it considered critical for its programs (wildlife management, industry, and power generation). Through the use of overlays the group determined that only a few areas actually were critical for conflicting uses and that careful design and siting could make otherwise conflicting adjacent land uses compatible. For the areas without conflicts TVA then revised its land use forecasts.

Following this regional approach TVA then focused upon one of the specific area in conflict, the Swan Creek area of Wheeler Reservoir (Ginn and Wright, 1978; Shipper, 1979). The State of Alabama and a local barge transportation enterprise both desired use of certain lands along the reservoir, and multiple program interests within TVA prevented agency agreement through the forecasting process on either of the requests. To resolve the conflict TVA initiated another joint land use planning process (which might be termed a joint problem solving effort in this case because the conflict had already developed). State and local agencies, TVA, and some members of the public all identified tracts critical and merely desirable

for their needs and came to a compromise which met each group's essential needs.

However, the public input had been limited, and TVA realized this had been an unfortunate omission. Later public opposition to TVA actions agreed upon in the planning process bore out this realization.

E. INTENSITY

The Conners Island Conflict had not reached a highly intense stage by the time TVA decided to act to resolve it. The precipitating event, the mayor's request to TVA, had occurred. During TVA response to this request the different offices had become aware of the matter, of course, and they had recognized some of the issues. The public also had become somewhat aware of the Mayor's request because it had been reported on the radio and in the newspaper. Therefore, the author would classify the conflict as being in the period of emergence, transformation, and proliferation of issues.

Most conflicts are not resolved at such an early stage. It is usually too early to tell if simple competitive tactics cannot work, if collaborative approaches can work, or even if the conflict will develop fully. The issues are too poorly defined and all of the parties have not yet emerged and stated their demands. Thus any action is likely to be premature and a waste of effort. Had the parties only been Guntersville and Claysville, probably no resolution would have been undertaken until later. However, TVA was interested in avoiding delays, had a real commitment to public

involvement, and was interested in developing new mechanisms of conflict resolution. Consequently they began early to develop a conflict resolution process, which is described in the following chapter.

CHAPTER V

RESOLVING THE CONFLICT--THE CONNERS

ISLAND EXPERIENCE

Resolving the Connors Island Conflict required TVA to carry out the the four activities noted in CHAPTER II:

- Determining TVA's goals, objectives, and authority;
- Assessing the conflict;
- Designing a resolution process; and
- Carrying out the process.³⁴

Chapter IV has discussed some of these activities already, particularly TVA's goals and objectives and the nature of the conflict as revealed by TVA's assessment. In this chapter the focus is how the activities were carried out.

Table 1 (adapted from a table prepared by Deardorff and in Hirsch, 1979a) is the chronology of events which took place during the resolution process.

³⁴One of the intriguing aspects of the Connors Island Experience is that it was done by persons unfamiliar with the existing literature on environmental conflict resolution. In addition, the seminal works by Susskind and others and Clark and Cummings, which were published in 1978 and 1981, respectively, would have been unavailable to TVA in 1978. Unfortunately, this unfamiliarity with the theory also means that the TVA staff and moderator did not carry out nor describe the process exactly as the theory would indicate. Consequently the author has had to reconceptualize artificially the TVA process to a certain extent to make it fit the theory. This subject is discussed further in Chapter VI.

Table 1
The Conners Island Experience
- Chronology -

Date	Event
March 28, 1978	Guntersville Mayor Robert L. Hembree formally requested (by letter to former Chairman Wagner) that Conners Island be made available for industrial development.
April 7, 1978	Former Chairman Wagner (by letter to Hembree) suggested joint study and planning effort prior to specific request for TVA land transfer. Referred matter to Division of Navigation Development and Regional Studies (ND&RS).
May 2, 1978	Staff of Regional Planning Staff (RPS) and Division of Forestry, Fisheries, and Wildlife (FF&WD) attended first meeting with Guntersville officials regarding joint planning effort.
July 19, 1978	First meeting of TVA Core Team to plan land use study.
July 31, 1978	Preplanning meeting of RPS and FF&WD staff with Guntersville officials to discuss study outline.
August 23/24, 1978	Staff of RPS traveled to Guntersville to inspect assessment area, take slides, and discuss the planning and citizen participation approach with city officials.
September 1, 1978	Staff of RPS met with officials to further discuss planning and citizen participation approach.
September 5, 1978	Second meeting of Core Team to delegate data support responsibilities.
September 13, 1978	Staff of Division of Agricultural Development (AGR DV) visited Conners Island to observe land use.

Table 1 cont.

Date	Event
September 22, 1978	Dr. David Weaver selected as process guide.
September 27, 1978	TVA Core Team visited the site with Dr. Weaver.
October 5, 1978	First public meeting regarding the Conners Island planning process. Formal identification of problems, issues, and interest groups begun.
November 2, 1978	Orientation meeting of Local Citizen Planning Team (LCPT).
November 9, 1978	Second meeting of LCPT (data presentation).
November 16, 1978	Third meeting of LCPT (data presentation).
November 30, 1978	Fourth meeting of LCPT (conclude data presentation).
December 7, 1978	Fifth meeting of LCPT (begin substantive plan input).
December 14, 1978	Sixth meeting of LCPT (complete plan input).
January 3, 1979	Chairman questions need for EIS on Conners Island referral.
January 11, 1979	Seventh meeting of LCPT (evaluation of plan alternatives).
January 18, 1979	Eighth meeting of LCPT (refine developmental policies).
January 29, 1979	"Conners Island Status of Planning" sent to Dr. Ring (TVA General Manager).
February 1, 1979	Ninth meeting of LCPT (review and prepare for second public meeting).
February 8, 1979	Second public meeting. LCPT presented its findings and recommendations to the public for review.

Table 1 cont.

Date	Event
March 24, 1979	Weaver submitted LCPT report to city of Guntersville.
March 27, 1979	Mayor's secretary reported LCPT report was received by Mayor Hembree.
April 5, 1979	Weaver's evaluative report of the citizen participation process received by staff.

Source: adapted from Hirsch (1979).

A. DETERMINING TVA'S GOALS, OBJECTIVES, AND AUTHORITY

TVA had to do very little in any formal sense to determine its goals, objectives, and authorities. The Conners Island conflict was similar to many others the agency had faced, and so it already knew what it wished to accomplish and what it could do.³⁵

Goals and Objectives

TVA's goals of making a wise decision and managing the conflict have been discussed in Chapter III. Basically TVA was interested in a wise decision that balanced development with preservation, an interest expressed right away in TVA's April 13 response to the Mayor's request (See Appendix B.) These goals were so well known to the agency staff that they required little other mention.

Likewise, the appropriate objective was rapidly apparent. Because the agency had recently discovered in the similar Swan Creek conflict over land use that a win-win solution was possible, it again wished to achieve that objective at Conners Island. In the terms of Figure 4 (Chapter III above, p. 41), from TVA's viewpoint this win-win objective was appropriate because TVA's assertiveness was high and the other parties appeared to be cooperative. The agency's stakes were low because it was not proposing an action in

³⁵This part of the process is poorly documented in TVA's files, and because it occurred so long previous to the author's research, the TVA staff involved did not recollect everything in detail. Consequently less than optimum information was available, and the author has had to supplement his research with some of his personal knowledge of TVA.

which it thereby had a vested interest and needed to defend, and it had the ultimate decision-making power, so it could reject any local requests if necessary. The parties' interests seemed to a large degree interdependent--all wanted preservation and development--and relationships were at least workable because the conflict was at such an early stage. The next step was to check out these assumptions with a conflict assessment.

Authority

When the Mayor's request arrived, TVA's authorities (both what it had to do and what it could do) appeared clear based on past TVA land management and planning. The major constraint was that TVA itself had to decide how its land could be used, so any joint process could only be advisory. Second, the decision about the land could only be made by TVA's Board of Directors, so any other staff members could not independently make definite commitments directly to the other parties. Third, the Administrative Procedures Act would prevent the TVA Board from meeting behind closed doors to decide the use of the land. Fourth, TVA had to abide by Federal laws concerning environmental protection, so it could not allow just any use of the land. Fifth, the agency had no direct control over privately owned land unless its use would affect the reservoir or TVA land adversely. Sixth, any release of land would have to be coordinated with State and areawide planning bodies (A-95 review) and would probably require the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

On the other hand, TVA had considerable latitude. First, it could engage in a variety of citizen participation processes and hire a outside process guide to run them. Second, it could sell the land, sell an easement, or grant an easement, and it could do so immediately or via a letter of assurance indicate that it would do so at some future time.³⁶ Third, it could exact deed restrictions upon the City as conditions for the release of the land.

Because these authorities were known so well to the agency no effort was made to discuss or confirm them, except that correspondence and internal memoranda on Connors Island were routinely referred to the Office of General Counsel.

B. ASSESSING THE CONFLICT

Having had a long relationship with Guntersville, and having been involved in similar environmental conflicts, TVA was already generally familiar with the issues and parties in the Connors Island conflict. However, TVA began to assess the conflict more systematically soon after receiving the Mayor's request.

The first step was to obtain a suitable assessor. At first TVA relied upon its own staff for this purpose, and they carried out

³⁶The agency generally held that issuing a letter of assurance, unlike the other actions, did not require an EA or EIS. The Director of the Division of Forestry, Fisheries and Wildlife (FF&WD) questioned this in an April 10, 1978, memo (Ripley, 1978) to the director of the Division of Navigation Development and Regional Studies (ND&RS), but no further discussion occurred until after the Local Citizen Planning Team completed its work. As it turned out, not resolving this disagreement was one cause of major delay in TVA's ultimately issuing a letter of assurance. This is further discussed in Chapter VI.

numerous activities. However, TVA later decided to employ Dr. David Weaver, a professor from The University of Alabama to assist with designing and carrying out the resolution process, and he helped TVA assess the conflict, as well.³⁷

TVA relied on its staff in two ways. Past TVA land use planning processes had been led by the Regional Planning Staff (RPS), part of the Division of Navigation Development and Regional Studies (ND&RS), so the Mayor's request to TVA was referred by the TVA General Manager to RPS. Also, the Connors Island area had been tagged in the forecast process (described above) by ND&RS for future industrial use. However, Connors Island also had been tagged by the Division of Forestry, Fisheries, and Wildlife (FF&WD) for recreational use, so FF&WD's Recreation Program was asked by RPS to assist. Therefore, on May 2, 1978, the Chief of RPS and the head of FF&WD's Recreation Program visited Connors Island to discuss with Guntersville's Mayor the City's request and possible methods of resolving the conflict over the best use of the land (Gober, 1978).

As Table 1 shows, there were also several subsequent assessment trips by RPS to Connors Island on July 31, August 23/24, and September 1 to view the area, meet with the Mayor and City Planner, and talk to local citizens (Deardorff, 1978a; Adams, 1978). Staff of FF&WD also made the July 31 trip.

³⁷Dr. Weaver's selection is described in a later section.

The second way TVA staff were used to assess the conflict was through the establishment of a multi-disciplinary Core Team. Early in May 1978, RPS requested all TVA staffs with interest in the Conners Island land to comment on the City's request (Ginn, 1978a). Based on these comments, on July 19 RPS convened the first meeting of the nine-member agency-wide Core Team to discuss possible parties to the conflict and what information would be needed to understand the issues (Ginn, 1978b). Based on that meeting and a second meeting on September 5, the Core Team decided that the following data should be obtained to assess the regional and local natural environments and the socio-economic context of the area (Deardorff, 1978e):

- by Forestry, Fisheries, and Wildlife (FF&WD)
 - threatened and endangered species
 - wetlands
 - soils and land capability
 - fish and wildlife
- by Navigation Development and Regional Studies (ND&RS)
 - existing land use
 - transportation facilities
 - utilities
 - demographic and economic data
- by Agricultural Development (AGR DV)
 - prime agricultural land
- by Property and Services (P&SVS)
 - TVA land ownership and leases

In addition to gathering these data on the issues, RPS, FF&WD, and the Core Team began to identify the other parties to the conflict. This began at the above-mentioned meeting with the Mayor on May 2 and continued at the other meetings throughout the summer. Most of the identification was theoretical; that is, who ought to be involved in the conflict. This was based on TVA's and the City's understanding of the probable issues; their knowledge of parties to previous similar conflicts in the region; the local governmental jurisdictions; and local clubs, organizations, interest groups, and contacts of TVA staff. However, some letters being written to TVA on the subject of Conners Island and articles in recent issues of the local newspaper revealed the identities of actual opposition to and supporters of development of the site.

The Core Team met numerous times from September on (too often to list in Table 1) and as noted in Table 1, toured the site together on September 29 (Deardorff, 1978g). The representative of AGR DV also visited the area on August 13 (Henderson, 1978).

The RPS staff realized early on that a major aspect of the assessment would be some sort of introductory meeting to inform the public and solicit their input. (See references cited above in this section and Ginn, 1978c.) Dr. Weaver (1979, pp. 4-5), who assisted RPS in designing the meeting, and RPS identified five general functions for this meeting:

- 1.) Explain TVA's community development role, and motives for operating the citizen participation procedure, including the land transfer request.
- 2.) Explain the projected mechanism for community involvement.
- 3.) Allow maximum opportunity for the expression of public opinion on future development of Conner's Island.
- 4.) Identify potential community representatives for selection for the planning team.
- 5.) Make the public sense their involvement in the planning process.

Because this first meeting was to be used to learn the views of the public regarding development of Conners Island, those attending needed to be representative of the potential interest groups. To achieve this, during September the Core Team members drew up lists of names of people who should be invited and made followup telephone calls to local contacts in their professional fields. As additional advertising, the meeting was announced on the local radio station and in the local newspaper (Deardorff, 1978g).

The public meeting was held at 7:30 p.m. on October 5 in the Guntersville Town Hall and lasted approximately two hours (Weaver, 1979, pp. 6-7; Deardorff, 1978f; Transcript of first public meeting). In attendance for TVA were Dr. Weaver as Moderator, Jeff Deardorff of RPS as TVA coordinator, and Jean Allen and Billy Carroll of FF&WD. About 100 local people attended. Deardorff opened the meeting by explaining its purpose. He then introduced Dr. Weaver, who established rules of order to keep the meeting flowing smoothly, encourage all to participate, and discourage disruptive persons. These rules of order are listed in Appendix C. Steve Cotney, Guntersville City Planner, explained the City's needs

for developable land and economic growth, and then the floor was opened for comment.

Twenty-seven different persons made comments, some several times. As Weaver (1979, p. 7) noted, opinions were deeply divided. There were strong support of and opposition to industrial development, as well as advocacy of other uses such as agriculture and recreation. Blacks were present but said little, though they applauded those speaking in favor of industrial development. Two additional dominant themes were Claysville's historical mistrust of Guntersville and the locals' general mistrust of TVA. At the start and end of the meeting Dr. Weaver encouraged those not speaking to write to TVA if they had comments.

Based on all of the pre-meeting study and the comments made at the meeting or submitted to TVA in writing, Dr. Weaver, RPS, and the City identified the specific parties to the conflict discussed in Chapter IV (Deardorff, 1978h). According to Deardorff and Weaver (personal communications), TVA at first recognized only the County, the Region, Claysville, Agriculture, Sportsman Conservation, Industry, and Natural Systems Preservation. The Mayor felt this group would be biased against the City and recommended adding the City, Minority Interests, and Recreation. (Part of the Mayor's concern was the particular agricultural representative, as noted below.)

C. DESIGNING A RESOLUTION PROCESS

Based on TVA's determination of its goals, objectives, and authorities and the preliminary assessment of the conflict, it appeared early on to RPS that a collaborative land use planning process similar to that used in the Swan Creek Conflict was appropriate. RPS realized, though, that better input from the public than in the Swan Creek Conflict was needed to ensure that all interests were involved and to create strong public support for the final decision. (See Deardorff, 1978b, for an indication of some of RPS's thinking on the subject.) Consequently RPS decided that a multidisciplinary land use planning process involving structured public input was needed. Within the framework of Chapter III (pp. 52-54, above), such a process would be termed joint problem solving, very similar to the process led by FORUM to develop the plan for San Francisco Airport, and the Special Area Plans done in Washington and Oregon. Elaboration on this general idea, which was first broached in TVA's April 7, 1978, response to the Mayor, and then agreed to by the Mayor in the May 2 meeting (Gober, 1978), took a number of weeks and considerable discussion among the TVA staff and with the City.

As ultimately designed, the process comprised the steps shown in Figure 8, which has been constructed according to the description of the process contained in various TVA documents (Adams, 1978; Deardorff, 1978a,d; Ginn, 1978c; and Weaver, 1979, pp. 5-6). (The Assessment Process, though already discussed, is shown in the figure

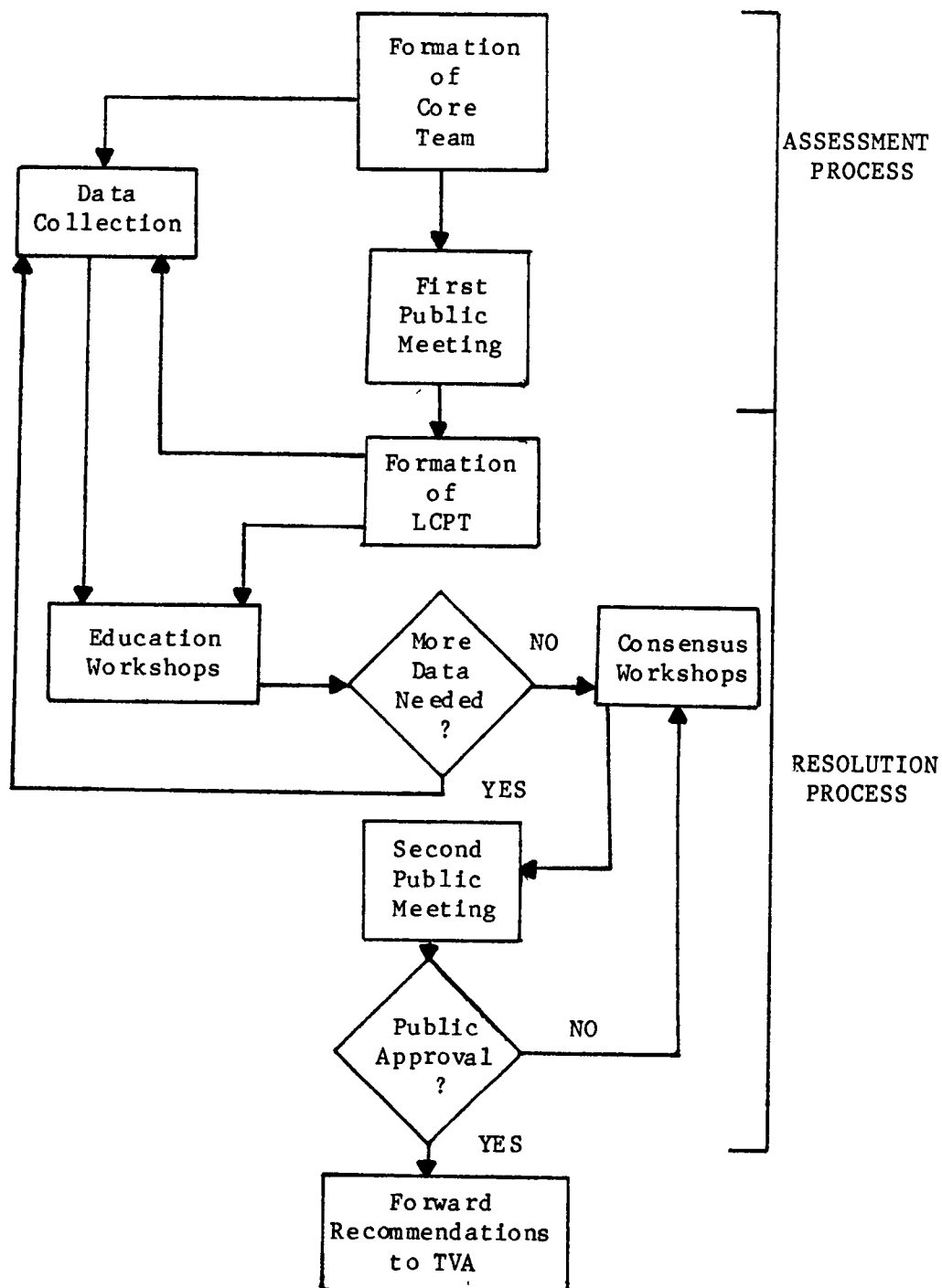


Figure 8. The TVA Joint Problem Solving Process.

