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# *Case Analysis*

## Designing a Dispute Resolution System for Water Policy and Management

*Matthew McKinney*

In 1988, the Montana Department of Natural Resources and Conservation designed a dispute resolution system to address the stream of complex, multi-party issues that characterize western water policy and management. The system, which is referred to as the "state water planning process," is based on one simple observation — that water resource problems and conflicts are chronic and inevitable. In light of this observation, the planning process provides an ongoing forum for affected interests and the public to work together to identify issues, explore alternative solutions, and develop consensus legislative and administrative recommendations.

Over the past four years, the Department and other participants have learned several general lessons about designing and facilitating a dispute resolution system. First and foremost, all affected interests should participate in designing the process as well as in negotiating over substantive issues. The decision-making process, and ground rules, must also be defined and agreed to before the process begins. The affected interests must have adequate time for negotiating an agreement. Finally, the relationship of the dispute resolution system to existing decision-making channels must be carefully considered and mapped out.

This case analysis examines these and other general lessons that have emerged from Montana's experience in designing and facilitating a dispute resolution system to address water policy and management issues. While Montana's state water planning process has improved relationships among diverse interests and resulted in some innovative policies, it might be fine-tuned and improved in a variety of ways.

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**Matthew McKinney** is a policy analyst and facilitator with the State of Montana Department of Natural Resources and Conservation, 1520 East Sixth Avenue, Helena, Mont. 59620.

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## The Montana State Water Plan

### *Origin*

In 1967, the Montana legislature passed the Water Resources Act, which outlines several water management goals for the state (Section 85-1-101, MCA). The legislature also called for the development of a state water plan as the mechanism to accomplish the goals (Section 85-1-101(10), MCA). According to the statute, the state water plan should be comprehensive; coordinated; provide for multiple uses; set out a progressive program for the conservation, development, and utilization of the state's water; and propose the most effective means by which the state's water resources may be used for the benefit of the people, with due consideration of alternative uses and combinations of uses (Section 85-1-203, MCA).

The Department of Natural Resources and Conservation is responsible for developing the state water plan. In the process of formulating the plan, the Department is to consult with the legislative Water Policy Committee, hold public meetings prior to adopting the plan, adopt the plan with approval from the Board of Natural Resources and Conservation, publish the plan, and submit it to the Water Policy Committee and to each general session of the legislature (Section 85-1-203, MCA).

Prior to 1987, efforts to develop the state water plan focused on comprehensive, multiple-use basin plans (McKinney, 1990). While these plans resulted in volumes of technical information, the institutional and political feasibility of implementing the plans was never considered. Consequently, the plans provided little guidance to resource managers in resolving complex and controversial water management problems and ended up as "shelf art."

In 1987, the Department embarked on a new approach to developing the state water plan. After reviewing the water planning processes of other western states, the Department decided to adopt the general approach used by the Kansas Water Office. The Department has adapted and refined the approach used in Kansas to reflect the unique hydrologic, institutional, and political characteristics of Montana.

### *A Collaborative, Consensus-Building Process*

The Montana state water planning process has gradually evolved and been refined during the past four years. Today, the state water planning process recognizes that a large number of federal, Native American, state, local, and even regional entities have a role in the management of Montana's water. It also recognizes that several interests are affected by water management decisions, including irrigators; municipalities; energy and industrial developers; and fish, wildlife, and outdoor enthusiasts. The planning process provides an opportunity for all these parties to be involved in formulating and implementing policies, programs, and strategies to resolve water resource conflicts and problems in Montana.

The planning process provides multiple levels of public involvement and opportunities for consensus building. All of these opportunities are designed to jointly identify problems and develop solutions that are acceptable to all affected interests. The opportunities for public involvement and consensus building include:

*Community Dialogues.* These public meetings allow the public and all potentially affected interests to participate in identifying issues that should be addressed by the state water plan during any given cycle.

