

# FOSTERING COLLABORATIVE PROBLEM SOLVING PROCESSES FOR CONTROVERSIAL WATER RESOURCES ISSUES<sup>1</sup>

**Gail Bingham  
Bruce Stedman**

RESOLVE Inc.

Water supplies in most parts of the world are increasingly limited, valuable, and vulnerable. As a result of competing demands for water between countries and between sectors within countries, governments, NGO's and the private sector are faced with a host of problems. Among these are allocating competing water supply needs, improving water quality and wastewater treatment, preserving in-stream flow and habitat values, and using the environmental assessment process to reconcile concerns about controversial, water-related projects.

Some are finding innovative solutions in creative policy concepts. For example, water resource managers recognize that management on a watershed basis provides some of the most promising opportunities for managing water resources effectively and efficiently. In addition, many advocate implementing conservation measures and strategies for demand management and conjunctive use, permitting easier water transfers, and recognizing the value of instream water uses as a matter of standard operating policy.

In addition, regional cooperation and broader participation of affected interests in collaborative problem solving efforts within and between countries will also be needed to address the number and intensity of water conflicts. Collaborative efforts to foster more effective dialogue to deal with water resource issues show great promise, but are not without challenge. Explicit efforts to draw on the "alternative dispute resolution" tools being developed in the field of mediation provide useful insights on how to overcome these challenges.

## ALTERNATIVE DISPUTE RESOLUTION BASICS

The phrase "alternative dispute resolution" (ADR) is used to describe a broad category of approaches, with which the parties to disputes voluntarily seek to achieve a settlement of the issues. Most are "consensual" or "collaborative" in nature, meaning that the goal is a voluntary agreement, or consensus on an action to be taken. Some approaches, such as *dialogue* and *negotiation*, are processes of direct communication between parties.

*Facilitation* and *mediation* are terms for the assistance of a neutral person in such dialogue or negotiation efforts. *Arbitration*, both binding and non-binding, is an ADR process in which the neutral is asked to hear facts and render an opinion concerning the terms of settlement.

Generally, ADR or collaborative problem solving processes share several characteristics that can help shape strategies for using them successfully. Four in particular are key:

1. the voluntary nature of the process;
2. direct communication among stakeholders;
3. flexible design; and
4. fairness and transparency.

First, parties have a choice both about whether to participate in the process and about whether to concur in a proposed course of action. Understanding these choices helps those organizing a process build relevant incentives for parties to participate and, later, to reach agreements. Although this can be a challenge at the beginning, it also increases the value of the process. The effort made up front helps to ensure that the process implemented is genuinely more likely to produce positive results for all parties than will confrontation in other forums.

Second, ADR or other forms of consensus-building all involve direct communication between stakeholders. Ultimately, successful resolution of issues requires stakeholders to exchange information, understand one another's interests and concerns, and develop options that address these concerns – in other words, to develop creative solutions that parties can legitimately persuade one another to accept. Basic principles of successful consensus-building and dispute resolution are essentially the principles of good communication – ask questions, listen carefully, and focus on interests, not positions.<sup>2</sup>

Third, ADR processes are inherently flexible. Rarely are any two mediation processes alike because of the tailoring of the process to the needs of the participants. During initial consultations on whether parties are willing to participate in a mediated negotiation, questions about *how* the process will be conducted are often key. Clearly, who will participate, what the scope of issues (and alternatives) will be, whether meetings will be open to the public or closed, what deadlines apply, and what the consequences will be if an agreement is reached, are all issues that link directly to parties' incentives to participate. One of the most important advantages of an ADR process is the flexibility to respond to the unique obstacles to agreement in each particular situation; whether that be a large number of parties, scientific uncertainty in predicting environmental effects, a long history of polarization, or high level of political scrutiny.

Finally, the credibility and thus, effectiveness of collaborative problems solving processes are enhanced by transparency and fairness. ADR processes seek to create as level a playing field as possible. Mediators not only must refrain from taking positions that side with one party or another as part of their commitment to neutrality, but they must assess whether the fundamental assumptions structuring the process are detrimental to any party's interest. Such assumptions must be made sufficiently open that parties either can work together to change them or if that is not possible, knowledgeable assess their risks. This is critical not only to the credibility of the process over the long run

#### **What Mediators Do That Is Helpful**

- Bring parties together
- Help design consensus-building processes
- Establish communication and set an atmosphere for negotiation
- Help with people problems
- Help convene large numbers of parties
- Help negotiate agendas and clarify issues to be addressed
- Help parties obtain data they need to make decisions
- Facilitate joint sessions and call caucuses
- Clarify interests, priorities and alternatives to an agreement
- Help parties explore (sometimes in private) ideas for creative solutions
- Identify overlapping interests or areas of potential agreement
- Help parties agree on criteria to evaluate solutions
- Record agreements as they develop
- Help parties understand limits on negotiating flexibility
- Help anticipate implementation problems and address future conflicts