Source: Constructed by the author based on Adams, 1978; Deardorff, 1978a,d; Ginn, 1978c; and Weaver, 1979, pp. 5-6.

for completeness and because the data collection step was part of both processes.)

To represent the parties previously identified by the conflict assessment, a Local Citizen Planning Team (LCPT) would be formed. Guided by Dr. Weaver, the LCPT would participate in a series of guided workshops with four functions (Weaver, 1979, p. 5):

- 1.) Articulate key issues.
- 2.) Provide a forum by which polarized interests would be mediated.
- 3.) Permit assessment of alternative solutions to problems.
- 4.) Facilitate the achievement of consensus opinions.

In the first few workshops the Core Team would present its data to the LCPT to educate them. The later workshops would then be used to articulate the issues and develop and evaluate alternative land uses for the Conners Island area. The only participants at these workshops were to be the LCPT, but others would be welcome as observers, and the meetings would be announced to the press.

The LCPT and moderator would then have a second public meeting (Weaver, 1979, p. 6) to outline the conclusions and recommendations of the LCPT and to permit the public to question the LCPT and express opinions on the findings. The recommendations of the LCPT would then be forwarded to TVA for decision.³⁸

³⁸If needed, the LCPT would hold additional workshops to consider any objections raised at the second public meeting. Further public meetings would also then be held to review the LCPT's work.

RPS, the Core Team, Weaver, and the City had determined that the first public meeting would be October 5, 1978, so that the entire process could be completed by January 1979.³⁹

D. CARRYING OUT THE RESOLUTION PROCESS

Once TVA and the City had agreed upon the collaborative joint problem solving process described in the previous section, they began to carry it out. This section describes how the nine-step process elaborated in Chapter III was accomplished.⁴⁰

Selecting a Process Guide

Past TVA land use planning processes had been led by RPS. However, state and regional agencies, environmental groups, FF&WD

³⁹It is important to note that this process was developed only after two earlier versions had been suggested. The first version (Deardorff, 1978d) called for an intermediate public meeting at which the LCPT would present alternatives to the public for evaluation, but the RPS came to realize that this could not be done well at a mass meeting. A second version called for two weeks of intensive public workshops after the introductory public meeting. At these small-group workshops, which would in aggregate involve numerous people, the public would identify issues, goals, and development objectives to lay the groundwork for developing an agreed-upon development concept plan. The plan itself would be developed by a City-TVA technical planning team. Some of the workshop attendees would be made members of an advisory committee which would be the liaison between the technical planning team and interest groups desiring to provide input (Ginn, 1978c). According to Deardorff and Weaver (personal communications), however, this format was rejected because the Core Team and Dr. Weaver realized that it would be too demanding on both TVA and the public.

⁴⁰References for statements made in this section consist of the tapes of and notes of the meetings (Taylor, 1978a-f,h) unless another source for a statement is cited. Because the text does not discuss the meetings in the order in which they occurred, for the readers' convenience Appendix D contains a table summarizing them.

(the environmentalist interests within TVA), and AGR DV (the farmland preservation interest) had long believed that RPS was biased by being within the industry-oriented Division of Navigation Development and Regional Studies (ND&RS).⁴¹ For the Swan Creek Process RPS and FF&WD had discussed retaining a neutral outsider as a facilitator to eliminate even the appearance of bias. They decided that coordination by TVA would be sufficient and help keep the process low key (Wright, personal communication).

For Conners Island, though, RPS felt an outside facilitator would be proper (Deardorff, personal communication). First it would prevent internal TVA conflicts and biases from dominating the process. Second, it would also prevent Gunterville's bias from dominating the process. The study was really a joint effort of the City and TVA, but if TVA did not lead the study, TVA certainly did not trust Gunterville to consider fully the impacts on the environment and Claysville or to live up to any promises it might make, based on past history. Third, TVA suspected that many of the parties thought TVA was biased (some feeling the bias was toward industry, others toward preservation) and would not trust TVA to

⁴¹There is no complete history of TVA's land use planning decisions (Ryan, 1976, tells some of the story) so it is not possible to tell even whether development "won" more conflicts than preservation, let alone whether decisions were made on justifiable grounds. Thus the charges of bias cannot be proved or refuted. However, based on his tenure with them the author believes RPS was not biased. The upper levels of management were, of course, by definition in favor of development, as were most community leaders in the Valley. Thus any bias was not due to RPS (ND&RS management apparently felt RPS was biased in favor of environmental protection) but to forces beyond control of RPS (and even TVA).

play fair. Fourth, TVA had little experience with facilitation and conflict resolution among lay citizens. TVA had dealt with the public for years but generally through local governments and industrial development groups as representatives. Only in the 1970's had explicit citizen participation been required of governmental agencies in environmental decision-making, and even that had been formal public hearings. Therefore, TVA could learn from observing an experienced process guide and develop the expertise to improve its own facilitation efforts. Fifth, and most important, TVA wanted all of the parties to participate fully in the process, but if TVA led, everyone else might believe the decision had already been made.

Upon determining that an outside process guide was needed, RPS began in August 1978, to search for one.⁴² They and the Core Team agreed that the process guide should not be connected professionally or socially with any of the parties, be able to relate well to all the parties, have experience with conflict resolution and group processes, and have a background in urban planning or a similar field (Deardorff and Nelson, personal communications). After interviewing a number of persons, in September RPS retained via a personal services contract Dr. David Weaver, professor in the Urban and Regional Planning Program of the Department of Geography and Geology

⁴²RPS would continue the leadership role within TVA, coordinating the work of the Core Team and acting as liaison among the City, process guide, and the agency.

at The University of Alabama. He had been recommended by a fellow professor in the Department who had taught one of the Core Team and had been asked by that member for recommendations. The contract, the normal TVA procedure for hiring temporary consultants, was to expire no later than January 31, 1978. Duties under it included moderating the conflict resolution process, generally advising TVA on the citizen participation, attending meetings of the Core Team, and submitting an evaluative report on the process. A copy of the contract is contained in Appendix E.

Ensuring That Each Interest Group
is Adequately Represented

Between October 6 and 27, the LCPT members were chosen by RPS, Dr. Weaver, and Mayor Hembree to represent each of the parties which had been identified during the assessment process. In addition to being a formally recognized spokesperson for an interest group or being particularly knowledgeable regarding an area of interest, each member was to be able to communicate his or her feelings with sensitivity to other people's concerns and with receptivity to other points of view (Press Release for LCPT Workshop No. 1, 1978).

Individuals were identified and selected in numerous ways (Weaver, 1979, pp. 7-8; Deardorff, Hembree, Core Team staff, and LCPT members, personal communications). Representatives of the Claysville Community, Sportsman Conservation and Industry were selected based on their comments at the public meeting and their

affiliations. The Claysville representative was president of the Claysville Community Club. The Sportsman Conservation representative was president of the local Ducks Unlimited Chapter. The Industry representative was chairman of the Guntersville Industrial Development Board. The representative of the Region and Natural Systems Preservation (both interests being represented by the same person), President of the Alabama Conservancy, was selected because all of FF&WD's contacts in the area mentioned him as an articulate and fair environmentalist, and because he lived in Huntsville and represented a statewide group. The representative of Agriculture was selected by TVA from a list of persons submitting by AGR DV's professional colleagues in the county.⁴³ The newly-elected County Commissioner for the part of the County containing Connors Island was selected by TVA as the representative of the County, and a newly elected City Councilman who along with the Mayor had been pushing for the development of Connors Island was selected by the Mayor as the representative of the City. The representative of Minority Interests, a Black woman who was on several other Boards and

⁴³The Mayor had objected to a representative of Agriculture suggested by TVA on the basis of that person's comments at the meeting and his being one of the best-known agricultural spokesmen in the area. This person had previously been a very outspoken opponent of the mayor on recent annexation and industrial development, and the Mayor believed that he would not be sensitive to others' concerns and points of view (Hembree, personal communication).

Committees, was also selected by the Mayor.⁴⁴ The representative of Recreation was selected by TVA, but because the Mayor had suggested that interest group after the public meeting, TVA had been unable to do any research on local commercial recreation. Therefore the TVA recreation program had to request from the Mayor's office the names of suitable people, one of whom they selected.

As final checks on the suitability of the representatives, at the beginning (and end) of the first meeting of the LCPT Dr. Weaver asked if they would all be able to attend all the meetings and if anyone else should be added. They all said they could attend and no one had any suggestions for other members. Then Weaver asked each person to discuss the interest he or she represented. At this point the representative for Recreation revealed that he had worked as an industrial recruiter for the Alabama Development Office for thirty years, and that industrial development was his main concern on the committee. Also, the Industry representative revealed that he was one of Guntersville's leading realtors. Five of the nine participants revealed that they supported industrial development on the site.

These revelations showed Weaver and Deardorff that in fact all interests were not adequately represented, that additional representation for agriculture and conservation interests was needed

⁴⁴RPS and the facilitator had also been concerned about the need for representation of minorities such as blacks, women, the elderly, the poor, groups traditionally disenfranchised from decision-making process. However, neither the RPS nor Dr. Weaver had knowledge of local spokespersons for these groups.

(Deardorff, personal communication). During the week before the second meeting they arranged to have a tenth member added to the LCPT to represent Soil Conservation. He was selected by TVA's AGR DV staff based on recommendations of the local Soil Conservation Service. As it turned out, he also strongly supported industrial development.

Confronting Fundamentally Different Values and Assumptions and Identifying the Key Issues

Before the LCPT could move toward solving its problem, it had to confront its members' different values and assumptions and identify the key issues. The first public meeting (described above), and the first five LCPT meetings and part of the sixth were primarily devoted to these parts of the problem solving process.

Confronting different values, however, is often difficult due to the inability of people to articulate deep-feelings and trusting those with different values. To help the LCPT members articulate their feelings and develop trust, Dr. Weaver attempted to structure the discussion in seven ways (Weaver, 1979, pp. 25-26):

- 1.) To facilitate the interaction of group members with each other rather than with the moderator.
- 2.) To encourage group members to pursue lines of reasoning through non-directive probes (e.g. "Would you care to say a little more about that . . .", "In what way . . .", "I'm not sure I understand . . .").

3.) To maintain neutrality by allowing equal time for opposing views, avoiding use of loaded terms, and avoiding opinion giving.

4.) To focus discussion on relevant matters by discouraging tangential conversation.

5.) To maintain an attitude of interest and concern without being patronizing, condescending or sarcastic.

6.) To mediate any personal disputes which might occur between group members.

7.) To avoid voting, which would polarize the group into winners and losers, and strive for consensus.

For the most part he moderated discussion in a non-directive way, establishing the subject, getting the conversation started, and then trying to keep the group generally on the subject. This kept the interaction informal, which helped build trust. (It also generated more information than a more direct style would have done.)⁴⁵

In addition to this continual style of moderation, Dr. Weaver explicitly used the first LCPT meeting to introduce the LCPT members to one another, have them state their desires for the use of Connors Island, and discuss any other items of personal concern. It was clear that the members had different values and that some were openly skeptical about the need for the LCPT.

⁴⁵Of course, this trust-building style of moderation lasted the entire time, not just for the first six meetings.

To help the LCPT members establish a common frame of reference instead of approach the issue with different values and assumptions about the area and also to identify key issues, during the second, third, and fourth meetings the Core Team members presented the information they had collected on the area's natural and socio-economic environment.⁴⁶ Many of the LCPT members contributed strongly in this information exchange, providing information relevant to their own interests.

During the fifth meeting each LCPT member was again asked to discuss his or her views on the proper use of the site. The LCPT identified 12 key issues (Taylor, 1978e):

1. Protection of wetlands and fish spawning grounds,
2. Impact on Claysville,
3. Dredging and disposal of spoil,
4. Protecting agriculture,
5. Wildlife,
6. Water and air pollution,
7. Number of employees and wages,
8. Control of development,
9. Need for associated facilities (roads, utilities, housing, etc.),
10. Claysville's role in planning and development,
11. Guntersville's role in planning, and
12. Impact on Guntersville.

⁴⁶During the first meeting Weaver also asked the LCPT what types of data they thought would be useful in understanding the potential uses of Connors Island so that the Core Team could try to obtain these data for the presentations.

Each issue was discussed in depth. If it related to the use of specific land, that land was indicated on the map by concerned member of the LCPT. Then in the sixth meeting the issues were divided into two groups: those relating to the most desirable uses of land in the Conners Island area and those relating to control of any land which TVA might release.

Generating a Sufficient Number of Alternatives

As noted above, the LCPT divided the issues into two groups, those dealing with desirable land use and those dealing with control of the land, and they developed several alternatives for each of these two concerns.⁴⁷ Although from the start of the process each member favored certain uses for the site, and there was considerable discussion of different uses, the systematic efforts to develop an acceptable range of alternatives were begun in the fifth meeting, after the group had been able to consider all the data provided by TVA.

During the fifth meeting several alternative land uses for the Conners Island area were suggested--a site for one or two large industries, an industrial park with many small industries, a private motel/resort/golf course complex, an active farm, a public recreation area, and no change. After reaching a tentative decision

⁴⁷Alternatives of control are discussed in the section Securing Commitments below.

in the fifth meeting favoring industrial use of most of the site, the group then began to consider alternative designs, including three places where the barge terminal should be located, and what the industrial site boundaries should be to preserve agricultural land, wetlands, and waterfowl habitat. A topic of particular interest was the improvement of U.S. 431 through Claysville. The group discussed whether the road should simply be widened in its present alignment through the business district or rerouted nearer the industrial site for better access. (During the seventh and eighth meetings the LCPT also discussed what should be done to improve the existing access roads to the site. Some suggested new four-lane roads, while others suggested widening but not four-laning the existing roads.)

The group was to choose among its alternatives and actually map the preferred land uses during the sixth meeting but was unwilling to. (This is discussed further in the next section.) Therefore at the sixth meeting Dr. Weaver, Deardorff, and Cotney agreed that TVA and Guntersville would draw up five alternative land use plans for the group to adapt as desired.⁴⁸ At the seventh meeting all of these alternatives were discussed. They all showed most of the site as industrial, but varied in the terminal site (on the west, south, or east), amount of industrial land vs. protected areas, alignment

⁴⁸Deardorff (personal communication) stressed to the author that the alternatives were simply scenarios consistent with the LCPT's criteria (discussed below) and were not intended to limit choice but to stimulate thought and discussion.

of U.S. 431 and type of development along it (strip vs. cluster), and other land use in the area.⁴⁹

Agreeing on the Boundaries and Time
Horizon for Impact Assessment

The boundaries for impact assessment were among the first subjects discussed by Steve Cotney (the Guntersville City Planner) and the TVA Core Team in planning the process (Deardorff, 1978a). TVA, of course, as a regional agency was oriented to the larger context of the development of Connors Island, and the City felt that other lands such as the airport, Buck Island to the east, and all of Claysville were significant, as was the realignment of U.S. 431, which extended through Claysville. Thus on July 31 TVA and the City agreed that the "assessment area" for which land use would be a concern would include all of the area shown in The Development Concept in Appendix F. Data on the county and region would also be used to set the socio-economic and natural contexts.

The LCPT, on the other hand, was reluctant to deal with any area beyond the TVA land and McDonald Estate. They believed that because they had no control over the larger area, to plan its land use would be a waste of time. They also felt uncomfortable making decisions about their neighbors' land. Finally, considering the larger area made the matter much more complex.

⁴⁹The alternatives were drawn roughly and on "yellow trash" tracing paper so that the LCPT would not view the drawings as final and be reluctant to alter them. They were not intended to be preserved and apparently have been discarded, so the author cannot reproduce them and does not know exactly what they contained.

Although the LCPT frequently discussed how much of an area they should deal with, they vacillated, and not until the seventh meeting were Cotney and Deardorff able to convince them completely that they should make recommendations for the entire assessment area. Deardorff pointed out that doing so would favorably impress the TVA Board with the LCPT's concern for the region and not just its own back yard, so to speak, and that it would be an opportunity to influence the State in its decision on improving U.S. 431. Cotney added that an industrial development of the size for which the LCPT was planning would have a major impact beyond the site.

The time horizon for impact assessment was not an explicit concern until late in the process. The Core Team, Cotney, and Weaver, of course, understood that planning looks at a relatively long period. The LCPT knew they were taking actions to benefit their children, and 20 year population projections had been presented by the Core Team. When the LCPT finally decided to consider the larger area, though, they began to discuss induced changes such as shopping centers along the new U.S. 431 and increased population by the year 2000, and so they agreed that a period of about 20 to 30 years was a good time horizon.

Weighting, Scaling, and Amalgamating Judgements About Impacts

To evaluate the alternative land uses and designs suggested in meetings 5 and 7, the LCPT estimated how well each one met four criteria: preserving prime agricultural lands, preserving wetlands and wildlife habitat, minimizing impact on Claysville community, and

expansion and improvement of economic opportunities.⁵⁰ Though no formal weighting, scaling, or amalgamating systems such as those described in Chapter III were used, the group did follow a kind of de facto hierarchical process in its discussion of the alternatives.⁵¹

The most heavily weighted criterion was clearly the expansion and improvement of economic opportunities. Because industry would aid the economy more and create more high-wage jobs than any other alternative, the LCPT agreed in the fifth meeting that most of the site should be used for industry, with some sensitive areas preserved.⁵² However, preserving prime agricultural lands did remain paramount to the agricultural representative, and he never did feel happy about the group's decision, though he accepted it.⁵³

⁵⁰These criteria were articulated as such only in the eighth meeting, and evaluation occurred during the fifth and seventh meetings. However from the notes and tapes of the meetings it is clear that the LCPT was indeed using these criteria for evaluating.

