

**National
Environmental Conflict Resolution
Advisory Committee**

Final Report

**Submitted to the
U.S. Institute for Environmental Conflict Resolution
of the Morris K. Udall Foundation**

April 2005

The U.S. Institute for Environmental Conflict Resolution

The U.S. Institute for Environmental Conflict Resolution (the U.S. Institute) is a federal program established by the U.S. Congress to assist parties in preventing and resolving environmental, natural resource, and public lands conflicts. The U.S. Institute is part of the Morris K. Udall Foundation, an independent federal agency, overseen by a board of trustees appointed by the President. The U.S. Institute serves as an impartial, non-partisan institution providing professional expertise, services, and other resources. Congress directed that the U.S. Institute assist the federal government in implementing Section 101 of the National Environmental Policy Act through the ser-

vices it provides. The U.S. Institute helps parties determine whether collaborative problem solving is appropriate for specific environmental and natural resource conflicts, how and when to bring all the parties to the table, and whether a third-party facilitator or mediator might be helpful in assisting the parties in their efforts to reach consensus or to resolve the conflict. In addition, the U.S. Institute maintains a roster of qualified facilitators and mediators with substantial experience in environmental conflict resolution, and can help parties in selecting an appropriate dispute resolution professional. (See www.ecr.gov for more information about the U.S. Institute.)

National Environmental Conflict Resolution Advisory Committee

In 2000, a bipartisan group of U.S. Senators asked the U.S. Institute to investigate “strategies for using collaboration, consensus building, and dispute resolution to achieve the substantive goals” of the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.) (“NEPA”) and “resolve environmental policy issues....” The U.S. Institute conducted initial analytical work in response to the Senators’ inquiry, then, in 2002, created a federal advisory committee. The committee was directed to provide advice regarding the U.S. Institute’s role in implementing Section 101 of NEPA, identification of critical environmental, natural resources, and public lands issues, assessment of opportunities to further collaborative processes, recognition of areas in which conflict resolution services are needed, discovery of new directions in

environmental conflict resolution, and evaluation of services and programs.

Members of the committee, appointed by the Director of the U.S. Institute, Dr. Kirk Emerson, serve a two-year term and may be reappointed to a second term. Members were selected to provide a balanced cross section of viewpoints concerning environmental issues and the field of environmental conflict resolution. Accordingly, members currently have affiliations with, among others, resource users, environmental advocacy groups, affected communities; federal, tribal, state, and local governments; the conflict resolution and legal communities, and academic institutions.

Acknowledgement: The National Environmental Conflict Resolution Advisory Committee wishes to thank the United States Department of Agriculture, Forest Service, Federal Highway Administration, and the Environmental Protection Agency for their generous contributions and support in producing and printing this report.



National Environmental Conflict Resolution Advisory Committee

Final Report

**Submitted to the
U.S. Institute for Environmental Conflict Resolution
of the Morris K. Udall Foundation**

April 2005

<http://www.ecr.gov/necrac/reports.htm>

Thomas C. Jensen
202.408.3956
tjensen@sonnenschein.com

1301 K Street N.W.
Suite 600, East Tower
Washington, D.C. 20005
202.408.6400
202.408.6399 fax
www.sonnenschein.com

Chicago
Kansas City
Los Angeles
New York
San Francisco
Short Hills, N.J.
St. Louis
Washington, D.C.
West Palm Beach

January 1, 2005

VIA HAND DELIVERY

Kirk Emerson, Ph.D.
Director
U.S. Institute for Environmental Conflict Resolution
130 South Scott Avenue
Tucson, AZ 85701-1922

Re: Transmittal of Final Report by the National Environmental Conflict Resolution Advisory Committee

Dear Dr. Emerson:

I have the privilege to transmit to you the Report of the National Environmental Conflict Resolution Advisory Committee. The Committee, chartered by the U.S. Institute for Environmental Conflict Resolution under the Federal Advisory Committee Act, worked diligently over the past two years to respond to the U.S. Institute's request for advice on how to fulfill its two-part mission to assist the federal government in preventing and resolving environmental conflicts and implementing the Nation's environmental policy set forth in Section 101 of the National Environmental Policy Act (NEPA).

The Report reflects the consensus of the Committee. The members took advantage of their very diverse perspectives to develop and articulate a strong, common understanding of the steps that the federal government can and should take to reduce controversy surrounding and improve the quality of agency decisions affecting the environment. As viewed by the Committee, the quality of a decision affecting the environment is likely to be improved--and the degree of controversy reduced--when interested parties are appropriately involved in making the decision, and when the decision is guided by the policy stated in NEPA. Applied in this way, the environmental review process under NEPA becomes a powerful problem-solving tool.

The Committee is well aware and gratified that the U.S. Institute has already begun some of the work recommended in this Report. Building on that work, and with the benefit of the full set of recommendations I am transmitting today, the U.S. Institute is well positioned to fulfill its important mission to help the federal government reduce conflict over decisions affecting the environment and promote the valuable national policy expressed by NEPA.

It has been a pleasure and an honor to work with you, your colleagues, and the members of the Committee. On behalf of the Committee, thank you for asking for our advice. I am confident that the Committee members would respond with enthusiasm should you require additional assistance as your work proceeds.

Sincerely,

Thomas C. Jensen
Chairman

Enclosure

cc:

Barry, Donald J.	Grant, Harry
Bear, Dinah	Kearney, Christopher
Beehler, Alex	Meyerson, Bruce
Bingham, Gail	Milius, Pauline
Blackwelder, Brent	Miller, Anne
Brogioitti, Lori	Peters, Mary
Brooks, Hooper	Raidt, John
Burbank, Cynthia	Riber, Julia
Carlson, Christine	Scarlett, P. Lynn
Charles, Sr., Larry	Schaefer, Mark
Collins, Sally	Schildwachter, Greg
Dos Santos, Jr., Placido	Souby, James
DuBois, Jr., Raymond	Suagee, Dean
Edwards, Mencer Donahue	Sullivan, Michael
Ehrmann, John	Williams, Terry
Evans, Dwight H.	Woodley, John Paul
Flitner, Stan	
Gallegos, Garry	

CONTENTS

Preface	1
Section 1: Executive Summary	3
Section 2: Overview	9
Section 3: Summary Goal, Objectives, and Key Recommendations	17
Section 4: NEPA Section 101 Subcommittee, Draft Findings, and Recommendations	25
Section 5: Affected Communities Subcommittee, Draft Findings, and Recommendations	35
Section 6: Capacity Building for ECR and Collaboration Subcommittee, Draft Findings, and Recommendations	45
Section 7: Report on NEPA/Environmental Conflict Resolution Case Reports	49
Section 8: Report on Collaborative Resource Monitoring and Environmental Conflict Resolution.....	61
Section 9: Challenges and Barriers to Effective Participation of Affected Communities in Environmental Conflict Resolution Processes.....	66
Appendix A: Letter from U.S. Senators	71
Appendix B: U.S. Institute for Environmental Conflict Resolution Mission and Programs.....	73
Appendix C: National Environmental Policy Act of 1969.....	81
Appendix D: Committee Charter and Bylaws.....	82
Appendix E: Committee Members Biographies	87
Appendix F: NEPA/ECR Case Reports	105
Appendix G: Report on NEPA 101 Survey of Federal Agency NEPA Liaisons	143
Appendix H: Five Elements of A Successful Agreement Addressing Environmental Justice Issues	156
Appendix I: Report on ECR and Collaboration Training Survey	158
Appendix J: Science Questions for Committee Consideration	171
Appendix K: References	172

PREFACE

This document is a report from the National Environmental Conflict Resolution Advisory Committee, a twenty-nine member federal advisory committee chartered by the U.S. Institute for Environmental Conflict Resolution of the Morris K. Udall Foundation. The Foundation is a federal government agency established in 1992 to design and implement programs honoring Congressman Morris K. Udall's legacy of public leadership, courage and vision, particularly in the areas of environmental education, conflict resolution and public policy.

In 1998, the U.S. Congress directed the Udall Foundation to create the U.S. Institute for Environmental Conflict Resolution as an independent, impartial federal institution to assist all parties in resolving environmental, natural resources, and public lands conflicts where a federal agency is involved, and "to assist the Federal Government in implementing Section 101 of the National Environmental Policy Act of 1969." The U.S. Institute formed the Advisory Committee in 2002 to help the agency fulfill its statutory mission.

On behalf of the Advisory Committee, we wish to thank Dr. Kirk Emerson, the U.S. Institute's talented and capable Director and her colleagues, particularly Ellen Wheeler, the Udall Foundation's General Counsel and Chief Operating Officer, for their unflinching courtesy and guidance. Nobody should have to work so hard to get free advice, but they never complained. Committee members Stan Flitner and Larry Charles deserve special thanks for hosting meetings in their Wyoming and Connecticut hometowns and reminding us that unexpected friendships build society. The Chairman of the Board of Trustees of the Morris K.

Udall Foundation, Terry Bracy, and the Foundation's Executive Director, Chris Helms, aided our work from beginning to end. Lastly, the Committee would never have gotten off the ground, or landed safely, without the splendid assistance of the U.S. Institute's Tina Urbina Gargus, who rose to every challenge and saw to every detail.

This report—fundamentally a communication to the U.S. Institute meant to help it perform its mission—is also something else. This report is a call from a group of prominent Americans to those of their fellow citizens who serve in government and hold any office with the power to make decisions that affect the environment. The Committee's call is this: Take to heart and take advantage of Section 101 of the National Environmental Policy Act.

Why take NEPA's Section 101 to heart? Because Section 101 articulates a national policy for the environment that is an elegant and compelling philosophy of balance, innovation, and personal responsibility. It comes as close as anything we know of to framing a set of environmental, economic, and social goals that most Americans could agree upon. It holds the potential to bring common purpose to our fellow citizens' dealings with each other and their government over natural resource and environmental issues. How to take advantage of Section 101? Use the diverse tools of environmental conflict resolution and the expertise of the conflict resolution profession to help Americans find solutions rooted in their shared values. NEPA Section 101 and environmental conflict resolution are mutually reinforcing tools. They should be used in concert with, and to support, the analysis and public involvement prescribed by Section 102 of

NEPA and other government decision-making processes.¹

The Committee's call is not abstract. Though hopeful, it is not naïve. It deserves a very respectful audience. The Advisory Committee members are veterans of some of the most intense battles in the country's natural resource and environmental wars. Livestock grazing, air and water pollution, protected species, Indian rights, environmental justice, international boundaries, highway-building, forest management, water allocation—Committee members carried spears in all of those conflicts and many more. And, to be sure, they did not come from the same perspective or bear the same interests. The Committee includes, ranchers, foresters, a utility executive, environmentalists, tribal leaders, litigators, planners, politicians, grant makers, farmers, and scientists—they cover the map. Many Committee members have strong partisan political credentials. The Committee's membership also includes some of the most seasoned dispute resolution professionals in the country; several of whom literally pioneered the field of environmental conflict resolution begun over 30 years ago.

The Advisory Committee members come from every sort of community across the country and have served at every relevant level of public and private sector leadership. They are a remarkable group. The Committee members communicate from a deep and diverse base of experience and understanding in the areas of law, public administration, dispute resolution, science, biology, economics, finance, policy making, and human nature.

This group is so diverse it had every reason to fracture and spin off in different directions long before it could render useful advice to the U.S. Institute. But that didn't happen. The Committee held together and found common ground, the contours of which are described

in the following pages. Despite the times, the Committee never fell prey to partisan division.

The Committee members' achievement should be a head-turner to anyone who believes that our country would benefit if we could avoid, resolve, or at least lower the temperature of the conflicts that plague environmental and natural resource management and policy. These experienced and opinionated people found ways to communicate and come to terms. The following report is this Committee's expression of faith in individual Americans, America's institutions of government, and existing law. The Committee members' faith should give us all hope and inspire government leaders to answer the Committee's call and take up the Committee's recommendations.

Having seen government act and react over many years, we are optimistic that there will be many national leaders who grasp the attractiveness of the Committee's recommendations and call for their implementation. Ironically, while we agree that so much positive change is possible in the way that governance occurs at the local level, we think that the hardest steps will come there. The conflicts that Washington leaders experience as policy disputes are not abstractions in the field. They are intensely personal issues and do not lend themselves to dispassionate discussion. The members of the Committee, and the leaders who read and find things to support in this report are going to need to commit themselves to the detailed work of ensuring on-the-ground implementation. The Committee's work will gain its real value when natural resource and environmental leaders lose count of the number of times that governance works well.

Thomas C. Jensen, Chair

Dinah Bear, Vice-Chair

¹ Many controversial decisions in the environmental field (e.g., decisions by the Environmental Protection Agency regarding implementation of the Nation's pollution control laws) do not require compliance with the procedural provisions of NEPA. This report is not a critique of NEPA Section 102 or other laws. It is an effort to describe ways to make better use of NEPA and other laws for the benefit of the Nation. Section 101 of NEPA and environmental conflict resolution techniques have relevance to all agency decision-making with the potential to affect the human environment, regardless of whether NEPA Section 102 applies.

SECTION 1:

Executive Summary

Introduction and Committee Charter

This report was produced by the National Environmental Conflict Resolution Advisory Committee (Committee), a federal advisory committee chartered under the Federal Advisory Committee Act by the U.S. Institute for Environmental Conflict Resolution (U.S. Institute) of the Morris K. Udall Foundation, a federal agency. The U.S. Institute serves as an independent, impartial federal institution to assist all parties in resolving environmental, natural resources, and public lands conflicts where a federal agency or interest is involved. The Committee's charter and other pertinent materials, including this report, are posted on the U.S. Institute's website www.ecr.gov.

In 2000, a bipartisan group of U.S. Senators asked the U.S. Institute to investigate "strategies for using collaboration, consensus building, and dispute resolution to achieve the substantive goals" of the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.) ("NEPA") and "resolve environmental policy issues...." (Appendix A). The U.S. Institute conducted initial analytical work in response to the Senators' inquiry, then, in 2002, created the Committee. The Committee was chartered to provide advice on future program directives—specifically how to address its statutory mandate to assist the federal government in

implementing Section 101 of NEPA (42 U.S.C. 4331).² The Committee charter will expire on April 30, 2005. The Committee's Designated Federal Officer is Dr. Kirk Emerson, Director of the U.S. Institute.

Committee Membership, Organization, and Meetings

The Committee comprises 29 members possessing diverse backgrounds in government, business, dispute resolution, conservation, and law—all of whom have high-level expertise in environmental and natural resource policy and dispute resolution. The Committee's work has been augmented by contributions from many other individuals. Several of the members who are senior federal agency officials received staff support from, or were represented by subordinates who participated fully and contributed to the Committee's work. One individual who was not a member of the Committee served as a member of a subcommittee. The Committee's work has been supported extensively by the staff of the U.S. Institute and by several employees of the U.S. Forest Service and U.S.

² Section 101 of NEPA establishes national environmental policy for the United States, but has been largely overlooked while Section 102, which requires preparation of environmental reviews, has received most attention from the courts, agencies, the Congress and the public affected by NEPA requirements. Section 101 is reprinted in this report. The Committee was not chartered to consider or provide advice with respect to Section 102.

Department of the Interior who served terms on special detail to the U.S. Institute under the Intergovernmental Personnel Act.

The Committee is chaired by Thomas C. Jensen, an attorney with the firm of Sonnenschein Nath & Rosenthal LLP who specializes in natural resources law and dispute resolution. The Committee's Vice-Chair is Dinah Bear, General Counsel of the President's Council on Environmental Quality and a leading expert on the National Environmental Policy Act. The Committee organized itself into three subcommittees, each of which is led by co-chairs. The Subcommittee on NEPA Section 101 and Environmental Conflict Resolution is co-chaired by the Honorable P. Lynn Scarlett, Assistant Secretary of the Interior for Policy, Management and Budget and Donald Barry, Vice President and General Counsel of the Wilderness Society. The Subcommittee on Capacity Building for Environmental Conflict Resolution and Collaboration is co-chaired by Christine Carlson, Director of the Policy Consensus Initiative in Portland, Oregon, and Cynthia Burbank, Associate Administrator for Planning, Environment and Realty of the U.S. Federal Highway Administration. The co-chairs of the Subcommittee on Affected Communities are Larry Charles, an environmental justice and community involvement advocate from Hartford, Connecticut, and Stan Flitner, owner and operator of the Diamond Tail Ranch in Greybull, Wyoming.