The assistance of a mediator can help parties overcome barriers to settlement under a variety of circumstances, e.g. when:

- parties are having trouble starting a negotiation because history of past conflict creates distrust that prevents negotiation or when some parties are reluctant to come to the table;
- there are too many parties (or issues) to stay focused;
- parties want to improve the quality of results predicted using usual processes;
- negotiations are at impasse;
- parties want confidential assistance to clarify strategies and positions (or to deal with different predictions of an outcome in court); and
- parties want to preserve (or improve) relationships.

but also to whether sufficient incentives will exist for all parties such that the process will be worthwhile in the first place.

## THE DYNAMICS OF WATER CONFLICTS

Applying ADR and other consensus-building processes in the water resources arena, whether internationally or domestically, requires understanding the special dynamics complicating water resources controversies and the needs that organizations bring to the negotiating table. Five characteristics of water resources conflicts are particularly relevant to analyzing disputes that arise and designing successful collaborative problem solving processes:

1. *Water flows across legal and political boundaries and the amount of water available to competing users varies seasonally and year to year, thus increasing the possibility for competition among many potential users.* Because water resources, although renewable, vary in time and location, claims of rights to use the “same” water are made by multiple units and levels of government and diverse private interests. This generally means that resource management disputes involve many parties and many issues, making organizing any negotiation process more difficult. Sometimes coalitions can be formed, where several parties can be represented by one negotiator. Concerns have been raised about limits to participation being imposed in some consensus-processes, however, where national interests may be at stake over what others might view as local resources. This issue of scale, who has a right to participate, and in what forums needs exploration.

Watersheds and basins can be drawn at any scale, but because water flows from small, headwater watersheds into larger and larger basins, establishing geographic boundaries to issues and identifying those who are affected is no easy task. A basic principle is that the scope of issues and parties should match as well as possible, so that one can evaluate whether the consensus-building process involves all of those who must implement or who can block an agreement. When water flows across political and institutional boundaries, however, this can be a large number of parties. Complicating this further, water resources issues in certain areas have larger national significance, either because of the value of the resource or because of the precedential nature of the issues. Involving only local groups, which has been the approach in some situations, has been criticized by national groups as exclusionary.

Resource management conflicts also are more often between organizations or groups than between individuals. The individuals at the table must get proposals ratified by others who are not participating directly. Because each entity has its own internal decisionmaking process, negotiators (and neutrals) need to know the degree to which each representative can speak for his or her constituency and the freedom each has to make proposals and to commit to an agreement. Negotiators also must keep their constituencies informed about progress and problems between negotiation sessions to increase the likelihood that agreements, if reached, will be ratified.

2. *Within and between countries, parties often have more than one forum available for decisionmaking.* Successful negotiators need to create sufficient incentives for all participants to choose collaborative approaches to deal with their differences. In contrast to more traditional administrative or judicial proceedings, few, if any, established procedures are available to structure routine applications of consensus-building processes to resource management issues. Each party, with different strengths in different forums, will have different perceptions about the relative advantages of negotiating. Thus, parties are as likely to approach a suggested negotiation with different assumptions on how to structure the negotiating relationship as they are to have different views on the issues.
3. *Technical complexity and scientific uncertainty make evaluating settlement options more difficult.* Sound scientific and technical information is essential for creating solutions that work. However, parties to natural resources issues are confronted with large volumes of information, requiring a wide variety of expertise and subject to honest differences of interpretation. Furthermore, gaps and uncertainties in the available information base are inevitable as scientific understanding continues to grow. Models can be developed to help deal with scientific uncertainties, but they themselves can be sources of dispute between the model builders or sources of confusion in negotiations where parties have unequal technical resources. Joint fact-finding processes, in which parties agree on the design of a model or study in advance, show considerable promise. Similarly, technical committees or information sharing workshops have been used constructively to supplement policy negotiations.