⁵¹No environmental impact assessment process was done by the LCPT. They all just used their experience and common sense to make estimates. Probably this was the case because no specific industry whose impacts could be calculated was planning to locate on Conners Island at the time. In a sense the information compiled by the TVA Core Team was part of an environmental assessment because it assisted the LCPT in understanding the features of the environment likely to be affected and in weighting the importance of impacts.

⁵²During the seventh meeting the Claysville representative made a motion that the site as designed be designated by the group as the land to be used for industry. The motion was seconded by the representative of industrial development and passed unanimously.

⁵³Actually, this member agreed with the group at first, but after the meeting he reread the information presented by TVA's AGR DV staff member and in later meetings expressed his displeasure.

Once the dominant type of land use had been established, the LCPT used the other three criteria to evaluate the alternative designs. They recommended the west (deep water) side of the industrial area be used for the terminal site to preserve the fish spawning areas, wetlands, and wildlife habitat elsewhere. They proposed that U.S. 431 be rerouted around Claysville to avoid harming the commercial area along the existing roadway. They advocated that some land be left for small farms between the industrial site and the residential western part of Claysville, and that the industrial site continue to be used for farming until developed.

Some of these designations were made during the fifth meeting, at which time several of the LCPT members "designed-in" the areas they wished preserved, and other designations were made in the seventh meeting, during which the LCPT marked up the alternatives prepared by the Core Team and Guntersville. In Appendix F, the LCPT report "Connors Island Development Concept," the Development Concept Plan shows the final result of this design process.⁵⁴

Establishing Appropriate Compensatory Payments or Mitigation Measures

Mitigation was one of the major concerns of the LCPT. After all, their criteria for adequacy of a proposal were that it have as little negative impact on Claysville, the wetlands and wildlife habitat, and prime agricultural land as possible. Thus most of the

⁵⁴The land use categories are described in the text of Appendix F.

design modifications of the industrial site were in fact mitigation of its impacts.

Two other mitigation measures were recommended by the LCPT in their report (Appendix F). First, only industries with the least negative impacts on the natural environment should be allowed to locate on the site. Second, vehicular access to the site should be provided by improving existing roads in ways avoiding acquisition of right-of-way and displacement of families. Of course, the LCPT also expected Federal and state environmental protection regulations to play a large role in mitigating negative impacts.

Two examples of compensation for unavoidable negative impacts were also recommended (Appendix F). First, to counteract the loss of farmland, TVA should assist those farming the land designated on the plan as "agricultural" through the agency's Rapid Adjustment Farm program. Second, to make up for economic losses suffered by property owners whose land would be taken or affected in the event of realigning U.S. 431, the state should not impose access controls. This would allow those property owners to take advantage of the economic opportunities created by the new highway.

Securing Commitments

Implementation of the LCPT's Connors Island Development concept would involve two separate groups of commitments. First, TVA would have to make some of its land available for industrial development, while retaining the remainder of its lands for preservation of the

natural environment. Second, actions would have to be taken to develop (or preserve) the privately owned backland as recommended.

During the third meeting, when TVA's industrial development staff was present, the LCPT had begun seriously discussing how the TVA land should be controlled should TVA release it. The representatives of Gunter'sville, Recreation and Industry pushed for TVA's transferring the land to the City. The Claysville representative and others preferred for TVA to retain and develop the site, sell it to industry directly, or transfer it to the county, or even to Claysville if it incorporated and so could legally control the site. No decisions were made at the time, and the subject was deferred.

In the sixth meeting alternatives for ownership were discussed again. Each person was asked to give his or her opinion on ownership and control of the site, and the same alternatives were suggested. However, the representatives of Industry, Gunter'sville, and Recreation, the main proponents of industrial development and the most informed on ownership matters, were absent, and a number of questions were asked about the deed restrictions, joint ownership, and what other control TVA could have. Therefore Weaver and Deardorff agreed to have a staff member of TVA's Division of Property and Services (P&SVS) attend the next meeting to discuss alternative methods of land ownership and control.

The P&SVS staff member was unable to attend the seventh meeting, but the group began to discuss alternative land uses further, regardless. In the middle of the meeting the representative of Industry abruptly made a motion, seconded by the

representative of Recreation, that the LCPT recommend that the site be transferred by TVA to the City of Guntersville. Weaver and the Claysville representative wanted to defer any action until after the P&SVS staff could attend, and Weaver attempted to dissuade the LCPT from a vote. However, the representative of Industry insisted that since the motion had been seconded a vote was required. The group agreed and passed the motion 5-4. The representatives of Industry, Minority Interests, Recreation, the County, and Sportsman Conservation voted for the motion, and the representatives of Agriculture, Claysville, National Systems Preservation, and Soil Conservation voted against. However, Weaver miscounted the vote and stated that the motion failed. The group then took the above-mentioned vote on the Claysville's representative's motion that the LCPT recommend the proposed site for industrial development.

During the eighth meeting the LCPT again discussed methods of control. Three alternatives were suggested:

- Transferring the TVA land to Guntersville, to be administered by the Guntersville Industrial Board.
- Transferring the TVA land to Marshall County with advisory committees of both Guntersville and Claysville residents; and
- Transferring the TVA land to a separate "Connors Island Industrial Authority" established by the State Legislature to administer the site, giving both Guntersville and Claysville representation.

After lengthy discussion led by the representative for Commercial Recreation, whose work for the Alabama Development Office (ADO) for 30 years had given him intimate familiarity with the subject, the group chose the first alternative. A County Industrial Board did not exist, and previous ones established across the state in the 1960's had been ineffective, largely due to competition among the cities within the counties. Special authorities had been successful in other areas, notably the Huntsville Jetport industrial area, but they had to be established by state legislative action, which would take time. Also, the authority would have to be active in day-to-day management of the site, which would be a financial and administrative burden bearable only for very large projects.

The group also agreed that the TVA land should be transferred to the City forthwith, so that the City could begin to make any site preparations needed and also because the ADO had a policy of not advertising or helping prepare a site which was not under the control of a city or an industrial board.

The LCPT secured no commitments for implementing the development of the backland. The group had not been intended to tackle the issue of ownership of the McDonald Estate. Marshall County did not have land use controls or other plan implementation tools such as a capital improvements program, so there was no way to control or guide the development of nonannexed land. Thus with regard to the development of the backland the plan was totally advisory.

Holding the Parties to Their Commitments

As noted above, the LCPT plan was only advisory, and thus there were no commitments made to which any parties could be held. However, the LCPT did recommend two deed restrictions on the transfer of any TVA property to Guntersville to ensure that the TVA property and McDonald Estate would be used for clean, minimal-impact industry only (Appendix F). One deed restriction was to require the committee of five Claysville residents advising the Guntersville Industrial Board in its industrial recruitment efforts. Though they would have no voting power on the Board (only City property owners could be voting members) they would be involved in the recruiting process, and any industry knowing of Claysville's opposition would certainly go elsewhere rather than fight it.

The other recommended restriction was that if any transferred TVA land designated for industrial use were ever used for any other purposes, then the land would revert back to TVA. In addition, of course, Federal and State environmental laws and regulations would apply to any proposed industry.

The LCPT discussed several times whether it should recommend that the county adopt land use controls of some sort. Deardorff, Cotney, Weaver, and the representative of National Systems Preservation urged such a recommendation, but the rest of the LCPT remained opposed. They would not even recommend that the county simply study the possibility of controls.

Although the LCPT's recommendations were only advisory to TVA, the conflict resolution process was linked to the agency's

decision-making process. The LCPT would prepare a report of its findings, and this report would be given to Mayor Hembree for guidance in making a request to TVA for land. The Director of the Division of Land and Forest Resources would coordinate an agency-wide review of this request as input for the Director. The LCPT report would also be reviewed by the TVA Core Team. The Director, in turn, would recommend action to the General Manager and Board of Directors, who would make a decision.⁵⁵

The recommendations for the backland were tenuously linked to several decision-making processes. First, the suggested alignment of U.S. 431 could be input into the State's ongoing planning for the road improvement. Second, developers could use the plan as a guide for their projects in the area. Third, Guntersville had a comprehensive plan which included the area, and the recommendations could be used to update that plan. However, the LCPT or the State, developers, or City did not state at the outset, as had TVA, that they would consider the plan. The LCPT also discussed their hopes that State and Federal monies could be obtained to develop the industrial site and access.

⁵⁵The LCPT actually was not aware of the details of the full procedure, only that TVA would consider their recommendations.

PART IV
EVALUATION AND
RECOMMENDATIONS

CHAPTER VI

EVALUATION AND CONCLUSIONS

A comprehensive evaluation of the Conners Island Experience should answer questions about three subjects (adapted from Rossi, Freeman, and Wright, 1979, p. 33):

- Process Planning--Was the conflict resolution process designed in conformity with its intended goals, and were the chances of successful implementation maximized?
- Process Monitoring--Was the joint problem solving process carried out in the intended fashion?
- Effects--Did the conflict resolution process have its intended effects? What other effects, intended or not, did it have? Had the process not been carried out, would the same effects have resulted from other causes?

This chapter presents the author's answers to these questions.

A. PROCESS PLANNING

Planning the conflict resolution process constituted determining TVA's goals, objectives, and authority; assessing the conflict; and designing a resolution process. In general, TVA did these fairly well, but there were several flaws.

Determining TVA's Goals, Objectives and Authority

In most respects TVA did a good job of determining its goals, objectives, and authority. Of course, the agency generally

knew them already, and thus very little actually had to be determined specifically for the Conners Island Experience. However, one important authority (actually constraint) which should have received more consideration was whether TVA had to prepare an Environmental Assessment (EA) if it issued a Letter of Assurance to the City. In previous cases the Board had said one was not needed, but the Manager of the Office of National Resources (ONR) suggested in an April 10 memo to the Division of Navigation Development and Regional Studies (ND&RS) that an EA might be needed (Ripley, 1978). The Core Team apparently never reached consensus on this, (it really was not their decision) nor requested a directive from the Board. Then late in the process, on January 3, 1978, the new Chairman, S. David Freeman suggested an Environmental Impact Statement (EIS) might be needed, and eventually the manager of TVA's newly-formed Environmental Quality Staff (EQS) called for an EA. As things turned out, this equivocation was important because it ended up greatly delaying TVA's response on the Mayor's request.⁵⁶

Assessing the Conflict

The Regional Planning Staff (RPS) and the Core Team assessed the conflict well, with one minor exception. From past experiences and in their trips to Guntersville, meetings with the Mayor and City Planner, meetings of the Core Team, and the first public meeting they developed a good understanding of the scope of the conflict,

⁵⁶This is discussed more fully below in PROCESS MONITORING.

issues, and parties. The public meeting was particularly valuable. It showed how salient the annexation issue was and how poor relationships were between Claysville and Guntersville and between everyone and TVA. Had TVA not realized these factors, the problem solving process would surely have been much more turbulent and full of conflict. Also, the long-standing relationship with Guntersville gave TVA a good understanding of problems with past land transfers which would have to be avoided.

One of the important elements of assessing the conflict was identifying all of the interests at stake. The Core Team, Guntersville, and Dr. Weaver identified the obvious local interests. They also identified the importance of the decision to the region, youth, Blacks, future residents, and the poor, groups which either have been traditionally disenfranchised or for whom benefits and costs cannot be easily computed.

The one mistake made in assessing the conflict was RPS's early neglect of the interest of the Division of Agricultural Development (AGR DV). In May 1978, when RPS first contacted the TVA programs with land management responsibilities, AGR DV was not consulted, though the farmland conversion issue was considered in forming the Core Team. However, AGR DV was asked to participate later during the summer of 1978 (Deardorff, 1978c).

Designing a Resolution Process

TVA did a good job of designing a resolution process in conformance with its goals and objectives (Weaver, 1979, pp. 15-16).

The public meetings would give both TVA and the public much information and show the public TVA wanted to involve them. The LCPT would represent the public and efficiently discuss problems and make decisions. A process guide would keep the process flowing smoothly. The internal Core Team would be useful in supplying technical information to the LCPT, advising it, and reviewing its product.

Two specific aspects of the process design were important. First, TVA did not formulate the process in secret, present the City and Weaver with it, and demand it be followed. Instead, TVA, the City, and Weaver worked together. The joint planning revealed unworkable activities, such as the planned series of workshops, which could then be changed, and it built a commitment from TVA, Dr. Weaver, and the City to the process.

Second, the process was flexible. As designed, it only specified two public meetings, two types of LCPT workshops, and an approximate time period. This allowed for more public meetings if needed, as many LCPT workshops as needed, and any useful techniques of consensus-building the process guide might use. No budgetary figure was set, either, so any expenditures (within reason) could be made. No specific outcome or product was planned, so no false hopes or mistaken hostilities were built up.

As things turned out, this flexibility was needed. The process took longer than expected (though only about two weeks) and hence cost more, and several different techniques occasionally were required to get the LCPT to reach closure on a topic.

B. PROCESS MONITORING

The joint problem solving process was carried out reasonably well, as measured by the result that the group reached essentially a consensus. In this section each of the nine steps of the process is evaluated individually to determine if it was carried out as designed.⁵⁷

Selecting the Process Guide

It was wise for TVA to select an outside process guide. The public's mistrust of TVA and Guntersville apparent at the first public meeting bore out the likelihood that neither TVA nor Guntersville could have appeared unbiased guides of the efforts. In fact, even with an outside process guide Guntersville continued not to trust TVA to an extent (and vice versa), and the different TVA program interests also still mistrusted one another somewhat.

Dr. Weaver was an excellent choice as a process guide. His work in planning, particularly research in the industrial location process and urban development in the southeast U.S., ensured that he understood the general issues. His living in Alabama since 1977 (in the Southeast since 1965) meant that he knew the region and its people. His being from England originally, living outside the TVA region, and being a university professor, not a full-time

⁵⁷As discussed above, the design for the process was made very general in order to allow flexibility. Therefore, each step is compared with the theory developed in Chapter III rather than with the design adopted by TVA, Guntersville, and Dr. Weaver.

consultant, gave him independence. He had done some work with human values and public participation in planning, and much chairing of departmental committees, all of which had given him a sound understanding of the theory and practice of general conflict resolution and small group dynamics. With only a few exceptions (noted in Chapter V and below) he was able to deal effectively with the range of values and attitudes on the LCPT and guide the LCPT to consensus. At the second public meeting each LCPT participant praised Dr. Weaver's work with them (Transcript of Second Public Meeting, 1979); one participant averred that if Dr. Weaver had been around at the time of the American Revolution he might have been able to talk them out of it!

Dr. Weaver had had neither formal education in conflict resolution nor previous experience in resolving environmental conflicts and, in fact, was unaware of the emerging field. (In fairness, it must be noted that most of the work in that field has been done in the western and northeastern United States, and at that time there was very little published literature.) Had he been aware of some of the experiences in this field, he might have improved the selection of representatives, he might have known of specific techniques for reaching consensus more rapidly, and he might have worked harder to ensure TVA's adoption of the LCPT recommendations. On the other hand, had he known about the field he might have felt that he had to use some of the more sophisticated computer-based or iterative survey and delphi methods, which would have greatly slowed the Connors Island process and made it much more expensive. His good performance

points out now the process guide's personality can often be more important than his academic or professional credentials. Dr. Weaver told the author that he believed being able to remain calm and amiable even when the parties' tempers flared and being able to deal with people at their levels, rather than knowing elaborate techniques, were the key to his success.

How Dr. Weaver was selected could possibly have been improved. TVA also was unaware of the field of environmental conflict resolution, so they did not know any of the established practitioners. Thus their choice of process guides was greatly constrained. They also did not search very systematically for a process guide, but instead relied on TVA staff and professional contacts for recommendations. Again, in fairness, the author realizes that TVA was under severe time constraints and the lack of published literature on environmental conflict resolution and activity in the southeast made it difficult to find experts. Moreover, TVA did have some well known contacts experienced in group processes, so persons recommended by them should have been competent, and familiarity with the region and being accessible were very important. However, as Deardorff pointed out to the author in retrospect, TVA was simply very lucky in finding Weaver and that he was such a good process guide.

The most potentially serious defect in the selection of Dr. Weaver was that he was funded by TVA alone. As Chapter III discussed, neutrality of the process guide can easily be destroyed by one-party funding. Even if the process guide does remain

neutral, the source of funding still may make all the parties suspect bias. Fortunately neither of these problems occurred, but they easily could have in the prevailing atmosphere of mistrust. That they did not appears to have been due to Dr. Weaver's exemplary performance and the fact that everyone was satisfied by his not being a full-time TVA employee. Also, Dr. Weaver's being a professor and not needing to obtain future contracts with TVA could have been a factor, as could have been the parties' lack of experience with guided processes, particularly with ones in which a supposedly neutral process guide had proved to be biased.⁵⁸

Ensuring That Each Interest Group
is Adequately Represented

In general, the concerned parties were represented adequately, as indicated by consistency with the theory established in Chapter III and by the LCPT's consensus being generally acceptable to TVA and the public. However, the representation of the parties could have been improved. Had it been better, the work of the LCPT could have been accomplished more rapidly. Also, if Dr. Weaver had not been so adept at controlling the process, certain participants would have been able to subvert it.

Certain aspects of the representation were carried out well. First of all, the parties were represented in approximately the proper proportions. Residents of the area generally favored

⁵⁸To some extent the author's disapproval of TVA's funding is simply academic. As Deardorff pointed out to the author (personal communication) there was no alternative.

industrial development of the site if the negative impacts were minimized, and the representatives favored industry by a slight margin as indicated by the first meeting's discussion and seventh meeting's vote. Also, the group with the most stake in the issue was Claysville, and six of the nine LCPT members either represented, owned land in, or had lived previously or live at the time Claysville.

Second, the size of the group was kept manageable by representing the major and easily represented parties directly and other minor or not-easily represented parties indirectly. The region as a whole was represented by the Huntsville-based Natural Systems Preservation representative. The Poor and and Unemployed, were represented by the Minority Interests representative. Local Youth and Future Residents were represented by the concern of all members of the LCPT, TVA, and Dr. Weaver for the future of the area.

Third, some of the specific representatives were very good, and most were adequate. The representatives of Natural Systems Preservation and Claysville were the best. They were recognized spokespersons for their interests, articulate, intelligent, and sensitive to the other parties views, and they frequently checked with their constituents. The representatives of Industry, the City, and the County were particularly appropriate because they were knowledgeable about legal and governmental matters and had sufficient authority in their official positions to make at least semi-official commitments.

Three representatives were not adequate, though. The representative of Minority Interests simply did not become properly involved. She missed several meetings due to other unavoidable business and said very little, despite Dr. Weaver's encouragement, when she did attend. In interviews with the author, other LCPT members identified persons whom they felt would have been better representatives of the Black community.

The second inadequate representative was that of Recreation. He owned a small marina, but his real interest was industry because he had worked for the Alabama Development Office for 30 years. He was an excellent advocate for industry and a very knowledgeable valuable member of the team, but he did not represent commercial recreation.

Third, the representative of Soil Conservation was not, as had been intended by Weaver and Deardorff, a supporter of conservation or carefully planned development at all, but an uncritical advocate of industry who added little to the discussions.