The Committee met in regular session four times (three times in Tucson, Arizona, once in Berkeley Springs, West Virginia), in special sessions on two other occasions (Hartford, Connecticut and Cody, Wyoming), and organized itself into three subcommittees, each of which has met on various occasions in connection with full Committee meetings and separately.

Committee Process

The Committee operates pursuant to written by-laws that provide for open dialogue and a consensus decision-making process. Committee meetings typically are well attended by members and U.S. Institute per-

sonnel and characterized by extensive, active discussion. Public notice of Committee meetings is published in the Federal Register and advertised through local news media at least two weeks in advance of each Committee meeting. The U.S. Institute arranges toll-free conference phone lines to allow participation in Committee meetings by parties in other locations. Members of the public in attendance at Committee meetings are invited to address the Committee. Committee agendas and working materials, including meeting minutes, report drafts, and research products, are posted and publicly available on the U.S. Institute's website. This report, initially drafted in June 2004 by a nine-member working group established by the Committee, was revised to its present form through two successive rounds of review and comment by the full Committee over a period of five months.

Committee Analyses

The Committee conducted numerous analyses to develop objective information useful in advising the U.S. Institute on how to further promote resolution of environmental conflicts involving federal agencies and to help the federal government implement Section 101 of NEPA. The Committee sought to become thoroughly familiar with environmental conflict resolution and with the way in which Section 101 of NEPA has been implemented since enacted in 1969. The Committee approached the task from several directions, working in the first instance through its subcommittees. For example, the Committee:

- ❖ Analyzed the means by which environmental conflict resolution is employed by federal agencies, and, using detailed case studies, focused considerable effort on understanding the circumstances in which conflict resolution processes have helped agencies make decisions that earned broad and durable support from parties affected by or interested in the decision. The Committee considered cases where the U.S. Institute had been involved as well as others;

- ❖ Reviewed the language and legislative history of NEPA and federal court decisions interpreting the law;
- ❖ Surveyed federal agencies to determine whether and how agencies apply the national environmental policies articulated in Section 101 of NEPA;
- ❖ Developed a comparison between the principles and policies expressed in NEPA and the characteristics that define successful environmental conflict resolution;
- ❖ Met with community leaders and advocates to learn about their experiences with NEPA implementation; and,
- ❖ Identified the principles and practices that have proven effective at engaging those types of communities and interested parties who, though potentially affected by agency actions, typically lack the financial, technical or other resources that are needed to influence agency decisions or, irrespective of available resources, simply do not trust agencies to respect their interests.

Committee Findings

The Committee's analyses have led it to conclude that effective forms of environmental conflict resolution can produce agency decisions that manifest the national environmental policies framed in Section 101 of NEPA. The Committee found tremendous potential value in promoting greater awareness of the values and principles reflected in Section 101 of NEPA, particularly in guiding agencies and affected interests away from conflict or helping to resolve those conflicts that do arise. Said another way, NEPA's policies and environmental conflict resolution techniques are available to serve as mutually reinforcing tools to help the federal government make sound decisions. The policies framed in NEPA can provide a common language, while environmental conflict resolution practices can create the conditions under which a common language

and productive strategies can be applied to reconcile different interests toward mutually agreed outcomes.³

The Committee has found a striking similarity between the policies set forth in Section 101 of NEPA and the principles and practices that characterize effective environmental conflict resolution. Where NEPA calls for productive harmony, the protection of health and environmental quality, sustainability and general welfare, environmental conflict resolution practices call for balanced representation of affected interests and values. Where NEPA calls for social responsibility, intergenerational welfare, sustainability and stewardship, environmental conflict resolution calls for full consideration of the short- and long-term implications of agreements and decisions, responsible and sustained engagement of all parties and wide access to the best available information.

Well-designed and executed environmental conflict resolution processes are capable of producing federal agency decisions that reflect NEPA's principles. Common interests can be identified. The range of disagreement can be narrowed. Decisions can be made in a timely way and social and intellectual capital can be built. Federal officials become partners with affected interests in a process where the issue is "owned" by all participants without the forfeiture of government's legal limits and responsibilities.

Some environmental decisions are made in circumstances relatively free of conflict. Coordinated and collaborative outcomes do occur in certain instances without significant conflict. But such cases are too few and the room for improvement is considerable. It is also achievable.

The Committee found a broad array of situations where more effective engagement by federal agencies of interested groups and individuals has produced decisions seen favorably by all involved parties. These situations are characterized by involvement of a bal-

³ Chairman's Note: The Committee's findings, while emphasizing the potential value of Section 101 and environmental conflict resolution, should not be interpreted to characterize the important role and contributions of Section 102 of NEPA. The Committee's intention is to call for better integration of policy and process to complement and build on the analytical work performed under Section 102 of NEPA and under other decision-making processes to achieve better decisions.

anced diversity of affected interests in a given matter, where those parties in effect serve as proxy representatives for the spectrum of values and interests encompassed by NEPA's policy goals.

The Committee places particular emphasis on the importance and effectiveness of agency efforts to engage with potentially interested parties very early in the process of setting policy, defining programs, or framing projects. The investment of time, effort, and thought “upstream” can reduce the risk of disputes “downstream,” when positions may have hardened and options narrowed. Early engagement with potentially affected parties will also facilitate consideration of matters on broad substantive and temporal scales.

Mere involvement of appropriate interests is not enough, however, to improve decision-making. The decision-making process often can be improved if the involvement is governed by appropriate conflict resolution practices and principles and, where appropriate, guided by experienced facilitators or mediators. This is especially important in high conflict, complex, multi-party disputes. Where the process of making a federal decision involves the right parties, focuses on the full range of issues, uses scientific and other advice, and follows the appropriate conflict resolution principles and techniques, the odds are significantly improved that the quality of the decision will be higher and the degree of public support for agency programs will be strengthened.

Federal agencies bear a special responsibility to ensure that such processes are appropriately designed and implemented. It may be far worse to attempt a poorly designed environmental conflict resolution process than to follow the traditional practice of agency decision-making without any conflict resolution process. Well-managed environmental conflict resolution practices repair and build relationships and social capital, often critical to long-term implementation and administration of federal programs. Poorly structured processes can be detrimental in the long run, sowing or deepening distrust and disaffection.

The Committee sees great value in the use of environmental conflict resolution and awareness of NEPA's policy goals, but of course there are limits. Environ-

mental conflict resolution techniques will not solve all problems and not every party will accept NEPA's policies or interpret them in the same way. There will always be cases where brewing disputes cannot be avoided and where existing disputes must be resolved through litigation or political intervention. Timing, parties, external events, information, rules, and resources: The pieces have to fit together to create common ground.

The Committee believes that the number and severity of “intractable” cases can be reduced significantly by proper use of environmental conflict resolution and awareness of NEPA's policy not because the various techniques or statutory language possess any special remedial powers, but because our fellow citizens usually have the capacity to be creative and fair and to want good results for the Nation as a whole.

Committee Recommendations

The Committee is making recommendations to the U.S. Institute that, if adopted, would help the federal government improve the quality of agency decision-making consistent with the policies of NEPA. The Committee's recommendations manifest three objectives:

- ❖ Advancing federal agency use of collaboration and environmental conflict resolution;
- ❖ Advancing the ability of affected communities to participate effectively in environmental decision-making; and,
- ❖ Advancing the U.S. Institute's leadership role in assisting federal agencies and communities in resolving environmental conflicts.

The Committee's key recommendations are that the U.S. Institute should:

- ❖ Work with the Council on Environmental Quality to develop approaches to implementing Section 101 of NEPA through environmental conflict resolution;
- ❖ Develop a “toolkit” of management approaches for federal executives to transform

agency culture in support of environmental conflict resolution and collaboration;

- ❖ Develop cross-agency training on environmental conflict resolution and collaboration;
- ❖ Identify ways to expand its leadership in developing applications of collaborative monitoring in the context of alternative dispute resolution and adaptive management;
- ❖ Collaborate with the Council on Environmental Quality to guide federal agencies and Affected Communities in the application of NEPA using the Affected Communities Subcommittee's recommended framework for environmental conflict resolution and collaboration;

- ❖ Continue to foster networks and partnerships that promote the best environmental conflict resolution practices and promote use of technology to facilitate sharing of lessons learned, science, literature and data; and,
- ❖ Obtain funding for and implement the U.S. Institute's participation grant program.
- ❖ The Committee also recommends that other agencies of government, at all levels, take advantage of the resources represented by effective environmental conflict resolution techniques and the principles and policy of NEPA to improve the quality of agency decisions and earn broader support from affected interests. ■



SECTION 2:

Overview

“NEPA is equal parts philosophy and law, and that’s what makes it so beautiful.”

—Stan Flitner, Diamond Tail Ranch,
Greybull, Wyoming

The National Environmental Policy Act of 1969 (“NEPA”) combines philosophy, policy and process. NEPA is best known for its process: it is the law that requires federal agencies to conduct environmental reviews and prepare environmental impact statements, a procedure that has been copied by many states and by nations around the world. NEPA is less well recognized for the truly remarkable and ambitious philosophy at its core, which is stated in NEPA Section 101.

The statute defines a National Environmental Policy for the United States. How many Americans know that our country has a national environmental policy and that it has been the law of the land for three decades? Even NEPA practitioners who know that the policy exists often have trouble recalling its terms.

NEPA Section 101, well worth reading and reproduced in the accompanying text box, declares that it is and shall be the continuing policy of the federal government to create and to maintain conditions under which man and nature can exist in productive harmony. The federal government is to use all practical means to improve and coordinate federal plans, functions, pro-

grams and resources to achieve a wide range of social, cultural, economic, and environmental values. And NEPA is clear in stating that each American has a responsibility to contribute to the preservation and enhancement of the environment. The nation’s environmental policy is written in expansive, hopeful terms that virtually any American would accept.

NEPA prescribes an environmental review and public involvement process for federal agencies to follow when considering actions that may affect the quality of the human environment. The purpose of the review process, set by NEPA Section 102, is to help achieve the law’s policies, but the statute has often been implemented as if the review process is an end, not a means. The success or failure of NEPA has come to be measured in terms of the legal defensibility of environmental reviews, not progress toward achieving the law’s policy goals for the country. The courts have been very active in judging the adequacy of the administrative process followed by agencies in preparing environmental reviews, but have generally declined to interpret or enforce NEPA’s broader policy goals. The values and policies articulated by NEPA have been largely divorced from the mechanical aspects of implementing the law.

To the extent that NEPA has been recognized to have a policy purpose, that purpose usually has been characterized as better incorporation of environmental values in federal agency decision-making. This is true, but it

is only partly descriptive of NEPA and it severely shortchanges the vision of the drafters of the law. They had something more encompassing in mind: Agency decision-making was to change to incorporate environmental values not for their own sake but because doing so would improve our nation's governance so it would (to paraphrase the law) function in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. In other words, people, families, businesses and communities have

been part of NEPA from the very beginning, and not as subordinates to environmental values, but as the beneficiaries of them. The drafters of NEPA set a policy for the United States that expressly integrates environmental quality with the quality of our country's economy and culture. The section of NEPA that requires preparation of environmental reviews directs agencies to evaluate impacts on "the human environment," a term that encompasses all identifiable environmental effects and interrelated social and economic impacts. How simple a concept and how immense a task.

National Environmental Policy Act of 1969

Title I

Congressional Declaration of National Environmental Policy

Sec. 101 [42 USC 4331].

- (a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.
- (b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs and resources to the end that the Nation may—
- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
 - (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
 - (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
 - (4) preserve important historic, cultural and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
 - (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
 - (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
- (c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

As the framers of the statute intended, NEPA brought the public, including state, tribal, and local governments, much greater information regarding environmental issues and awareness of the potential environmental impacts of federal agency actions. How else could citizens fulfill their duty to contribute to preservation and enhancement of the environment? The law brought information to citizens so they could, in turn, bring their views to the government. The law is notably silent, however, on the question of how members of the public and federal government officials were to go about resolving the different individual views and values implicated by the potential impacts of agency actions.

The burden has largely fallen on federal agencies to decide what to do with the diverse opinions of citizens who choose to express their views on a proposed federal action. Under the traditional model for NEPA implementation, agencies announce their plans, share their analyses of potential impacts of a range of options, solicit public comment, make decisions, deal with the fallout, if any, and move on to the next project. The agency's decision, though based on a collection of views and interests, is generally not a collective decision.

Three decades after NEPA was enacted, environmental protection has become a widely accepted social goal, and the nation has enjoyed many successes in conservation of public resources, reduction of pollution, and remediation of damage done by prior generations. Many of these achievements came about through NEPA-governed decision processes. The traditional model for NEPA implementation is not a failure.

But the traditional model for NEPA is certainly is not a complete success, either. Any observer of environmental and natural resource issues will recognize that the number of points where interests are coming into conflict on environmental matters is not decreasing and environmental issues appear to be increasing in scope and complexity. The decision-making success stories, though real, are shadowed by too many failures.

Today, agency decisions affecting the environment are often highly confrontational. Project and resource

planning processes routinely are too lengthy and costly. Environmental protection measures are often delayed. Public and private investments are foregone. Decisions and plans often suffer in quality. Hostility and distrust among various segments of the public and between the public and the federal government seem to fester and worsen over time. The traditional model for NEPA is not responsible for all these problems--indeed it is not even applicable in all cases—but it does not take full advantage of the many strengths of Section 101. NEPA, a tool meant to foster better governance to help America find productive harmony between people and nature, is now, in some cases, used or experienced as a process available to delay or defer agency decisions or as a negative intrusion into socially important government and private sector initiatives.

People are inevitably going to have different views about federal actions potentially affecting the human environment, and there is absolutely nothing wrong with that. It is a deeply rooted American value that citizens and their government at all levels should be in continuous dialogue aimed at successfully reconciling our diverse interests and values. We are a country that prides itself on diversity—a hallmark of a pluralistic and democratic society. It should not be surprising or seen as problematic that interests and values will come into conflict—the fact that they do is a vital aspect of societal growth and fuels creative aspects of our collective lives. But freedom of expression and freedom of thought and the right to petition for redress, and ultimately the right to vote, are about more than shouting into a void.

Americans expect to be able to work things out and make things better over time. It is not inevitable, and it is clearly not desirable, that society's ability to constructively address and resolve conflicts should languish or fail to adapt to changing times. The current state of environmental and natural resource decision-making is dominated by the traditional model, which too often fails to capture the breadth and quality of the values and purposes of NEPA. It cannot be the best we can do, nor can it be what NEPA's drafters intended. Could a different approach, in appropriate circumstances, better reflect NEPA's policies and help our country achieve the law's valuable purposes? The

Committee believes that we can, in fact, do a much better job.

During the same three decades that have passed since NEPA was enacted, a new profession has emerged that is committed to development and application of conflict-avoidance and conflict-resolution techniques in the context of environmental decision-making and environmental disputes. "Environmental Conflict Resolution," or "ECR," is best understood as a mechanism to assist diverse parties to gain an understanding of their respective interests and to work together to craft outcomes that address those interests in effective and implementable ways. ECR takes many forms and can be applied in many settings (see text box at the end of this section), but in the context of federal decision-making, it enables interested parties (including state, tribal, and local governments, affected communities, and citizens) to engage more effectively in the decision-making process. Interested parties are no longer merely commenters on a federal proposal, but act as partners in defining federal plans, programs, and projects. ECR offers a set of tools, techniques and processes that can complement traditional NEPA processes and improve the procedural and substantive quality of agency decisions.*

* The Committee notes that the report of the Capacity Building for ECR and Collaboration Subcommittee, included here as Section 7, uses the term "upstream collaboration" to describe efforts to anticipate and forestall actual "conflicts" or "disputes," and suggests that "upstream collaboration" is an activity that precedes and is different from conflict resolution or dispute resolution. The Committee shares the Subcommittee's belief that "upstream collaboration" is extremely important and deserving of much greater emphasis by federal agencies. At the risk of being imprecise in our use of language, the Committee chose to use the term "Environmental Conflict Resolution" in a way that does not restrict the type or extent of problem-solving work properly to be done under that terminology. The Committee believes that it is vital for federal agencies to anticipate the circumstances under which values and interests among parties may diverge or collide and to attempt to avoid or minimize the adverse consequences and maximize the benefits of those circumstances. This may be more in the nature of "conflict avoidance" rather than "conflict resolution," but we intend that both activities be covered under the rubric of ECR, as we use it. The U.S. Institute's mission and current programs, which are oriented toward fulfillment of NEPA's policies and promotion of successful conflict resolution, clearly embrace measures to reduce both the *number* and *severity* of environmental conflicts and, as such, include both anticipatory and reactive strategies and tactics. Thus, the Committee's use of the term "Environmental Conflict Resolution" is meant to reach fully "upstream" and "downstream." The Committee acknowledges that our use of the term may have stretched it somewhat out of shape, but we do not know of a more convenient way of saying what we mean. In time, better terminology may emerge and, thanks to Committee member Cynthia Burbank, we are mindful of Lewis Carroll's warning about misuse of language:

The benefits of ECR attracted the attention of federal policymakers. The Congress established the U.S. Institute for Environmental Conflict Resolution in 1998 at the Morris K. Udall Foundation to assist the federal government in fulfilling NEPA's purposes by identifying better ways to resolve environmental conflicts (see Appendix B). The chief sponsor of the legislation creating the U.S. Institute, Senator John McCain, explained that the purpose was "to promote our nation's environmental policy objectives by reaching out to achieve consensus rather than pursuing resolution through adversarial processes."

