

## CHAPTER FOUR

### DELINEATING COLLABORATIVE ENVIRONMENTAL DECISIONMAKING

#### 4.1 Elements of Collaborative Environmental Decisionmaking in the Literature

Prior to determining the effectiveness of collaboration as an environmental decisionmaking methodology, I needed to characterize the process. Thus, I began this work by attempting to determine the features or elements of collaborative decisionmaking. I started with an examination of how collaborative environmental decisionmaking is characterized in the literature.

Starting with Gray's (1989) seminal work on collaboration, the five characteristics of collaboration she noted are:

- participation of independent stakeholders,
- stakeholders making joint decisions,
- stakeholders taking joint responsibility,
- an emergent nature to the process, and
- solutions occurring through a discourse over differences.

In the analysis of a collective process where a habitat conservation plan for the desert tortoise was drafted, Reilly (1998) surveyed and interviewed the participants, and conducted a content analysis of the documents it produced. The author concluded that a successful collaboration must:

- involve the affected parties,
- develop shared leadership,
- increase the trust among participants, and
- provide a forum for discussions.

A paper whose purpose was to illustrate ways in which forest managers can understand the concept of collaborative solutions indicated that the features of the collaborative process are:

- joint decisionmaking,
- shared power, and
- joint responsibility (Selin and Chavez, 1995).

A study of a consensus-based, collaborative process indicated its elements are:

- participation by all stakeholders,
- a consensus decisionmaking process, and
- empowerment of locals

(Paulson, 1998).

Moote and McClaran (1997) stated that an effective participatory approach has:

- representation of all affected interests,
- access to decisionmakers,
- open forums,
- shared information,
- continuous involvement in the decisionmaking process, and
- joint ownership of decisions.

In a case where the public became upset after the Bureau of Land Management attempted to purchase riparian lands in Arizona, the authors of an article on that subject indicated that the characteristics of a participatory democracy approach to decisionmaking consist of:

- a broad range of interest representation,
- the sharing of information, and
- the establishment of joint responsibility

(Moote and others, 1997).

Daniels and Walker (1996) indicated that federal natural resource management agencies are moving away from commodity and user-based management, and toward ecosystem management. Learning and civic dialogue are cited as basic to decisionmaking in such a system. Chrislip and Larson's (1994) book on collaborative leadership indicated that the conditions of successful collaboration are an open process with broad-based involvement and support from leaders. A 1995 review of literature sources listed the principles of collaboration as:

- inclusion of all parties who have a stake in the problem,
- shared decisionmaking,
- the exploration of differences by all parties collectively,
- the consideration of appropriate information, and
- the consideration of joint problems.

(London, 1995).

Porter and Salveson's (1995) book on collaborative planning identified the involvement of all affected interests and consensus as keys. Healey (1997) stated that the essence of collaboration is the inclusion of all stakeholders in a dialogue.

When placed in tabular form for comparative purposes, these sources indicate that the most common features of collaborative environmental decisionmaking are:

- the involvement of all affected parties,
- open discussions,
- the sharing of information,
- joint decisionmaking,
- joint responsibility, and
- the sharing of power

(Table One).

#### **4.2 A Review of Case Studies in the Literature and Print Media**

After I determined the most common features of collaborative environmental decisionmaking from the literature, I refined these features into a few basic elements by analyzing actual situations where environmental issues were addressed by affected parties through an open discussion process. I evaluated each example by determining whether the features of collaborative environmental decisionmaking, as determined from the literature, were present. I located 76 examples where the two most basic characteristics of collaboration -- participatory democracy and civic discourse -- occurred within a management and/or decisionmaking context (Appendix Two). Twenty-six (26) examples

were chosen from Yaffee ' s (1996) book and 21 from the EPA website. The remaining 29 examples came from newspapers, magazine articles, and professional journals.