All of the other representatives were adequate, though they had some minor shortcomings. The representatives of Sportsman Conservation and Agriculture could have been more articulate. The representative of the City informed the author that he was continually skeptical of the value of the conflict resolution process. As indicated by the tape and notes of the fifth meeting, the representative of Industry was somewhat insensitive to environmentalist viewpoints. He also seemed to consider the process as more of a negotiation rather than collaboration in instigating the voting in

the seventh meeting. Fortunately, Dr. Weaver was an adept process guide and able to surmount these obstacles.

Several steps could have been taken to correct the major deficiencies in representation. If the Core Team had had greater familiarity with local politics and personalities they would not have been forced to rely blindly on their contacts or the Mayor's suggestions for representatives. Dr. Weaver should have been given the authority to select representatives, and he also should have interviewed all suggested representatives individually before the official selections were made. This way he could have learned the possible representatives' views, the possible representatives could express their opinions freely in private, and he could select proper representatives, all before the identities of the representatives had been made public and the dynamics of the LCPT had been established. If these steps had been taken, better representatives for Minority Interests, Recreation, and Soil Conservation could have been selected. It might also have been possible to select more articulate representatives for Sportsman Conservation and Agriculture.

Also, as Deardorff remarked in retrospect to the author, it might have been better for TVA to have acted as the representative of the Region, stating at the outset that it, as a regional agency, would review the LCPT recommendations for their consistency with regional objectives before making a decision on relinquishing the land. The representative of Natural Systems Preservation was the

president of the statewide Alabama Conservancy, but the primary orientation of the organization was environmental concerns.

Confronting Fundamentally Different Values
and Assumptions and Identifying the Key Issues

The different values of the parties, though acknowledged, were not confronted as well as they could have been. This was largely due to not selecting stronger and more articulate proponents for Sportsman Conservation, Minority Interests, Agriculture, and Recreation. Thus the values of the particular members of the LCPT were relatively homogeneous. Also, the discussion generally centered on facts rather than feelings about those facts.

Several things could have been done to help expose and confront different values. The LCPT could have visited Connors Island together and talked about what it meant to them. The author was taken to the site by the representative of Recreation, who made clear that he had many fond feelings for it but that it should be developed regardless, and the author thinks that had all the LCPT members visited, there would have been a good gut-level exchange of feelings.⁵⁹ The LCPT could have visited the area of Guntersville where the blacks lived, to get a real feeling for the poverty. Perhaps some of the area's youth could have visited with the LCPT.

⁵⁹According to notes taken by the Mayor's secretary, some members of the LCPT did visit the site together on December 27, 1978. However, the visit was brief and they were part of a larger group which had met with an aide to State Senator Stewart, so there was little opportunity for dialogue (Taylor, 1978g).

Dr. Weaver could have initiated some role playing in which advocates of development and preservation pretended to be each other.

The key issues were identified well. The first public meeting was an opportunity for the public at large to blow off steam and let TVA know what they felt (Weaver, 1979, p. 15). The discussions at LCPT meetings described in Chapter V were a good way for the members to express their opinions.

Three particular techniques of identifying issues were useful. First, both the TVA Core Team in August and the LCPT at the first meeting engaged in a type of "data mediation" to identify the sort of data that were needed. Second, the technical information presented by TVA to the LCPT in meetings 2, 3, and 4, and the information offered by LCPT members greatly helped the LCPT separate major issues from minor issues. Particularly important was the information on the local economy because it helped the representative of Natural Systems Preservation realize that jobs should have precedence over preservation of the site in a natural state. Also, information on the fish spawning areas helped the LCPT decide where a barge terminal could best be located. One innovation which was apparently understood well by the LCPT was TVA's use of computer-generated maps of soil characteristics. The third important technique was the "design-in" during the fifth meeting in which the LCPT indicated on a map the areas to be protected (Weaver, 1979, p. 27). This process helped the members state their opinions and desires and understand the impacts more clearly.

There were four problems with the information. First, not all of it was available to the LCPT and the public for review until about midway through the series of meetings because it took time for TVA to prepare final copies which could be left in Guntersville. Second, access to the information was difficult. It was left at the Mayor's office so that people could come by and review it, but they had to come by during the day because the office was closed at night. Also, the information was not to be checked out, and only some information was in the form that copies could be given to each LCPT member. Third, though most presentations were brief and nonadvocatory, as Weaver and the Core Team had agreed, they would be, the presentation by AGR DV was both long and openly advocatory (Weaver, 1979, p. 24). The AGR DV representative stated to the author that he believed that agriculture was underrepresented on the LCPT and undervalued by the City, TVA, and the LCPT members other than the representative of Agriculture. Therefore he openly took the position of trying to convince the group that agriculture was the appropriate use of the site. Fourth, the information on the high agricultural capability of the area soils was incorrect, as a 1981 Soil Conservation Service map of Marshall County prime farmland later showed.⁶⁰ Therefore the importance of the site for agri-

⁶⁰The AGR DV staff knew the soil classification they had access to was not exactly comparable to the prime farmland classification, and they pointed this out. The author does not mean to imply that AGR DV deliberately overstated its case.

culture was mistakenly overstated, which gave the issue of agriculture more emphasis than it should have been given.

Generating a Sufficient Number of Alternatives

The LCPT had difficulty generating alternatives. Dr. Weaver and RPS had hoped the LCPT would be able to map alternative land uses, but they were unwilling to, even though they discussed a wide range of possible development concepts, at least one of which was acceptable to all members. However, Dr. Weaver deftly managed to get around this obstacle by having TVA and Guntersville draw up the five different development concepts, which the LCPT then analyzed and adapted. Claysville's not having a professional staff to produce an alternative was a concern to the representatives of Claysville and Natural Systems Preservation, but the alternatives produced covered a range of options acceptable to Claysville. In essence this was also a design-in though not done directly by the LCPT.

Agreeing on the Boundaries and Time Horizon for Impact Assessment

That Dr. Weaver (with Deardorff's and Cotney's assistance) was able to convince the LCPT to consider the wider assessment area instead of just the Connors Island site was one of the better examples of the value of a good process guide. Had the LCPT continued to consider only the site, the planning process would have had much less value because it would not have been set in an overall context and because some elements such as rerouting U.S. 431 and

preserving adjacent agricultural land were important parts of the adopted development concept.

Agreeing on the time horizon was also important, but it really created no difficulty. The LCPT easily accepted the need to look into the future 20 to 30 years. However, as the Core Team retrospectively pointed out in its review of the LCPT report (Deardorff and others, 1979, p. 9), the time horizon probably should have been considered 15 to 20 years.

Weighting, Scaling, and Amalgamating Judgments About Impacts

This part of the process showed the LCPT at its best. The group adopted four criteria, judged the five alternatives against them, and adapted the alternatives based upon the criteria. Though only common sense estimates of impacts, not an expensive EIS process, and only group discussion, not an elaborate rating system, were used, the LCPT followed the essentials described in the literature.⁶¹

Establishing Appropriate Compensatory Payments or Mitigation Measures

The LCPT also did a generally adequate job of compensation and mitigation. Each interest losing something due to development was either compensated or the impacts were mitigated to the extent

⁶¹In fact, none of the LCPT's work involved any of the elaborate mathematical or computer-based techniques described in Chapter III except the TVA computerized soils information, which was already in the TVA files. This demonstrates that simple techniques can work as well as complex ones in certain cases.

feasible. Fortunately, all of the members accepted types of mitigation or compensation which could be carried out by TVA, Guntersville, or the State.

There were two problems with the compensation and mitigation, one minor and one major. First, as the Core Team pointed out in its review of the LCPT recommendations (Deardorff and others, 1979, p. 11) the LCPT appeared to have an incomplete understanding of the TVA Rapid Adjustment Farm (RAF) Program recommended to assist farmers of the lands designated for agriculture use. Those farmers would probably not fit the criteria for participation in the RAF program. However, the Core Team did suggest that farm demonstrations of various other types might be possible.

The major mistake in suggested compensation, at least to the author, Deardorff, and Cotney (the Guntersville planner) was the LCPT's recommendation that access controls not be imposed on U.S. 431 if it were realigned. True, this would compensate property owners for loss of some land to the highway, but it would lead to extensive unsightly and dangerous strip development along the highway. It is possible that such impacts of the new highway could in many ways be even more detrimental than the feared impacts of the industrial development of Connors Island. Unfortunately, the LCPT's aversion to land use controls and the state's plan not to control access (according to Jack Carroway, Design Bureau Chief of the Alabama Highway Department) meant there was little TVA could do to correct this mistake.

Securing Commitments

The step of securing commitments had some very bad aspects but also some very good aspects. One bad aspect was the lack of binding commitments, particularly as related to the backland. Of course, this could not be helped: the process had been designed to be advisory. Another bad aspect was the fortuituous inability of the staff of TVA's Division of Property and Services to attend the meetings.⁶² This greatly restricted the LCPT's consideration of alternative methods of control and disposal of the TVA land. The third bad aspect, which could easily have caused the collapse of the entire process, was the forced vote on disposition of the TVA land. More than anything else in the process, this vote violated the principles discussed in Chapter III.

On the other hand, after the Mayor's secretary informed the LCPT that the vote had been wrongly counted as not passing, Dr. Weaver was able to defuse the antagonisms built up by the vote and got the LCPT members to agree to rely on consensus rather than the results of the vote. This was probably the very best aspect of the entire process and clearly showed the crucial importance of an adept process guide.

There were two other good aspects of how commitments were secured. The representative of Recreation played an important role in the discussion of alternative ways to dispose of and control the

⁶²The representative had been unable to attend due to his wife's having a baby.

TVA land. Though he did not have a full understanding of TVA's authorities for control and disposal, he did fully understand local and State laws and the practicalities of different methods. His role in this step points out how he was of great value to the LCPT even if he was not a good representative of Recreation. Also, of course, the fact that the LCPT did come to decisions on the disposition of the land was good.

Holding the Parties to Their Commitments

The LCPT's two recommended deed restrictions for holding Guntersville to its commitment to use the site for high-quality industry were strong, and they were probably the best of what could realistically be expected for an advisory process in which no binding commitments could be made. Because the recommendations were linked to TVA's and others' decision-making processes, moreover, there was at least a reasonable possibility that some of the LCPT recommendations would be followed, particularly by TVA.

C. EFFECTS

The Conners Island Experience was intended to have one primary effect: to influence TVA's decision about the use of its land on Conners Island. If successful, however, it should also have had several subsidiary effects, such as changing the attitudes of LCPT members and the parties in general about each other and the issues, and changing the City's and TVA's methods of dealing with environmental conflict.

Influencing TVA's Decision

The joint problem solving process was a partial success in influencing TVA's decision as to the use of its land in the Connors Island Area. After the LCPT's development concept and policies to guide that development had been generally supported at the second public meeting, Jeff Deardorff took these recommendations and the TVA core team's material and compiled a report, presented in Appendix F, summarizing the LCPT's work. This report was sent to Mayor Hembree in March 1979, for his guidance in requesting any TVA land.

On April 28, 1979, the Mayor did make a formal request (contained in Appendix G) to the TVA Board for the TVA land identified as industrial by the LCPT report. In addition, he requested for industrial development 35 additional acres south of the McDonald estate, which the LCPT report had designated for preservation. This request was referred to the Division of Land Forest Resources (L&FR) for consideration. As input to the L&FR review, the TVA Core Team reviewed the LCPT report and in its own report (contained in Wright, 1979) recommended that the Mayor's request for the additional 35 acres not be granted, and that the land designated for development in the LCPT report not be transferred then but be indicated in a letter of assurance as available to an industrial client. The Core Team also recommended that the letter require that the McDonald Estate be acquired either by the Guntersville Industrial Board or a Marshall County Industrial Board, that any deed of conveyance contain as restrictions the requirements recommended by the LCPT, and

that any site plans be subject to TVA's review and approval. Because they believed the LCPT had been misguided in not advising land use controls in the area, the Core Team recommended as well that annexation, zoning, or some other growth management technique consistent with the proposed development plan (except the development along the realigned U.S. 431) be one of the deed restrictions.

Following the Core Team review, the request was reviewed by the rest of the agency, and an environmental assessment (EA) was prepared by L&FR on the proposed release of land. This EA, which is contained in Appendix G, concurred with issuing a letter of assurance making available only the lands designated industrial in the LCPT report.

Along with the EA, L&FR supplied to the General Manager a draft letter of assurance (also contained in Appendix G), which he approved and sent to Mayor Hembree. The basic premise of the LCPT, that the land be made available, was followed. However, the letter of assurance did not require as deed restrictions the specific recommendations of the LCPT and the Core Team. It did state that "establishment of developmental and environmental standards as covenants running with the land for industries located in the park" would be required, from which the LCPT/Core Team recommendations can be inferred. Whether the recommendations are actually followed, however, will depend on the sincerity (and memory) of the TVA staff at the time a request for the land is approved.

At the present time the Mayor has not taken steps to acquire the McDonald Estate or convince an industry to locate there so that

he can again request the land from TVA.⁶³ Therefore the full impact of the conflict resolution process cannot yet be determined, and only when an industry decides to locate on Connors Island will the effects become known.

One of TVA's biggest problems with the Connors Island Experience was delay in reviewing the Mayor's April 25, 1979, request. (As well, that request came 13 months after his first request.) It took about six months, until October of 1979, for the Core Team to complete its review, four more months for the rest of the agency to review the Mayor's request and L&FR to do a short EA and letter of assurance, and three months for agency review of the EA and letter. Then the Manager of TVA's Environmental Quality Staff, who had overall responsibility for environmental reviews, decided a longer EA was needed, and preparing it took two more months. Review took an additional month, so the response to the Mayor finally went out in late July 1980, over a year after the Mayor's request and over two years after the start of the process.

However, the slowness of the process should not be attributed solely to bureaucratic inefficiency. As Deardorff pointed out to

⁶³In a meeting with the mayor, he told the author that he had simply been concentrating on ensuring the proposed TVA coal gasification plant would be located at the Murphy Hill site in northeastern Marshall County because that was a much bigger economic boost and required less City effort. At that meeting, the LCPT members representing Recreation and Industry added that because TVA had never given only an assurance before, the City and Industrial Development Board were unsure about how to proceed. Also, the author was informed by a Claysville resident that the mayor has responded to Claysville residents now wishing to be annexed that the City cannot afford to provide services, so probably the City cannot afford to buy or prepare the Estate.

the author (personal communication), during the Connors Island Experience the Agency underwent major changes. Chairman Wagner resigned and S. David Freeman, who placed more emphasis on formal environmental assessment, became Chairman. Also, all of the Divisions were reorganized as components of new Offices, with new Office Managers. Of particular importance, during the review of the Mayor's request the Division of Property and Services was eliminated, and its staff and environmental assessment function were reassigned to the Division of Land and Forest Resources and the newly created Environmental Quality Staff. Consequently there was a temporary delay of most of the ongoing activities, not just the Mayor's request, as new Office Managers, Division Directors, and staff determined their new duties.⁶⁴ Also, Jeff Deardorff was reassigned to another office, so he was unable to follow up on the review.

Effects on LCPT Members

If the LCPT's work was effective the LCPT members should have developed a better understanding of and sensitivity to the issues and persons with different values. This in fact did happen. At the second public meeting (Transcript of Second Public Meeting, 1979) and later with the author most members discussed how their early skepticism shifted to support of the process. Several members men-

⁶⁴The author has personally been affected by three reorganizations of the Office of Community Development since October of 1979 and can attest to the difficulty of maintaining continuity during one.

tioned to the author how the information by TVA had helped them understand the area better. One member noted to the author that his opinion of environmentalists had greatly risen.

Perhaps the most outstanding example of a personal shift in attitudes and understanding occurred in the fifth meeting, when the representative of Natural Systems Preservation stated that based on his new knowledge of the area and its needs for jobs, he favored industrial development of the site. This surprised everyone, particularly the representative of Industry, who had just implied that the environmentalist had been orchestrating a campaign of letters from Huntsville opposing development of Connors Island. This moment appeared to be a turning point to both the author and Jeff Deardorff (personal communication). After the environmentalist's statement the LCPT members seemed much less suspicious and much more willing to cooperate with each other to design an environmentally sensitive development concept.

Not everyone experienced such changes in values, it seems. Based on the occurrences noted above in the evaluation of the representation of parties and the Mayor's request for additional land, the author believes that the City and the representatives of Industry and Recreation never did quite abandon a semi-competitive negotiating approach for a collaborative one. Also, even after the whole process, when the author interviewed the Mayor in April of 1981, the representatives of Industry and Recreation also

attended.⁶⁵ They all briefly discussed their belief that if an industry did come in TVA would give Guntersville more land than the plan showed, and that they wanted the additional 35 acres for executive housing sites, not the industry itself. (TVA had a policy of not making its land available for housing.)

Effects on the Public

TVA, Guntersville, Dr. Weaver, and the LCPT all hoped the LCPT's development concept and the openness of the process would satisfy the public at large that their interests had been considered. The second public meeting was the acid test of this hope. After about three weeks of publicity on the radio and in the local newspaper, the meeting was held at Claysville High School on February 18, 1979, at 6:00 p.m. (Weaver, 1979, pp. 13-14; Transcript of Second Public Meeting, 1979). About 150 people attended, most from Claysville. Dr. Weaver introduced the meeting and summarized the development concept, the LCPT members (one was absent) discussed the LCPT effort from their points of view, and then the public was encouraged to ask questions and make comments. There were many questions and comments, but much less hostility in evidence, and almost no real opposition to the LCPT development concept.

One interesting apparent effect of the conflict resolution process was the realization by a number of Claysville residents that

⁶⁵The representative of Recreation had kindly agreed to set up the author's meeting with the Mayor, but his presence was not really expected, and the Industry representative's attendance was a total surprise to the author.

land use controls could be beneficial in protecting against the adverse impacts of industrial development, according to the President of the Claysville Community Club who succeeded the LCPT representative of Claysville (personal communication). This was the reason that, not longer after the process was completed, several Claysville residents requested Guntersville to annex them.

Effects on the City's Methods of Dealing With Conflict

The City appeared to have a semi-competitive attitude about the Connors Island Conflict throughout the process. In addition to the way the City's representative on the LCPT behaved, and the Mayor's eventual request for more land than the LCPT recommended, Weaver (1979, pp. 28-29) noted that the City committed several other "indiscretions." A City representative made unfounded criticism of the LCPT structure and stated the public participation was "inconsequential." The Mayor apparently tried to exclude persons from the LCPT who might oppose the City's position, and he directed any local people to write to TVA if they wanted to help the City (instead of telling them to talk with the appropriate representative). While the process was occurring, the City published a Chamber of Commerce brochure lavishly praising Connors Island as a city industrial park. Finally, according to notes by the Mayor's secretary (Taylor, 1979g), on December 27 the City hosted a meeting of Ed Brown, aide to State Senator Stewart, with representatives of the Industrial Development Board and LCPT to discuss how the Senator could assist Guntersville in the industrial

development of Conners Island. Although this was after the LCPT's decision that the area should be used for industry, the LCPT had not adopted the development concept, nor had the public yet been able to comment at the second public meeting. Thus the Mayor seems to have jumped the gun a bit in his eagerness to develop the area.⁶⁶

The style of process used for Conners Island did seem to impress the City as useful in some situations, however. During 1980, the wife of the representative of Sportsman Conservation was involved in resolving a conflict over misuse of a park. According to her (personal communication), the City used a similar process for reaching a settlement. After requesting assistance from TVA (Hembree, 1979), the City appointed a committee which held workshops over an extended period, was given technical assistance by TVA's recreation planning program, generated alternative park plans, selected one, and implemented it. The plan was reportedly well accepted.