The U.S. Institute chartered the National Environmental Conflict Resolution Advisory Committee ("Committee") in 2002 to advise the Institute on means to fulfill that charge. (See Appendix D for Committee Charter and Bylaws and Appendix E for the Committee Member Biographies).

The Committee met four times, always in public session. On two other occasions, the Committee sponsored or co-sponsored meetings specifically designed to engage the public in discussion of NEPA, environmental conflict resolution, and the interests of communities affected by agency decision-making. In February 2004, the Committee met in Hartford, Connecticut, to hear from community leaders regarding environmental justice issues arising in the context of the siting of a solid waste incinerator. In June 2004, the Committee co-sponsored, with the Governor of Wyoming and the Council on Environmental Quality, a meeting in Cody, Wyoming, where we heard from a number of Wyoming citizens regarding federal agency implementation of NEPA. In both cases, community involvement was broad and informative. In addition to

"I don't know what you mean by 'glory,'" Alice said.

Humpty Dumpty smiled contemptuously. "Of course you don't- till I tell you. I meant "there's a nice knock-down argument for you!"

'But 'glory' doesn't mean "a nice knock-down argument,"' Alice objected.

'When I use a word,' Humpty Dumpty said, in rather a scornful tone, 'it means just what I choose it to mean- neither more nor less.'

'The question is,' said Alice, 'whether you can make words mean so many different things.' 'The question is,' said Humpty Dumpty, 'which is to be master- that's all.' (Through the Looking-Glass, Ch. VI.)

full Committee meetings, the various subcommittees met individually on several occasions.

Based on our deliberations during the last two years, the Committee has concluded that NEPA's policy goals can be revitalized, and that one key way to do so is for the federal government and affected communities of interest to use particular practices to resolve environmental conflicts. The Committee has found, and this report describes, a broad array of situations where more effective engagement of interested groups and individuals by federal agencies when making decisions has produced results viewed favorably by all involved parties. These situations are characterized by involvement of a balanced diversity of affected interests in a given matter, where those parties in effect serve as proxy representatives for the spectrum of values and interests encompassed by NEPA's goals.

Mere involvement of appropriate interests is not enough, however, to improve decision-making. The decision-making process often can be improved if the involvement is governed by appropriate conflict resolution practices and principles, where appropriate, and guided by experienced facilitators or mediators, especially in the context of high conflict, complex, multi-party disputes. Where the process of making a federal decision involves the right parties, focuses on the full range of issues, uses scientific and other information, and follows the appropriate conflict resolution principles and techniques, the odds are significantly improved that the quality of the decision will be higher and the degree of public support in the near and long term for agency programs will be strengthened.

Federal agencies bear a special responsibility to ensure that such processes are appropriately designed and implemented. It may be far worse to attempt a poorly designed environmental conflict resolution process than to follow the traditional practice of agency decision-making without any conflict resolution process. Well-managed environmental conflict resolution practices repair and build relationships and social capital, often critical to long-term implementation and administration of federal programs. Poorly managed ECR processes can be detrimental in the long run.

The Committee reviewed numerous case studies of environmental conflict and conflict resolution. Those studies revealed principles and practices of successful conflict resolution. These principles and practices significantly contribute to the establishment of appropriate levels of respect, trust, accountability, responsibility, and shared commitment. The key factors leading to these results are commitment of time and energy of all parties, balanced representation among interests, appropriate use of third party neutrals, significant autonomy for the decision making group and procedural fairness. Additional factors include reliance on an agreed scope of issues, careful consideration of "implementability," and access to reliable, relevant information.

The Committee has found a striking similarity between the policies set forth in Section 101 of NEPA and the practices of environmental conflict resolution. Where NEPA calls for productive harmony, the protection of health and environmental quality, sustainability and general welfare, ECR practices call for balanced representation of affected interests and values. Where NEPA calls for social responsibility, intergenerational welfare, sustainability and stewardship, ECR calls for full consideration of the short- and long-term implications of agreements and decisions, responsible and sustained engagement of all parties and wide access to the best available information. ECR processes are capable of producing decisions that reflect NEPA's principles. Common interests can be identified. The range of disagreement can be narrowed. Decisions can be made in a timely way, social and intellectual capital can be built. Federal actors become partners in a process where the issue is "owned" by all participants without the forfeiture of government's legal limits and responsibilities.

The transformation of the role of the federal agency considering a proposed action to that of a partner can be enhanced if all of the governmental agencies with jurisdiction by law or special expertise (including state, tribal and local government agencies) are engaged in the decision-making process as early as possible. And federal decisions then become based on high-quality information and enjoy broad support.

The Committee's analyses have led it to conclude that effective forms of environmental conflict resolution produce agency decisions that manifest the national environmental policies framed in Section 101 of NEPA. The Committee found tremendous potential value in promoting greater awareness of the values and principles reflected in Section 101 of NEPA and believes that they can serve to help guide agencies and affected interests away from conflict or help to resolve those conflicts that do arise. Said another way, NEPA's policies and environmental conflict resolution techniques are available to serve as mutually reinforcing tools to help the federal government make good decisions, and take better advantage of the important analytical and public involvement steps spelled out by Section 102 and other decision-making processes. The policies framed in NEPA can provide a common language, while environmental conflict resolution practices can create the conditions under which a common language and productive strategies can be

applied to reconcile different interests toward the common good.

While the Committee sees great value in the use of ECR, there are limits. ECR techniques will not solve all problems. There will always be cases where brewing disputes cannot be avoided and where existing disputes must be resolved through litigation or political intervention. Timing, parties, external events, information, rules, and resources: The pieces have to fit together to create common ground.

The Committee believes that the number and severity of "intractable" cases can be reduced significantly by proper use of ECR. This is not because ECR possesses any special remedial powers, but because our fellow citizens usually have the capacity to be creative and fair. ECR works because it taps those human and American traits for the common good.

ENVIRONMENTAL CONFLICT RESOLUTION PROCESS DEFINITIONS

Defining Environmental Conflict Resolution (ECR)

For convenience and consistent with how the U.S. Institute carries out its charge, we use the term environmental conflict resolution (ECR) to encompass an array of interest-based, agreement seeking techniques and processes that serve to improve environmental decision making by directly engaging the parties at interest in a creative problem solving process. Among these techniques and processes are:

Case Evaluation/Neutral Evaluation:

This is a form of conflict resolution in which the disputing parties meet informally with an experienced, neutral evaluator. Each party is afforded the opportunity to meet with the evaluator who assesses the strengths and weaknesses of each side's case and explores prospects for settlement. If the parties are unable to reach agreement during the evaluation session, the neutral evaluator may offer an impartial non-binding opinion as to the settlement value of the case and/or a non-binding prediction of the likely outcome if the case were to go to trial. If both parties agree, the evaluator's opinion may become binding.

Collaborative Monitoring:

Collaborative monitoring seeks to engage interested and affected stakeholders as well as public agencies and science and technical experts in a more direct manner. Participants in collaborative monitoring may play a variety of roles; determining target outcomes, defining criteria and indicators to monitor those outcomes, determining the appropriate system for monitoring, participating in the data gathering and analysis, and/or interpreting the data over time. Collaborative monitoring is being implemented in a variety of program contexts, and it has been conducted within many different structural settings.

Conflict Assessment:

Conflict assessment (also known as "*convening*") helps to identify the issues in controversy in a given situation, the affected interests, and the appropriate form(s) of conflict resolution. The assessment process typically involves conferring with potentially interested persons regarding a situation involving conflict in order to: assess the causes of the conflict; identify the entities and individuals who would be substantively affected by the conflict's outcome; assess those persons' interests and identify a preliminary set of issues that they believe relevant; evaluate the feasibility of using a consensus-building or other collaborative process to address these issues; educate interested parties on consensus and collaborative processes so as to help them think through whether they would wish to participate; and design the structure and membership of a negotiating committee or other collaborative process (if any) to address the conflict.

Conflict Resolution:

Often termed dispute resolution, *conflict resolution* includes all possible processes for resolving a conflict or dispute in a peaceful way. This term is broader than alternative dispute resolution (ADR) in that conflict resolution includes not only alternative dispute resolution techniques such as mediation and arbitration, but also judicial processes, negotiating consensus building, diplomacy, analytical problem solving, and peacemaking. The consensual nature of most conflict resolution methods (other than litigation) requires that all parties participate jointly in the process of selecting which process best fits their dispute.

Consensus Building:

Consensus building describes a number of collaborative decision-making techniques in which a facilitator or mediator is used to assist diverse or competing interest groups to reach agreement on policy matters, environmental conflicts, or other issues in controversy affecting a large number of people. Consensus building processes are typically used to foster dialogue, clarify areas of agreement and disagreement, improve the information on which a decision may be based, and resolve controversial issues in ways that all interests find acceptable. Consensus building typically involves structured (yet relatively informal), face-to-face interaction among representatives of stakeholder groups with a goal of gaining early participation from affected interests with differing viewpoints, producing sound policies with a wide range of support, and reducing the likelihood of subsequent disagreements or legal challenges.

Joint Fact-Finding:

Joint fact-finding is a process by which interested parties commit to build a mutual understanding of disputed scientific or technical information. [Interested parties can select their own experts who presumably reflect differing interpretations of available information. Alternatively, they can jointly decide on an unassociated third-party expert or a panel of experts.] A facilitator/mediator works to clarify and define areas of agreement, disagreement, and uncertainty. The facilitator/mediator can coach [the experts] to translate technical information into a form that is understandable to all interested parties. The goal is to avoid adversarial or partisan science where competing experts magnify small differences, rather than focusing on points of agreement and/or creating a strategy to provide for a joint conclusion.

Mediation:

Mediation is facilitated negotiation in which a skilled, impartial third party seeks to enhance negotiations between parties to a conflict or their representatives by improving communication, identifying interests, and exploring possibilities for a mutually agreeable resolution. The disputants remain responsible for negotiating a settlement, and the mediator lacks power to impose any solution; the mediator's role is to assist the process in ways acceptable to the parties. Typically this involves supervising the bargaining, helping the disputants to find areas of common ground and to understand their alternatives, offering possible solutions, and helping parties draft a final settlement agreement. While mediation typically occurs in the context of a specific dispute involving a limited number of parties, mediative procedures are also used to develop broad policies or regulatory mandates and may involve dozens of participants who represent a variety of interests. Mediation most often is a voluntary process, but in some jurisdictions may be mandated by court order or statute.

SECTION 3:

Summary Goal, Objectives, and Key Recommendations

This section of the report provides detail on how the Committee organized its thinking and summarizes the Committee's specific recommendations to the U.S. Institute. Subsequent sections of this report present subcommittee reports and other deliberative documents that were considered by the Committee and that further support the Committee's recommendations.

Summary Goal

The Committee was charged with providing advice to the U.S. Institute on fulfilling the agency's mission. To bring focus to that role, the Committee agreed that its work should have this substantive target:

To improve the quality of environmental decision making consistent with the policies of NEPA.

It is important to explain the components embedded the Committee's chosen goal. NEPA and ECR are not ends in themselves. Neither is environmental decision making, as we use the term, simply about the environment. ECR in support of NEPA implementation can provide value because it is capable of helping improve the quality of decisions affecting the human environment, as that term is used by NEPA. The Committee designed its work process and formulated its recommendations with that focus in mind.

The Committee divided into three subcommittees to address the following key focal points for our deliberations:

- ❖ Existing and potential approaches to implementing Section 101 of NEPA;
- ❖ Improving the capacity of federal agencies to use ECR; and
- ❖ Addressing the particular interests of communities affected by federal decisions related to the environment.

Subcommittee on NEPA Section 101

The NEPA Section 101 Subcommittee was charged with examining the common principles between ECR and NEPA Section 101. The subcommittee also explored whether ECR helps achieve aspects of the goals in Section 101, directly or indirectly, and completed a set of case studies to explore the interaction more thoroughly. This subcommittee was chaired by Lynn Scarlett, Assistant Secretary of Policy, Management and Budget, of the U.S. Department of Interior, and Don Barry, Executive Vice President and General Counsel of the Wilderness Society.

Subcommittee on Capacity Building for ECR and Collaboration

The Subcommittee on Capacity Building for ECR and Collaboration focused on how to increase the effective use of ECR by federal agencies. This subcommittee

explored the potential for the U.S. Institute to develop and coordinate interagency training on collaboration and conflict resolution and also assisted the two other subcommittees when matters pertaining to best practices arose. The co-chairs of the subcommittee are Christine Carlson, Director of the Policy Consensus Initiative, and Cynthia Burbank, Associate Administrator for Planning, Environment and Realty of the U.S. Federal Highway Administration.

Subcommittee on Affected Communities

The Affected Communities Subcommittee addressed methods for more effectively engaging affected communities in collaborative processes and dispute resolution. The subcommittee examined barriers and challenges to participation in these processes in both urban and rural settings. The co-chairs are Larry Charles from Hartford, CT, and Stan Flitner, Owner and Operator of the Diamond Tail Ranch in Wyoming.

Objectives and Key Recommendations

Each subcommittee pursued its charge through a process of research, discussion, and formulation of consensus findings and recommendations. The subcommittee reports were presented to and considered by the full Committee. The Committee was given ample opportunity to review and discuss all subcommittee-provided materials but was not directed by the Chair specifically to approve, disapprove or edit each subcommittee product, many of which were highly detailed or of a background nature. The Committee's recommendations are influenced and largely based on the subcommittees' important work. In total, the Committee makes 21 recommendations directed to the Institute; many are also pertinent to other federal agencies and Congress.

Several of the recommendations involve the U.S. Institute working with the Council on Environmental Quality (CEQ). CEQ is the agency in the Executive Office of the President with the responsibility for advising the President on environmental matters, assisting in the development of federal environmental

policy and interagency coordination, and overseeing the implementation of NEPA. It is understood that carrying out many of these recommendations would require additional resources not currently available to the U.S. Institute and CEQ. It bears noting that every government agency involved in making decisions affecting the environment faces resource constraints that may hinder adoption and implementation of even the most sensible and desirable changes in practice and procedure. Similarly, non-governmental organizations also confront resource constraints that may limit their capacity to engage in new approaches to natural resource and environmental decision making.

The Committee determined that the subcommittees' 21 recommendations fall into three categories. Each category can usefully be described as an objective that points toward the Committee's goal of improving decision making to achieve the policies of NEPA. The three objectives are:

- Objective 1: Advance federal agency use of collaboration and environmental conflict resolution (ECR).**
- Objective 2: Advance the ability of affected communities to participate effectively in environmental decision making.**
- Objective 3: Advance the U.S. Institute's leadership role in assisting federal agencies and communities in resolving environmental conflicts.**

In this section, the Committee highlights several recommendations that it believes can directly assist in achieving each objective. Additional recommendations that support these objectives are contained in the individual subcommittee reports in Sections 5, 6, and 7 of this report.

Objective 1: Advance federal agency use of collaboration and environmental conflict resolution (ECR).