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*State Water Plan Advisory Council.* This is a broad-based group, appointed every two years by the governor, to advise the Department on the development and implementation of the state water plan.

*Steering Committees.* These committees, which are created for each issue addressed in the state water plan, are composed of representatives from all affected interests. They jointly identify the specific problems related to each issue, explore and evaluate options, and make recommendations to the Council.

*Open Houses.* These public meetings provide an informal opportunity for the public to review and comment on draft recommendations.

*Public Hearings.* These formal public meetings, sponsored by the Department and the Board, provide an opportunity for public review and comment on the proposed final recommendations.

These formal opportunities for public involvement and consensus building are supported by a series of meetings with the legislative Water Policy Committee, the Board of Natural Resources and Conservation, water user groups, and special interest groups.

In addition to providing multiple opportunities for public involvement and consensus building, the Montana state water planning process is continuous. It is based on the simple observation that water resource problems and conflicts are chronic and inevitable. Therefore, it is a systematic, ongoing process to address not just a single water management issue or dispute, but the "stream of disputes" that characterize the management of water in Montana and throughout the West. In this respect, the Montana state water planning process is a "dispute resolution system" (Ury, Brett, and Goldberg, 1988). It is anticipatory, proactive, and adaptable to a variety of water policy and management issues. The Department is currently working with the State Water Plan Advisory Council to develop a systematic process for monitoring and evaluating the implementation of policies and programs that emerge from the planning process. This evaluation process will include a procedure for revisiting issues based on implementation experience and emerging problems and opportunities.

The state water planning process operates on a two-year cycle, corresponding with the biennial legislature. The process is initiated immediately after each legislative session and concludes just prior to the next legislative session. The planning process focuses on both policy-level issues and watershed-specific problems.

Although the Department is responsible for developing the state water plan, it has realized, based on its experience of producing "shelf art," that the most valuable role it can play is not to determine what recommendations or outcomes are reached, but how they are reached. The Department facilitates the development of the state water plan by focusing on such concerns as who is involved in the process; how the issues are identified and defined; what information is brought to bear; how alternatives are developed and analyzed; how trade-offs are made; and what procedures are used for implementing, monitoring, and evaluating the final recommendations. The Department, in cooperation with the Governor's Office and the Board, has the final authority to approve and adopt the state water plan.

In sum, the Montana state water planning process provides an ongoing, systematic forum for the broad set of interests affected by water management

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decisions to voluntarily sit down together, exchange information, and develop solutions through negotiation, collaboration, and consensus building.

## **Implementation Experience**

### ***The Experience in 1988***

During 1988, the first year of implementing this new planning process, the Governor appointed a State Water Plan Advisory Council to oversee the development of the plan. The Council consisted of ten members, including the directors of four state natural resource agencies, four legislators, and two members from the public-at-large.

With minimal public consultation, the Council selected four issues to address during the first planning cycle (water information management, agricultural water use efficiency, federal hydropower licensing and state water rights, and instream flow protection). The Department then created Steering Committees for each issue. After limiting the initial composition of the Steering Committee on instream flow protection to advocates, which resulted in some very controversial recommendations, the Department broadened the composition on all the committees to include representatives from all the affected interests. The Steering Committees ranged in size from 15 to 20 persons. The Department also prepared a background paper on each issue that examined existing programs and policies, identified problems, and presented alternative solutions.

Each Steering Committee, under the leadership of a representative from the Department, met to discuss the background papers during one all-day meeting. Each meeting began with considerable posturing by the participants. Most of the participants, as traditional adversaries, were not familiar with or comfortable participating in a collaborative, consensus-building forum. In response to this tension, and given the fact that no ground rules or guidelines were presented, the participants spent a considerable amount of time questioning their role in the planning process. Eventually, the Steering Committees addressed the problems and options presented in the background papers. In some cases, the participants agreed to the problem and a recommended solution. On several issues, however, the members could not reach agreement.

