Facilitated Processes for Avoiding and Resolving Environmental Conflicts: U.S. Experiences

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ABSTRACT

Processes that aim to help avoid and/or resolve environmental conflicts employ various instruments that are designed to provide an opportunity for all affected parties to share their comments, ask questions and exchange information. For almost two decades many formats of consultative/facilitated processes have emerged in the U.S. in an attempt to lessen litigations and reach consensus or consensus recommendations. These processes are aimed at facilitating communication among diverse interest groups and allow each interest group to hear the perspectives and concerns of other interests and formulate ways to alleviate these concerns and resolve conflicts.

This paper will discuss the emergence of such approaches that endeavor to engage all major stakeholders and their role in environmental management practices in the U.S. It will discuss the legal framework for such instruments and will provide some case study examples discussing the advantages, disadvantages and lessons learned in each case. The examples discussed will range from the use of Consensus Building, to facilitation of conflicts among different departments of the government, to legally binding Regulatory Negotiations.

INTRODUCTION

“Let’s go to Court” has been and too often still is, a “battle cry” heard coming out of corporate boardrooms and the mouths of concerned interest groups and community representatives in the U.S., particularly when the issues of contention involve disputed government environmental regulations.

The complexity of the US government regulatory process has increased greatly over the past 35 years. The increased formalization and complexity of the rulemaking process has been particularly notable in environmental regulations where a vast amount of new laws, under the Clean Air Act, the Clean Water Act and related statutes and regulations have emerged since the establishment of the US Environmental Protection Agency (EPA) in 1970. These developments have promoted environmental protection but have also had adverse consequences, not the least of which is heavy reliance on litigation.
In centralized or closed systems regulations are imposed while in more open systems, businesses, groups and concerned citizen groups and individuals may comment on the proposals in public hearings, yet with little possibility of making major structural and functional modifications to the regulations. This process, while well intentioned, often leaves stakeholders feeling disempowered and frustrated. They may feel that they have a minimal voice in designing the regulations, standards and provisions that must be obeyed, and, as a result, compliance of these regulations may be low, pushing enforcement and punitive costs higher, presenting a double-edged sword.

Stakeholder reactions to top-down regulatory developments can, and many times do, have negative implications. If penalties are increased to discourage noncompliance, businesses may migrate into a "shadow economy," thereby fueling corruption, reducing tax revenues and evading the regulatory regime altogether. In some instances civil society groups aiming to modify or eliminate imposed regulations pursue lengthy and costly litigation in the courts. Antagonistic and adversarial relations between regulatory agencies and the regulated parties, as well as among stakeholders with varying agendas, may ensue, resulting in delays or outright disregard for the regulations’ intents. The lack of effective and frank negotiations between the regulators and the regulated and between the various stakeholders is usually blamed for the emergence of adversarial relationships that in turn prevent participants from focusing on creative solutions to problems.

Several processes that aim to help avoid and/or resolve environmental conflicts exist. They include Consensus Building; facilitated processes such as regulatory negotiations between Government and Industry and between different government departments; Policy Dialogues; Open-Ended Round Table discussions; and Community Outreach (i.e. Community Action Panels or CAPs). Other processes available are Mediation and Litigation.

The preferred way to resolve environmental conflicts is through negotiated settlements. In the negotiation world stakeholders, may they be corporations, industry associations, private businesses, interest groups or government, should evaluate their BATNA – their “best alternative to a negotiated agreement”¹ and assess it vs. a “walk-away” option. When a “negotiation route” has been decided upon, a Mutual Gains Approach to negotiation should be selected, preferably utilizing a neutral Facilitator to move matters along.

This presentation will address some of the processes mentioned above, their legal framework, their advantages and disadvantages and will introduce several illustrative case studies.

**LEGAL FRAMEWORK AND POLICY TOOLS**

This section will briefly cover the legal framework and policy tools of different approaches that are currently being used in the US. They range from the formal creation of a US Institute for Environmental Conflict Resolution, to the practice of Regulatory Negotiations (Reg-Neg), to the policy framework adopted by the US EPA, known as the “Enlibra Principles”.

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The Administrative Dispute Resolution Acts

The federal government has enacted ADR acts mandating federal agencies to ensure that public disputes in which they are involved are settled as quickly and effectively as possible, utilizing a negotiated approach.

As a result of these legislations, several federal agencies have changed the ways in which they deal with administrative and legal challenges to their activities and quite a number of states have or are considering enacting parallel legislation.