Federal agencies are vested with the responsibility to make difficult decisions that affect people and the environment. The strategies and tools embodied in

ECR have played, and should continue to play, a critical role in assisting the agencies in carrying out their responsibilities under NEPA. The Committee strongly believes that early and meaningful involvement of interested and affected parties can lead to better, more lasting decisions.

To assist federal managers in reducing conflict and to encourage creative problem solving, the NEPA Section 101 Subcommittee compiled and reviewed the documents in Section 8 and Appendices E and F, and conducted a survey of agencies' use of Section 101 of NEPA. Those documents in summary are the:

- ❖ Report on NEPA/ECR Case Studies;
- ❖ 20 NEPA/ECR Case Reports; and
- ❖ Report on NEPA 101 Survey of Federal Agency NEPA Liaisons.

The documents include one that highlights the shared goals of NEPA and ECR, case studies that incorporate valuable lessons learned, a survey of federal agencies' application of Section 101 of NEPA, and a description of collaborative monitoring and its role in adaptive management.

These documents, provided later in the report, should aid the U.S. Institute and agencies in addressing challenges associated with ECR. From the dozens of case studies reviewed, the Committee chose 20 cases that, taken together, provide a mosaic of successes applicable to an array of settings. A related document highlights key characteristics of the cases, key principles illustrated by the cases and the common elements of NEPA Section 101 and ECR. The cases range from the Las Cienegas National Conservation Area and Sonoita Valley Planning Partnership, which involved balanced representation and sustained involvement of interested and affected parties, to the National Elk Refuge case study that illustrates the importance and nature of early assessment and the importance of devoting resources to gain an understanding of scientific issues.

The NEPA Section 101 Subcommittee also developed a document that illustrates the relationship between the objectives of NEPA Section 101 and the principles of ECR, best practices, and measurable outcomes. This

document can serve as a guidepost for individuals and organizations to use in training courses and other efforts. Key examples of Section 101 objectives/ECR best practices include: civic engagement; stewardship/collaborative decisions that involve responsible and sustained engagement of all parties, including all relevant federal and non-federal governmental entities; inclusion; collaboration; representation; stewardship; and legitimacy.

The report on collaborative monitoring provides a clear guide for agency use in collaborative monitoring of adaptive management practices by enhancing broad-based participation in monitoring and providing specific advice to agencies and others involved in monitoring.

Above all, these recommendations and the associated documents are designed to provide federal agencies and all interested parties with useable ECR strategies and tools.

Recommendation 1: Working with the Council on Environmental Quality, the U.S. Institute should develop approaches to implementing Section 101 of NEPA through ECR.

This should include processes that enhance collaboration early in a decision-making process as well as those aimed at mediation or resolution of existing disputes. The focus should be on integrating the goals and policies of Section 101 with agencies' specific missions, and should build on the information obtained from the NEPA 101 Agency Survey Report.

The U.S. Institute should convene a workshop(s) to exchange information and ideas about Section 101. The workshop(s) should feature use of the case studies as well as individuals who participated in the cases highlighted. Such a workshop(s) should also feature the use and discussion of the Section 101 Objectives and Principles/ECR best practices document. The focus should be on providing tangible, useable information and guidance to agency representatives. As part of this activity, the U.S. Institute should develop a module on Section 101 suitable for inclusion in NEPA training and education courses, both for staff hired to implement NEPA and for decision-makers.

Recommendation 2: The U.S. Institute should develop a toolkit of management approaches for federal executives to transform culture in support of ECR and collaboration.

The toolkit should include a set of examples, approaches and techniques that can be used in connection with the CEQ-U.S. Institute initiative identified above, as well as independently. Agency executives could pick and choose from the toolkit, as appropriate for their agency. The specific components of the toolkit are listed in Section 8.

Recommendation 3: Develop cross-agency Training on ECR and collaborative planning.

The U.S. Institute should spearhead the development of a multi-agency training course on best practices in ECR and early collaboration. For maximum leverage, CEQ should partner with the U.S. Institute in gaining federal agency support for this. The focus of this training would be to bring federal agency staff together from multiple perspectives (especially environmental regulatory agencies and agencies that are subject to environmental process regulations) in a neutral setting, to learn best practices. The training should help agency staff identify all environmental review and consultation requirements that might apply to proposed actions under consideration and engage all relevant agencies (federal and non-federal) early in the process. The training should include a module on NEPA Section 101 and should be included in NEPA training and education courses, both for staff hired to implement NEPA and for decision-makers. Training opportunities for federal and non-federal partners should be provided, particularly in the context of specific problems areas or disputes, where possible.

Recommendation 4: The U.S. Institute should identify ways to expand its leadership in developing applications of collaborative monitoring in the context of alternative dispute resolution and adaptive management.

The U.S. Institute should identify mechanisms for oversight and monitoring of adaptive management activities to ensure achievement of performance goals. The White Paper developed by the committee (Section

9) should be used, to the maximum extent possible, as a guide by the Institute and agencies when working with communities and other interested parties to help ensure performance-based outcomes.

Objective 2: Advance the ability of affected communities to participate effectively in environmental decision making.

The Committee recognizes that the word “community” can appropriately be used to describe any group of people with common interests. We use the term “affected community” to describe those communities who have often been underrepresented in traditional decision-making processes and, as a result, have been more affected by than involved with the decision-making process. Affected communities are traditionally underrepresented individuals and organizations whose interests may be impacted by the issue in conflict. Impacted interests typically include quality-of-life concerns such as health, noise, odor, traffic, solitude, recreation, property values, livelihoods or tribal customs.

While “affected communities” is certainly not a precise term, the Committee sees it as including both geographically based interests, such as people living near a proposed facility whose health or property values might be affected by decisions, and geographically dispersed people with common interests, such as ranchers in the West or environmentalists living in rural communities who are dependent on resource-extractive industries. An affected community might also be geographically distant from the area affected by a project, such as an Indian tribe that was removed from its aboriginal homeland. The Committee focused attention on the experience of affected communities because, as detailed in the Affected Communities Subcommittee report, the Committee believes that too often, and for many different reasons, the interests of these communities have not been adequately considered in agency decision making. The Committee does not suggest that certain communities of interest are more legitimate than others, but that the process of governance can and should do a better job of enfranchising the types of interests we term “affected communities.”

The Committee believes that an appropriately designed and implemented ECR process, using best practices, can increase the likelihood that affected communities are adequately considered in the agency decision-making process. These communities should have the opportunity to participate and be represented in a manner consistent with the nature of their interests in the issue at hand. Determinations of who is part of any specific affected community, just as decisions regarding the representation of other interests, should be made on a case-by-case basis. In many instances, the determination may include some level of self-identification, as affected interests step forward seeking to participate. In other cases, federal law might provide that the affected community has the right to determine for itself whether it will participate. For example, if a proposed action would affect a historic property to which an Indian tribe (a term that includes Alaska Native villages, regional corporations, and village corporations), or a Native Hawaiian organization attaches religious and cultural importance, then that tribe or organization has a right under the National Historic Preservation Act and its implementing regulations to be a consulting party.

The Committee developed a number of recommendations intended to strengthen the role of affected communities in NEPA decision making. Two primary recommendations are:

Recommendation 1: The U.S. Institute, in collaboration with CEQ, should guide federal agencies and affected communities in the application of NEPA using the Affected Communities Subcommittee’s recommended collaborative ECR framework.

Early, effective, and sustained participation by affected communities and their representatives in the ECR process increases the chances that the conflict will be resolved with an informed, equitable, sustainable, and improved decision. In Section 6, the Committee discusses key principles, conditions, and actions that must be respected when engaging Affected Communities.

The application of the ECR framework proposed by the Committee for resolving environmental conflicts might also:

- ❖ Replace legal and political confrontations as the chief strategy used by affected communities to influence decision making. Although not always appropriate, ECR might help shift emotion-charged conflicts from newspaper headlines to a dialogue focused on resolving differences among all interested participants at a properly set table (see Barrier Analysis, Section 10).
- ❖ Build trust and relationships at the local level that might lead to improved decision making on other issues—improved governance and the advancement of democracy.
- ❖ Redefine the role of federal actors as facilitators in a process where the issue becomes owned by all interested participants without the forfeiture of government’s legal limits and responsibilities (Figure 1, Section 6).

Recommendation 2: Continue to foster networks and partnerships that promote best ECR practices and promote use of technology to facilitate sharing lessons learned, science, literature, and data.

Affected communities nationwide are experiencing an “environmental awakening,” where citizens are becoming more conscious of environmental risks that threaten human health and livelihoods. Issues are often emotionally charged and involve communities that have had little of the experience needed to develop effective skills in process and ECR. Useful information is often lacking. Government actors and community members confront barriers that hinder effective interactions. As a nation, we must find a way to address this situation. It is important for the U.S. Institute to focus on increasing the skill level and number of ECR practitioners.

By using existing infrastructures in professional, academic, community, and business sectors, the Institute can institutionalize the process for ECR skill development and improve environmental decision making. This work should include:

- ❖ Continuing the biannual ECR conferences sponsored by the U.S. Institute.

- ❖ Increasing use of the Federal Interagency ECR coordinators network.
- ❖ Sharing information and technical resources to increase skill and knowledge among existing or new networks and partners.
- ❖ Increasing efforts to include affected community representatives in ECR networks.
- ❖ Continuing to support networks of individuals and institutions involved in environmental issues and partner with them to promote ECR through their publications, meetings, and professional development activities.
- ❖ Deploying technology and science to create a web-based "community of practice" of federal staff in headquarters and the field who are involved in environmental processes and hosting various applications for use by all interested participants. The web-based Community of Practice would enable practitioners to have electronic dialogues on issues and share information and insights.
- ❖ Assisting state, local, and tribal governments in using ECR.

As a nation, we must find a better way to identify conflicting interests, be honest about our differences, and earnest in our efforts to accommodate those differences. Often in environmental conflicts, human-health impacts, cultural differences, and/or economic hardships drive the conflict to highly charged levels where parties have difficulty finding a way to resolve their differences constructively. ECR has proved to be an effective way to address these dynamics. We note that ECR principles still depend on humans for appropriate application, and ECR will not work and is not appropriate in every situation. We simply propose that use of ECR increases the chances that a satisfactory decision can be achieved.

Objective 3: Advance the U.S. Institute’s leadership role in assisting federal agencies and communities in resolving environmental conflicts.

The U.S. Institute was directed by Congress to assist parties in resolving environmental, natural resources, and public lands conflicts where there is a federal agency involved. The Committee believes that the Institute fills a unique niche and has provided critically important services to federal agencies and communities through its work. There is no other entity that is specifically focused on supporting the use of ECR in the NEPA context. The work of the Institute focuses on four major areas:

- ❖ Advocacy through leadership: policy development, networks, identification of new issues/challenges;
- ❖ Capacity building: education, training of users, training practitioners/experts;
- ❖ Conflict resolution services: consultation/convening, assessment/process design, mediation/facilitation, system design, policy review; and
- ❖ Resources and infrastructure: roster referral system, evaluation/Government Performance and Results Act-models for replication, research, innovative practice, and demonstration.

The Committee deliberations clearly affirmed the need for strengthened involvement by the Institute in each of these areas. Specifically, the Committee recommends that the U.S. Institute:

Recommendation 1: Continue and strengthen coordination and cooperative efforts between the U.S. Institute and CEQ to foster the first two objectives and advance the connection between ECR practices and NEPA principles.

The experience of various Committee members, as well as surveys (see Appendices F and H), revealed a wide range of experience, capacity, and skills across federal agencies regarding collaboration and ECR. This is not surprising given the evolution of these problem-solving approaches and the range of responsibilities held by various agencies. However, it is also clear that this disparity between expertise and capacity will not be remedied without a focused effort.

In 2003, CEQ, working with the U.S. Institute, initiated an interagency effort to promote collaborative problem solving and ECR across federal departments and agencies. The U.S. Institute should continue its 2003-2004 initiative with CEQ to gain commitment to the underlying principles for agency engagement in ECR and collaborative processes. To be successful, the U.S. Institute and CEQ should develop a compelling case to explain to agencies why ECR and collaboration are in their best interests. This case should demonstrate how ECR and collaboration could help agencies advance their missions and performance objectives more quickly and, at least in many cases, at less cost. The U.S. Institute and CEQ should seek and support federal executive champions to spread the message to other agencies.

Recommendation 2: Implement the newly authorized participation grants.

A key building block in the development of the recommendations regarding the involvement of affected communities in collaboration and ECR was an assessment of the barriers that currently exist to effective involvement (Section 10). As a result of that analysis and the experience of Committee members, the Committee identified the need for adequate resources to support the involvement of interests that might otherwise be underrepresented in ECR processes. The Institute had previously identified this need and proposed that special funding could assist in addressing this need.

In 2003, Congress authorized appropriations for grants that the Institute would make to assist non-federal parties to effectively participate in collaborative prob-

lem solving and ECR processes involving federal agencies. The grants could be used to pay for neutral services and to provide other types of support to non-federal parties.

The Committee recommends that in implementing the U.S. Institute's ECR participation grants, the U.S. Institute should:

- ❖ Use the grants to assist effective engagement of affected communities that do not have other means of supporting their participation;
- ❖ Develop a long-term strategy to expand and institutionalize the grants in support of the grants program;
- ❖ Seek a diverse set of partners (e.g., private sector, foundation, other agencies) in support of the fund;
- ❖ Explore whether the fund could be managed as a revolving fund that would be replenished from other sources;
- ❖ Ensure robust evaluation of projects to share and communicate the added value of effective engagement of communities;
- ❖ Establish a mini-grants program to support the involvement of community groups and organization in ECR processes; and
- ❖ Explore the use of environmental fines and penalties in support of the grants program.

(Chairman's Note: Nothing in this report is intended as an interpretation of, or in any way to affect the treaty or other legal rights of Indian tribes.)■



SECTION 4:

NEPA Section 101 Subcommittee, Draft Findings, and Recommendations

NEPA Section 101 Subcommittee Members

Co-Chairs: Lynn Scarlett and Don Barry

Dinah Bear, Alex Beehler, Gail Bingham, Hooper Brooks, Sally Collins, Harry Grant, Chris Kearney, Anne Miller, Julia Riber, and Greg Schildwachter

Subcommittee Contributing Staff

David Emmerson – U.S. Department of Interior

Howard Levine – BLM Milwaukee Field Office

Jo Reyer – USDA Forest Service

Context and History for NEPA Section 101 and Environmental Conflict Resolution

The U.S. Institute established the National Environmental Conflict Resolution Advisory Committee in 2002 to advise the U.S. Institute on carrying out its programmatic responsibilities, including its responsibilities in regards to Section 101 of NEPA. The Committee appointed a NEPA Section 101 Subcommittee to work specifically on:

- ❖ Learning more about whether and how federal agencies could better achieve the objectives of Section 101 through collaborative processes and consensus building;

- ❖ How Section 101, as a statement of national environmental policy objectives, might serve as a guide for improvements in ECR use and practice; and
- ❖ How the Institute’s work could advance both of the above objectives.

It is helpful to understand this effort in the context of Section 101 of NEPA (Appendix C). When Congress debated NEPA in 1969, a great deal of discussion centered around this unprecedented effort at articulating environmental policy on a national level. Congressional debate about the policies was preceded by a joint House-Senate *Colloquium to Discuss a National Policy for the Environment*, held in July 1968, followed by the publication of a *Congressional White Paper on a National Policy for the Environment*. The efforts focused considerable attention on appropriate policy statements, as well as the mechanisms for carrying out those policies. NEPA was introduced in the Senate on the same day the White Paper was published in the Congressional Record. S. 10785, 91st Cong., 1st Sess., October 8, 1969. Senator Henry Jackson introduced NEPA with the explanation that, “The survival of man, in a world in which decency and dignity are possible, is the basic reason for bringing man’s impact on his environment under informed and responsible control.”

Significantly, NEPA’s implementation has been different from what the framers of the legislation

anticipated. Judicial reluctance to interpret and enforce in court the policies of Section 101 (“NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.” *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519 (1978)) along with considerable judicial scrutiny of agencies’ compliance with the procedural provisions of NEPA have led many to ignore Section 101 or dismiss it as purely hortatory language. Though not generally enforced in court, it would be inaccurate to say that Section 101 has had no effect whatsoever. It has been used by Presidents of both parties as the basis for executive orders, policy statements, and directives to heads of agencies. Additionally, environmental analyses for actions that have been determined not to trigger the procedural requirements of NEPA (e.g., trade agreements) have been undertaken in some measure because NEPA’s policy mandate provides a rationale above and beyond its procedural requirements. Finally, NEPA has been used as a model by other countries for both statutory and constitutional provisions to articulate environmental policy. Nonetheless, some participants in environmental debates are concerned that the day-to-day implementation of NEPA has tended to focus more on process rather than on substantive policy.