The results of the Steering Committee meetings were then summarized and presented to the State Water Plan Advisory Council. The Council meeting was very similar to the Steering Committee meetings. The Council members were not familiar or comfortable participating in a cooperative forum, and no ground-rules or guidelines existed to guide their deliberations. Consequently, the Council also spent a considerable amount of time questioning their role in the planning process and in developing water policy. When the Council finally debated the proposed options and recommendations, it approved preliminary recommendations for each issue largely by majority voting rather than by consensus decision-making.

The Department then facilitated nine public meetings to receive public input on the proposals. Approximately 2,500 people attended the nine meetings. Most of the comments focused on the instream flow protection and agricultural water use efficiency plan sections. While some people supported the recommendations in these two plan sections, the comments were overwhelmingly opposed to the recommendations. The greatest concern expressed was the fear that the state water plan was designed to take away existing water rights.

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Several people questioned the credibility and legitimacy of the Department and wondered why it was developing a "state water plan." Some questioning also occurred as to how and why the four issues being addressed had been selected. Many people also felt that representation on the Council and the Steering Committees was not balanced. In short, there was a considerable amount of resistance on all fronts to the state water plan itself and to the specific recommendations contained in the first four plan sections.

The Department summarized and evaluated the public comments and then provided recommendations to the Council on how to revise the four plan sections. The Department's recommendations responded largely to the concerns of the agricultural community, and hence, many of the more innovative preliminary recommendations in the instream flow and agricultural water use plan sections were significantly scaled back.

The Council adopted nearly all of the Department's recommendations for revising the plan sections, this time through consensus decision making. The Council then sponsored three more public hearings on the proposed final plan sections. Approximately 300 people attended the three public hearings, and their comments were generally the same as those during the first set of public meetings. After the public hearings, the Council discussed the public comments and revised some of the recommendations in the instream flow and agricultural water use plan sections. During this revision process, the Council resorted to majority voting rather than consensus decision-making. Given that no decision or ground rules were presented or agreed to before the planning process began, the Council appeared to jump back and forth, without any discussion, between voting and consensus decision-making, depending on how controversial and/or binding the decisions would be.

Before the Department submitted the Council's somewhat controversial final recommendations to the Board for their approval, the new Governor stepped in and asked to review the recommendations. Working with the Department, the Governor suggested several changes to the Council's final recommendations. The revised recommendations were then presented to the Board, and it approved the first four sections of Montana's state water plan. When the plan sections and legislative recommendations were presented to the legislature, the state water planning process and many of the recommendations that emerged during 1988 continued to be widely criticized.

### ***Major Lessons from 1988***

The Department made several mistakes during 1988 and learned several lessons about designing and facilitating a dispute resolution system for water policy and management. Representatives from all potentially affected interests should participate from the beginning in designing and fine-tuning the dispute resolution system. Given that the state water planning process was initiated and designed solely by the Department, nearly all affected interests questioned the credibility and motivation of the Department. The resulting spirit of distrust was perhaps the major obstacle during the first year.

It is also extremely important to define and agree to the decision-making process and ground rules before the process begins. During the first year, the roles and responsibilities of the participants, including the public, were not clearly defined. Because of the large number of formal actors (including the legislative Water Policy Committee, the Board, the Department, the Council,

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and the Steering Committees), there was considerable confusion over who should be making what decisions and at what point in the process the decisions should be made. The number of decision makers and decision points should also be held to a minimum to reduce the opportunities for derailing consensus recommendations reached earlier in the process.

All working committees, including the Council and the Steering Committees, must be perceived as including a balanced representation of all affected interests. As mentioned earlier, the agricultural community believed that the committees did not adequately represent their interests, even though it had representatives on all committees.

It is also critical to provide adequate time for the participants on the Steering Committees and the Council to educate one another, build trust, define and agree on the problems, gather and analyze information, generate all possible alternative solutions, and negotiate over the acceptability of the alternatives. During 1988, the state water planning process was crammed into one calendar year, which severely limited the opportunities for public involvement and consensus building.