In the past two decades many Community Dispute Resolution Centers have been established throughout the US assisting local officials, interest groups and individual citizens to settle their disputes through mediation and negotiation.

Regulatory Negotiations

In the United States, negotiated rulemaking became an officially recommended approach to develop new regulations by federal government agencies in 1990 when Congress passed the Negotiated Rulemaking Act. An Executive Order issued by the White House in September 1993 requires all federal agencies to consider applying negotiated rulemaking strategies in future regulatory actions, thus reinforcing the approach that has been used informally by government agencies since the 1970s. The Department of Labor, the EPA, and the Department of the Interior, are its principal proponents, with EPA being the most frequent user of negotiated rulemaking by far. Just between 1982 and 1995 there have been over 50 documented cases of federally negotiated rulemaking with many more applications having been conducted at the state level.

The alternative approach to the traditional process of regulatory formulation and implementation is the negotiated rulemaking or regulatory negotiation (Reg-Neg). Negotiated rulemaking brings together affected stakeholder groups -- businesses, organizations, and citizens -- with the relevant government agency and a neutral mediator or facilitator to build a consensus on the features of a new regulation before it is proposed officially by the agency. Regulatory provisions are developed as a bottom-up participatory process of negotiation.

US Institute for Environmental Conflict Resolution

The 1998 Environmental Policy and Conflict Resolution Act created the U.S. Institute for Environmental Conflict Resolution (ECR) to assist parties in resolving environmental conflicts around the country that involve federal agencies or interests. The Institute provides a neutral

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5 U.S.Code, Title 5; sections 561-570
6 U.S.Code, Title 20; Chapter 66, Sec. 5605 and 5607 (P.L. 105-156)
place inside the federal government (but outside of Washington DC) where public and private interests can reach common ground.

Its primary objectives are to:

- Resolve federal environmental, natural resources, and public lands disputes in a timely and constructive manner through assisted negotiation and mediation;
- Increase the appropriate use of environmental conflict resolution (ECR) in general and improve the ability of federal agencies and other interested parties to engage in ECR effectively;
- Engage in and promote collaborative problem solving and consensus building during the design and implementation of federal environmental policies to prevent and reduce the incidence of future environmental disputes.

The Institute is located in Tucson, Arizona, and operates under the aegis of the Morris K. Udall Foundation. The institute’s primary mission is to assist the Federal Government in providing assessment, mediation, and other related services to resolve environmental disputes involving agencies and instrumentalities of the United States. It receives direct congressional funding as well as fees paid by public and private sector clients. The Institute offers expertise, guidance, and training in environmental conflict assessment, facilitation, and mediation. It maintains a network of programs and practitioners around the country who can be called upon to assist in specific projects.

Examples of environmental regulations developed using negotiated rulemaking in the United States include:

- Penalties for businesses for noncompliance with the Clean Air Act;
- Exceptions for licensing pesticides
- Performance standards for wood burning stoves
- Controls on volatile organic chemical equipment leaks
- Standards for transporting hazardous wastes
- Standards for chemicals used in manufacturing wood furniture.

**EPA’s ‘Enlibra Principles’**

The ‘Enlibra’ doctrine is an approach to environmental stewardship that was co-authored by former Utah Governor and later EPA Administrator Mike Leavitt and former Governor John Kitzhaber of Oregon. The term Enlibra comes from Latin and it means, "move toward balance." The ‘Enlibra’ approach is based on the dual concepts of balance and stewardship, and is built upon principles of flexibility, innovation, partnership and collaboration. The philosophy emphasizes collaboration instead of polarization, national standards with local solutions, economic incentives instead of mandates, solutions that transcend political boundaries, and other common sense ideas that can contribute to acceleration of environmental progress.

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7 http://www.epa.gov/adminweb/administrator/enlibra.htm
These principles and a brief description of their aims and recommended approaches are provided below:

- **National Standards, Neighborhood Solutions - Assign responsibilities at the right level**
  
  States and local governments have the flexibility of developing their own plans to achieve national standards, and to provide accountability, in addition to federal mandates. Local plans that consider ecological, economic, social and political factors often enjoy more public support and involvement and therefore can reach national standards more efficiently and effectively.