**Table One. Common features of collaboration as indicated by various authors.**

Features	Author											T O T A L S
	R e i l l y	H e a l l e y	G r a y	L o n d o n	S e l i n	P o r t e r	P a u l s o n	M o o t e & M c C	M o o t e a n d	D a r i e l s	C h r i s t i p	
Involvement of Affected Parties	X	X		X		X	X	X	X		X	8
Shared Power*	X				X		X					3
Joint Decisionmaking			X	X	X			X				4
Joint Responsibility			X	X	X				X			4
Shared Information or Shared learning				X				X	X	X		4
Trust Developed	X											1
Open Forum	X							X				2
Open Discussions		X	X	X						X	X	5
Stakeholders Independent			X									1
Emergent process			X									1
Consensus						X	X					2
Access to Decisionmakers								X				1
Support of Leaders											X	1
<b>TOTALS</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>3</b>	

\*Because joint decisionmaking and joint responsibility imply power sharing, they are placed within a single category in order to simplify the number of elements being considered.

The examples differed in terms of subject matter, geographical location, government agency involvement, and problem solving approaches. They considered such varied topics as wetlands protection, land acquisition, and endangered species protection, and covered geographical areas not only across the United States, but also in Switzerland, Australia and India. The EPA, U.S. Fish and Wildlife Service, U.S. Forest Service, Bureau of Land Management, U.S. Army Corps of Engineers, and myriad state agencies were among the governmental organizations involved. Outcomes included development of plans and reports, land purchases, ongoing management, scientific studies, monitoring and evaluation, project implementation and development, and conflict resolution.

Since the feature of public involvement was used to select the examples, it was, by definition, a feature of all the studies. Further, while not mentioned as an element of collaborative decisionmaking in the literature, most of the examples (65 of 76) involved the establishment of some type of formal organization. The organizations varied from strictly delineated committees to loose forums. The existence of a formal organization is likely derivative of the participation element -- perhaps a more organized level of public participation -- that is useful for comparative purposes.

In 61 of the examples, participants shared information. In 50 of the examples, the issues were addressed collectively by sharing some power through joint decisionmaking or problem solving, or through cooperation, collaboration, or compromise. Because joint decisionmaking and joint responsibility require the sharing of power, I collapsed them into the one category of shared power to reduce the number of elements being considered. In over half the examples (40), there was an unrestrained, civic dialogue reported among the participants that often led to

consensus being reached on an issue (Table Two).