Finally, the relationship of the dispute resolution system to existing decision-making channels must be carefully considered and mapped out. Ideally, representatives from the formal decision-making arenas should participate in the dispute resolution system. In 1988, however, several influential legislators and the Board were not adequately involved and informed throughout the planning process. Consequently, they resisted approving the plan and passing legislation implementing some of the plan's recommendations.

### ***The Experience in 1989-1990***

The development of the state water plan during 1989-1990 went much smoother than in 1988 for several reasons. To increase public involvement early in the process, the Department facilitated eight community dialogues that allowed the public to participate in identifying the issues that would be addressed. Two issues, both identified by the public, emerged from this process — water storage and drought management. This initial step in the planning process allowed the public and affected interests to gain some ownership and commitment to the process, from the very beginning, by participating in identifying which issues to address.

The Department also asked interest groups to identify one or more persons who could represent their interests on the Council and the Steering Committees. This procedure helped ensure that representation on the Council and the Steering Committees was carefully balanced from the perspective of all affected interests.

The Department played a more neutral role in facilitating the development of the plan sections on water storage and drought management. It had one staff member who facilitated each Steering Committee and another staff member who served as a technical expert on each Steering Committee. This relationship allowed the Department to maintain its neutrality in facilitating the process while also contributing substantively to the development of water policy. The Department has balanced, at times precariously, the need for broad-based participation in resolving water policy and management issues, its neutral role in facilitating the planning process, its advocacy role in negotiations over substantive issues, and its authority, shared with the Governor's Office and the Board, to approve and adopt any recommendations that emerge from the planning process.

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To allow additional time for research, negotiation, public involvement, and consensus building, the planning cycle was extended to two years.

Finally, the public and affected interests were familiar with the state water planning process during 1989-1990, and, thus, were not caught off-guard.

The success of the state water planning process during 1989-1990 is illustrated by the ease with which four bills, all developed as part of the plan sections on water storage and drought management, sailed through the 1991 legislative session. These four bills, which have been signed by the Governor:

- create a Drought Advisory Committee to respond proactively to drought conditions throughout Montana (HB 537, 1991);
- allow for the temporary transfer of water rights (SB 386, 1991);
- allow water users to maintain the right to beneficial use of water saved by improving the efficiency of their systems (SB 265); and
- establish a comprehensive water storage policy for the State of Montana (SB 313, 1991).

In addition to providing bipartisan support for these bills, the working relationships that were established among diverse interests through the state water planning process carried over to several other important pieces of legislation.

## **Evaluation**

### ***General Reactions***

One need look no further than the recent success of the legislative initiatives emerging from the state water planning process to find evidence that the dispute resolution system is popular. All affected interests, legislative leaders, and the Governor have praised the system as an effective and efficient way to resolve water policy and management issues.

The planning process has established communication channels and cooperative working relationships among the diverse water interests in the state. It has also resulted in the development of some innovative water policies and programs. Finally, the idea of a dispute resolution process or system is being suggested for many other water management and natural resource issues in the state.

### ***Survey of Steering Committee Members***

After the completion of the 1989-1990 planning cycle, the Department surveyed the Steering Committee participants to determine the effectiveness of using broad-based groups to resolve water policy and management issues. Based on the results of the survey, several recommendations emerged on how to improve the use of broad-based Steering Committees to develop the state water plan. Some of the more substantive recommendations were to:

- Include more legislators and others responsible for implementing state water plan recommendations on the Steering Committees;
- Include more public interest representatives on the Steering Committees;
- Include fewer government representatives on the Steering Committees, but ensure that sufficient technical expertise is available to the committees;
- Define the objectives and tasks of the Steering Committees;

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- Provide more time for the Steering Committees to gather and analyze information and to negotiate over alternative courses of action; and
  - Clarify how Steering Committees should make decisions.