- **Collaboration, Not Polarization - Use collaborative processes to break down barriers and find solutions**
  
  Environmental issues tend to be highly polarizing, leading to destructive battles that do not further environmental goals. Goals are best accomplished through balanced, open, transparent and inclusive approaches at the ground level, where stakeholders work together to formulate critical issue statements and develop solutions.

- **Reward Results, Not Programs - Move to a performance-based, instead of a process-based, system**
  
  A clean and safe environment will best be achieved when government actions are focused on outcomes, not programs and processes, and when innovative approaches to achieving desired outcomes are rewarded.

- **Science For Facts, Process for Priorities - Separate subjective choices from objective data gathering**
  
  Environmental science is complex and uncertainties often exist. Competing interests usually point to data supporting their view and ignore or attack conflicting or insufficient information. This results in polarized positions, interferes with reconciling the problems, and may leave stakeholders in denial. A much better approach is to reach agreement on the underlying facts as well as the range of uncertainty surrounding the issues before framing the choices. A public, balanced and inclusive collaborative process needs to use respected scientists and peer-reviewed science. If agreement on scientific facts cannot be reached, decision-makers must evaluate the differing information and make the difficult policy choices.

- **Markets Before Mandates - Pursue economic incentives whenever appropriate**
  
  Most individuals, businesses, and institutions want to achieve desired environmental outcomes at the lowest cost to themselves and society. Conversely; many environmental programs include mandates and threat of legal action, fines and other penalties that may not
always be efficient or cost-effective. By contrast, market-based approaches and economic incentives often result in more efficiency at less cost, and may lead to less resistance and more rapid compliance. These win-win approaches reward environmental performance, promote economic health, encourage innovation and increase trust among all stakeholders.

- **Change a Heart, Change a Nation** - *Environmental education and understanding are crucial*

  Beginning with the nation's youth, people need to understand the importance of sustaining and enhancing the natural world for themselves and future generations. Environmental progress depends on citizens’ understanding that a healthy environment is critical to their social and economic health. Government needs to raise awareness and educate people about stewardship of natural resources.

- **Recognition of Benefits and Costs** - *Make sure all decisions affecting infrastructure, development and environment are fully informed*

  Environmental decisions should be guided by an assessment of the true costs and true benefits of different options, including life-cycle costs. These assessments can illustrate advantages of various methods of achieving common public goals. However, not all benefits and costs are measured in dollars. Non-economic factors, such as equity within and across generations need to include social, legal, economic and political factors.

- **Solutions Transcend Political Boundaries** - *Use appropriate geographic boundaries to resolve problems*

  Many environmental challenges fall within natural geographic locations, but most cross political boundaries. Focusing on the natural boundaries of the problem helps identify the appropriate science, possible markets, cross-border issues, and the full range of affected interests and governments that should participate and facilitate solutions. Voluntary interstate strategies as well as other partnerships are important tools as well.

**MUTUAL/JOINT GAINS APPROACH TO NEGOTIATIONS**

A high degree of skepticism prevails among regulators and the regulated public regarding environmental negotiations. The regulated do not believe that regulators have any discretion in enforcing the law and thus, they may fear, any attempt on their behalf to “negotiate” agreements will be perceived as an attempt to circumvent the law and might result in adverse consequences for them. The regulators on their part believe too that they have very little discretion in the matter and therefore cannot budge and negotiate.

The reality, however, is that well structured negotiations can, and often do, result in gains for all parties concerned, may they be the regulators, the regulated as well as the community at large.
Process

The Mutual Gains Approach entails four main stages: Preparation; Value Creation; Value Distribution and Follow Through.

- **Preparation**: Each stakeholder must estimate its BATNA, realistically, and clarify its own essential interests while at the same time also assess the other stakeholders’ BATNA and interests. Each stakeholder should formulate a mutually beneficial proposal. Such proposal should meet ones own interests while also addressing the interests of the other stakeholders.

- **Value Creation**: During negotiations, stakeholders should “separate inventing from committing”\(^8\). Each party should be free to generate options, listen to others, suspend criticism, and not be held committed to options generated until final decisions are reached.

- **Value Distribution**: Parties should use objective criteria to explain why they believe that their recommended distribution of value is fair to all parties involved. It should be pointed out that once all the “value” has been distributed an agreement has been reached.

- **Follow Through**: After an agreement has been reached, monitoring procedures should be established to verify compliance, a dispute handling mechanism created, and proper communication channels between stakeholders put in place to allow for resolution of potential conflicts in the future.