4. *Differences in the power and resources negotiators have available can create negotiation problems.* Participatory processes are resource intensive. The premise is that these are resources invested up front, with reduced costs during implementation; but parties still need time to participate, funds for travel expenses, and funds for information collection, evaluation, and expert advice. Government agencies and private corporations generally are represented by paid staff. Tribal governments (and other indigenous peoples) and national resource user and environmental organizations have staff, but they are stretched further and have fewer funds than agencies or corporations. And, local non-governmental organizations many times rely on volunteers who have other jobs. For the principle of inclusiveness to be realized in practice, adequate resources must be available for participation and for informed decision making. The most successful models where parties have unequal resources have been when at least some resources, particularly for technical analyses, are provided by the project sponsor or the government agency responsible for the decision to be made.
5. *Public decisions require public, not private, decisionmaking.* Another characteristic complicating resource management conflicts is that the issues in dispute involve public matters that may need to be resolved in public forums. Negotiators need to deal with the press and open meeting laws sensitively, and arrive at outcomes that can withstand public scrutiny and comment. As ADR expands in the water resources arena, government agencies, parties, neutral mediators, and others must pay careful attention to questions of accountability. Carefully designed, consensus-building processes can maximize the flexibility within public institutions while holding negotiated solutions to the same legal and regulatory standards to which any decision would be subject.

#### INTEGRATING CONSENSUS-BUILDING INTO THE ENVIRONMENTAL ASSESSMENT PROCESS

Because many water conflicts in developing nations and countries with economies in transition, are played out in the context of environmental assessments (EAs) that are increasingly required by multi-lateral lending organizations and bi-lateral aid agencies, the EA process may offer a natural framework for introducing consensus-building strategies. At the same time, many funding agencies from national governments, the World Bank, USAID, the OECD, and other multi-lateral organizations are also interested in using ADR techniques to ensure greater public involvement, improve project design, and reduce the negative impacts of implementation for water development projects. Experience with both ADR and environmental assessment processes suggest an attractive synergy.

The emphasis and objectives of EAs and collaborative problem solving processes are very similar – both emphasizing better informed decisionmaking. Both are designed to provide: 1) increased focus on relevant information; 2) improved communications and trust among affected parties (and ability to solve problems in the future); 3) greater acceptance and therefore “staying power” of decisions; and 4) decreased likelihood of costly and lengthy litigation.

**Truckee River Settlement:** The cui-ui is an endangered fish central to the culture of the Pyramid Lake Paiutes, in California, U.S.A. Because the cui-ui is long-lived, it does not need to spawn every year. However, non-Indian diversions since the turn of the century, both upstream in the Truckee and from the Truckee into the Carson River watershed, have made almost any spawning impossible. As the Tribe’s legal claims began to be recognized by the courts, quiet negotiations between Sierra Pacific and the Tribe resulted in an agreement that Sierra Pacific would pay the costs of storing water claimed by the Tribe in upstream reservoirs. This water would be released in wet years for spawning flows and would be used by Sierra Pacific for urban populations during drought years. It seems unlikely that such a creative solution would have emerged only from the formal adjudication of water rights.

The steps in both processes are comparable as well – both emphasizing classic problem solving:

- 1) identifying the issue (or proposed action);
- 2) soliciting input on the process from stakeholders (scoping);
- 3) defining issues and information needs;
- 4) identifying options (alternatives);
- 5) negotiating an agreement (selecting the preferred alternative); and
- 6) obtaining broad public review and comment.

Lessons from ADR suggest that combining the two may improve *how* one involves stakeholders and thus increase the likelihood of resolving differences through the EA process. The dynamics are very different if an agency, no matter how sincere about the EA process, is listening to information and concerns presented but waits until later to consider on its own what action to take, than if it is seeking to reach agreements with stakeholders directly. Project sponsors or governments still have a variety of choices in seeking to work collaboratively with stakeholders. Agreements could potentially be sought at one or more of the following decision points, depending on the situation:

- on issues to be studied during the scoping process
- on the alternatives to be considered
- on the criteria to be used in choosing among alternatives
- on the preferred alternative

Each is likely to produce different dynamics and different results. This is not to recommend one approach over another in all situations, nor even to suggest that these are the only possible variations -- they are not. However, for an EA to achieve its intended potential, it may be necessary to explore these and other opportunities for enhancing the process beyond more traditional notice and comment processes.

Despite the complementary aspects of EA and ADR, this linkage does not seem to have been widely identified or utilized. More specific attention to the application of ADR techniques to the EA process through increased awareness of proven ADR techniques and the use of neutral facilitators or mediators where appropriate would enhance the ability of agencies to use the EA process as the decision making tool it was intended to be rather than the onerous procedural burden it seems to have become.