The National Environmental Conflict Resolution Advisory Committee believes many of the underlying principles of Section 101 of NEPA are consistent with the central tenets of ECR, and that several expected outcomes of both NEPA and well-managed ECR work are complementary.

As a first step to addressing the Committee’s charge, the NEPA Subcommittee identified five basic components to the objectives of NEPA 101, the first three of which were substantive and the last two procedural. The subcommittee identified a need to explain the relationship between Section 101 of NEPA and ECR, including how the practice of ECR contributes to the achievement of the national environmental policy objectives articulated in Section 101 of NEPA.

The subcommittee produced two draft papers, “Primary Objectives and Underlying Principles Derived

from Section 101 of the National Environmental Policy Act” and “Shared Principles – NEPA Section 101 and Environmental Conflict Resolution.” The papers were discussed and approved by the full Advisory Committee at its November 2003, meeting in Tucson, AZ, (Attachments 1 and 2).

It also is helpful to understand these components in the context of the evolution of ECR in practice and in law. The first application of mediation to environmental issues can be found in the early 1970s. By the early 1980s, perhaps 200 environmental issues had been mediated. In 1982, the Administrative Conference of the United States published a report outlining how mediation should be structured to make it consistent with the Administrative Procedure Act and other federal statutes. By 1991, Congress had enacted the Administrative Dispute Resolution Act (ADRA) and the Negotiated Rulemaking Act, codifying alternative dispute resolution (ADR) in federal decision making. ADRA encourages federal agencies to adopt policies on the use of ADR for the full range of agency actions. As noted above, in 1998, Congress passed the Environmental Policy and Conflict Resolution Act, establishing the U.S. Institute for Environmental Conflict Resolution.

No comprehensive inventory exists of ECR cases, but the number today clearly is in the thousands. In some situations, people explore their differences early through dialogue. In other situations, people with very diverse interests negotiate solutions to problems long before a “dispute” occurs. In still other situations, parties to litigation settle public disputes with the assistance of a mediator. Many of these cases, at all stages in development, involve NEPA. The basic principles that guide successful processes of resolution are similar, whether they involve public issues or not. However, there are many additional reasons why NEPA and other environmental disputes are challenging to resolve. They include the large number of interested parties, multiple and interrelated issues, complex and uncertain science, complex institutional issues, multiple forums in which the dispute might be decided (perhaps offering different advantages for the contending parties),

asymmetry of influence and resources, and the political limelight in which the issues are addressed.

Much already has been learned about constructive dialogue and negotiation in these circumstances, including the value of early situation assessments, inclusiveness, transparency, clear expectations and roles, relationship building, collaborative inquiry and joint fact-finding, analysis of multiple options suggested by interested parties, respecting diverse sources of information, etc. Much more remains to be learned. The U.S. Institute and others are engaged in analysis of case studies and other research to explore and illustrate how the principles in NEPA and the best practices emerging from the conflict resolution field may contribute to accomplishing the national interests established by Congress in 1969.

The National Environmental Conflict Resolution Advisory Committee has been asked by the U.S. Institute to focus on the intersection between NEPA Section 101 objectives and ECR practices.

The Committee identified three broad questions:

1. How does the U.S. Institute 's ECR work implement Section 101 of NEPA?
2. How can federal agencies better achieve the objectives of Section 101 through collaborative processes and consensus building?
3. How can Section 101, as a statement of our national environmental policy objectives, serve as a guide for improvements in ECR use and practice?

The Committee drew attention to the important role that tribal governments and state and local governments can play, in addition to the leadership role federal agencies have played, in achieving outcomes that better meet NEPA Section 101 objectives by initiating and supporting ECR processes. From a preliminary conceptual analysis, the Committee has identified the following six recommendations to the U.S. Institute.

NEPA Section 101 Subcommittee Recommendations

1. Working with CEQ, the U.S. Institute should develop approaches to implementing Section 101 of NEPA through ECR that include processes that enhance collaboration early in a decision-making process as well as those aimed at mediation or resolution of existing disputes. The focus should be on integrating the goals and policies of Section 101 with agencies' particular missions, and should build on the information obtained from the NEPA 101 Agency Survey Report. As part of the development, the U.S. Institute should convene a workshop to exchange information and ideas about Section 101.
2. The U.S. Institute should develop a module on Section 101 suitable for inclusion in NEPA training and education courses for those that implement NEPA and for decision-makers.
3. The U.S. Institute should continue to work on the challenges of integrating ECR approaches with the NEPA process that have been previously identified by the NEPA Subcommittee.
4. The U.S. Institute should form a roster or network of individuals from government agencies, nongovernmental organizations, and other organizations with expertise in collaboration, who would serve as champions or experts with others in similar roles. The roster would be a vetted list of individuals who have met established criteria for participation. The members would provide mentoring and advice to agencies or groups interested in using collaborative processes to address environmental issues.
5. The U.S. Institute should identify ways to expand its leadership in developing applications of collaborative monitoring, particularly in the context of ECR and where adaptive management is being used in the environmental and natural resources areas. In particular, the U.S. Institute should identify mechanisms for over-

sight and monitoring of adaptive management activities to ensure achievement of performance goals.

6. In consultation with its Roster Working Group, the U.S. Institute should explore ways to inform the mediators and facilitators on its current roster about the principles in Section 101 of NEPA and should foster a dialogue among roster members about the linkages between Section 101 of NEPA and ECR principles and best practices. As part of the dialogue, the U.S. Institute could convene

workshops for roster members to exchange information and ideas, using case studies of mediation in the NEPA context to illustrate opportunities and constraints to consider Section 101 in the ECR process. The U.S. Institute could also develop materials for roster members to inform them of the approaches suggested to agencies, as noted in Recommendation 1, thereby expanding the number of individuals able to inform agency staff of these options.

Attachment 1

Primary Objectives and Underlying Principles Derived From NEPA Section 101

To consider how NEPA Section 101 is or is not being furthered by federal agencies and by the use of ECR, the NEPA Section 101 subcommittee of the National ECR Advisory Committee summarized Section 101 in the following objective statements. These objectives are paraphrased from and encompass the language of Section 101. The full text of Section 101 is attached to this document for overall context. Federal agencies, tribal governments, state and local governments, the private sector, public interest groups, and individuals all play important roles in achieving these objectives.

Each objective is followed by principles that also underlie the practice of ECR. The three substantive objectives are listed first.

- 1. To incorporate environmental values along with economic, community, tribal cultural, and other social considerations “...to create and maintain conditions under which man and nature can exist in productive harmony” including maintaining tribal cultural reliance on environmental functions. (Section 101(a))**

Section 101(a): “The Congress...declares that it is the continuing policy of the Federal Government...to create and maintain conditions under which man and nature can exist in productive harmony....”

Section 101(b): “(2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3): attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; 4) preserve important historic, cultural and natural aspects of our national heritage and maintain,

wherever possible, an environment that supports diversity, and a variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

Section 101(c): “The Congress recognizes that each person should enjoy a healthful environment....”

Principles: Productive Harmony, Protection of Health and Environmental Quality, Integration, Sustainability, Equity, Balance

- 2. To fulfill our responsibility to meet “...the social, economic, and other requirements of...future generations...” as a “trustee of the environment...” (Section 101(a) and (b)(1))**

Section 101(a): “...fulfill the social, economic, and other requirements of present and future generations...”

Section 101(b): “...it is the continuing responsibility of the Federal Government to...(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;”

Section 101(b)(6): “enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources;”

Principles: Social Responsibility, Intergenerational Equity, Sustainability, Stewardship

3. To enhance personal responsibility for “...preservation and enhancement of the environment...” (Section 101(c))

Section 101(c): “The Congress recognizes...that each person has a responsibility to contribute to the preservation and enhancement of the environment.”

Principles: Stewardship, Civic Engagement

The following two objectives are procedural and apply to the three previous substantive objectives.

4. To engage in practical problem solving “...to foster and promote the general welfare...” (Section 101(a))

Section 101(a): “...use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare...”

Section 101(b): “...it is the continuing responsibility of the Federal Government to use all practicable means, to... (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity, and a variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

Principles: Pragmatism, Efficacy, Protection of Health and Environmental Quality

5. To “...improve and coordinate Federal plans, functions, programs and resources...” and coordinate among people, values (including tribal cultural values) and interests, in order to improve the legitimacy, equity, effectiveness and efficiency of decision-making, and the durability of outcomes. (Section 101(b))

Section 101(a): “The Congress...declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations...to create and maintain conditions under which man and nature can exist in productive harmony....”

Section 101(b): “...it is the continuing responsibility of the Federal Government to...improve and coordinate Federal plans, functions, programs, and resource to the end that the Nation may - (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity, and a variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

Principles: Inclusion, Collaboration, Representation, Stewardship, Legitimacy

Attachment 2

Shared Principles—NEPA Section 101 and Environmental Conflict Resolution

The following table is a working draft that is intended to explore conceptually how the practice of ECR contributes to the achievement of the national environmental policy objectives articulated in NEPA Section 101. Many of the underlying principles of

Section 101 are consistent with the central tenets of ECR best practices and several expected outcomes are also compatible. Since this document focuses on environmental outcomes, it does not capture all the outcomes of ECR processes.

NEPA Section 101 Objective	NEPA 101 Principles	Consistent ECR Practices	Shared ECR/NEPA Outcomes
<p>1. Incorporate environmental values along with economic, community, tribal cultural, and other social considerations, "...to create and maintain conditions under which man and nature can exist in productive harmony..." including maintaining tribal reliance on environmental functions. <i>101(a)</i></p>	<p>Productive Harmony, Protection of Health and Environmental Quality, Integration, Sustainability, Equity, Balance</p>	<p>Balanced representation of all essential and affected interests and values</p> <p>All key issue, concerns, and perspectives addressed</p> <p>Options for integrating mutual gains into agreements explored</p> <p>Clear goals, objectives, and expectations defined</p> <p>Appropriate use of scientific information</p>	<p>Integrative solutions and durable agreements reached</p> <p>Outcomes that reflect a consensus balance of environmental, social, cultural, and economic concerns</p> <p>Improved ability to value and integrate different kinds of knowledge and perspectives</p> <p>Outcomes contribute to the sustainability of natural and social systems</p>
<p>2. Fulfill responsibility to meet "...the social, economic, and other requirements of ...future generations..." "...as a trustee of the environment..." <i>101(a) and (b)</i></p>	<p>Social Responsibility, Intergenerational Equity, Sustainability, Stewardship</p>	<p>Short-term and long-term implications of agreements and decisions explored and weighed</p> <p>Draft agreements tested to ensure future contingencies planned for</p> <p>Participants have access to best available information</p>	<p>Durable agreements are reached that provide for long-term stewardship</p> <p>Agreements have sufficient flexibility to sustain future changes in underlying conditions</p> <p>Parties are committed to implementation</p>

NEPA Section 101 Objective	NEPA 101 Principles	Consistent ECR Practices	Shared ECR/NEPA Outcomes
<p>3. Enhance personal responsibility for "...preservation and enhancement of the environment." <i>101(c)</i></p>	<p>Stewardship, Civic Engagement</p>	<p>Collaborative decisions require responsible and sustained engagement of all parties</p> <p>Representatives of groups keep their constituents informed and have authority to negotiate on their behalf</p> <p>Parties have the time, money, and skills to engage fully</p>	<p>Increased motivation to participate</p> <p>Increased value placed on citizen participation by agencies and citizens</p> <p>Civic engagement affects world views, ideas, actions, and relationships of parties</p> <p>Agreements capable of being implemented</p> <p>Participants are prepared to implement resulting actions or agreements</p>
<p>4. Engage in practical problem solving "...to foster and promote the general welfare..." <i>101(a)</i></p>	<p>Pragmatism, Efficacy, Protection of Health and Environmental Quality</p>	<p>Structured process design to facilitate timely productive and effective engagement</p> <p>Scope of issues for negotiation narrowed for practical resolution</p> <p>Clear decision making structure and ground rules developed and adhered to consistent with participants' cultures and expectations.</p> <p>Process is voluntary, informal, and flexible and is not overly prescriptive</p> <p>Participants have access to best available information</p> <p>All parties plan for implementation and clarification of responsibilities and roles</p> <p>Use of appropriate technology to facilitate engagement</p>	<p>Real world, on-the-ground solutions achieved</p> <p>Decisions are timely</p> <p>Decisions will maintain or improve environmental health and quality and productive harmony</p> <p>Compliance with the agreement is likely</p> <p>Cost-effectiveness</p>

NEPA Section 101 Objective	NEPA 101 Principles	Consistent ECR Practices	Shared ECR/NEPA Outcomes
<p>5. To "...improve and coordinate Federal plans, functions, programs and resources..." and coordinate among people, values (including tribal cultural values) and interests, in order to improve the legitimacy, equity, effectiveness and efficiency of decision making, and the durability of outcomes. 101(b)</p>	<p>Inclusion, Collaboration, Representation, Stewardship, Legitimacy</p>	<p>Initial assessment determines appropriateness of ECR approach and process design</p> <p>Balanced representation of all essential interests at the table</p> <p>Process is voluntary, informal, and flexible and is not overly prescriptive</p> <p>Parties involved in developing process design or design is transparent to parties</p>	<p>Commonality of interests identified</p> <p>Range of disagreements narrowed</p> <p>Decisions are timely</p> <p>Social and information networks created</p> <p>Intellectual capital built through commonly shared and accepted information</p> <p>Parties coordinate frequently and expend fewer resources on disputes in the future</p> <p>Improved plans and programs</p>

References

“GUIDING PRINCIPLES FOR ECR PROCESSES: Best Practice Considerations for Participants and Neutrals Engaged in ECR” (11/8/02 draft, U.S. Institute for Environmental Conflict Resolution)

“Best Practices for Government Agencies: Guidelines for Using Collaborative Agreement-Seeking Processes” (Society of Professionals in Dispute Resolution, Report and Recommendations of the Environment/Public Disputes Sector Critical Issues Committee, adopted by the SPIDR board January 1997)

“Success Story: What is Success? Evaluating Collaborative Local Planning in Portugal” (The Collaborative Edge, a quarterly newsletter of the Center for Collaborative Policy, April 2003)

Draft documents of the National Environmental Conflict Resolution Advisory Committee’s NEPA Section 101 Subcommittee, with particular credit to Lynn Scarlett and Anne Miller

PROGRAM EVALUATION questionnaire for Environmental Conflict Resolution Parties, U.S. Institute for Environmental Conflict Resolution, OMB No. 3320-0004■



SECTION 5:

Affected Communities Subcommittee, Draft Findings, and Recommendations

Affected Communities Subcommittee Members

Co-Chairs: Larry Charles and Stanley Flitner

Lori Brogoitti, Placido dos Santos, Don Edwards, John Ehrmann, Dwight Evans, Gary Gallegos, Mark Schaefer, Jim Souby and Terry Williams

Introduction

Section 101 of NEPA is great poetry and eloquently describes the goal of the citizens of the United States and their government to find balance between our use of natural resources and our responsibility to protect those resources. Section 101 establishes a minimum baseline that must be maintained in a way that responsibly reflects good stewardship securing precious environmental resources for future generations. Seeking productive harmony, protection of health and environmental quality, integration, sustainability, equity, and balance are principles that are consistent with the vision set forth in NEPA.

This chapter presents the key findings and recommendations of the Affected Communities Subcommittee. The intent is to link the work of the subcommittee to the work of the NEPA 101 and Best Practices sub-

committees based on the assumption that the applicability and effectiveness of NEPA Section 101 and ECR should be measured and assessed at the community level.

The goal of the subcommittee is to document key principles and strategies to assist local interested parties in effectively participating in ECR processes. Understanding barriers and obstacles that hinder effective dialogue and negotiation among involved parties is key. The definition of the "affected community" will vary from environmental problem to problem due to variances in geographic scope as well as the cultural and civil attributes of people and communities affected by the problem.