Many of these recommendations are consistent with and re-emphasize the lessons learned during 1988. They are also consistent with many of the guidelines suggested by other attempts to design and facilitate dispute resolution systems to resolve public policy issues.

### ***Guidelines for Designing Dispute Resolution Systems***

Dispute systems design is an evolving field with a literature that offers numerous practical guidelines (Ury, Brett, and Goldberg, 1988; Brock and Cormick, 1989; Goldberg, Brett, and Ury, 1989). Montana's experience in designing a dispute resolution system for water policy and management reinforces many of the guidelines found in the literature. It also suggests some additional perspectives on designing dispute resolution systems.

One of the principal guidelines from the literature is that it is often easier to bring the affected interests together and jointly create and support an alternative forum for problem solving and dispute resolution when there is widespread dissatisfaction with existing decision-making processes. However, as the Montana case study illustrates, this is not always necessary. The affected interests were not overtly dissatisfied with the existing arenas for resolving water resource problems and conflicts. Rather, it was the Department of Natural Resources and Conservation that realized it needed a more inclusive process if it was going to be effective in developing water policies and programs that are politically and institutionally feasible.

This observation suggests that, for a dispute resolution system to be considered seriously, the existing decision-making authorities must be willing to experiment with new ways of solving problems and resolving disputes. Although the Department struggled at first with the idea of a collaborative, consensus-building process, it has since embraced this approach as a standard way of doing business. Given the need to balance the potentially conflicting roles of neutral facilitator, substantive advocate, and decision maker, the role of the existing decision-making authority in such a process must be clearly defined and agreed to by all the parties.

The existing decision-making authority must also assume the responsibility of educating or notifying the participants about any administrative or policy constraints. In the Montana state water planning process, this is often a high-wire act that forces the Department, as one of the final decision makers, to assure that the process results in a product that it can support while not jeopardizing the credibility of the process itself. This awkward position could create the perception that the Department is unfairly influencing the process, but to date, it has not appeared to do so.

Another guideline from the literature is that the forum for developing the system should be flexible and adaptable to emerging needs and opportunities, and be dominated by the participants rather than staff and experts. On the other hand, the dispute resolution system must also provide some procedural certainty and predictability, so that the participants are not caught off-guard. This general lesson was supported by the experience in Montana. With some success in resolving policy-level issues through the state water planning process,

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the Department of Natural Resources and Conservation is now applying the process, with some modifications, to watershed-specific problems.

The participation of an experienced neutral facilitator, with access to key parties and knowledge of existing decision-making processes, is likely to improve the efficiency of the process and the quality of the products. In Montana, the Department and other affected interests are slowly learning this lesson as certain staff, trained in mediation and facilitation, have been able to illustrate the benefits of a neutral facilitator.

Once the system is designed, it should be tested on a pilot project so that bugs can be worked out, confusion and frustration minimized, and positive experience built upon. While Montana's experiences in 1988 were widely criticized, they clearly resulted in a host of lessons that have since improved the dispute resolution system.

Another important guideline supported by the literature is that the participants must be motivated and be provided with the necessary skills and resources to participate effectively in the process. All the affected interests must be willing to participate in the process and learn to trust one another. They must also be able to negotiate complex issues within a multiparty context. Additionally, they must have adequate financial and other resources that allow them to participate in the process. During 1988, all of these factors limited the effectiveness of the Montana state water planning process. Since then, however, many of the affected interests have acquired the necessary motivation, skills, and resources.

Finally, in the process of designing and implementing a dispute resolution system, it is important to realize that initial failures often contribute to future successes. Montana's experiences in 1988 provided a common foundation and contributed to the refinement of the dispute resolution system. It is also important to realize that a dispute resolution system may not be appropriate for resolving all issues. In general, the issues that are most likely to be resolved through collaboration and consensus building are those where:

- the issues in dispute are well-defined;
- the different parties having a stake in the decisions to be made are well-known and organized;
- power between these parties has become well-developed and somewhat balanced;
- it is costly for all parties to continue in an adversarial process;
- the issues must be resolved and a decision made one way or the other; and
- the parties are willing to participate in good faith and learn to trust one another.