Advantages

In their book “Negotiating Environmental Agreements”, Suskind at.al. point out the advantages of a negotiated agreement for all parties involved: “For the regulator, an effective agreement can produce voluntary compliance that goes beyond minimum standards required or mandated by law. For the regulated company, an effective agreement can offer flexibility in when and how requirements must be met and the opportunity to explain, face to face, the financial and commercial constraints on the regulated industry. For the community at large, agreements can result in better environmental performance and stronger commercial enterprises, yielding numerous benefits to the community”\(^9\).

Disadvantages and Obstacles

Some stakeholders, particularly environmental interest groups, feel powerless when confronting the government and/or powerful corporations. They are painfully aware that they are not capable matching the economic resources and the skilled personnel backing these entities and are therefore hesitant to enter into negotiations. On the other end of the scale, some corporate leaders and public officials may be concerned that willingness on their part to enter into negotiations will be perceived as a sign of weakness and are, therefore, refusing to negotiate.

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\(^{8}\) Fisher, Ury, and Patton, 1998, *ibid*

\(^{9}\) Suskind, Levy, and Thomas-Larmer, 2000, *ibid*
Another major obstacle to the Mutual Gains Approach is opposition from the legal field. Many legal advisers discourage their clients, may they be corporations or interest groups, from negotiating and, for obvious reasons, advise them to take the litigation route, contrary to the best interests of their clients who would be better served by a settlement.

**Overcoming Obstacles and Making the Mutual Gains Approach Work**

The most effective means of overcoming obstacles to the Mutual Gains Approach and moving the four stages of the process forward is by utilizing the assistance of a neutral facilitator.

A skilled facilitator, who gains the trust of all stakeholders involved, could play a pivotal role and assist in all phases of the process: The pre-negotiation phase - meet with potential stakeholders to assess interests, handle logistics, draft protocols, promote the setting of ground rules etc.; The negotiation phase – manage and facilitate the brainstorming process, suggest possible trade-offs, help in “binding” the parties to agreements reached and more; The implementation phase – serve as the monitor of implementation and the convener of post-negotiation stakeholder meetings to handle and resolve possible post implementation disputes.

**CASE STUDIES**

**Case Study 1: Regulatory Negotiations**

Negotiated rulemaking is a fully collaborative process in which all interested groups are convened in an "Advisory Committee." Key issues and concerns are identified, the interests of all sides are compared and contrasted, negotiations take place, and hopefully, agreements based on consensus are developed.

- **Background**

  The control of volatile organic compounds and hazardous air pollutants attributable to fugitive equipment leaks from process components in chemical manufacturing facilities and refineries has been a contentious issue in the US throughout the 1980s. In late 1989 the US EPA convened a Reg-Neg to address control of these emissions. In addition to the regulators, the US EPA, and several trade associations, such as the American Chemical Council (ACC) and the American Petroleum Institute (API), to name just a few, represented industry. The public sector was represented by the Natural Resources Defense Council (a national NGO) and by representatives of state and local air pollution agencies.

- **Process**

  Negotiations aimed at developing rules pursuant to the U.S. Clean Air Act and addressed the need to implement Maximum Achievable Control Technology (MACT). The Reg-Neg addressed the control of emission of hazardous air pollutants from equipment leaks at synthetic organic chemical plants. API was invited to participate in this negotiations because control of equipment
Leaks at refineries is in many respects similar to control of equipment leaks at chemical plants and API was advised that the negotiated rule for chemical plants (assuming the negotiations were successful) would establish a framework that would, subsequently, likely be used in a similar rule for refineries.

The equipment leaks negotiations commenced in the fall of 1989 and was conducted through monthly meetings, each lasting 2-3 days, in which performance data were exchanged, example programs were presented and various issues were brainstormed. The negotiations were carried out in plenary and in smaller working groups. As part of the process the facilitator also included “breaks” in the formal negotiations to allow the various stakeholder groups to caucus among themselves and respond to various proposals raised by the parties.

The monthly, in person, meetings lasted for about a year and were followed by additional negotiations on the specific consensus text of the agreement. Consensus was reached and all parties signed the agreement. The US EPA incorporated this agreement into a final rule on April 22, 1994, pursuant to the stipulation of the Clean Air Act. Also, as previously suggested, the concepts adopted in this rule were later included in a similar rule for petroleum refineries.