We encourage the reader to internalize the thoughts listed here. We speak conceptually and do not propose to outline the specific formula for success in resolving conflicts. Common sense and a sense of fairness should guide the practitioner to a good end.

Preamble

Freedom, liberty, and self-preservation are inherent to the human personality regardless of geography, economic, education, and cultural or ethnic position.

These principles sustain the hope of achieving balance among us all as separate peoples with diverse interests.

There are, however, other natural traits among us and within affected communities that work to divide us; we must commit ourselves to be honest in acknowledging our differences and earnest in our attempts to accommodate them. These differences may be driven by our lack of knowledge of each other's culture, customs, traditions, and values. In the end, we must find a way to communicate the idea that we are all affected by our individual contributions to the degradation of our environment and we must all work to change behaviors and enhance stewardship across a large number of communities to have a measurable and needed improvement to our environment.

What we say here is derived from honest dialogue among representatives of communities, the private sector, federal, state, and tribal government, and mediator/facilitator perspectives. We used the principles described here to resolve hard conflicts in views and ideas that developed among us from time to time and believe this document represents our best thoughts. We offer our thoughts as guidance so other interested parties can avoid the high costs in time, money, emotional energy, and lost opportunity that we have suffered in our own experiences with environmental conflicts.

Learning must occur among all interested parties to increase our appreciation for our separate interests and sovereign rights. We must see the humanity in each of us and commit ourselves to build the level of trust required to solve complex conflicts.

Importance of Affected Communities

Threats to the environment, economy, culture, and social values affect urban and rural communities throughout the country; the rise of these conflicts will impact all communities. Communities and government agencies lack sufficient capacity to solve these challenges using traditional approaches, such as legal confrontation and technical challenges to decisions. Therefore, many communities resort to the methods they know best -- political confrontation and conflict. Managing these conflicts has been an enormous and

costly challenge to federal, tribal, state and local regulators and is burdensome to individuals, organizations, and communities. The fundamental message of this document is that conflict resolution can no longer be considered an "alternative" – its principles, conditions, and actions must be standard practice while staying within the statutory confines of the law and respecting legal rights of advocates. The early and effective involvement of affected communities is an essential, not optional, element in the implementation of NEPA.

The subcommittee pursued its discussions without assuming that NEPA itself will need to be amended to achieve the goals that are articulated. However, the subcommittee does not rule out the possibility that such changes might be necessary in the future should sufficient progress not be made within a reasonable period of time.

The work of the NEPA 101 Subcommittee substantiates the fact that NEPA Section 101 and ECR are mutually reinforcing and entirely compatible. The subcommittee believes that it is particularly important that federal actors, other levels of government, and non-governmental participants recognize the mutually reinforcing objectives of Section 101 and ECR.

NEPA supports basic principles and values with regard to "incorporation of environmental values along with economic, community, tribal, cultural and other social considerations..." The subcommittee believes, however, that the current application of NEPA falls short of fulfilling this objective. For example, with regard to tribal concerns, three important aspects should be addressed: the role of tribes as cooperating agencies, the consideration of off-reservation impacts related to trust resources, and the need for consistent application of early engagement of tribes at the time of determining plan, purpose, and need.

Key Principles, Necessary Conditions, and Actions

During its deliberations, the subcommittee discussed and defined a set of principles, necessary conditions, actions, and barriers that must be overcome (Section

10). Deliberations were informed and enriched through interaction with members of the public during the sub-committee meeting in Hartford, CT.

Principles that must be understood and adhered to in order to create workable, fair and just solutions to problems affecting communities.

- ❖ **Respect and Trust** - Mutual respect among all parties before, during, and after a problem is identified is essential to success. Without mutual respect there is no foundation upon which to build constructive solutions. To obtain active and committed participation from the affected community, respect and trust must be established. For example, acknowledge the role of the community as teacher; ask questions rather than presenting the answer, and do not be misled by images and stereotypes. Building and maintaining trust is essential to successfully resolving problems. Trust should not be assumed, it must be earned.
- ❖ **Accountability/Responsibility** - All parties to a dispute must honestly communicate and define their interests and concerns. Parties should be held accountable for living up to the commitments they make through evaluation based on measurable objectives.
- ❖ **Courage** - All parties must have the courage to be committed to achieve fair and just decisions and the courage to take risks in order to reach and hold final solutions.
- ❖ **Moral obligation** - Public officials must be committed to public service in a manner that honors the social, cultural, and economic values of affected communities as well as the public at large. Community members must be committed to spend the time necessary to accurately and ethically reflect the concerns and interests of their community. An agreement must reflect the interests of the affected parties without jeopardizing the human environment.
- ❖ **Shared responsibility** – In addition to representing their own interests, rights, and

obligations, all parties share the responsibility of defining common goals and striving to attain them for the betterment of the affected community and society as a whole.

Conditions that are critical to achieving workable solutions.

- ❖ **Definition of separate interests** – All parties must share their respective interests, needs, and goals in order to lay the foundation for development of mutually acceptable outcomes. Ideally, outcomes will be characterized as win-win for all interested and involved parties, considering priority interests of all.
- ❖ **Transparency and openness** - All parties must accept responsibility to inform each other in a thorough and timely manner regarding matters that might either limit or enable an agreement. No “gotcha” or surprises saved for a last-minute ambush.
- ❖ **Strong relationships among parties** - To solve long-term, complex problems, parties must understand each other’s interests and limits working toward solutions in creative ways. With honest dialogue, a trust can be built that is sufficient to create an opportunity for agreement.
- ❖ **Commitment** – Often months or years of continuous dialogue may be required to sort out conflicting interests. All parties must be willing to stay to the end.
- ❖ **Sovereignty** - All parties in a dispute must understand and respect the legal authority, roles, and interests of the other participants.
- ❖ **Problem Solving Approach** – Participants must have a focus on addressing the issue and solving the problem, not on imposing the power/authority of one entity to the exclusion of others. Regulators should be willing to transfer ownership of the issue to a collaborative process that involves all concerned parties and must be willing to support facilitation to assist all interested and involved parties.

- ❖ **Availability of Credible Information** – Parties need a shared understanding of best available science and traditional and local knowledge from credible and trusted sources.

Actions that help solve problems or prevent disputes.

- ❖ **Implementation** – Parties must meet obligations including honoring the principles and conditions that underlie agreement. They should use tools (i.e., decision registers) that track the elements of the agreement, tasks, responsibilities, and completion timelines.
- ❖ **Monitor and evaluate** – Parties must collaboratively design and manage the process to ensure conformity with agreements, continuous improvement of conditions, and re-validate original principles.
- ❖ **Open and timely communication** - All parties must be honest and forthright in their actions and communications, including creation of a public record. No party should withhold information that is critical to addressing the issues at hand.
- ❖ **Be timely and take time** - Early community involvement is essential, including identifying and getting the right parties to the table and responding to urgent community needs, while taking the time to build relationships that will last through the process and implementation of the solution. As an initial step, parties should agree upon a process timeline that establishes key milestones and actions.
- ❖ **Be flexible** - All parties, especially agencies, should encourage innovation and flexibility. Parties must be willing to listen to other ideas and think beyond their institutional position or prior experiences.
- ❖ **Build capacity and encourage leadership** – The process should be designed to build a sustainable capacity within the affected community to address future issues.

- ❖ **Training** - Sensitivity to cultural, social, and economic values of the affected community is essential to successful engagement, as is understanding of process and constraints. It is in the interest of a successful dialogue for the affected community to receive training on relevant law, technical issues, and collaborative processes. Project proponents, including agencies, will benefit from training regarding the interests and understandings of the affected community.
- ❖ **Fund participation and technical assistance** - Agencies and other participants should set aside resources and funds to ensure that affected communities can participate fully and are fairly represented.

Recommended Process

Government decision makers should understand and support the movement of the issue/conflict to a process in which interested parties are full participants and the government role becomes more of facilitator and enabler than unilateral decision maker. This alteration in role does not undermine the authority and responsibility of government to ensure compliance with the law. The responsible governmental entity always retains that authority, but what needs to change is the willingness of agencies to consider participant-based approaches to formulating decisions.

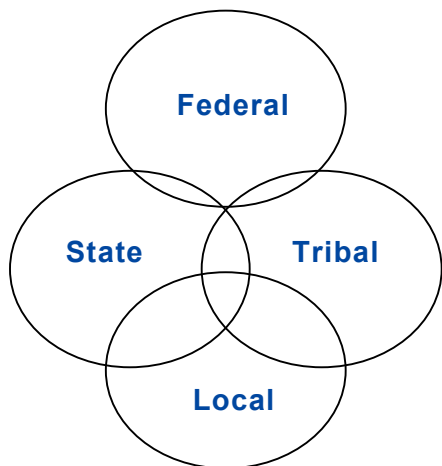
The figure below illustrates the suggested approach. The fundamental difference between the traditional approach and the recommended approach is the sense of ownership of the issues and process by the interested parties, in collaboration with the relevant agencies.

To make the process work effectively, community members have to embrace ECR as a viable and effective way to resolve conflicts. The key steps include:

1. *Creation of a participant table*—All interested parties share in the design and implementation of the problem-solving process in accordance with the guiding principles articulated above. All inter-

ests would come to bear on the decision-making process sooner or later because these processes would be “front-loaded” in the effort to create a coherent forum/process within which to express those interests.

2. *Determination of appropriate parties*—Authentic community interests should be well and accurately represented. Often there will be multiple communities with an interest in the issue being addressed. It is better to be more inclusive than limiting at the outset and to create an open process. The group should be directly involved in decisions about adding new participants to the group. All parties should stay at the table long enough to gain an honest understanding of respective interests. Mutually determining the goal and objectives of the



Traditional

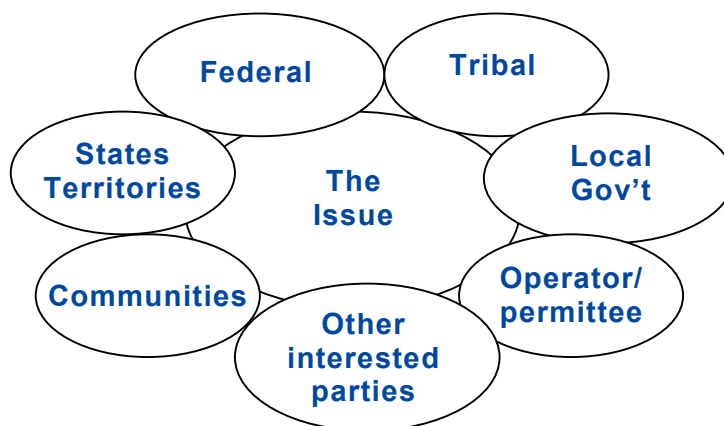
process should be one of the first items participants might address. A level playing field is created if all interested parties are at the table as equals.

3. *Maintain focus on the issue*—Keep a priority focus on the issue rather than the regulations, and use the legal/regulatory framework to help solve the problem (not the other way around, as is too often the case).
4. *A different role for the federal representatives*—Officials should empower the process and the parties through creation of incentives, providing

information, and aggressively pursuing solutions, rather than simply holding back as the final decision maker. Federal officials should make their interests transparent, use available flexibility under applicable mandates (including the Federal Advisory Committee Act), and honor the federal trust obligation to Indian Tribes.

5. *Pursuit of agreement regarding ground rules*—All parties should contribute to establishment and implementation of ground rules to guide the process and protect the participants.

Appendix H contains a description of how this approach has been applied in the context of environmental justice concerns.



Recommended

Recommendations

1. The U.S. Institute, in collaboration with CEQ, should guide federal agencies and interested parties in the application of NEPA using the Committee’s recommended collaborative ECR framework. Specifically, the U.S. Institute should ensure that the framework reflects the concerns of and is accessible to affected communities through the development of agency guidance, training materials, and research and evaluation.

-
2. In implementing the U.S. Institute's authorized ECR Participation Fund, the U.S. Institute should:
 - ❖ Use the fund assist effective engagement of affected communities who do not have other means of supporting their participation;
 - ❖ Develop a long-term strategy to expand and institutionalize the fund in support of community participation;
 - ❖ Seek a diverse set of partners (e.g., private sector, foundation, other agencies) in support of the fund;
 - ❖ Explore whether the fund could be managed as a revolving fund that would be replenished from other sources;
 - ❖ Ensure robust evaluation of projects to share and communicate the added value of effective engagement of communities;
 - ❖ Establish a mini-grants program to support the involvement of community groups and organization in ECR processes; and
 - ❖ Explore the use of environmental fines and penalties in support of the fund.
 3. Steps should be taken to assist federal actors so they can avoid reinforcing the existing barriers to effective community participation that have been identified. Clear guidelines and training on topics, such as the underlying principles of effective community involvement, cultural history and awareness, and communication skills, should be developed and made available and delivered to those key personnel. The subcommittee suggests that there may be an appropriate role for the U.S. Institute for Environmental Conflict Resolution to assist in the development of these materials. The subcommittee recommends that targeted resources be obtained to further develop these training materials based on the findings in the report. The U.S. Institute should designate a person to coordinate the development of a network to support the development and delivery of training and to serve as a resource for agencies.
 4. The U.S. Institute should assist in coordination and sharing of resources and expertise among agency personnel responsible for public participation, tribal issues, ECR, environmental justice, and NEPA. The U.S. Institute should develop a strategy to integrate, network, and exchange information across agencies. There should be a focus on implementation and ways to create incentives for the improved use of ECR approaches with affected communities. The U.S. Institute should develop approaches to integrating recognition for the effective use of these approaches by agency personnel. The U.S. Institute should also take the lead in developing performance outcomes and measures for agencies that can be used under the Government Performance and Results Act.
 5. The U.S. Institute should suggest to the EPA's Office of Environmental Justice that an ECR subcommittee of the National Environmental Justice Advisory Committee be created.
 6. The U.S. Institute should explore the creation of exchange programs between nongovernmental organizations, private sector entities, community organizations, and government agencies to facilitate mutual education and shared experiences across interests.
 7. The U.S. Institute should consider how to engage the private sector in support of these approaches. The U.S. Institute could assess effectiveness of past cases and target specific industry sectors that are interacting with communities on an ongoing basis (e.g., military).
 8. The U.S. Institute should identify several specific issues where significant future impacts on communities are anticipated and therefore, can benefit from proactive engagement between project components and communities. Examples include military base closures, energy development, and forestry and fire policy, and management.
 9. The U.S. Institute should recharter the National ECR Advisory Committee to assist in implementing these recommendations.



Attachment 1 - Barrier Analysis

The following is a summary of a more extensive analysis that was conducted by the subcommittee during its first several meetings. Details are provided in Section 10.

Reviewing opportunities to establish a formal ECR process within NEPA requires identifying the following issues. Some examples are provided to illustrate the issues that affect communities and their ability to adequately participate.

1. Reviewing opportunities to establish a formal ECR process within NEPA requires identifying issues facing affected communities and their ability to adequately participate. Among the issues raised were inadequate communication, language barriers, and cultural differences, which result in lack of participation. Examples of issues are:

- a) Inadequate communication due to
 - ❖ Ineffective management, staffing, and process (e.g., inadequate training, turnover);
 - ❖ Laws, interpretations, and regulations;
 - ❖ Lack of technical assistance and access to information; and
 - ❖ Poor public or late notice and lack of public agency personnel to facilitate meaningful and systematic participation causes increased conflict for stakeholders.
- b) Language barriers
 - ❖ Translations may be needed that articulate the issues and provide past, present, and future desired conditions for decision-making.
- c) Cultural differences

- ❖ The ability to self identify through knowledge-based interest;
 - ❖ Empowerment legitimized by cultural ties to the issues; and
 - ❖ Health-related issues based on culture.
2. Empowerment of communities, power balance at the table, and balanced, broad and effective representation.
 - a) Difficulty in defining the affected community that represents a community as a whole and maintaining its legitimacy throughout a prolonged process.
 - b) Affected communities' representatives are challenged by maintaining a connection to a community with multiple views and interests.
 - c) Affected communities lack political and jurisdictional powers of influence, power among community members, and unity within the community itself.
 - d) Affected communities' multiple perspectives and difficulties establishing consensus positions might affect their ability to develop the range of alternatives available to them and the ability to determine an equitable settlement.
 3. Community sovereignty, self-determination, and involvement.
 - a) Affected communities tend to assume a greater degree of intergovernmental collaboration at all levels. This causes confusion about roles, jurisdiction, and rules, including a lack of understanding of tribal governance, self-determination, and self-regulation.