Effects on TVA's Methods of Dealing With Conflict

The Conners Island Experience had mixed effects on TVA's own methods of dealing with environmental conflict. One sign that the

⁶⁶Weaver (1979, pp. 28-29) and the author agree that these actions were not necessarily conscious or coordinated efforts by the City to sabotage the LCPT's work, but they do suggest some insensitivity to appearances, reluctance to participate fully in the process, and a tendency to rely on traditional methods of industrial promotion. For example, the City could at least have informed Dr. Weaver that the brochure was being published and it was too late and expensive to stop it.

agency appreciated the value of the process was the Board's instruction to RPS in a briefing on April 13, 1979, to "identify other critical areas requiring advance planning along the TVA reservoirs," and to "organize a similar approach to involving diverse interests in arriving at a local consensus on the use of TVA and related lands" (Hirsch, 1979b). As a followup on this instruction, in January 1980 a team was formed to develop a new TVA Land Management Planning Process for developing comprehensive reservoir plans in conjunction with outside agencies and the public (Nelson and others, 1980). The outgrowth of this study to date has been the completion of a plan for the TVA lands along Pickwick Reservoir and the start of a similar plan for the TVA lands along Guntersville Reservoir.⁶⁷ These plans, however, are being coordinated by L&FR, not RPS. When S. David Freeman ascended to the Chairmanship of the TVA Board in 1978, he shifted the land use planning for TVA lands to L&FR because it was part of the newly-created Office of Natural Resources (ONR). He was an ardent environmentalist and believed that ONR was better equipped to do environmentally sensitive land use plans because of its conservation orientation, because it contained L&FR (whose mission is to manage TVA lands), and also because it had the computer-based data generation and presentation ability it used for Connors Island.

⁶⁷How the Guntersville plan deals with Connors Island will be a good measure of the effect of the Connors Island Experience.

However, the agency has not become totally committed to collaborative or negotiated conflict resolution. In 1979 TVA was requested to approve a proposal for a coal barge terminal on Melton Hill Reservoir across from the city of Oak Ridge. RPS began to coordinate a process similar to the Swan Creek effort (time was too short and the public's emotions were too high to make public involvement as in Connors Island feasible) but in the middle of the effort the Board directed it to cease and decided that the coal barge terminal should not be allowed.⁶⁸

Finally, the Connors Island Experience had surprisingly few effects upon the Core Team. For some members it was the first time they had been able to participate in such a multidisciplinary process and they welcomed it. However, it appeared to the author from his review of internal memoranda and interviews with all of the Core Team members that most of the staff entered the process somewhat skeptical and remained that way. The staff of AGR DV demonstrated this skepticism to an extreme degree. They prepared a paper for presentation at the 1979 meeting of the Alabama Academy of Sciences, which they did ask Jeff Deardorff to review out of professional courtesy, but which expressed their belief that the process was rigged in favor of development (Henderson and Woodward, 1979). The ex-RPS Regional Planners (RPS no longer exists as a staff) on the other hand, retains their beliefs that AGR DV and ONR do not know how "the system" works, that politics always enters in and prevents

⁶⁸The author was personally involved in this planning effort.

purely technical decisions from being feasible (Ginn, Deardorff, and Wright, personal communications). However, the author determined from his discussions that the individual staff members do not feel particularly hostile to one another personally; the disagreements are mostly due to philosophical differences and organizational conflicts.

Effects on Other Actors

Finally, there were several other actors on whom the effects of the Conners Island Experience might give some indications of its value. The State Highway Department could have taken account of the LCPT's recommendation for realignment of U.S. 431, in a subsequent study the State and TARCOG did of U.S. 431 and needed improvements, but according to Bill Powell, Assistant Environmental Coordinator for the Department, they recommended widening of the existing highway rather than realignment. The Guntersville Planning Commission knew of the LCPT report but the author was told they had no concern for it because the area outside the city limits.⁶⁹ Finally, developers in the area might have considered the plan in their work, but no development has occurred near Conners Island since the LCPT's

⁶⁹The Planning Commission had had TARCOG prepare a comprehensive plan for the city in 1974, and the plan included Conners Island, but really the Commission was nearly inactive, meeting only when requested by the City.

plan. Thus the plan has had essentially no effect at all up to now on any of the other actors than the City and TVA.⁷⁰

⁷⁰One final note is appropriate on the subject of effects. Some social programs can have no effect even though a desired change has occurred because the change was due to exogenous factors. In the case of the Conners Island Experience, there really were no exogenous factors operating to cause the observed effects except in the case of TVA's land use planning. The agency had been building up its Citizen Action office, first organized in 1978, and Chairman Freeman was interested in public involvement in environmentally-sensitive planning, so it is probable that the new reservoir planning process is largely independent of Conners Island. It may be more accurate to say that both the Conners Island Experience and the reservoir planning are two separate examples of a common TVA desire. In fact, several of the Core Team who were also involved with the Pickwick Plan did explain to the author that the process for Pickwick was quite different, and deliberately so, from that for Conners Island.

CHAPTER VII

OBSERVATIONS AND RECOMMENDATIONS

From this research a number of observations and recommendations can be made. Some of these concern the future use of collaborative conflict resolution processes by TVA. Others concern joint problem solving processes in general. Finally, several avenues for continued research are apparent.

A. FUTURE TVA EFFORTS AT COLLABORATIVE CONFLICT RESOLUTION

It is clear that the Connors Island Experience was at least a partial success. The LCPT reached a consensus with which the public and TVA generally agreed. However, future collaborative conflict resolution processes by TVA can be improved in some important general ways in addition to the specific ones discussed in Chapter VI.

First, TVA must gain more information about the local parties to conflicts so that adequate representatives can be identified; fortunately, several steps are being taken which happen to enable this. Recently the Office Of Economic and Community Development (OECD) was reorganized to place more staff in the field, which should give TVA more knowledge of local opinions. Another OECD program, Community Preparedness, actually helps communities develop leadership and involve all of their diverse interests in formulating

and working toward community goals. The new Citizen Action Office can also help collect information through its telephone call-in line. The TVA Board is holding more of its meetings throughout the Valley and not just in Knoxville.

Second, TVA and the public need to develop skills as participants in resolving conflict so that all parties can articulate their desires, participate equally, and collaborate rather than compete. In addition to its Community Preparedness work with communities, OECD is giving its own staff training in conflict resolution and consensus-building, but this training also needs to be given to the other program interests throughout the agency, particularly the staff of the Office of Natural Resources (ONR), which is responsible for guiding TVA's reservoir lands planning process.

Third, TVA, the Southeastern Federal Regional Council, the States, local governments, and pro-development and environmental groups should join together to provide funding in some sort of equitable proportions for training a cadre of process guides and for hiring them to resolve conflicts in the region. This way the guides would be independent and would be available when needed.

Fourth, TVA cannot attempt to use joint problem solving processes similar to the Connors Island Experience to resolve conflicts over use of each individual tract of TVA land. The staff and time required will be too great. Instead, the agency must move toward conflict anticipation in developing plans for all TVA lands on each reservoir. Preservation and development can be "traded" more easily at this scale of planning, helping to resolve more conflicts at

lower intensity and more quickly. The agency is indeed doing this, as discussed in Chapter VI. However, unless the staff preparing these plans receive the training mentioned above, these plans, as did the Pickwick Plan, may well avoid dealing with the very difficult conflicts which they were really intended to resolve.

Finally, TVA must reduce its personnel turnover and reorganizations during conflict resolution processes. Deardorff (personal communication) pointed out to the author that turnover of Core Team members wasted much time due to the need for orienting new members and rehashing previously settled disputes. Reorganizations greatly delayed the preparation and review of the Environmental Assessment (EA) on the letter of assurance. And of course Deardorff himself was transferred before the EA was done.

B. JOINT PROBLEM SOLVING IN GENERAL

This research has shown that joint problem solving can be at least partly successful. However, the research also suggests that it is not a panacea. Joint problem solving is messy, not cut and dried. As Deardorff (personal communication) noted to the author, the Regional Planning Staff was never certain what techniques would work, and Weaver and Deardorff had to try several techniques several times to keep the process moving. Also, the discussion in Chapter V of the assessment and nine step resolution process show that things do not always take place in the order stated in the theory. Clearly, flexibility, adequate time, and a liberal budget are essential.

The theory also holds that joint problem solving is a voluntary process, but it may be that in at least some cases the agency needs to have a trump card in its hand, so to speak. Deardorff (personal communication) advised the author that had TVA not held the ultimate decision-making power the agency probably could not have persuaded all the parties to participate. The parties all realized that only if they participated fully would TVA be likely to consider their interests as legitimate.

This case study shows that there may be some formidable barriers to joint problem solving in addition to those described in Chapter III. For example, intra-agency conflict can slow or stop it. Also, even a powerful agency may be unable to impose all of the conditions for the best possible process due to the need to avoid alienating parties. Local governments, particularly, can strike back through contacts with Congress.

Finally, it is apparent that the process of collaborative resolution of environmental conflict is essentially the same as the standard comprehensive planning process. Both processes involve perceiving a problem, establishing goals and objectives, gathering data to define and analyze the problem, developing alternative solutions, evaluating them, and taking action. The only difference is that planning methodology concentrates on technical aspects and tends to gloss over the potential for conflict inherent in comprehensive planning process involving groups with different values and goals. This similarity suggests that if planners develop greater understanding of conflict they will be much better guides of

collaborative conflict resolution than are lawyers, traditionally the main professionals involved in conflict resolution. The planners' comprehensive view, orientation to the future, willingness to ask "what if" and "why not" questions, and concern for the welfare of all groups would be especially useful.

C. SUGGESTIONS FOR FURTHER RESEARCH

Environmental conflict resolution contains many opportunities for further research. To begin with specific opportunities relevant to TVA, the development of Connors Island should be monitored to see what actually does happen in the area and hence whether the process ultimately has its intended effects. Also, TVA's other efforts at land planning and conflict resolution should be studied to determine what new processes are used and how well they work. Only in this way can TVA evaluate and improve its ability to resolve environmental conflict.

The field in general also needs further research. More case studies of all types of competitive, collaborative, and negotiated processes and statistical studies and catalogs similar to those of Gladwin (1980) are needed to continue to refine the theory and make it easier to design the right process for any given conflict.

The areas of uncertainty and risk assessment and acceptance discussed in Chapter II particularly need more study. Differences in assessment and acceptance of uncertainty and risk are the hearts of some environmental conflicts, but little effort seems to have been expended to reduce these differences.

Related to differences in risk assessment and acceptance but even more difficult to deal with are differences in values, which also underlie many environmental conflicts. Conflicts over data can often be resolved relatively easily, but conflicts over values are much more difficult to resolve because even if new data are presented these data are colored by the values. The author uncovered very little research on how and why values change in environmental conflicts, yet these appear to be critical questions.

One final subject which requires analysis is the economic efficiency of collaborative methods of resolution. That is, we need to know what the costs of these methods are and whether they are any less than the costs of other methods (Rossi, Freeman, and Wright, 1979, p. 33). This information is really the critical component of an evaluation yet it is extremely difficult to obtain. The author desired to do so for this research project, but the costs were never calculated (not even all of TVA's budgetary expenses), there was no different or "control" process with which to compare it, and not all of the effects had occurred. Thus this case study cannot shed any light on this important consideration.

D. POSTSCRIPT

What of the future of environmental conflict resolution? It should be clear at this point that collaborative processes have considerable potential to be useful. It should also be clear that environmental conflict is not soon going to disappear magically. Logically, then, collaborative processes should continue to be used

and perhaps will even increase in use. No less an authority than Chief Justice Warren Burger has recently decried the overwhelming burden of civil suits (which include nearly all environmental lawsuits) and urged the use of more administrative processes, mediation, conciliation, and arbitration (Knoxville News-Sentinel, 1982)

Unfortunately, the present Reagan administration seems bent on reducing the ability of the public to participate in decision-making of Federal agencies (Odell, 1981c; McFeatters, 1981). By reducing access to information and cutting agency funding for public participation, the administration is making resolution by any other means than litigation or legislation more difficult. It is to be hoped that agencies will recognize that being "penny-wise" in cutting these costs is really being "pound-foolish" in risking much greater costs in staff time and delay should conflicts escalate to lawsuits. However, other budget cuts make the transfer of funds difficult.

Exactly what these early administration actions portend remains to be seen, but it would be ironic if promising new techniques for effectively resolving costly environmental conflicts become restricted by an administration which professes an intent to reduce costs and delays.

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APPENDICES

APPENDIX A
INTERVIEW QUESTIONS AND PROTOCOLS

QUESTIONS TO GUIDE INTERVIEWS

1. What is your job?
2. How long have you lived in the area?
3. What involvement did you have in civic affairs?
4. How did you perceive your role on the LCPT--for example, a questioner, an idea generator, an evaluator, active, or passive, keeping people calm or happy?
5. What were the issues at stake (both surface and hidden)?
6. Who were the parties and what were their values, goals and motives?
7. What had the historical relationships between the parties been?
8. Were there previous conflicts like Conners Island?
9. Do you now deal with other members of the LCPT?
10. Have you been on any similar committees?
11. Why were you selected to be on the LCPT?
12. How did you determine your group's interest and make sure you tried to meet it? For example, did you periodically check back with them?
13. Did other LCPT members listen to you, agree with you, criticize you a lot?
14. What attitude did you have? Were you a negotiator for your group, working for the public good, or trying to get something for yourself?
15. Were there any turning points at which things all of a sudden seemed to come together?
16. Were there times when things seemed about to fall apart?
17. Were you reluctant or enthusiastic at the start, and how did your feelings change? Why?
18. How well did LCPT members get along with one another?
19. Did the LCPT seem more interested in getting things done or more interested in having a good time?

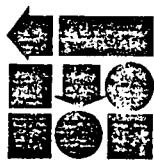
20. Were others enthusiastic or reluctant?
21. Was there active conflict at LCPT meetings?
22. Were people angry or just disagreeing?
23. Were people willing to listen to each other and consider their points of view?
24. How did attitudes toward one another change as time passed?
25. Were the meetings run well, or would you have changed anything?
26. Should there have been a different balance of interest groups on the LCPT?
27. Should other interests have been represented?
28. Were the members the best representatives of their interests?
29. Did any other members have hidden motives?
30. Were people trying to come to a solution everyone would like or did some people try to ram through their favorite ideas?
31. Did any coalitions form among members?
32. When the TVA staff presented technical information,
 - a. did they explain it understandably,
 - b. did it seem relevant,
 - c. did you know how to use it,
 - d. did they present it objectively or try to influence you, and
 - e. did the LCPT actively discuss it, ask questions, or just listen?
33. Did you use the information?
34. Did everyone believe it?
35. Did it change your opinions about the issues?
36. Do you think the development concept should have covered the large area it did or only dealt with the industrial site?
37. Did you think the exercise of drawing alternatives for the development of the site was useful for generating ideas and getting people to agree on alternatives?
38. Should there have been other alternatives?

39. Did the final development concept seem reasonable to you and those you represented?
40. How did the LCPT members accept the development concept--in a spirit of gaining something, losing but accepting it, and losing but figuring they might be able to win next time?
41. What do you think about the lack of progress on finding an industry for the site?
42. Did TVA treat the other groups fairly?
43. Do you think that if an industry is recruited the development concept will be followed?
44. On the whole, do you think the process was worth the effort?
45. If you had been in Dr. Weaver's position, what would you have done differently?
46. If you had been in TVA's position, what would you have done differently?

Note: These questions were written as notes to the author as guides to the interviews of each member of the LCPT and other local residents. They were not all to be asked verbatim; consequently they do not follow the formal format of a questionnaire. Not all questions were for each interview--some obviously used apply only to LCPT members.

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THE UNIVERSITY OF TENNESSEE/GRADUATE SCHOOL OF PLANNING
1411 WHITE AVENUE, KNOXVILLE, TENNESSEE 37916/(615) 974-5159



Research Center

February 23, 1981

Dear Member of the Conners Island Local Citizen Planning Team:

I am a student in the Graduate School of Planning here at the University of Tennessee. For my Master's Thesis I am studying the recent Conners Island planning process, in which you participated as a member of the Local Citizen Planning Team. To get information for my study I intend to visit north Alabama to interview local residents about their opinions on the Conners Island planning. Because you were a member of the LCPT, I would especially like to interview you.

Much attention is now being given to resolving conflicts over the use and development of land. My study of the Conners Island experience should be of national significance due to the unique type of citizen participation used and the focus on land use planning as a way to resolve conflicts. However, for my research to be carried out properly, I very much need your assistance. Therefore, to interview you is important. I will telephone you in a few days to set up a convenient date and time for us to get together for an hour or so.

Thank you for your consideration.

Sincerely,

Peter K. Scheffler

STATEMENT OF INFORMED CONSENT

Thank you for allowing me to interview you to obtain information for my Master's Thesis on the Conners Island Experience. Before we begin the interview, please read this form, which explains what we will discuss, how I will conduct the interview, and how I will use the information. Then sign in the space provided.

1. What We Will Discuss

I would like to ask you some questions about the issues behind the Conners Island Conflict and your opinion of the final result of the work of the Local Citizen Planning Team (LCPT) and TVA. If you were on the LCPT I would also like to discuss why you were selected, how the LCPT worked together, and whether being on the LCPT has helped you deal with other conflicts. For this last part I will give you a survey to fill out.

2. How I Will Conduct This Interview

I will ask you a good many questions. If you don't want to answer any of them because they are threatening, offensive, improper, or embarrassing, just say you don't want to talk about that subject, and we'll go on to another. I want to keep this interview as informal as possible, so if you want to bring up anything else as we go along, please do so. Also, feel free to take a break at any time. When we get to the survey, I'll tell you how to fill it out. As we go along I'll take notes and tape our conversation.

3. How I Will Use This Information

This research is for my Master's Thesis at the University of Tennessee Graduate School of Planning, which means it will be published and other people will read it. Normally I might want to quote you in the thesis, but if you prefer to remain anonymous because you think someone might use what you say to harm you, you don't have to discuss that particular subject, or just tell me not to quote you. When I'm through with the thesis I will also destroy the notes, tapes, and survey form if you wish. Otherwise, no one will see them unless further research on Conners Island is done later. I will send a copy of the thesis to the Chairman of the LCPT so that you can read it.

Now that you have read this information, do you have any questions, or would you prefer another arrangement? I will be glad to change anything I can. If not, please sign the statement below.