- Lessons Learned and Observations

A Reg-Neg process can be cumbersome and resource intensive for all involved. It is particularly complicated when trade associations are involved, because several negotiations, including intra-association negotiations, are normally conducted, simultaneously, during the process. For example, at API, internal committees are used to make decisions on regulatory issues. These committees are composed of representatives from member companies who, essentially, are competitors. In all regulatory matters, members need to report the results of the negotiations to, and have them approved by, their respective companies before they can agree on an API consensus position.

While official representatives to the negotiations are given some latitude, there may be significant limits placed on their ability to negotiate because proposals affect competitors within the trade association differently. Standards that one company can easily achieve (for example, because the company has controls already in place as a result of more stringent state requirements) may be prohibitively expensive for another company.

Also, the Reg-Neg involves intense negotiations at which representatives of state and federal agencies, public interest environmental groups, and perhaps others, join industry representatives. Building enough trust among these diverse groups to reach an agreement is a long and a difficult undertaking.

- Potential Benefits and Pitfalls

EPA now uses a variety of rulemaking processes and there probably is no single best approach. Reg-Neg can be an effective tool for crafting creative solutions and providing certainty. These
benefits are not always achieved, however, and the Reg-Neg process places considerable time and resource demands on participants.

A Reg-Neg is most likely to be successful if issues are well defined and participants are carefully selected. For example, issues that are highly political are not good Reg-Neg candidates and should be avoided.

**Case Study 2: Channel Islands Marine Reserve Working Group**

This is an example of a “consensus-building” effort. It required a facilitated process in order to bring the many federal and state authorities to the table to reach consensus on a common action plan.

- **Background**

The Channel Islands National Marine Sanctuary surrounds Channel Islands National Park off the coast of southern California. The Marine Reserve Working Group (MRWG) was jointly sponsored by the Channel Islands National Marine Sanctuary and the California Department of Fish and Game. The sanctuary is managed by the federal National Oceanic and Atmospheric Administration (NOAA). The Channel Islands National Park in and of itself is a unit of the National Park Service (also a Federal entity), while the fisheries within the state waters of the sanctuary are managed by the California Department of Fish and Game. In addition to all these agencies, stakeholders also included the National Marine Fisheries Service, and representatives of environmental organizations; as well as consumptive and non-consumptive recreational and commercial interests.

- **Process**

The group’s purpose was to consider the establishment of marine reserves within the sanctuary. Participants tried to balance marine ecosystem protection values with commercial and recreational fishing and diving uses. The collaborative group effort was initiated before the start of the environmental analysis process.

The group met for nearly two years participating in joint fact-finding and trying to reach a consensus decision on marine reserves. Facilitators were selected by the sponsoring agency rather than by the participants themselves. The neutral facilitators engaged in considerable communications in-between meeting and engaged in “shuttle diplomacy” between and among groups. The U.S. Institute for Environmental Conflict Resolution was involved as an institutional broker among the agencies and with the contracted neutral facilitators.

The group reached agreement on a problem statement, goals and objectives, and on implementation strategies. They worked on developing alternatives and assessing their economic and environmental impacts. The group did not reach full consensus on a comprehensive recommendation regarding marine reserves. However, they did reach agreement on about 85% of the proposed locations and

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10 David Emerson and Jo Reyer, *Case Study Reports*, U.S. Institute for Environmental Conflict Resolution, April 2004
sizes of a network of marine reserves within the sanctuary. They also reached agreements regarding monitoring approaches and recommendations for implementation.

➢ Lessons Learned and Observations

The process resulted in a more informed and higher quality decisions that attempted to achieve environmental benefits while minimizing negative economic and social impacts. Early on, the working group developed a problem statement that captured the current disharmony in the situation, and stated a desire to restore the integrity and resilience of impaired ecosystems. The group attempted to find ways to achieve ecosystem goals without unduly impacting any single interest group. Proposals were generated that responded to a multitude of interests rather than more narrow or limited interests.

Goals and objectives for the working group included enhancing long-term ecosystem productivity, achieving sustainable fisheries, and maintaining long-term socioeconomic viability while minimizing short-term socioeconomic losses to all users and dependent parties. The working group discussed the historic conditions of the ecosystem and the people who used it, and talked about how they wanted future generations to share the same experiences that they had known.

A very positive outcome of the process was that the personal responsibility for the environment taken on by participants, spread to others in the groups they represented. The working group was very aware of the importance of their decisions to the Channel Islands marine environment. They sought to foster stewardship by providing educational opportunities and linking monitoring and research and developed a better understanding of both the substance and process of marine resource policy making.