- b) Participants, including governments, often lack understanding of the federal government’s obligation to tribes to support their self-governance and the continuation of their cultures.
 - c) Failure to acknowledge that species and pollutants move across all boundaries and, in so doing, create shared stewardship opportunities and responsibilities.
 - d) Involvement of affected communities in decision making and in ECR processes.
 - e) Involvement and input from local communities for decision making—use of place-based knowledge.
 - f) Ability of communities to secure long-term, binding agreements.
4. Resources and Economics.
- a) Lack of access to resources (i.e., financial and informational) for effective participation
 - ❖ Poor knowledge of and access to information regarding rights, roles, procedures, and terminology and poor access to scientific services, legal services, communications technology.
 - ❖ Poor access to decision makers, policy makers, and agency personnel and lack of political support.
 - b) Time requirements for the effective participation in ECR processes (during the workday and across several months or years, during harvest, etc.).
 - c) Other stakeholder representatives are paid to participate.
5. Governments are not effective enough at engaging affected communities in environmental decision-making processes.
- ❖ Processes are hard, rigid, legally contradictory, conflicting, and the lack of clarity produces barriers for affected communities.
- ❖ Fear and discomfort by government decision makers in engaging community representatives.
 - ❖ Too often all that is sought from communities is input, not true involvement in decision making.
 - ❖ Need for increasing diversity in agency staffs to assist in developing productive relationships with local communities.
6. Decision processes do not engage affected communities early or in ways that lead to effective expression of the affected community’s interests—as expressed by the typical agency’s “decide, announce, defend” syndrome, as opposed to “propose, engage/partner, decide.”
- ❖ Agencies tend to develop preferred course of action before consulting affected communities.
 - ❖ Affected communities require up front time and effort to have adequate participation and should be notified at the point of purpose of need.
 - ❖ Project proponents demand that agencies make rapid decisions, which tends to truncate time for effective community engagement
 - ❖ Agency staff and others can be intimidated by affected communities but should maintain respect for the affected communities’ role, including respect for time commitments and resources.
 - ❖ Despite budget constraints, public involvement needs champions and committed and trained managers within agencies.
7. Role of science and technology.
- ❖ Affected communities need access to reliable scientific information, as well as the expertise to interpret scientific information.
 - ❖ Affected communities might be skeptical of technological fixes and lack the ability to interpret the fixes for decision making.

-
- ❖ Dueling experts/science can cause difficulties.
 - ❖ Obtaining reliable information and using technology might be cost-prohibitive.
 - ❖ Traditional and local (place based) knowledge is not readily accepted as scientific or valid.
 - ❖ Structuring and translating science for decision makers.
 - ❖ Need for appropriately designed monitoring.■

SECTION 6:

Capacity Building for ECR and Collaboration Subcommittee, Draft Findings, and Recommendations

Capacity Building for ECR and Collaboration Subcommittee Members

Chris Carlson and Cindy Burbank (Co-chairs)
Gail Bingham, Sally Collins, Dwight Evans,
Pauline Milius, Julia Riber, Dean Suagee and
Michael Sullivan

Subcommittee Contributing Staff

Cheryl Caldwell – U.S. Geological Survey
Jo Reyer – USDA Forest Service

Subcommittee Purpose

The purpose of this subcommittee was to increase the commitment to and use of effective practices in ECR and upstream collaboration. To accomplish this:

- ❖ We went beyond ECR to add “upstream collaboration” to the scope of our efforts. We did this because we wanted to promote collaborative efforts upstream, which might prevent the need for downstream, project-specific ECR, and because upstream collaboration can be more effective, more flexible, more construc-

tive, and more holistic, for the benefit of all interests.

- ❖ We developed draft recommendations and held a half-day meeting with a small cross section of interests (federal and non-federal) to get their feedback and suggestions on our draft recommendations.
- ❖ We reviewed barriers to upstream collaboration and to ECR and discussed ways to overcome these obstacles.
- ❖ We incorporated in our recommendations some of the ideas and recommendations that had surfaced earlier from the NEPA 101 Subcommittee and the Affected Communities Subcommittee. We agreed that there might be additional opportunities to incorporate the work of the other two subcommittees in our recommendations during the discussion at the NECRAC meeting in Tucson in May.

Targeted Audiences

Ultimately, the Capacity Building for ECR and Collaboration Subcommittee would like to reach all those interested in environmental conflicts (federal agencies, tribes, state/local government agencies, interest groups, businesses, etc.) to increase their commitment

to and use of effective practices in ECR and upstream collaboration. However, we targeted our immediate recommendations to federal agencies because they are our “wholesale” customers, who can then “retail” the use of effective practices among the broader array of interested participants.

Recommendations

1. Continue to work with CEQ to gain federal executive commitment to best ECR practices and upstream collaboration.

The U.S. Institute should continue its 2003-2004 initiative with CEQ to gain commitment from federal executives in major agencies to promote ECR practices and upstream collaboration. To be successful, the U.S. Institute and CEQ should develop a business case for agencies, explaining why ECR and collaboration are in their best interests. This business case should demonstrate how ECR and collaboration could help agencies advance their missions and performance objectives quicker and cost effectively. The U.S. Institute and CEQ should seek out and support federal executive champions to spread the message to other agencies.

2. Develop a toolkit of management approaches for federal executives to transform culture in support of ECR and collaboration.

The toolkit can be used in connection with the CEQ-U.S. Institute initiative identified above, as well as independently. Agency executives could pick and choose from the toolkit, as appropriate for their agency.

The toolkit could include:

- ❖ A business case for ECR and collaborative upstream planning;
- ❖ Definitions of ECR, collaboration, and related terms;
- ❖ Discussion of NEPA Section 101, its vision of “productive harmony,” and products of the NEPA 101 Subcommittee;

- ❖ Discussion of affected communities and tools/recommendations to ensure affected communities are effectively engaged in ECR and upstream collaboration;
- ❖ The “basic principles” for agency engagement in ECR and collaborative problem solving;
- ❖ Model policies and procedures for ECR;
- ❖ Case studies on successful use of ECR and collaborative upstream planning;
- ❖ ECR training especially on the core components of ECR and collaboration that could be incorporated into each agency’s training curriculum;
- ❖ ECR training—a synthesis of information on ECR training offered by various federal agencies;
- ❖ Information on barriers to collaborative problem solving and how to overcome them;
- ❖ Information to help agencies use ECR effectively in conjunction with the Federal Advisory Committee Act and other federal laws that could pose obstacles to ECR and collaboration, (e.g., The Unfunded Mandates Reform Act, 2 U.S.C. §1534, provides that meetings between federal and state officials and local and tribal governments are not subject to the Federal Advisory Committee Act.);
- ❖ Methods for assessing and demonstrating the effectiveness of ECR practices and upstream collaboration;
- ❖ Information on the U.S. Institute and how it can help agencies;
- ❖ Approaches to make effective use of scientific information and analytical tools to support decision making;
- ❖ Information and examples of collaborative monitoring and adaptive management;
- ❖ Information on other agency approaches to innovative application of NEPA Section 101; and

- ❖ Information on integrating ECR into the NEPA process and integrating NEPA and other environmental laws (e.g., National Historic Preservation Act, Section 106) into ECR.

Although it seems like a major undertaking for the U.S. Institute to compile this toolkit, the subcommittee believes that many of the tools already exist. For those that do not exist yet, the U.S. Institute should tap the assistance of the subcommittees and various federal agency “champions” of ECR and upstream collaboration.

3. Develop cross-agency training on ECR and collaborative planning.

The U.S. Institute should spearhead the development of a multi-agency training course on best practices in ECR and upstream collaboration. For maximum leverage, CEQ should partner with the U.S. Institute to gain federal agency support. The focus of this training would be to bring federal agency staff together from multiple perspectives (especially environmental regulatory agencies and agencies that are subject to environmental process regulations) in a neutral setting to learn best practices. The training should include a module on NEPA Section 101. A certain number of slots should be reserved to include non-federal representatives, such as affected communities, business interests, public interest organizations, and tribal, local and state governments. The purpose would be to promote cross-fertilization and expanded perspectives, as well as to provide a wider access to success stories and lessons learned. The U.S. Institute would ask federal agencies to fund the development of such a course and to commit to a specific number of agency staff that would attend the course each year for a fee that covers costs.

4. Use U.S. Institute projects as laboratories for continual evolution and improvement of best ECR practices.

The U.S. Institute is involved with a significant amount of environmental conflicts and resolution efforts. As such, the U.S. Institute is in an ideal position to synthesize information and recommendations from this experience.

- ❖ The U.S. Institute should experiment with hands on approaches, ‘applied training’ to assist people to use best practices. Training may be most effective when it is done around real issues. Experiment with a coaching-mentoring approach in working with agency leaders and managers who sponsor ECR processes.
 - ❖ The U.S. Institute should focus attention on "upstream" best practices in conflict avoidance/management/ consensus building, as opposed to "downstream" conflict resolution. An upstream focus could be on large areas (e.g., states, metro areas, or watersheds) over at least a 20-year horizon, as opposed to the immediate, project-level focus of many EIS's and environmental disputes. In particular, review "Scenario Planning" activities, such as Envision Utah and Chicago Metropolitan and Chesapeake Bay Watershed, as potential models for involving the public and governmental agencies in building a consensus on future growth and environmental needs. Provide visibility for these approaches and recommend ways to encourage states, metro areas, and tribes to undertake such efforts.
 - ❖ The U.S. Institute should review and evaluate the stream of cases from various agencies and develop generic recommendations as well as agency-specific recommendations based on experiences with these cases.
5. Continue to foster networks and partnerships that promote best ECR practices. The U.S. Institute should continue to support networks of individuals involved in environmental issues and partner with them to promote ECR and upstream collaboration best practices, through their publications, meetings, professional development activities, etc. This could include:
- ❖ Continuing the biannual ECR conferences sponsored by the U.S. Institute;
 - ❖ Increased use of the Federal Interagency ECR Coordinators network;

-
- ❖ Increased effort to include affected community representatives in ECR networks; and
 - ❖ Creating a web-based “community of practice” of federal staff in headquarters and the field who are involved in environmental processes, which would enable practitioners to have electronic dialogues on issues and share information and insights.
6. Explore broadening the U.S. Institute's mission to include upstream collaboration, in addition to downstream ECR.

As the United States continues to grow, there will be increasing pressure on environmental resources. Every 20 years, this country's population increases in an amount equivalent to the population of Canada, generating demands for housing, energy, jobs, infrastructure, and recreational opportunities. It is ineffective and

problematic to deal with the resulting conflicts downstream. At the point of a specific federal action within a limited landscape and at a specific point in time the options are often limited and sub optimal, both from the perspective of environmental values and economic needs. We need a federal proponent for upstream collaboration, to promote large-scale inter jurisdictional planning and consensus building at the level of states, ecosystems, or ethnographic landscapes across multiple agencies throughout a 20-year or longer horizon. This planning would involve multiple federal, tribal, and state agencies. Public stakeholders would incorporate information about expected growth, would help educate the general public about growth and environmental impacts, and would attempt to provide a foundation for upstream decisions about where/how to channel growth and where/how to protect environmental resources. ■

SECTION 7:

Report on NEPA/Environmental Conflict Resolution Case Reports

Case Reports

Twenty case reports were selected by applying criteria developed jointly by the U.S. Institute and the NEPA Section 101 Subcommittee to a larger set of collaborative processes that have occurred during the past 15 years. The case reports are published in Appendix F. The case-study criteria called for cases that span the gamut of ECR and NEPA themes in terms of their substantive issues, the phase of conflict (up or downstream NEPA), the formality of process, the use of a third-party, and other themes.

The case reports were compiled through a combination of interviews with participants and other interested parties and research of applicable documents. The 20 cases include:

1. The Applegate Partnership of California/Oregon
2. The CETAS collaboration of Oregon
3. Channel Islands Marine Reserve
4. Coconino National Forest Antelope Management
5. Corridor H Settlement
6. Everglades National Park Endangered Sparrow
7. Fire Island National Seashore Driving Regulations
8. Glen Canyon Dam Adaptive Management
9. Hanford Land Use Plan
10. Karner Blue Butterfly
11. Las Cienegas NRA
12. National Elk Refuge Bison Management
13. Paris Pike Kentucky
14. Park Overflights
15. San Juan National Forest Land Use Plan
16. Sequoia National Forest Land Plan Appeals
17. Spring Mountains HCP
18. Swan Valley Conservation Agreement
19. Uncompahgre Plateau
20. Upper Salmon Basin

Factors Common to Successful Collaboration

This analysis briefly discusses some of the factors shared by particular cases, as well some of their anomalies.⁴

Participant Energy, Time, and Commitment: Many of the cases involved multi-faceted issues that ranged in complexity. The minimum amount of time needed by a particular group to reach agreement was 2-3 years (Fire Island, Park Overflights). Some of the collaborative projects have been in existence for almost 10 years (Las Cienegas NRA) and continue to function as a collaborative body. Involvement in this type of lengthy process requires a great deal of energy and time, particularly from private-sector individuals who are not compensated for their efforts.

Balanced Representation: Most groups sought a balance of interests. Commonly, groups would identify interests and try to ensure that all relevant interests were involved in the collaboration. Some collaborations functioned successfully without engaging all interests, but they were not without problems. The Swan Valley Conservation Agreement involved an agreement between a private landowner and the USDA Forest Service, U.S. Fish and Wildlife Service, and State of Montana Department of Natural Resources. The agreement was later challenged (unsuccessfully) in court by an interest group not a party to the agreement.

Use of a Third-Party Neutral: Most of the successful collaborations used a third-party neutral to conduct at least some of the facilitation involved in the process. Some groups, such as the Applegate Partnership, opted for the third-party neutral only when they knew they were dealing with a contentious issue. Other groups, such as the Fire Island National Seashore FACA committee, thought the third-party neutral to be so essential that the non-federal parties agreed to fund all of the third party neutral's costs when the federal source of funding had been exhausted.

Process Autonomy: The cases indicate that when more autonomy is given to a group, the group is more likely to succeed. The amount of autonomy varied from case to case. In the Applegate Partnership, the group functioned as a completely autonomous private body, with no government representation. In the Uncompahgre Plateau collaborative, the group (federal, state, and local agencies) created two councils, one for governmental agencies and the other open to the public. Usually, the collaboration was convened by a government agency that allowed the group to set up and run its own process.

Procedural Fairness: Groups that functioned well tended to have a structured process for group deliberations. In many of these cases, the process became almost institutionalized, with the group agreeing to meet on a regular basis, using a set of agreed-upon ground rules. Often, the ground rules were put in writing, after being deliberated by the group. In the more successful cases (Fire Island National Seashore) the group would lay out a "process map" that showed all the steps necessary for the group to accomplish its objectives. Successful groups also recognized their decision-making process in their ground rules; whether it was consensus (Overflights), modified consensus (Fire Island), or by majority vote (Applegate).

Clear Expectations: Groups that functioned well had a clear understanding of what their role would be in the process. In most of the NEPA processes, the group was informed that their decisions would be treated as recommendations that would be accorded significant weight, but that the final decision rested with the convening agency.

Transparency: Groups that operated in a transparent environment were more likely to engender a feeling of trust in the participants. For example, at one of the first meetings of the Fire Island National Seashore FACA committee, the National Park Service put forward its own proposal to solve the problem faced by the collaboration. Several members of the Committee were surprised by this and questioned the integrity and fairness of the Committee process. (Despite this, the group later succeeded in reaching agreement on many issues).

⁴ Report Prepared by Jo Reyer, USDA Forest Service, & David Emmerson, U.S. Department of Interior.

Ability to Receive and Analyze Information: Most of the successful collaborations organized themselves in a way that allowed them to systematically pursue knowledge and information. Most established subcommittees to engage in fact finding, examine issues in detail, and report back to the full Committee. For instance, in the Sequoia National Forest Plan Appeal process, the subcommittee on grazing determined the minimum height of grass necessary to ensure the health of riparian areas, which was determined to be scientifically sound by the Forest Service and was adopted into later management plans.