**Table Two. Occurrence of Elements of Collaborative Environmental Decisionmaking among the 76 case studies.**

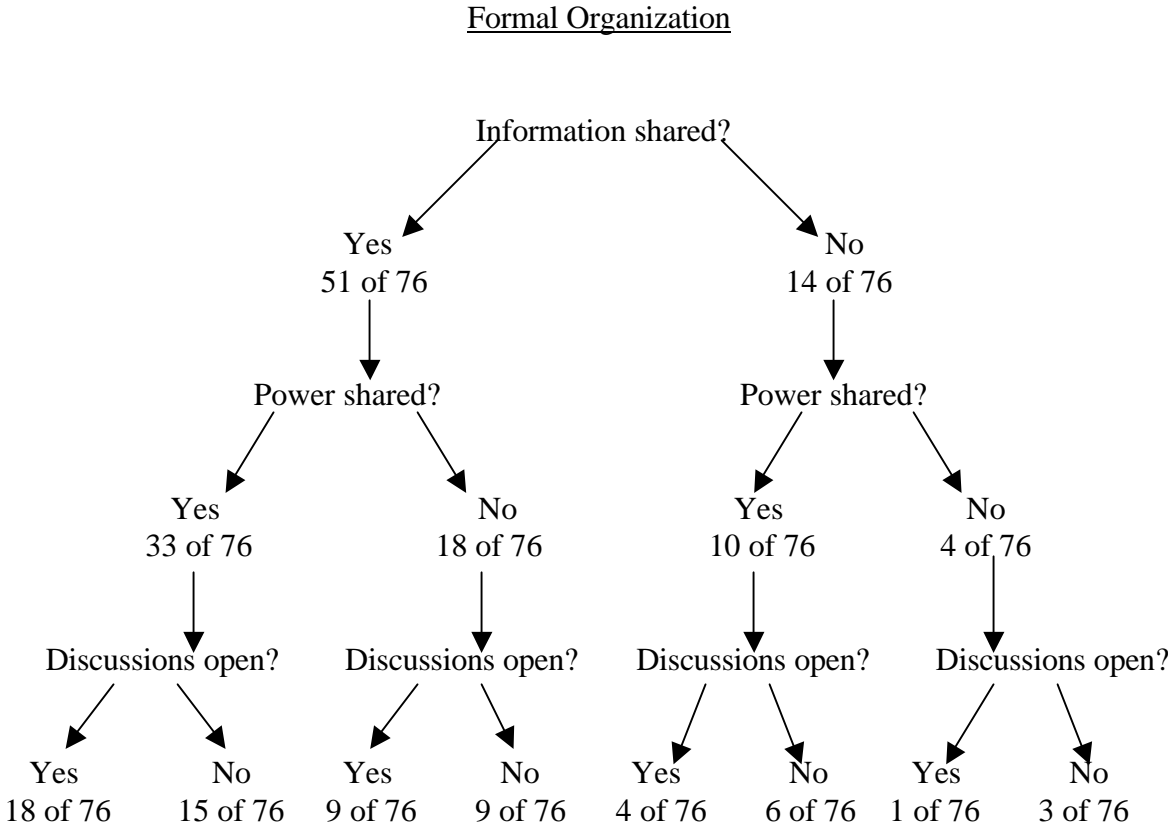
<b>Involvement of Affected Parties</b>	<b>Formal Organizations Established</b>	<b>Information Shared</b>	<b>Power Shared</b>	<b>Open Discussions</b>
76 cases	65 cases	61 cases	50 cases	40 cases

**4.3 Relationships Among the Elements**

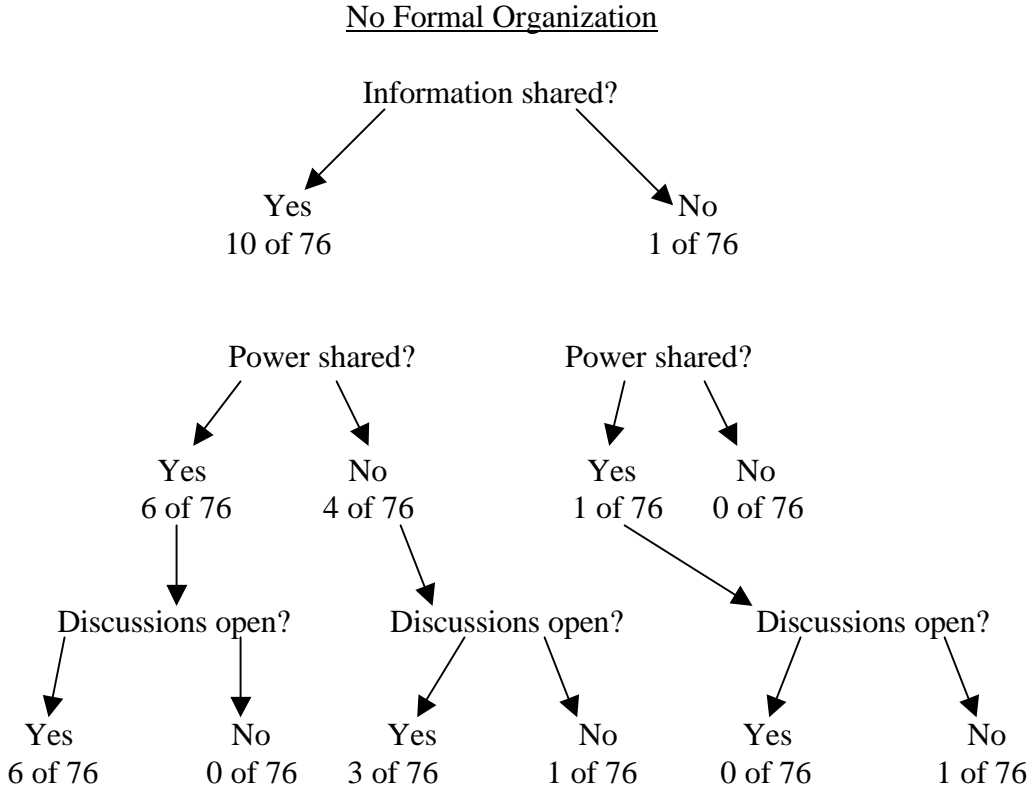
The literature search revealed that different scholars have described collaboration in similar manners that illustrate common features. These features provided a starting point for determining what the process is, but they did not provide any insight into relationships among these elements. I analyzed associations among the basic elements of collaborative environmental decisionmaking within the 76 groups by developing branching diagrams (Figures One and Two).