I consent to be interviewed for your thesis on Conners Island. I understand the purpose and procedure of this interview, that some risk and discomfort may be involved, and that I am free not to answer any question or discuss any topic. Also, I may request that there be an alternative procedure, that my responses be kept anonymous, and that the notes, tapes, and survey form from this interview be destroyed when the thesis is completed.

NAME:

DATE

Any changes requested:

THE UNIVERSITY OF TENNESSEE, KNOXVILLE
KNOXVILLE 37916

OFFICE OF THE VICE CHANCELLOR FOR
GRADUATE STUDIES AND RESEARCH

404 ANDY HOLT TOWER

AREA 615
TELEPHONE 974-3466

April 16, 1981

Peter K. Scheffler
Graduate School of Planning
1411 White Avenue
The University of Tennessee
CAMPUS

Dear Mr. Scheffler:

As Chairperson for the Committee on Research Participation, Dr. L. B. Cebik has reviewed your proposal entitled "Evaluation of the Conners Island Experience: A Case Study of Environmental Mediation," CRP #1203. On behalf of the Committee, he will approve this proposal upon receipt of the following recommended changes or additions:

Informed Consent:

1. Include a statement that subjects have the right not to participate;
2. State that subjects have the right to withdraw from participation at any time without penalty.

Research should not be initiated until full approval has been obtained.

Please do not hesitate to call or write if you have any questions.

Sincerely,



Mary Ellen Gentry, Recording Secretary
Committee on Research Participation

cc: James A. Spencer
David A. Johnson
George E. Bowen

THE UNIVERSITY OF TENNESSEE
THE GRADUATE SCHOOL OF PLANNING
1515 CUMBERLAND AVENUE
KNOXVILLE, TENNESSEE 37916
(615) 974-5227

June 4, 1981

Ms. Mary Ellen Gentry
Committee on Research Participation
Office of the Vice Chancellor for
Graduate Studies and Research
404 Andy Holt Tower
CAMPUS

Dear Ms. Gentry:

Thank you for clarifying the procedures for obtaining informed consent. Unfortunately, our proposal was unsuccessful in obtaining a grant, but I'm doing my thesis on the subject anyway.

Your letter arrived after my interviews had already been completed, so it was not possible to obtain consent in exactly the manner you have indicated. After discussion with Mr. Spencer, my adviser, and the departmental Human Subjects Committee, I have written a letter, a copy of which is attached, to each subject explaining the situation and that he or she may without penalty withdraw the interview. We believe this procedure satisfies the spirit of the regulations.

Sincerely,

Peter K. Scheffler

cc: James A. Spencer
David A. Johnson
George E. Bowen

THE UNIVERSITY OF TENNESSEE
THE GRADUATE SCHOOL OF PLANNING
1515 CUMBERLAND AVENUE
KNOXVILLE, TENNESSEE 37916
(615) 974-5227

June 4, 1981

Dear Member of the Conners Island Local Citizen Planning Team:

I really appreciate your talking with me for my Master's Thesis on the Conners Island planning. I enjoyed meeting you and visiting the area, and I would like to return sometime. The writing of the thesis is going well, and I should be finished this summer.

I apologize for bothering you with this, but the administration here at the University has informed me that federal regulations require me to ask you one more question, and I need a response from each of you for me to complete my thesis. When I originally asked to interview you we agreed that you didn't have to answer any questions you didn't want to answer, but I didn't tell you specifically that you had the right not to participate at all in my study or to quit participating at any time during the interview without it reflecting poorly on you. So now I have to tell you that if you want to withdraw your interview, you may do so, and I won't mind at all. I won't refer in my thesis in any way to the interview or even mention that I talked to you. None of you need to worry, because I hadn't planned to quote anyone, but the regulations require me to ask if you want to withdraw the interview.

Below are two statements. Please mark the box beside the statement with which you agree. Then sign and date your response, refold the letter with the address and stamp showing, staple or tape it closed, and mail it back to me by June 30. Thanks a lot for your help.

Sincerely,

Peter Scheffler

I wish to withdraw my interview. ☐

I do not wish to withdraw my interview. ☐

*P.S. If you have any questions about this, say so and
when I get the letter back I'll call you.
Peter*

THE UNIVERSITY OF TENNESSEE, KNOXVILLE
KNOXVILLE 37916

OFFICE OF THE VICE CHANCELLOR FOR
GRADUATE STUDIES AND RESEARCH

June 23, 1981

404 ANDY HOLT TOWER

AREA 615
TELEPHONE 974-3468

Dr. L. Evans Roth
Vice Chancellor for Graduate
Studies and Research
404 Andy Holt Tower
The University of Tennessee
CAMPUS

Dear Dr. Roth:

Peter Scheffler, Graduate School of Planning, submitted a project entitled "Evaluation of the Conners Island Experience: A Case Study of Environmental Mediation," CRP #1203. The departmental human subjects committee has reviewed and approved this project. In their judgment, this project comes within that section of their approved guidelines, which permits the Chairperson of the Committee on Research Participation to give approval to the project on behalf of the Committee.

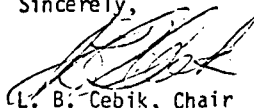
After reviewing this project, I certify that it does conform to Committee and Departmental guidelines. Therefore, acting on behalf of the Committee, I have approved this project.

The responsibility of the project director includes the following:

1. Prior approval from the Committee must be obtained before any changes in protocol are instituted.
2. Signed consent statements from each experimental subject must be kept for the duration of the project and for at least three years thereafter.
3. The Committee must be informed of any physical or psychological effects on subjects for re-evaluation of the protocol approval.
4. A statement must be submitted (Form D) at 12-month intervals attesting to the current status of the project (protocol is still in effect, project is terminated, etc.)

The Committee wishes the project director success in his research endeavors.

Sincerely,



L. B. Cebik, Chair
Committee on Research Participation

/meg

cc: Peter Scheffler ✓
James Spencer
George Bowen

APPENDIX B
MAYOR'S REQUEST FOR LAND
AND TVA'S RESPONSE

City of Guntersville

OFFICE OF THE MAYOR

PHONES (205) 582-2120 CITY HALL
582-5391 CITY HALL
582-3645 RESIDENCE
582-5603 BUSINESS

ROBERT L. (BOB) HEMBREE
MAYOR

341 Guntersville Avenue
Guntersville, Alabama 35976

March 28, 1978

Mr. Aubrey J. Wagner, Chairman
Tennessee Valley Authority
240C Liberty Building
Knoxville, Tennessee 37902

Dear Mr. Wagner:

It is my understanding that TVA has identified Conner's Island near Guntersville, Alabama, for industrial development. I feel that this would be an ideal location for an industry or possibly an industrial park.

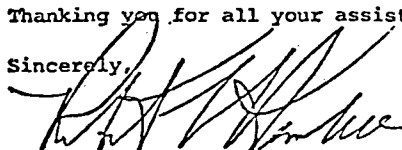
We have in Guntersville growth problems caused by our geographic limitations. We have a high unemployment rate and quite a problem with out-migration. We lack sufficient jobs for our available work force and offer no attraction for new residents to our area. We are willing to work for and with new industry, however, as I said, because of the geographic situation here we have limited acreage to offer.

I certainly would like to see the Guntersville area grow and prosper however, we are in desperate need of industry to create this growth. I would like to ask your assistance in making TVA land available for industry in our area. Also, any help you can give us in attracting and securing industry would certainly be appreciated.

We have had very good experience with TVA in the past, and I am hoping that we can work together on this matter to help create jobs for our area.

Thanking you for all your assistance, I am

Sincerely,


Robert L. Hembree
Mayor

RLH/jvm

cc: Mr. S. David Freeman

4-1-78--ILT

cc: Mr. W. L. Jenkins

Mr. S. David Freeman

Mr. Lynn Seeber

Mr. M. I. Foster - to prepare draft reply promptly for Chairman's signature, coordinating with Mr. J. S. Rozek

Mr. J. S. Rozek, 109 KCB, K 1

Mr. H. S. Sanger, Jr.,

E11833 C, K

Mr. John Van Mol, E11833 C, K 1

April 13, 1978

APR 17	EX-1
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The Honorable Robert L. Hembree
 Mayor of Guntersville
 341 Gunter Avenue
 Guntersville, Alabama 35976

Dear Mayor Hembree:

We appreciate your letter of March 28 requesting TVA assistance in attracting new jobs for Guntersville and asking about the availability of Conner's Island. First of all, please be assured we will be glad to work with you in planning for and carrying out economic development.

We have made a quick survey of the current situation in the Conner's Island area. It has potential for a number of large scale reservoir-related uses, including recreation as well as industry. In fact, together with the adjoining backland, it is an important resource for the future of Guntersville and the regional area.

In view of this importance and your expressed interest, we have asked our staff to work with you and other local interests you may wish to involve in preparing a development concept for the Conner's Island area that will recognize its potential for industry, recreation, fish and wildlife, and other uses. Representatives of our Division of Navigation Development and Regional Studies will be responsible for arranging any TVA expertise that may be needed and for working with you to get the job done. You will hear from our people in the next few days.

Thank you for providing this opportunity to work with you and your community.

Sincerely,

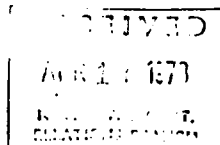
Aubrey J. Wagner
 Chairman

MIF:MDD

cc: Mr. W. L. Jenkins
 Mr. S. David Freeman
 Mr. H. N. Stroud, Jr.
 Mr. M. I. Foster

Mr. T. H. Ripley
 Mr. J. S. Rozek
 Mr. H. S. Sanger, Jr.
 Mr. John Van Mol

REGIONAL PLANNING STAFF		
To	From	Date
JLG		
LWC		
JTS		
JBY		



This letter has been coordinated w/Property & Services.

APPENDIX C

RULES OF ORDER FOR PUBLIC MEETINGS

PUBLIC MEETING
CONNERS ISLAND STUDY
Guntersville, Alabama

-Rules of Order-

The following rules of order are suggested in order to ensure everyone will have equal opportunity to express his view and ask questions about the Conners Island study:

1. Those who wish to make statements or ask questions must first be recognized by the moderator.
2. Only one person may speak at one time.
3. Statements and questions must be restricted to a 5-minute time limit.
4. Those making statements or asking questions will be required to state their name, home address, and interest in the Conners Island area.
5. If time permits, those wishing to speak for an additional five minutes must wait until all other speakers have had an initial opportunity to speak.
6. Written statements and documentation of any information presented will also be accepted by the moderator.

APPENDIX D

SUMMARY OF LCPT MEETINGS

CONVERS ISLAND DEVELOPMENT CONCEPT

LOCAL PLANNING TEAM

SUMMARY OF MEETINGS

<u>Date</u>	<u>TVA Representatives</u>	<u>Objectives</u>	<u>Remarks</u>
November 2	Weaver, Moderator Deardorff, ND&RS (coordinator)	Orientation of LPT members, explain process, and establish relationships regarding TVA, Guntersville, and Marshall County.	Weaver notes apparent "imbalance" in LPT membership. Mayor Hembree not present. Town hall council chambers deemed inadequate as a meeting place. Media was present.
November 9	Weaver, Moderator Deardorff, ND&RS Hester, FF&WD Burbank, FF&WD	Data presentation, interpre- tation, and discussion: Aerial color slides Soils and suitability T&E species Flora and fauna,	Bud Moore (SCS) was added to the membership due to "imbalance" and was present. Ophelia Chandler was absent. Steve Cotney was absent. Also present was Woodward, AGR DV
November 16	Weaver, Moderator Ginn, ND&RS Marker, FF&WD Fisher, ND&RS	Data presentation, interpre- tation, and discussion: Aerial photo composite Water and sewer plans Identify TVA lands Industrial potential Recreation potential	Ginn substituted for Deardorff. Meeting held at Chamber of Commerce Conference Room. Bud Moore was absent. Also present were Allen, FF&WD; and Hester, FF&WD. Media not present.
November 30	Weaver, Moderator Deardorff, ND&RS Henderson, AGR DV Woodward, AGR DV	Conclude data presentation, interpretation, and discussion: Prime agricultural lands Demographic trends Economic trends Existing land use Geologic data Flowage topography	Chandler and Neely absent. Steve Cotney was not present. Weaver notes need to get on with substantive plan development. Pat Roys presented information regarding the costs of growth. Media not present.

CONNERS ISLAND DEVELOPMENT CONCEPT

LOCAL PLANNING TEAM

SUMMARY OF MEETINGS

<u>Date</u>	<u>TVA Representatives</u>	<u>Objectives</u>	<u>Remarks</u>
December 7	Weaver, Moderator Deardorff, ND&RS (coordinator)	Begin substantive plan input; discuss plan concerns and preliminary development policies and criteria; readdress issues and positions in light of data	Members sketched concepts on map. Moore and Brassell absent. Moore's son substituted for Bud Moore. Press not present.
December 14	Weaver, Moderator Deardorff, ND&RS	Wrap-up of substantive plan input; finalize basic development policies and criteria; reiterate issues and facilitate compromise of various positions	Weaver recommends several alternatives be prepared by TVA and City for evaluation by team. Neely, Brassell and Clark absent. Press not present but notified of the teams progress.
January 11	Weaver, Moderator Deardorff, ND&RS	Present, evaluate, and modify plan alternatives prepared by TVA staff; begin discussion of land use and development policies	Dinner meeting; Clark absent; media not present; industrial site location and space requirements agreed upon. Deardorff notes need to further consider backlands and highway alignment.
January 18	Weaver, Moderator Deardorff, ND&RS	Consider 431 highway alignment; further develop concept plan for backlands; refine and finalize development policies and implementation strategy	Chandler absent; media not present; TARCOP plans deemed inconsistent; team could not come to grips with plan implementation; public presentation meeting set for February 1.
February 1	Weaver, Moderator Deardorff, ND&RS	Present and review revised land use concept plan and further refine development policies; organize format and prepare for February 8 public meeting	Chandler, Neely, and Roys absent. Media not present. Public presentation meeting rescheduled for February 8.

APPENDIX E

DR. WEAVER'S PERSONAL SERVICES CONTRACT

DRAFT

DAVID C. WEAVER

CONTRACT NO.

TENNESSEE VALLEY AUTHORITY

CONTRACT

FOR

PERSONAL SERVICES

THIS AGREEMENT, effective _____, between
David C. Weaver, whose address is Northport, Alabama, hereinafter called
"Contractor," and TENNESSEE VALLEY AUTHORITY, herinafter called "TVA":

W I T N E S S E T H:

IN CONSIDERATION of the mutual ccvenants hereinafter contained,
the parties agree as follows:

1. Contractor agrees to render services to TVA, when and as
requested by the Division of Navigation Development and Regional Studies,
by assisting the Regional Planning Staff in conducting a citizen participation
process designed to assist TVA in cooperative effort with the City of
Guntersville, Alabama, and other units of local government in the preparation
of a Connors Island Development Concept Plan. More specifically, the
Contractor shall:

A. Serve as an objective moderator of local public meetings,
workshops, and other group processes deemed necessary and appropriate
by TVA for the purposes of initial preparation and continued modi-
fication of various development plan alternatives.

B. Provide general technical assistance to TVA relevant to the citizen participation process including recommendations for how said process may be improved to better achieve desired citizen participation objectives including but not limited to:

1. identification and articulation of key issues,
2. learning what citizens desire regarding future area development,
3. providing a forum by which polarized interests may be mediated, and
4. strengthen public understanding of TVA's regional development role.

C. Attend meetings of the TVA planning team if and when such attendance is deemed necessary by the Regional Planning Staff for the purposes of the citizen participation process and plan development.

D. Submit, within a reasonable amount of time, a written, evaluative report of the citizen participation process should such a report be deemed appropriate by the Regional Planning Staff.

2. A. TVA agrees to pay Contractor at a rate of two hundred (200) dollars per day for time spent by the Contractor in the actual performance of services and related travel hereunder; provided, however, that for the purposes of this contract "day" shall mean a period of eight (8) hours of services and related travel; provided, further, that should the Contractor perform less than eight (8) hours of service and travel in a given day, he shall be paid at

one-eighth (1/8) the daily rate for each hour so spent; and provided, further that the total number of days does not exceed fourteen (14) days.

B. Payment under subparagraph 2.A shall be made as soon after receipt of Contractor's invoice for services rendered as such invoice can be processed, said invoice to be submitted at the conclusion of the citizen participation process.

3. TVA further agrees to reimburse Contractor for transportation and subsistence expenses incurred in connection with the performance of services hereunder; provided, however, that such reimbursement shall be subject to and computed and paid in accordance with the TVA travel regulations applicable to employees.

4. No member of or delegate to Congress or Resident Commissioner or any employee of TVA shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

5. The term of this agreement shall begin with its effective date and shall not extend beyond January 31, 1979.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names as of the day and year first above written.

David C. Weaver

TENNESSEE VALLEY AUTHORITY

By _____
Chief, Employment Branch

Law

APPENDIX F

LCPT REPORT

CONNERS ISLAND DEVELOPMENT CONCEPT

A Report of the Findings and Recommendations of
the Local Citizen Planning Team

David Weaver, Moderator

Walter Brassell	Norman Greenwell
Ophelia Chandler	Bud Moore
Bentley Clark	Ed Neely
T. L. Conner	Pat Roys
Randy Gaines	J. D. Sutton

February 1979

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BACKGROUND

Local Citizen Planning Team

The Local Citizen Planning Team served as the key element in the joint TVA/City of Guntersville Connors Island study approach. Membership of the team was solicited subsequent to the first public meeting regarding Connors Island held on October 5, 1978. Interest groups were identified based on comments made at the meeting as well as local leaders' knowledge about the Marshall County community and TVA's concern for issues of regional significance. The team's membership was determined collectively by the city and TVA and reflects community interests as indicated below:

Recreation	Walter Brassell, Marina Owner
Minority Interests	Ophelia Chandler, Private Citizen
Guntersville	Bentley Clark, City Councilman
Agriculture	T. L. Conner, Farmer
Sportsman Conservation	Randy Gaines, President, Ducks Unlimited
Claysville	Norman Greenwell, President Claysville Community Club
Soil Conservation	Bud Moore, Soil Conservation Service
Industry	Ed Neely, Chairman, Industrial Development Board
Natural Systems Preservation	Pat Roys, President, Alabama Conservancy
Marshall County	J. D. Sutton, County Commissioner

Thus, the membership is a representative sample of the concerns and attitudes shared by the greater Marshall County community. Consequently, the recommendations of this report do not reflect the exclusive desires and wishes of the representative of any one interest group. Instead, the recommendations are a product of collective compromise through the consensus of all members of the Local Citizen Planning Team.

The Local Citizen Planning Team was conceived as a mechanism whereby the city and TVA could obtain meaningful and effective citizen participation in the Connors Island land use decisionmaking process. The mechanism was

specifically designed to serve as the means through which polarized developmental interests could be mediated and resolved through negotiation and compromise based on accurate technical planning data.

In order to ensure that all interests would be treated fairly, TVA employed Dr. David Weaver, a faculty member at the University of Alabama, to serve as moderator of the planning process. Dr. Weaver also served as chairman at all the local planning team meetings where he ensured objective discussion of issues and facilitated mediation of conflicting interests.