There was a strong awareness of practicality within the working group. Along with the substance of a decision, how it would be implemented was a major focus, as evidenced by the group’s recommendations that a system be established for effective monitoring and that an interagency Memorandum of Understanding (MOU) be developed to address enforcement requirements.

It should also be noted how the use of science enhanced the process: An existing University of California/Santa Barbara research group of 12 scientists agreed to serve as a Science Panel for this effort at no cost to the working group or the participating agencies. A Socioeconomic Team was also used, made up of NOAA economists along with contracted local social scientists and economists. While both the Science Panel and the Socioeconomic Team contributed valuable information to the working group, it must be emphasized that when using scientific advisory panels, it is important to be clear about roles, responsibilities and relationships between technical experts and stakeholder advisory groups.

➢ Potential Benefits and Pitfalls

The Sanctuary Advisory Council was committed to passing on the working group’s agreements essentially intact to the Sanctuary management, and the decision-making agencies were committed to
adopting the group’s consensus recommendations. When full consensus was not reached, items of agreement and disagreement were passed on to the Sanctuary Advisory Council.

The group did improve productive working relationships and generated a significant knowledge base relevant to scientists, decision makers, resource users, interested stakeholders, and the public. Although the group did not reach full consensus on a proposal for marine reserves, the issues in dispute were narrowed.

Due to the lack of final consensus on all the points, some participants returned to their original positions on issues and litigated the eventual decisions by the state agency.

**Case Study 3: Collaborative Environmental and Transportation Agreement Streamlining**

This case study provides an example of a consensus framework that served as the basis for interagency deliberations and that helped in expediting the assessment of new transportation projects within the context of environmental laws and regulations.

- **Background**

  The Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) Group, formed in June 2000, committed to promoting environmental stewardship while providing for a safe and efficient transportation system in the State of Oregon.

  State transportation agencies normally scope projects to determine if they require a formal environmental impact assessment. Participating agencies include the Federal and State Departments of Transportation, as well as a variety of other State and Federal agencies, including resource agencies such as the Bureau of Land Management, the Fish and Wildlife Service and Oregon Department of Environmental Quality. At monthly meetings, agencies receive project briefings and concur on purpose and need, range of alternatives, criteria for selection, and preferred alternative. Once concurrence is reached, issues are not revisited unless major project changes or new environmental requirements become effective.

- **Process**

  The Oregon Department of Transportation has decided to streamline efforts for minor transportation projects by focusing on broadening the use of framework agreements with the respective agencies in the areas of wetlands protection and endangered species habitat protection. Once a programmatic agreement is in place, it can be applied to elements of larger projects as well.

  Transportation and resource agencies have engaged jointly in environmental assessments and through regular working group meetings have fostered relationships built on trust. Decision-making is by consensus. Elevation to the next level of decision-makers within the agencies
occurs on the rare occasion when consensus is not reached. The Oregon Department of Transportation (ODOT) that convened and led the meetings facilitated the group.

The purpose of the meetings was to get early involvement by all agencies and accelerate the process by avoiding agency conflicts and subsequent permit delays during final design, thus allowing projects to be completed in budget and on time. One of the main obstacles that had to be overcome was the availability of staff resources to coordinate this activity.

- Lessons Learned and Observations

The process allows agencies in Oregon to expand the state's environmental goals and guidelines. As a result, Oregon transportation agencies are mapping natural and cultural resources, balancing interests by implementing a habitat mitigation program, improving partnerships with resource agencies, instituting an environmental management system, and developing a seamless transportation development process with local partners and contractors.

The resulting cultural changes in the transportation agencies from this program are expected to last over time, benefiting future generations environmentally and economically. The parties have demonstrated their commitment by good attendance and participation in meetings, and by suggesting issues for working out programmatic agreements.

Information dissemination occurs through consultations between agency participants and peers within their respective agencies, although indications are that there is always still room for improvement in this aspect.

- Potential Benefits and Pitfalls

This process covers the range of issues beginning with purpose and need, continuing through alternatives, criteria for selection of a preferred alternative, and identification of the preferred alternative. Beginning with purpose and need is a key point in the success of the project. So far in the process, there has been one example of the group not being able to reach consensus, and this was on identification of a preferred alternative. The group had agreed on criteria for selection, but thought that it would lead to a different outcome.