**Figure One. Number and percentage of cases with similar elements in situations where a formal organization was established (65 of 76 cases).**



**Figure Two. Number and percentage of cases with similar elements in situations where no formal organization was established (11 of 76 cases).**



For each case, I began by determining if a formal organization was established. Then, I established whether or not information was shared, with a “yes” answer leading down one pathway and a “no” the other. In that manner, I determined a yes or no pathway for the presence of the elements for each of the 76 cases.

Open discussions, with the fewest number of occurrences, formed the base. The establishment of a formal organization, with 65 cases, formed the top of the diagram (Since all of the cases involved affected parties, that element was not needed for construction of the branching diagrams -- it was present in all of the 76 groups). In between these two elements are information sharing and power sharing. Working from the base element of the diagram (open discussions), both open discussions and power sharing occur together in only 28 of all 76 groups (37%). Thus, it appears that in collaborative environmental decisionmaking processes, open discussions and power sharing do not necessarily have some meaningful relationship to the process when bound to one another. However, in looking only at the 41 cases where open discussions occurred, power was shared in 31 of them (75%). One possible conclusion is that there can be open discussions without power sharing when a group gathers to address an environmental issue. This is essentially what public comment on existing decisions -- the level of public involvement called for in the National Environmental Policy Act -- represents. However, power cannot be shared without open discussions. When a group shares power yet does not undertake discussions, there is no decision process. In such a situation, either there is total agreement or total impasse (no one is talking to the other side) among power sharers. Where decisions must be made, participants in a collaborative process must open a dialogue and establish common ground to reach joint decisions. Yet, open discussions were not indicated in

every group reporting the sharing of power. The reason for this is likely that the element of open discussions in power sharing groups is so obvious that it was simply not reported.

Moving up the diagram from the power sharing level to the information sharing level, the same kind of analysis can be made with respect to power and information sharing. Power sharing and information sharing occur together in 39 of the 76 cases (51%). Of the 50 groups where power sharing occurred, information sharing occurred in 39 of them (78%). Information can be shared among all the participants in a group without giving the participants decisionmaking power. This is illustrated in the extreme by the once prevalent federal agency procedure of “decide-announce-defend” -- where a decision was made, the decision was made public, and the decision was then defended from public criticism. Alternatively, power sharing requires information sharing. To reach a decision in a situation where power is shared among all members of the group, each member must persuade the other members to his or her position by educating them. This education requires information to be shared. Should a member not share information, he or she runs the risk of not being able to persuade the rest of the group and, should it get out that such a member was holding back vital information, his or her position is likely to be discounted. There is little to gain and much to lose by not sharing information in a power sharing situation.