However, when issues are being addressed in a more proactive posture, before full-blown disputes emerge, some of these conditions may not apply. In the Montana state water plan, for example, it is not always imperative for the issues to be resolved during a given planning cycle. The goal of Montana's dispute resolution system is to resolve issues before affected interests become polarized and resort to reactive, adversarial dispute resolution processes.

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## Prospects for the Future

The state water planning process has initiated a new way of thinking about natural resource policy and management in Montana and throughout the West. While it provides an innovative model for resolving the stream of complex, multi-party issues that characterize water policy and management, it could be refined and improved in a variety of ways.

The State Water Plan Advisory Council should become a permanent body. That is, it should be a continuous body with members that have overlapping terms. To balance political representation on the Council, members should be appointed by both the Governor and the legislature. A permanent, continuous Council is likely to provide more consistency and continuity to the state water planning process, increase the monitoring and evaluation of implementation activities, and reduce the amount of unproductive downtime.

Within this context, the affected interests should reconsider the decision-making roles of the Department and the Board of Natural Resources and Conservation. Given the broad-based representation on the Council and the multiple opportunities for public involvement and consensus-building throughout the process, perhaps the Council should be the entity that formally adopts recommendations emerging from the planning process.

In addition to reconsidering the structure and role of the Council, the Department of Natural Resources and Conservation should develop and test some innovative techniques for public involvement. As with most public involvement processes, members of the general public are not likely to participate in the state water planning process unless the issues being addressed directly affect their interests. During the past four years, general public involvement has waxed and waned depending on the issues and recommendations. To maintain the credibility and legitimacy of the process, the public must be involved throughout the planning process.

The Department and the Council should also develop a more effective system for monitoring and evaluating the implementation of state water plan recommendations. To date, the attention of all affected interests has focused on the "development" of the state water plan and the implementation of recommendations for legislation. Very little attention has focused on the implementation of the other recommendations contained in the state water plan.

While each plan section identifies a particular public or private entity that is responsible for implementing a given recommendation, there is currently no system of accountability — that is, there is no systematic way to ensure that the recommendations are being implemented. In addition, there is no systematic way to evaluate the "on-the-ground" impact of the various recommendations. As mentioned earlier, the Department is currently working with the Council to develop a system for monitoring and evaluating the implementation of the state water plan.

The Council and Department should also critically think about how the state water planning process can be most effective in light of limited resources. Should it focus on both policy-level and watershed-specific issues? Should it incorporate issues that emerge during any given planning cycle? Should it address issues that are recommended from other ad hoc advisory committees, government agencies, or the legislature? If the Council and the planning process too quickly broaden the scope of their work, it may limit the effectiveness of the existing dispute resolution system.

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## Conclusions

The Montana state water planning process represents one example of how a government agency with decision-making responsibilities can design and facilitate a dispute resolution system. Dispute resolution systems can increase the participation of all affected interests in developing and implementing public policy. This, in turn, should increase their ownership in the final decision and in seeing that it is implemented. A dispute resolution system may not decrease the volume of conflicts, per se, but it should reduce the high costs of conflict and realize the benefits of conflict more efficiently.

The use of dispute resolution systems to address complex, multi-party public policy issues also provides other benefits, including the consideration of diverse perspectives and interests; the cooperative and systematic analysis of technical and scientific information; the formation of more pragmatic, equitable, and mutually acceptable goals and alternatives; and the improvement of relationships among diverse, often competing interests, government agencies, and policymakers.

## NOTE

An earlier version of this article was presented at a conference titled "Innovation in Western Water Law and Management," held at the Natural Resources Law Center, University of Colorado School of Law, 5-7 June, 1991.

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