Operating under a formal agreement gives the group credibility and helps ensure that the process continues. Members are designated in the agreement by position, with changes occurring when agency representatives move on and are replaced by a different employee. This results in some “catch-up time” for the new member, but so far new members have been well briefed by their outgoing counterparts.

Operating by consensus works well for the group with the one exception already mentioned. For this disagreement, an elevation process was developed whereby the next level of decision-makers within the agency attempts to reach consensus, a process that will now be used in the future if lack of consensus will occur again.
SUMMARY

Advocates, policy makers, and adjudicators are increasingly looking for ways to improve environmental decisions. The use of strategies based on “Mutual/Joint Gains” problem solving, mediation, facilitation, and consensus-building offer promise for certain cases. While these approaches should not be viewed as a panacea, hundreds of significant cases involving public health, public lands, and natural resource issues have been successfully mediated or facilitated to date. These include "upstream" cases when rules and policies are being made and "downstream" issues when parties are involved in enforcement, compliance, and litigation. Thousands more cases could be wisely and amicably resolved if good scientific and technical information were properly integrated into the search for solutions.

In environmental disputes, high quality information almost always forms the foundation and backbone for good deliberations and problem solving. How such information comes into the process, is used by the parties, and is threaded into solutions is critically important. Too often it is an afterthought to the economics and politics of deal making. In many cases, critical uncertainties are not well addressed by anyone. In other cases, millions of dollars are spent in irrelevant or un-usable research. And finally, agreements that could be forged often fail to be reached because of "warring" scientists who are swept into the inherent “side taking” of adversarial litigation. Therefore, for "Mutual/Joint gains” strategies to be effective one must develop powerful and purposeful approaches for gathering, sorting, and integrating scientific information. A suggested list of strategies that may be used for tackling scientific issues during negotiations is offered in the box to the right.

Suggestions for Tackling Scientific Issues in Negotiations

1. Integrate science issues into the conflict assessment
2. Help coach the parties on the different approaches that might be used to resolve information-intensive issues.
3. Explore individual BATNAs to deal with the way in which each party will deal with science uncertainty if there is no agreement.
4. Promote dynamic, heuristic, and adaptive agreements that balance reasonable stability (which is needed for business assurance) with flexibility, plasticity, and performance-based adaptability (which is needed for environmental assurance).
5. Insure access to all information by all participants
6. Get the parties to jointly decide what is "adequate" information.
7. Lead the disputants through a process of finding and bringing to the table the information they need.
8. Get the parties to identify the experts they need to illuminate the state of available information.
9. Create (or sometimes separate the parties into) sidebar forums that allow the scientists to disagree in a "safe" setting away from lawyers and clients.
10. Work carefully with the parties to frame the questions that the scientific and technical people will need to answer.
11. Get agreement on the criteria that will jointly be needed to select impartial experts.
12. Use an expert to help you facilitate discussions.
13. Choreograph the translation process to help the group understand the scientists and vice versa.
14. Help the technical people translate their information and knowledge to lay and public audiences.
15. Help technical people translate information in plain language and using good visuals so that participants can understand the issues, the data, and the uncertainties
16. Help bridge between the science and the problem at hand by focusing the scientific questions so the information is germane for decision-making.

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Despite some difficulties, the experience with negotiated rulemaking in the United States has produced several benefits:

- While negotiated rulemaking takes more time and effort upfront than traditional modes of developing regulations, all stakeholders, including government agencies, are more satisfied with the results.
- Participants find that with a negotiated process, the resulting regulations tend not to be challenged in court. (in contrast, about 80% of all EPA regulations have been challenged in court and about 30% have been changed as a result.)
- Less time, money and effort are expended on enforcing the regulations.
- Final regulations are technically more accurate and clear to everyone.
- Final regulations can be implemented earlier and with a higher compliance rate.
- More cooperative relationships are established between the agency and the regulated parties.

The Consensus Building process, in most instances, proves to result in:

- A more informed and higher quality decisions.
- Assumed “ownership” of the decisions reached by all parties involved.
- Focus on the implementation of the decisions reached utilizing MOU.

For as long as different stakeholders, each with its own “purpose of being” and with its particular agenda, will exist there will be conflicting interests. It is best for all stakeholders, and especially for future generations, that these conflicts are, if possible, avoided, or when they surface, be effectively, fairly and amicably dealt with and resolved. The approaches and methods presented above aim to do just that.