Open discussions occur in 36 of the 61 groups where information sharing is reported (59%). There can be information sharing without open discussions. This kind of occurrence can happen when expert knowledge is presented to a group. An authority presents findings, they are considered factual, and there are no discussions. There can also be discussions without information sharing such as when a participant puts forth a position and is unwilling or unable to

explain or defend that position. However, this is an unproductive situation and will not lead to consensus or solutions being developed. Thus, these situations can be discounted as collaborative events.

Open discussions, power sharing and information sharing occur together in 24 of the 76 cases (32%). As evidenced by these numbers, there appear to be many situations where the three elements are not all present. There is then a question as to whether collaboration requires all three. If information is shared and discussed in a situation where decisionmaking is retained by one party, it may still be possible to build social capital. By social capital is meant the trust and networks that occur through interactions that are possible when any group is formed. In such a situation, a solution does not necessarily have to be reached; the building of social capital in and of itself may be a valuable end to an interactive process. If a solution occurs at some later point in time or space as a result of a process that previously only exchanged information, then the process was worth while. Thus, power sharing may not be a necessary element to such a process. If participants were able to speak, were listened to, and had their ideas discussed, the process was valuable. If all three elements are present, the event is collaborative. If power is shared and there are open discussions, the event is collaborative. However, if power is shared and information is shared, the event may not necessarily be collaborative. Consider a situation where information is presented to a group and that group then acts or does not act. Did they collaborate? No. What if they voted, without discussion, after receiving the information? Did they collaborate? No. In both situations they acted independently, without interacting with the other members of the group. Thus, while open discussions were only mentioned in 40 of the 76 groups, in a

situation where open discussions do not occur, there is something other than collaboration occurring.

Information sharing occurs in 51 of the 65 groups that were described as formal organizations (78%). Formalizing an organization, defined herein as simply coming up with a name for the group, is reported in 86% of the groups examined. This is important to the collaborative process because it establishes an identity and a sense of belonging. If a group has an identity, it is likely that there is some purpose to the group's existence. If it has purpose, then it is at least possible for the group to accomplish something. If a person willingly belongs to an identified group, then that person is likely to assume some sense of responsibility with respect to the group. Purpose and responsibility are features of civic discourse. People are unlikely to gather in a forum for a free interchange of ideas where there is no purpose to the meeting. Attending meetings, identifying with a group that has a purpose, and taking responsibility for the performance of that group are strong action indicators. Acquiring a formal name in a collaborative setting fosters identity, purpose, and responsibility. Information sharing occurs in such groups because they are naturally structured to accept the knowledge of the participants. They are formed around the need for a discourse on some issue, concern, problem or idea. To understand and resolve the issue, concern, problem or idea, the group requires information.

Can there be a formalized, collaborative organization without information sharing? No. If there is no sharing of information, then the group is not collaborative. Each member comes to the group as a constituent of some pre-existing position or concern. Without sharing that position or concern, or any information about them, there can be no group

solutions. Either that or there was no need for the group 's existence because all were in agreement before the group was formed. If the group is formed only of people already in agreement, it is not a collaborative effort. It is a foregone conclusion. That is why each and every group examined attempted to include the affected parties. Collaborative environmental decisionmaking starts with an invitation for affected parties to meet and exchange information.

Sharing both information and power within the structure of a formal organization is reported in 33 of the 76 groups (43%). This is less than half the groups and again is likely attributable to the concept that solutions are not always the endpoint of a collaborative process. People or organizations that have a tradition of antagonism may not be able to reach a solution when meeting together to resolve an issue or problem. However, over time, they might be able to learn from each other, to build trust, and to begin to understand one another. Since environmental problems and issues are not going to disappear, the social capital built by this process might resurface in another group established for some other, related, purpose.