The local planning team met a total of nine times prior to presenting its findings and recommendations to the general public at the February 8, 1979, meeting held at the Claysville School. Based on the comments and statements received at that meeting, the Local Citizen Planning Team concluded that the general public concurs with the concept plan and recommendations that follow.

TVA Technical Planning Team

The Local Citizen Planning Team's technical counterpart was the Technical Planning Team comprised of professionals from a range of program interests within TVA. The technical team functioned as a multidisciplinary group which provided technical assistance to the Local Citizen Planning Team by collecting and interpreting land use planning data and responding to specific questions relevant to respective disciplines. Continual interface between the technical and citizen teams was facilitated by a representative of TVA's Regional Planning Staff who attended all meetings of both teams.

DATA ANALYSIS

The recommendations of this report are based in part on technical land use planning data collected and interpreted by the TVA Technical Planning

Team. Although not provided as part of this report, data supporting our findings and recommendations are available from the TVA Regional Planning Staff, Division of Economic Development, 290 Liberty Building, Knoxville, Tennessee 37902.

In addition to background research concerning economic and demographic trends, data concerning both natural and manmade factors were studied at several levels of detail. The team looked first at a multicounty geographic area so that countywide and site specific data as well as local desires could be further evaluated in a regional context. Although the primary issues addressed by the team revolved around the potentials and constraints of the Conners Island area proper, the team realized that significant development of nearly any kind would have impacts far beyond the public shorelands managed by TVA.

Consequently, the team delineated an "assessment area" which included a geographic area which was anticipated to be significantly impacted should any particular alternative development option be exercised. The assessment area extends south from what is known as Roden Valley Road to the shorelands of the northern side of the Gunter'sville Reservoir as delineated on the concept plan on page 7. The findings and recommendations of this report, therefore, apply to the assessment area but are based on data evaluated at the regional as well as the local and site level of detail.

Economic and Demographic Trends

With regard to economic and demographic data, the Local Citizen Planning Team evaluated:

- o Population--growth rate comparisons of Guntersville, Marshall County, and other cities within Marshall County and the State of Alabama as a whole.
- o Migration--the flow of people into and out of Marshall County over the years and the age groups that are moving.
- o Commuting patterns--and what they reflect regarding regional economic relationships.
- o Per capita income--and comparative trends displayed by Marshall County, the Tennessee Valley, and the Nation.
- o Distribution of earnings--and what trade sectors are responsible for area residents' livelihood.
- o Unemployment--comparisons between Guntersville, Marshall County, the Huntsville SMSA, the State, and the Nation.

Natural Factors

In addition to the economic and demographic trends, the local planning team reviewed data concerning both natural and manmade factors which influence the character and quality of development. Natural factors considered include:

- o Slope--with regard to topographic limitations to various types of development alternatives.
- o Geology--and the hazards and developmental constraints associated with various types of subsurface bedrock.
- o Land cover--and the implications it has for various types of development options.
- o Soils--the characteristics of prevalent soil types and their implications for the suitability of the land for certain types of land use (i.e., agricultural potential and soil percolation rates).
- o Threatened and Endangered Species--plant or animal life found within the assessment area that may be on the verge of extinction within the State or Nation.
- o Wildlife habitat--with regard to preserving environmentally sensitive areas needed to support a variety of animal life.
- o Hydrology--in terms of the water depth needed for barge navigation and in terms of flood potential of reservoir shorelands.

Manmade Factors

Manmade factors that influence the character and quality of development are those that may be attributed to the activities of man and the facilities he has constructed to conduct or expedite those activities. Those factors reviewed by the team include:

- o Existing land use--how the land is now being used, the potential impacts of development on existing land uses as well as existing development's impact on new land use proposals.
- o Utilities--Existing and proposed service capacities of water, electric, and sewerage service areas.
- o Transportation facilities--an inventory and assessment of highway, rail, air, and water transportation modes.
- o Emergency services--such as fire and police protection and the existing and long-range proposed service levels.

All of the above factors were evaluated and weighed along with the desires of planning team members and the respective interest groups they represented. The following recommendations are a result of negotiated compromise by team members as well as the factors that influence development.

RECOMMENDATIONS

The Conners Island Development Concept

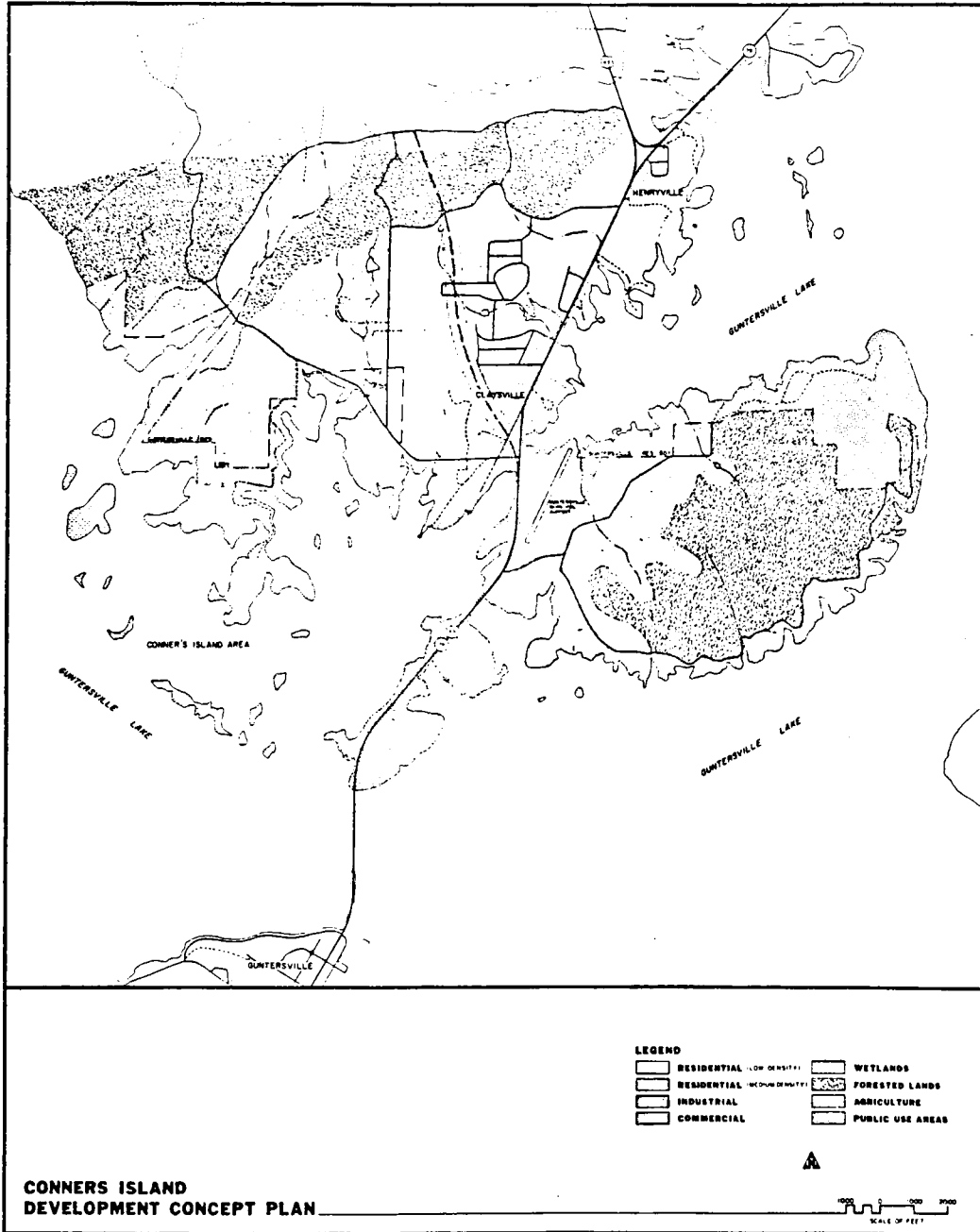
The Conners Island Development Concept is based on four basic planning criteria. The plan must be responsive to the area's need to:

- o Expand employment opportunities.
- o Preserve undeveloped prime agricultural lands.
- o Minimize developmental impacts on the Claysville community.
- o Preserve wetlands and wildlife habitat.

The Local Citizen Planning Team recommends that these concerns may be best served with the adoption and implementation of a development pattern that is consistent with the concept plan displayed on page 7. The plan is meant to be "conceptual" in nature by suggesting the idea of what pattern of development is desirable over the next 20 or 30 years. In this regard it could be used as the basis for a zoning map, but for the most part it alone could not be used to make day-to-day site specific decisions about land use. The team felt that such level of detail was not appropriate in view of the virtual absence of land use controls for the unincorporated areas of Marshall County.

The land use categories prescribed in the land use concept plan require further explanation regarding the rationale that guided the team's decision about how respective land use categories should be spatially located.

- o Residential (low density)--This category includes single-family dwelling units on relatively large lots. This category is proposed in areas not likely to be serviced by sewer facilities or in other areas where higher density development is not desirable. The low-density residential use proposed on the western side of Taylor Road reflects the desirability of "minifarms" where residential areas are backed by prime agricultural lands.
- o Residential (medium density)--This category includes residential areas characterized by planned subdivision development with a full range of urban support facilities such as public water and sewerage service. Such development is recommended for areas east of Taylor Ridge Road and the western portion of Buck Island having suitable slope. The concept plan assumes that sewer service will eventually be extended to the Claysville community after these services are extended to the proposed industrial site.
- o Industrial--Industrial development is recommended for that area south of Bakers Chapel Road yet north of the environmentally sensitive wetlands and other areas of wildlife habitat. Most development would take place on what is now known as the McDonald estate. Additional acreage (approximately 22 acres) now under TVA ownership would be needed to provide reservoir access on the western side of the Conners Island peninsula on the deepwater inlet as noted. This location for an industrial barge terminal was preferred over others



because it had the least amount of impact on sensitive wetlands and also would require the least amount of dredging. Approximately 43 acres of TVA land to the south of the McDonald estate is also recommended for industrial use as noted. In addition the area around the Guntersville Airport is also designated as industrial in order to reduce the potential for land use conflicts with airport operations.

- o Commercial--Continued and expanded commercial development is recommended for those areas already being utilized for that purpose. The team also recommends that commercial development proceed within a commercial development corridor contiguous to the recommended realignment of Route 431 to Huntsville.
- o Wetlands--This category includes those natural areas the team determined should be preserved to protect fish spawning areas and waterfowl habitat for which the Guntersville Reservoir is noted.
- o Forested Land--This category includes those areas of significant tree cover worthy of preservation and management in order to protect the aesthetic qualities of the area and enhance wildlife habitat. These areas usually have slope characteristics that prohibit other types of land use.
- o Agriculture--This category includes areas designated by the team as "prime" farmlands. As most of the other prime farmlands of the assessment area are already developed for other purposes, these remaining areas are recommended to be used for crop production. This proposal also serves as a buffer between the industrial site and proposed residential areas.
- o Public Use Areas--Are those areas in public ownership which may be used by the public for active or passive recreational purposes. These include the Marshall County Park and the TVA-managed lands on the northern side of Buck Island. Although not a recreation area, the TVA maintenance base is included in this category.

Developmental Policies

In addition to the adoption of the proposed land use concept plan, the Local Citizen Planning Team recommends that the City of Guntersville, Marshall County, the Guntersville Industrial Board, and TVA collectively adopt the following development policies regarding Connors Island and the Claysville community:

Land and Property Rights Transfer--TVA should make land available for industrial development as noted in the land use concept plan. The total industrial site should be acquired by the city and managed by the Guntersville Industrial Board.

Industry Selection Advisory Committee--The Guntersville Industrial Board should appoint an advisory committee comprised of at least five (5) members of the Claysville community selected by the community and approved by the Guntersville City Council to assist the Board in its search for and selection of industries that would be interested in locating at the Connors Island industrial site. This advisory arrangement should be guaranteed by making it a condition of any property transfer from TVA to the city.

Type of Industry--The type of industries sought and selected by the industrial board should be those providing relatively large numbers of jobs at moderate or high wage; those requiring the use of barge for shipment and/or receipt of materials; and those whose activities would provide the least negative impact on reservoir water quality, area wildlife, and the natural environment.

Deed Restrictions--If the land designated for industrial use is ever used for other developmental purposes, any TVA land leased, transferred, or otherwise conveyed to the City of Guntersville should revert back to TVA ownership and control.

Industrial Site Access--Vehicular access to the proposed industrial site should be provided by improvement of existing two-lane roads (Bakers Chapel Road and Roden Valley Road) in such a manner that would avoid additional right of way acquisition and displacement of houses and families.

Prime Agricultural Land--Effective use should be made of the good farmland in areas designated on the proposed concept plan as "agricultural." This should be done, in part, through voluntary participation in TVA's Rapid Adjustment Farm Program.

Wetlands--Areas designated on the land use concept plan as wetlands should be indefinitely preserved for waterfowl and other wildlife. Although these areas might be used for passive public use, timber resources should be carefully managed to ensure the amenities of the natural environment and a visual buffer between the industrial site and both the reservoir and backland development.

Land Use and Growth Management--Although it is an objective to minimize negative impacts on the Claysville community and foster harmonious land use relationships, the team recommends that growth management techniques not be investigated at this time because they are not desired by area residents.*

Route 431 Realignment--In the event that Route 431 is realigned, it is recommended that access controls not be imposed in order that contiguous property owners may take advantage of the economic opportunities provided by the realignment.

*Mr. Pat Roys requested that the record reflect that he supported zoning to maintain natural areas. Mr. T. L. Conner felt that the issue needed to be studied more thoroughly.

APPENDIX G

MAYOR'S SUBSEQUENT REQUEST FOR LAND,
ENVIRONMENTAL ASSESSMENT, AND
TVA LETTER OF ASSURANCE

City of Guntersville

*Don P. 5/7 L.A. E. (Guntersville)
Ralph E. Solano
Pile 4.*

5/6/79

OFFICE OF THE MAYOR

PHONES (205) 582-2120 CITY HALL
582-5391 CITY HALL
582-3645 RESIDENCE
582-5603 BUSINESS

ROBERT L. (BOB) HEMBREE
MAYOR

341 Gunter Avenue
Guntersville, Alabama 35976

April 25, 1979

Mr. S. David Freeman
Chairman
Tennessee Valley Authority
Liberty Building
Knoxville, TN 37902

MAY 4 1979

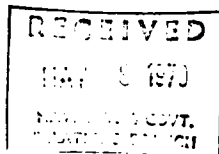
Reference: CONNER'S ISLAND DEVELOPMENT CONCEPT
GUNTERSVILLE, ALABAMA

Dear Mr. Freeman:

I have read the report of the Local Citizen Planning Team's findings and recommendations for Conner's Island. I agree with the four basic planning criteria developed by the team. The criteria -- expand employment opportunities, preserve undeveloped prime agricultural lands, minimize developmental impact on the Claysville Community and preserve Wetlands and Wildlife habitat -- were well addressed. However, I feel that additional land will be needed. By viewing the attached map you will find the outline of the City's official request of land transfer. Please note it is still responsive to the identified criteria but will also more adequately meet the criteria of expanded employment opportunities.

The area delineated on the Planning Team's concept will not meet long term needs because of space limitations. It is not incomprehensible that a single industry could take the entire site leaving us in the same situation in a few years. If the site were larger there would be additional sites available for modest sized industries even if a large one did locate. The increasing of the industrial complex as we request will have no effect on any of the designated criteria as does the Planning Team's recommendation.

- There would be a beneficial impact on expanded employment opportunities criteria due to the fact that there will be more sites available for additional employment centers.



MAY 01 1979

OFFICE OF THE
GENERAL MANAGER
DOH NO. 012

5-10-79

S. David Freeman
Tennessee Valley Authority
April 25, 1979
Page 2

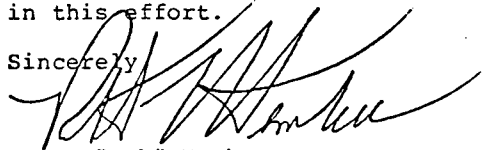
- Preservation of undeveloped prime agricultural lands would not be affected since, according to your technicians, there is no prime agricultural land indentified on this site.
- It is realistic to assume that the entire industrial area will not fill-up over night rather it will occur over many years. Therefore, developmental impact on the Claysville Community will be minimal and gradual over a long period of time.
- Wetlands and Wildlife habitats would not be affected by this request.

This tract of TVA property 589F is forecast by your agency as an industrial site, as is tract 590R (the island south of 589R). We would like all the property for the City to develop industrially, however, if the City were given the opportunity to develop the tract 589R (South of the McDonald Farm to the 600 contour line, as shown on the map for industry), we could abide with the Planning Team's recommendation not to use tract 590R (even though it has an industrial forecast).

We are most anxious to begin our industrial search to provide jobs for the citizens of this area and request that we be notified when your board has reached a decision.

I would also like to take this opportunity to extend my sincere appreciation to you and your staff for the extensive research and assistance you have given in this effort.