#### ADR IN INTERNATIONAL SETTINGS

In certain circumstances, ADR approaches offer a number of advantages over other legitimate, nonconsensual strategies such as litigation in the courts, political action, or in the case of transnational conflicts, appeal to international authorities. When interested parties participate in conflict resolution, they are better able to shape the decision to satisfy their interests. Also, parties involved in disputes during water-related EAs and other planning processes tend to be well informed about the technical issues. The ADR approach allows a more in-depth and creative exploration of potential solutions, whereby all parties may achieve more of their goals than they would without negotiation. Similarly, negotiating parties tend to be highly sensitive to implementation concerns. Because they volunteer to participate, they are likely to be more invested in ensuring a positive outcome. As a result, dispute resolution processes enhance the possibility that the substantive issues will be well addressed and the agreements reached will be successfully implemented.

In 1996, Lao PDR, southeast Asia's only landlocked country, agreed to sell 3,000 megawatts (MW) of power to its neighbor Thailand by the year 2006. At the heart of this agreement is the proposed 680 MW Nam Thuen 2 (NT2) hydroelectric dam for which Lao sought a political risk guarantee from the World Bank.

In July 1997, Lao finished a series of public meetings of about 200 people each to consider the economic, social, and environmental impacts of building NT2. The staff of Lao's Scientific, Technical, and Environment Office (STENO) worked with a mediator/facilitator to design the meetings to comply with internationally accepted approaches to public participation and environmental assessment. The primary purpose of the meetings was to facilitate consultation between public groups, government agencies, and the EA study teams.

For the future, the Lao PDR faces the challenge of living up to its new standards for EA and public participation. STENO now recognizes the value of open and extensive public discussion about significant projects. However, future projects may require different approaches to ensure that all views and ideas are heard and considered.

Despite the advantages of consensus-building strategies, at times other approaches may be needed to create conditions required for ADR processes to work. At a minimum, interest-based ADR requires that government

officials have the political commitment to encourage public participation in decision making, the willingness to permit the open interchange of views, and the necessary transparency to ensure good information exchange. Rights-based and power-based decisions can often establish these conditions.

Much can be accomplished if water managers and other stakeholders in water resource decisions simply consider talking to one another. Such a consideration can and should include an evaluation of whether the minimum conditions above are present. In addition, there can and should be efforts to deal with such issues as who will participate in the process or on what the objectives for the process will be. The use of dispute resolution processes is a way to attain success more frequently.

## CONCLUSION

If more comprehensive water management is to work, it is important to integrate processes that involve significant interests and recognize their concerns, with a greater diversity of management options to meet varying needs. The procedures through which water conflicts are resolved can be improved, and substantive innovations can help address the interests that produce stalemates. A combination of innovative decisionmaking processes and technical or policy solutions is critical to creating workable solutions to controversial water resource problems.

**Gail Bingham** is President of RESOLVE, Inc. and has been a practicing mediator for 20 years, specializing in water resources and other public policy issues. She has served as a mediator on many subjects including drinking water regulations, water allocation, wetlands, groundwater protection, hydro-electric relicensing, and others. Ms. Bingham is the author of *Resolving Environmental Disputes: A Decade of Experience; Seeking Solutions: Alternative Dispute Resolution and Western Water Issues*; and (as co-author) *Resolving Water Disputes: Conflict and Cooperation in the United States, the Near East, and Asia*. She did her graduate work in environmental planning at the University of California, Berkeley.

**Bruce Stedman**, a Senior Mediator at RESOLVE, has 20 years of combined experience in facilitation and mediation, training, public involvement, and environmental planning. His work has involved community groups, non-governmental organizations, private companies, and public officials (local, regional, and national) for projects in Brazil, the Canadian Arctic, Egypt, Estonia, Jordan, Kazakhstan, Laos, Philippines, Russia, and Uruguay as well as the U.S. Trained at MIT, he has directed four start-up NGOs and companies, and taught academic courses in negotiation and conservation biology at Harvard University.

## ENDNOTES

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<sup>1</sup>This article draws extensively from the following previously published work: Bingham, G., and L.M. Langstaff. Alternative dispute resolution in the NEPA process. Pages 277-288 in: Clark, Ray, and Larry Cantor. 1997. *Environmental Policy and NEPA. Past, Present, and Future*. St. Lucie Press. Bingham, Gail, Aaron Wolf and Tim Wohlgenant. 1994. *Resolving Water Disputes. Conflict and Cooperation in the United States, the Near East and Asia*. ISPAN, Arlington, VA. Bingham, Gail. 1997. *Seeking Solutions: Exploring the Applicability of ADR for Resolving Water Issues in the West*. Report to the Western Water Policy Review Advisory Commission.

<sup>2</sup> See Roger Fisher, William Ury and Bruce Patton, 1991 (2<sup>nd</sup> Edition). *Getting to Yes*, Penguin Books.