There is a remaining question about one element -- power sharing. Can a process be collaborative if power is not shared among the participants? Perhaps an open discussion where information is shared but power is retained by a subgroup or individual is an acceptable situation. However, in collaborative decisionmaking, it is the group solution that makes it unique. This study is an examination of situations where groups are formed to make a decision or resolve an issue. They may not always make a decision or resolve an issue, but that is the reason they were formed. If power is retained by an agency, company, or

individual, then the organization can be considered nothing more than an advisory group. There are many advisory groups in existence, particularly among federal agencies. They cannot be described as collaborative. Collaborative decisionmaking must entail a group taking joint responsibility and invoking joint decisionmaking. If an agency, company, or individual with decisionmaking power is unwilling to give that power to the group, then they are only seeking advice from the group. Thus, there may be an environmental group that is formed for advisory purposes, but this kind of group is not capable of ultimately resolving issues, problems, or controversies, or reaching solutions. Further, not all affected parties are going to be attracted to an environmental group that can only offer advice. When a group of affected parties takes responsibility and makes decisions, hard, controversial issues and problems can be fairly and equitably resolved. This is not going to occur in an advisory group setting.

#### **4.4 Group Clusters Around Element Combinations**

The dichotomous classification system developed for this study indicated that the 76 groups clustered under certain combinations of the elements of collaborative environmental decisionmaking. For each case, I made a determination as to whether or not a formal organization had been established. Once that was done, whether “information sharing” occurred was noted, then whether “open discussions” occurred, and finally whether “power sharing” was described. As a result, each of the 76 cases was ultimately assigned to 1 of 16 endpoints. This made it possible to compare cases for similarities and differences with respect to the presence of the elements of collaborative decisionmaking (Appendix Three).



A cluster of 18 of the 76 groups examined formed under the element combinations of attendance of affected parties, establishment of a formal organization, information sharing, power sharing, and open discussions. The importance of these elements has already been discussed, and the fact that the largest cluster formed where all of the elements were reported to be present verifies their identification and importance. However, another 15 groups fell under a combination of formal organization, information sharing, and power sharing (no open discussions); the next largest clusters had 9 groups falling under the elements of formal organization, information sharing, and open discussions (no power sharing); and another 9 under formal organizations and information sharing (no power sharing, no open discussions). Over 40% of the case studies fell under only 2 of the 16 possible combinations of elements; two-thirds of the groups are accounted for in only 4 of the possible 16 clusters. Taking into account the previous arguments on open discussions and power sharing (i.e. that the lack of open discussions can be attributed to a failure of the reporter to note an obvious action, and that power sharing is essential to collaborative environmental decisionmaking), then it can be argued that the groups falling under the two clusters where no power sharing occurs can be eliminated from the total of 76. Because there is no collaboration without power sharing this category can be argued as meaningless for comparison purposes herein. If the element of open discussions is ignored, the two clusters with the elements of formal organization, information sharing, and power sharing present can be combined to form one cluster of 33 groups. Thus, over half of the groups, 33 of 58, fall under 1 of 8 possible clusters. The other 25 groups are scattered among the other 7 combinations of elements.

The point of this exercise is that the groups are not randomly distributed among the

different classification endpoints. Each of the groups examined did not just exhibit one or two of the elements. Most of them exhibited three, four, or five of them, further validating their importance. To at least some extent, they delineate the characteristics of collaborative environmental decisionmaking. If that point is accepted, then the elements can be used to describe the process and to identify instances of collaboration. They can then be applied to a study of how and why the elements affect specific cases.

These results would appear to validate the elements of collaborative environmental decisionmaking described in the literature. However, it is important to realize that this kind of an analysis relies on descriptions reported by the analysts, scholars, reporters and others who were providing the summaries. Thus, whether these particular descriptions did or did not happen to include particular features of collaboration is not necessarily conclusive of their presence or absence. Yet, the summaries are likely to have presented the most important components of the described incident. Through this procedure, the features described in the literature were refined into some basic elements of collaborative environmental decisionmaking.