Sincerely,


R. L. "Bob" Hembree
Mayor

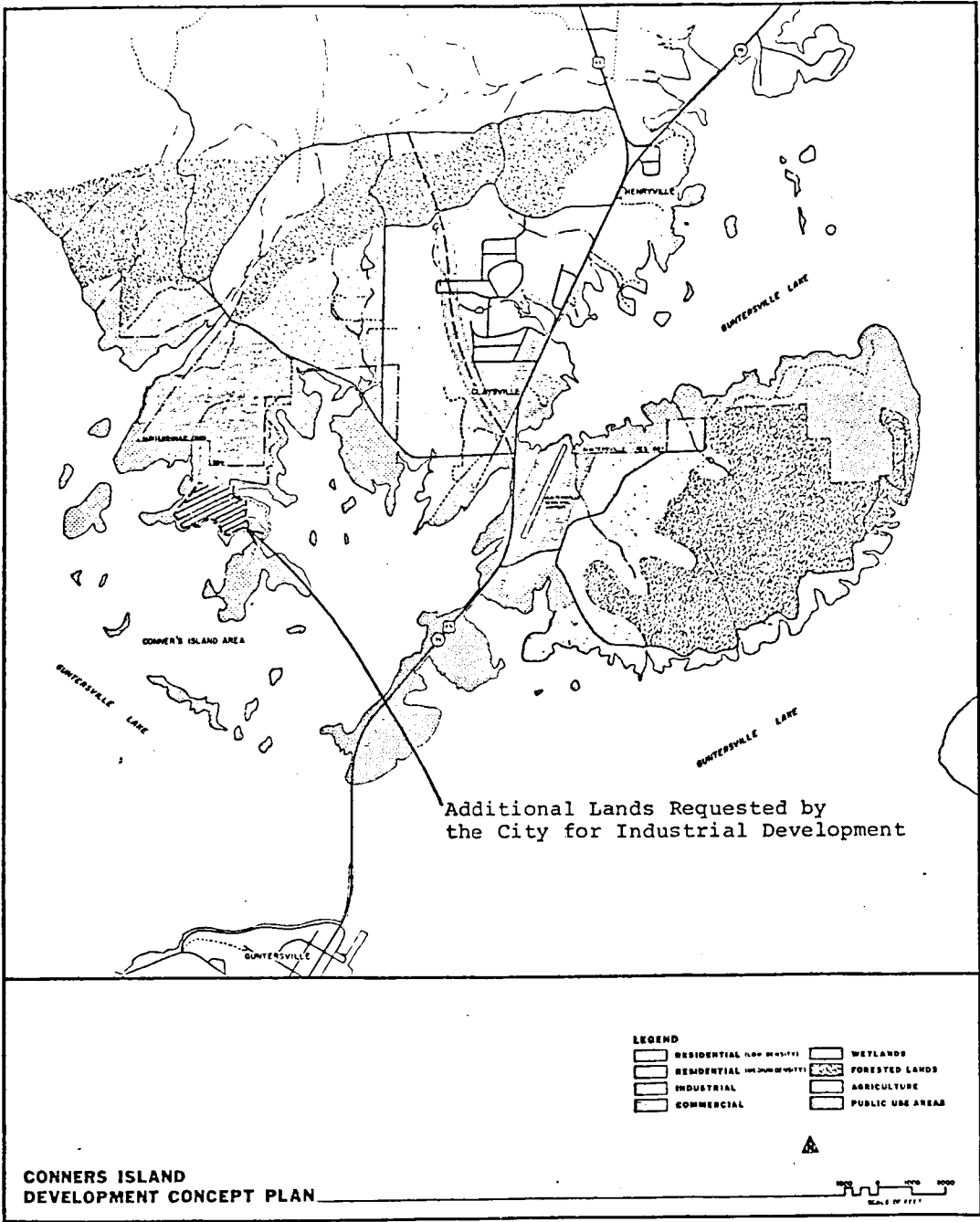
RLH/jt

Attachment

5/4/79--GM

CC (Attachment):

Richard M. Freeman
Director's Office
Leon E. Ring
T. H. Ripley - to prepare reply for Chairman's signature
J. L. Bentley, 104 HBA, K
S. P. Hirsch, 200 LB, K
H. C. Moore, Jr., 268 401B, C
H. S. Sanger, Jr., Ell B33 C, K
W. F. Willis, W12 A1 C, K



ENVIRONMENTAL ASSESSMENT - LETTER OF ASSURANCE TO
THE CITY OF GUNTERSVILLE, ALABAMA

PURPOSE AND NEED

The city cited lack of industry as a major cause of the high unemployment rate and slow economic growth in the Guntersville-Marshall County area. This high unemployment rate can be partially attributed to the unavailability of large industrial sites and the physiographic limitations of the area.

BACKGROUND - THE PLANNING PROCESS

In March of 1978, the Mayor of Guntersville, Robert L. Hembree, requested TVA to release for industrial development TVA-retained land in the Connors Island area. Because of the property's diverse development potential, TVA recommended an evaluation of the land-use options for the area.

A Local Citizen Planning Team (LCPT) composed of representatives of special interest groups was conceived as a mechanism whereby the city and TVA could obtain effective citizen participation in the decision-making process. The mechanism was specifically designed to mediate and resolve polarized development interests through negotiation and compromise based on technical planning data. The LCPT's technical counterpart was the Technical Planning Team comprised of professionals from a range of program interests within TVA. The technical team functioned as a multidisciplinary group which collected and interpreted land-use planning data. An outside moderator was retained to conduct a series of 10 public meetings, to ensure objective

discussion of the issues, and to facilitate mediation of conflicting interests. This joint effort resulted in two reports: Conners Island Development Concept--A Report of Findings and Recommendations of the Local Citizen Planning Team and Conners Island Development Concept Review--TVA Technical Planning Team.

The team evaluated the economic and demographic trends of the area, and reviewed data concerning both natural and manmade factors which influence development. In consideration of the economic, social, and environmental constraints, the LCPT developed a land-use plan and a set of policies to guide the development of Conners Island. The TVA core team was generally supportive of the citizen plan and outlined several recommendations in their report.

DESCRIPTION OF PROPOSED ACTION AND AFFECTED ENVIRONMENT

The planning team recommended that development be focused on 250 acres of private land known as the McDonald Estate. The city requested two parcels of TVA land (attachment 1) to supplement the McDonald Estate. A 22-acre parcel along the shoreline on the western side of the peninsula is proposed for barge terminal use. This location was preferred because it would have less impact on sensitive wetlands and also would require the least amount of dredging. The second parcel, 48 acres, is located along the southern boundary of the proposed industrial site. TVA recommended that the 48-acre parcel be conveyed only when an industrial prospect can demonstrate that space requirements or site design criteria warrant utilization of the property. The parcel will, in effect, act as a buffer between the wetland and industrial areas. If a letter of assurance is issued, the city

will have the right to advertise the availability of these two parcels of TVA lands.

The overstory vegetation at the site is young pines, hardwood, and shrubs; the understory is grasses and annual and perennial forbs. Wildlife include cottontail rabbit, bobwhite quail, groundhog and other species which typically inhabit open field and early successional habitat. Species that inhabit the wooded areas include gray squirrel, raccoon, and opossum. Several nongame species typical of early successional habitat that are interspersed with wooded areas include eastern meadowlark, red-winged blackbird, blue grosbeak, red-eyed vireo, eastern kingbird, black rat snake, black king snake, and cotton rat.

The TVA land south and southeast of the requested tracts is mostly wetlands with emergent vegetation and aquatic beds. There are 16 upland islands of mixed pine-hardwood forests, ranging in size from 1-30 acres, with a total area of 110 acres. The 18 miles of shoreline in this area (including islands) contain extensive growths of watermilfoil. The abundance of this vegetation in shallow water (less than 15 feet), along with the highly irregular shoreline and island complex, makes this an extremely important fisheries spawning and nursery area, as well as a waterfowl feeding and resting area. The area also provides an opportunity for informal recreation and scenic quality.

The TVA Regional Heritage Program did not identify any threatened or endangered species in the immediate area. There are no sites listed in or eligible for listing in the National Register located in or on the immediate vicinity of the sites. Prior to terrain alteration a cultural and archaeological field survey will be conducted on areas selected for industrial development. The survey results will be coordinated with the State Historic Preservation Officer.

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Land and Forest Resources

The air quality of the area is generally good. Madison County is designated nonattainment of the ozone standard. According to the Alabama Air Pollution Control Commission, there are no sources in the vicinity of the site which emit significant amounts of SO_2 .

Water quality in the vicinity of Conners Island is good and suitable for all designated uses.

ALTERNATIVES

There are three reasonable alternative actions:

1. No action - decline to issue a letter of assurance.
2. Make available the two tracts identified by the planning team.
3. Make an additional 35 acres of land available as requested by the Mayor of Guntersville.

Alternative 1 - No Action

This alternative would result in no change in the interim status of the TVA properties on Conners Island. The area would remain an open green space for public use. Although there will be no new impacts on the physical environment, several socioeconomic impacts would be experienced. Unless an industrial site is available that will support large industry, the Guntersville-Marshall County area will continue to have high unemployment, out-migration, and lower-than-average per capita income.

Alternative 2 - Make Available the Land Identified by the Planning Team

Under this alternative industrial development will be located primarily on the McDonald Estate. The 22-acre TVA tract would provide reservoir access on the western side of Conners Island, and the 48-acre

tract would supplement the McDonald Estate and act as a buffer zone between the development and environmentally sensitive areas.

Unquestionably, industrial development of this site will impact the natural resource; however, during the planning process the region was screened for industrial suitability and environmental sensitivity and these tracts best fit the planning criteria. Surface disturbance of areas which support unique or sensitive natural or cultural systems will not be permitted. Conflicts will be identified during site-specific environmental assessments on industries that locate on the tracts.

Alternative 3 - Make an Additional 35 Acres of Land Available

As was discussed earlier, Mayor Hembree of Guntersville, in a letter to Chairman Freeman (attachment 2), indicated that the TVA land delineated by the planning team will not meet long-term needs because of space limitations. The additional land requested by the mayor is located south of the 48-acre TVA tract (attachment 3). This tract was designated by the planning team as a wetlands natural system that should be preserved. Under this alternative, more land would be available for future industrial development; however, development of this tract would adversely impact wetlands, wildlife, aesthetics, and informal recreational use.

Preferred Alternative

In summary, the preferred alternative is to make the two parcels of TVA land available as discussed in alternative two. This proposed action is consistent with Connors Island Development Concept and is responsive to the area's need to protect the natural/cultural resources of the area, preserve undeveloped prime agricultural lands, expand employment opportunities, and minimize impacts on the nearby community.

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Land and Forest Resources

Environmental Consequence of the Preferred Alternative

Construction would require removal of existing ground cover, resulting in a loss of vegetation; however, proper revegetation along with natural regeneration should minimize this loss. During construction, less mobile organisms would be destroyed; however, the diverse habitats around the area would serve as refuge for many of the species occupying the site. Should industrialization of the designated sites affect riparian areas, compliance with Executive Order 11990 (Protection of Wetlands) will be undertaken. No known archaeological or historic properties will be impacted under the preferred alternative; however, any sites identified during site-specific environmental assessment will be protected by mitigation. Levels of noise, dust, and turbidity will increase during construction, but should be of short duration and of little significance. There will be some effects to small farm agriculture and the rural communities in the vicinity of the proposed industrial area.

No detrimental effects on air quality are anticipated. However, TVA's Murphy Hill inventory site is 13 kilometers northeast of Connors Island. If Murphy Hill is developed as a coal gasification demonstration plant, there will likely be competition for air quality increment at some time in the future. Subsequent environmental review procedures should make adequate provision for the evaluation of this possibility prior to a commitment being made for a specific land use.

Depending on the type of industrial development, potential adverse water quality impacts resulting from the proposed action include increased turbidity during construction and the addition of nutrients and oxygen-demanding wastes which contribute to low hypolimnetic dissolved oxygen conditions in Gunter'sville Reservoir. With proper controls, these impacts are not expected to outweigh the benefits of the proposed development.

Compliance with the following controls and Executive Order 11988 (Floodplain Management) will avoid adverse floodplain effects.

1. No activities for which there is any practicable nonfloodplain alternative will be permitted below 100-year flood elevation 596, and this restriction will be included in the conveyance. (It should be marked on the property when other surveys are made and a plat provided.)
2. Any facilities or equipment subject to flood damage must be located above or floodproofed to structure profile elevation 600.
3. TVA would retain the right to flood any part of the tract which is below maximum probable flood elevation 603.
4. The easement should also be subject to conditions and restrictions which TVA finds necessary to protect water quality in Gunter'sville Reservoir.

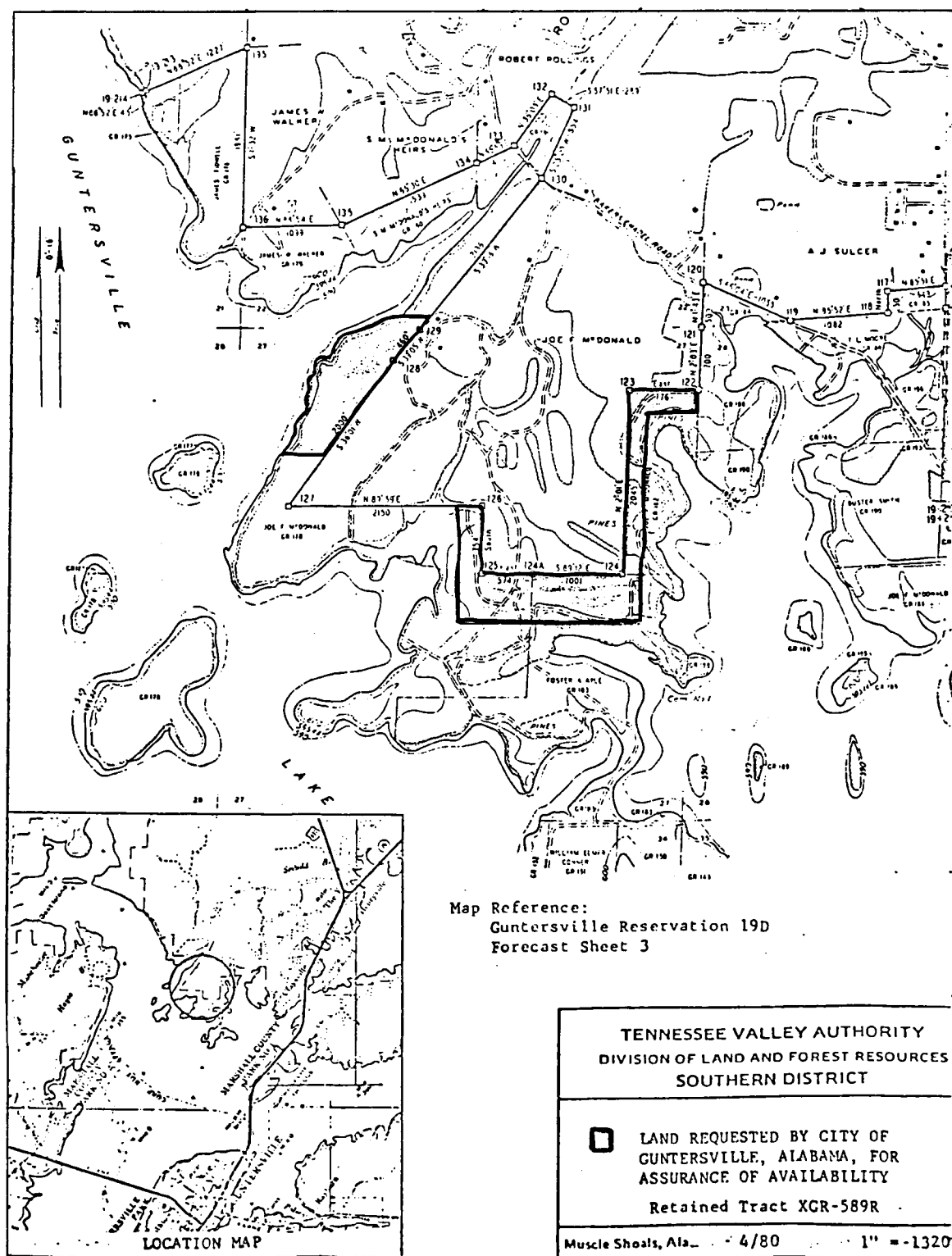
All land granted under this alternative would be in accordance with TVA policy on the transfer of land for industrial purposes. Accordingly, any industry locating in the area would have to be in full compliance with all applicable standards and requirements relating to pollution control now in effect or hereafter established by or pursuant to Federal, State, or local statutes, ordinances, or regulations. The land will be committed permanently for industrial use but may be reclaimed on termination of this use.

CONCLUSION

Based on the Connors Island planning process, this environmental assessment, and comments of interested TVA programs, we conclude that the proposed action, issuance of a letter of assurance to the city of Gunter'sville

Division of
Land and Forest Resources

for two parcels of land (TVA tract XGR-589R), is not a major Federal action having significant effect on the human environment and/or highly controversial. Therefore, an Environmental Impact Statement is not required. We request the concurrence of the Environmental Quality Staff in this determination.



July 23, 1980

The Honorable Robert L. Hembree
Mayor of Guntersville
Guntersville, Alabama 35976

Dear Mayor Hembree:

This refers to your March 1978 request that TVA make public land in the Conners Island area available for industrial development. The city seeks assurance that this site on Guntersville Reservoir will be available for industrial development should a suitable industry inquire and obtain the necessary approvals.

As you know, TVA worked with Guntersville to prepare a concept plan for the integrated development of the public and private land in the Conners Island area. As a result of the planning effort and environmental assessment, an industrial development was recommended to be primarily located on the 250-acre area known as the McDonald Estate with a 48-acre tract of TVA property supplementing that development and a 22-acre tract providing reservoir access for the entire industrial tract (see enclosed map). The additional 35 acres that you requested on April 25, 1979, are not available for industrial development. Also, TVA's Murphy Hill site is the preferred location for a coal gasification demonstration plant, and there could be competition with other industries for air quality increments at some time in the future.

Subject to the conditions stated below and in accordance with the environmental assessment, TVA staff is prepared to recommend to the TVA Board of Directors that it determine the sale of an industrial easement would not be adverse to the interests of the United States or TVA, and that it authorize such a sale of the property.

The conditions for staff recommendation are:

1. Favorable resolution of environmental questions, including any questions arising under the National Environmental Policy Act of 1969 (42 U.S.C. KK 4331-4335, 4357 (1970; Supp. V, 1975)), Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), and 11593 (Protection and Enhancement of the Cultural Environment), other applicable laws, and TVA's own policies;
2. Coordination of the proposal with State and local planning as required by Office of Management and Budget Circular A-95;
3. Acquisition of the 250-acre McDonald Estate by the city;

FILES

Division of
Land and Water Resources

July 23, 1980

The Honorable Robert L. Hembree

4. Obtaining the required approvals and permits for development including Corps of Engineers permits; and
5. Establishment of developmental and environmental standards as covenants running with the land for industries located in the park. TVA reserves the right to review detailed plans for construction and operation and to disapprove the siting of industries that fail to meet such standards.

We hope this conditional assurance is sufficient to enable you to proceed in your discussions with prospects interested in the development of the Connors Island area.

Sincerely,

W. F. Willis
General Manager

Enclosures

WES:JAM:LJH

cc (Enclosures):

S. David Freeman
Richard M. Freeman
Robert M. Clement
T. H. Ripley, FOR B-N
B. J. Bond, A214 NFDC-M
C. Bonine, Jr., E3C76 C-K
H. W. Dixon, 200 LB-K
M. T. El-Ashry, FOR B-N
H. G. Parris, 500A CST2-C
H. S. Sanger, Jr., E11B33 C-K
bc: J. A. Curry, FOR B-N
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Prepared by William E. Smith and Jackie A. McKittrick

7-28-80 --- THR

cc: J. P. Blackwell, 100A ROB-M
R. L. Morgan, FOR B-N

VITA

Peter Knox Scheffler was born in Martinsville, Virginia on October 11, 1951. At the age of 2 he moved to Rock Hill, South Carolina, where he later attended elementary and secondary schools, being graduated from Rock Hill High School in 1969. In 1973 he graduated from Haverford College, Haverford, Pennsylvania, with a Bachelor of Arts degree in Geology, and in 1976 he received a Master of Science degree in that field from The University of South Carolina, Columbia.

For two years Mr. Scheffler then worked as an engineering geologist with Ebasco Services Inc. in Greensboro, North Carolina. During this time he developed an interest in land use planning, so in September 1978 he entered the Graduate School of Planning at The University of Tennessee, Knoxville to obtain a Master of Science in Planning. The degree was awarded in March 1982.

Mr. Scheffler is a member of Phi Kappa Phi, The American Planning Association, The Association of Engineering Geologists, and The National Association of Environmental Professionals. He has been a research associate at Oak Ridge National Laboratory and is presently employed as a Regional Planner in the Office of Economic and Community Development at the Tennessee Valley Authority, Knoxville.

Mr. Scheffler is married to the former Susan Tandy Wilkins of Durham, North Carolina.