NEPA Section 101

Balance of Interests: Most of the successful collaborations sought to balance ecological, economic, and social interests. In the Swan Valley collaborative effort, timber interests were balanced against the needs of Swan Valley Grizzlies. In the Uncompahgre collaboration, the health of mule deer was balanced against grazing and other interests. In cases where an interest was omitted, problems arose. For example, in 1992-1994, the U.S Fish and Wildlife Service and the National Park Service crafted a management plan for the bison and elk herd in the National Elk Refuge that did not reflect the interests of a group opposed to the use of hunting to reduce the herd. This group later successfully asserted its interest in court, which caused the agencies to abort their EA process.

The Interests of Future Generations: The interests of future generations were not explicitly mentioned in any of the cases studied. However, the interviewees in each case said that stewardship, which by definition encompasses the interests of future generations, was an important part of their collaborative effort. For some agencies, this concept is an engrained part of agency culture. The National Park Service Organic Act, for instance, requires the Park Service to preserve park resources for the benefit of future generations. The BLM's agency mission statement contains similar language.

Fact finding/Use of Science: Section 101 of NEPA deals with broad themes, stating it is the policy of the

federal government to create conditions under which man and nature can exist in “productive harmony.” The implementation of the balance sought by this language often requires rigorous technical and scientific research and fact-finding, which was accomplished in many of the cases studies. Many of the cases used GIS applications, in-house and third party scientists, and other sources to become as educated as possible about the issues with which they were dealing.

Case Study Selection Criteria

The following criteria are based on themes developed by the NEPA Section 101 Subcommittee of the National Environmental Conflict Resolution Advisory Committee and on recommendations from the “Report and Recommendations on a NEPA Pilot Projects Initiative” (August 2001). Selected cases should represent several criteria and provide a particularly good example of one or more of the criteria.

1. Cases selected for study should be spread across the range from pre-NEPA (upstream) to litigation (downstream).
2. The cases selected should vary in their scope of participation (local versus national interests) and demonstrate creative ways of addressing power, time, resource, and knowledge imbalances between participants.
3. Include a few case studies that used a pre-existing forum. Other cases selected should have a range from informal to formal processes/forums.
4. Selected cases should demonstrate creative approaches to reaching agreement on science issues, including delegation to other agencies or experts, integration of indigenous knowledge/civic science, and use of information technology, adaptive management, joint fact-finding, technical work groups, and multiparty monitoring.
5. The cases should vary in the decision-making authority of participants—from only an advisory role to shared decision making.

-
6. Cases should vary across the range of collaborative contexts (e.g., interagency, intergovernmental, multi-interest initiated by government, and multi-interest initiated by affected interests), and some should include cross-jurisdictional issues among federal, state and tribal governments.
 7. A variety of U.S. geographical areas should be represented in the selected cases.
 8. Cases should include projects initiated by a variety of interests.
 9. Selected cases should include projects that are examples of: governmental policy and regulation, programmatic issues, and site-specific issues

Case	Case Characteristics					NEPA 101/ ECR Factors					
	Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum
1. Apple-gate Partnership/ (OR)	Health of watershed versus economic (timber/ grazing) interests	No federal agencies; interests represented include: environmental, agricultural, timber, mining, and others.	Upstream— Group develops proposals for BLM, Forest Service on multi-use, health of watershed.	Group makes recommendations on super-majority vote.	Group invites research and has relationships with several universities	All private interests; no government interests	Health of watershed primary concern	Meetings are open to public—process flourishes on private initiative	Many proposals have been implemented by federal agencies; group has existed for more than 10 years	Structured process/regular meetings/ground rules/neutral used for contentious issues	Civic engagement (III)— partnership flourishes on private initiative
2. CETAS of OR	Streamlining transportation EIS's	DOT, FWS, assorted State agencies	Midstream NEPA— Committees meet to determine how to expedite process	Decisions by consensus	Natural and cultural resources mapped, GIS applications used, science panel established	Only governmental interests; no private interests	Integration of stewardship goals in planning.	Internally transparent, though process does not include non-governmental entities	Ongoing monitoring	Monthly meetings—highly structured/ most participate by conference call	Pragmatic solutions (IV)— group devised process to expedite NEPA without impairing NEPA's substantive goals
3. Channel Islands Marine Reserve (CA)	Protection of marine ecosystem	NPS, NMFS, FWS, NOAA, CA State agencies, commercial fishing interests, environmental interests, others.	Midstream— preparation of management plan that might involve EA, EIS	Decision by consensus; deadlocked on several major issues; some work addressed later at state level	Science panel used, sometimes criticized for potential bias.	Interests balanced— deadlock on many issues	Group agreed on general goals—had difficulty agreeing on specific goals. There was agreement on 85% of locations of reserves	At least one participant had concerns over transparency of aims between participants	Remains in question; some of group's work brought forward in later processes	Structured process/science panel enhanced legitimacy	Future generations (II)— group agreed on need for long-term protection of marine ecosystem
4. Coconino National Forest (AZ)	Plan that restores antelope population without eliminating grazing	FS, State agencies, Diablo Trust, National Wildlife Federation, others	Preparation of EIS	Subgroups received scientific data	Subgroups used GIS applications and computer modeling to further goal of adaptive management	All interests represented	EA for grazing management/ enhance health of antelope	Open process enhanced transparency between participants	Agreement successfully implemented/monitoring team established	Structured process, regular meetings	Future Generations (II)— agreement addresses decline of antelope population

Case	Case Characteristics					NEPA 101/ ECR Factors					
	Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum
5. Corridor H Settlement (WV)	Construction of highway in West Virginia	FHWA, state agencies, environmental groups, property owners, historic preservation groups, others	Downstream—settlement of lawsuit	Decisions made by consensus	Detailed mediation agreement resulted from extensive fact finding	Closed process—only parties to lawsuit involved	Measures taken to construct highway to mitigate damage to resources	Closed process—settlement talks	Court-approved agreement by consensus—should be durable	Court approved of forum—settlement talks	Pragmatic solutions (IV)—complex agreement satisfying all interests completed within 6 months
6. Everglades National Park (FL)	Endangered Sparrow	NPS, Army Corps of Engineers, FWS, State, agencies	Midstream—EIS	Agreement includes preferred alternative into EIS	Group used computer modeling to predict effects on endangered sparrow and flood protection	Initial EIS lacked key interests; subsequent EIS incorporated all federal interests, but was later challenged by tribe	Agreement protected endangered species and wildlife habitat	At least one participant concerned about transparency within federal group	Agreement implemented despite legal challenge by Indian tribe	Skilled neutrals helped parties establish process—regular meetings, ground rules, etc.	Structure of forum (V)—parties unable to come together until forum (with help of neutral) is devised that engages parties' interests in fair manner
7. Fire Island National Seashore (NY)	Agreement on driving regulations	NPS, local communities, FWS, seasonal residents, year-round residents, others	Midstream—agreement will lead to EA (regulations)	Group told at outset its consensus decisions would be adopted	Group used subgroups to analyze scientific information	All interests represented	Agreement should protect rare, threatened, or endangered species	Initial concerns assuaged as process proceeds; strong civic engagement; parties decide to fund process on after federal funding used	Post-agreement group established to monitor implementation	FACA committee, skilled neutrals, very structured process	Civic engagement (III)—parties decide to fund process after federal funding used

Case	Case Characteristics					NEPA 101/ ECR Factors					
	Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum
8. Glen Canyon Adaptive Management (AZ)	Effect of dam on Colorado River ecosystem	BOR, NPS, FWS, DOE, Other federal agencies, tribes, state, local agencies, energy industry	Midstream, upstream	Group strives for consensus; mission, goals agreed on	Ongoing engagement of scientists via sub-groups to receive information	Interests balanced	Agreement designed to further adaptive management, stewardship	Some concerns about lack of public outreach	Group has ongoing role of monitoring and receiving information	FACA Committee meets in structured forum	Future generations (II)—group focused on learning about effect of G.C. Dam on ecosystem for impact to future generations.
9. Hanford Land Use Plan (WA)	Plan for former nuclear site	DOE, FWS, state, local	Midstream; development of EIS	DOE makes final decision	Each agency prepares an alternative for EIS using own process	Government and industry represented on FACA committee	Preferred alternative protects salmon run; used as foundation for National Monument.	Alternatives developed independently—little transparency.	ROD has procedures for thorough implementation and monitoring of EIS.	Structured meetings thru FACA process, primarily conference calls.	Future Generations (II)—protection of salmon run; creation of National Monument.
10. Karner Blue Butterfly (WI)	Combined Habitat Conservation Plan/EIS	FWS, state, and local agencies, forest product industry, utilities, and environmental groups	Upstream, midstream	Group developed preferred alternative	Subcommittees vigorously involved in receiving scientific information	Interests balanced.	Agreement protects habitat for butterfly	Information plan includes federal, private organizations, website, other means of communication	Subcommittee oversees implementation	Structured process produces articles of partnership, monitoring protocol, resulting in 10-year take permit	Balance of interests (I)—agreement protects butterfly and economic (timber) interests
11. Las Cienegas National Conservation Area (AZ)	Land use plan	BLM, state agencies, user groups, grazing, mining, environmental interests	Upstream through midstream, leading to EIS	Desired Condition statements used as basis for EIS	Subcommittees received and analyzed scientific information relating to riparian areas.	Interests balanced	Agreement protects resources in Las Cienegas NRA	Active public information campaign culminates in congressional designation of area	Agreement used as basis for statutory designation	Structured process produces desired condition statements, form basis for EIS; facilitated meetings w/ground rules/strive for consensus	Future generations (II)—work of group wards off development; preserves natural and cultural resources for future generations.

Case		Case Characteristics				NEPA 101/ ECR Factors					
Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum	Which Principle does case best exemplify?
12. National Elk Refuge (WY)	Elk/Bison management plan (EIS)—follows previous EAs.	FWS, NPS, other federal, state, local agencies, tribes, ranchers, hunters, environmental groups	Midstream, downstream NEPA—current EIS follows two previous EAs and two lawsuits	Current EIS process is standard NEPA—not consensus-based; NPS/FWS final decision maker based on extensive engagement of public and interests during more than 20 public meetings	Science panel established; university scientists reviewed biological issues, other scientists engaged to review range of potential alternatives	FWS and NPS committed to issuing final EIS with balanced alternatives; situation assessment performed; researchers examined alternative to ensure range of options	EIS should protect bison/elk herd for future generations	Public informed of meetings through local media, notices, mail; meetings well attended.	Science panel established; vaccine controversy with state resolved	Standard NEPA process of public meetings conducted by NPS and FWS; not stakeholder-owned	Future generations (II)—Should ensure viability of bison/elk herd
13. National Park Overflights	Natural quiet versus air tours over parks	NPS, FAA, air tour industry, general aviation, environmental groups	Upstream—developed by FACA subcommittee.	Decisions made by consensus	Group receives scientific information (particularly noise-related science) from agencies, industry.	All private interests represented—environmental, industry, tribes also represented; FAA and NPS not on committee.	Agreement becomes foundation for legislation	FACA subcommittee meetings open to public.	Agreement creates committee to monitor implementation—also, outlines process for park air tour management plan that is adopted into statute.	Forum highly structured/facilitated/mediated by neutral, rigid ground rules, process map laid out; interest “leaders” reprimanded members of interest for not following ground rules	Future Generations (II)—first time natural quiet is recognized as park resource in park-wide legislation
14. Paris Pike (KY)	Construction of highway versus preservation of cultural and natural resources	FHWA, DOT, state agencies, environmental groups, historic preservationists, others	Upstream, downstream (present effort began in wake of lawsuit filed in late 1970s)	Decisions made by consensus by advisory committee	Subgroups do most fact finding, analysis	Closed group captured all interests	Report used as foundation of plan for road that is completed	Advisory committee conducts extensive outreach satisfying needs of former project opponents	Road completed, and need for transportation versus need for preservation is balanced	Process conducted through detailed MOA, setting out ground rules, goals, etc.	Structure of forum (V)—unstructured process fell apart; subsequent process using best ADR practices produces highway

Case	Case Characteristics					NEPA 101/ ECR Factors						
	Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum	Which Principle does case best exemplify?
	and values											supported by all
15. San Juan National Forest (CO)	Forest plan	FS, BLM, state and local agencies, public	Upstream—pre-NEPA development of alternatives	Working groups established to look at 3 geographic areas of San Juan NF and 6 topical areas—operate by consensus	Working groups engage in extensive fact finding/analysis	Process is open to public	Work being used in development of alternatives and is forming basis for other planning efforts (fire, plan for National Monument.)	Two types of committees—geographical and topical (timber, prescribed fire, old growth, recreation management, travel management, wildfire, range and aquatic resources); more than 100 citizens participate in monthly meetings during 18 months	NEPA process ongoing; ties formed through process have been sustained in other forums, plan for National Monument, fire plan; other pragmatic solution, grazing not reason for decline in sage grouse	Process conducted through monthly meetings; facilitated, primarily by Fort Lewis College Office of Community services	Civic engagement (III)—nine working groups formed, attract about 100 participants, leading to substantive recommendations; include social, economic assessment of plan, analysis of decline in sage grouse, among others	
16. Sequoia National Forest Land Appeals (CA)	Resolution of land use plan appeals	FS, 19 appellants to land use plan	Downstream—settlement of 19 appeals to land use plan	Group uses consensus-based process	Sub groups established to fact find, receive scientific information	Although interests are limited to appellants, all major (environmental, economic) interests represented through appeals	150-page mediation agreement contains general and detailed findings (recommends minimum grass height in riparian areas); used as basis for later planning efforts and foundation for subsequent National	Closed process—settlement of appeals	Agreement becomes basis for later NEPA processes; balances economic (timber, grazing) and ecological interests (Sequoia groves, etc.)	Highly structured meetings take 18 months to result in 150-page agreement; mediator used caucuses and other techniques	Balance of interests (I)—economic and ecological interests agree on final mediation settlement	

Case	Case Characteristics					NEPA 101/ ECR Factors						
	Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum	Which Principle does case best exemplify?
							Monument. Protects Sequoia groves, riparian areas					
17. Spring Mountains National Recreation Area (NV)	Development of habitat conservation plan	USFS, FWS, BLM, state, agencies, environmental groups, user groups	Upstream—pre-NEPA	No formal consensus process; commitment to reaching consensus on the preferred alternative; group's preferred alternative adopted by FS	Subgroups complete extensive fact finding, detailed analysis	All interests represented	Agreement addresses needs of 68 species of plants and animals; used as basis for preferred alternative	Meetings open to public; strong education and partnership relationships maintained between agencies and interested groups	Group emphasized joint fact finding—one stakeholder developed predictive model on species locations and recreational use patterns that was accepted by all	Highly structured process—open group but main interested parties regularly attended meetings and maintained high level of involvement	Balance of Interests (I)—habitat conservation plan protects 68 species of plants and animals while also allowing for recreational use of resource	
18. Swan Valley Conservation Agreement (MT)	Survival of grizzlies in Swan Valley versus timber interests	FS, FWS, state, Plum Creek Timber Company	Upstream—agreement used as basis for future EAs, EIS	Decisions made by consensus	Ongoing science group receives joint funding and is trusted by all participants	Not all interests represented; closed group; governmental agencies and property owner	Agreement establishes zones allowing two groups of grizzlies to link up, enhancing chances of survival	Closed group for agreement and subsequent NEPA processes conducted through standard NEPA engagement process	Agreement allows for joint management of ecosystem between government and private landowner	Structured forum/regular meetings, active science sub-group	Balance of interests (I)—government and landowner agree on measures to protect grizzlies while allowing for timber harvesting	
19. Uncompahgre Plateau Partnership (CO)	Health of Uncompahgre Plateau ecosystem	BLM, FS, state, local governments, public	Upstream—work forms foundation of EAs	Decisions made by consensus	Technical group (government agencies) analyzes scientific data	Bifurcated process (technical council, collaborative council) allows all interests to be	Agreement promotes health of ecosystem; identified, reasons for decline in mule deer,	Public engaged through outreach by partnership with independently funded posi-	Agreement allows for unfettered ecosystem adaptive management	Highly structured bifurcated meeting process; independently funded administration of partnership	Future Generations (II): agreement allows for much easier management of area as one ecosystem—	

Case		Case Characteristics				NEPA 101/ ECR Factors					
Case Name	Nature of Dispute	Agencies/ interests	Upstream/ Downstream	Decision-making authority/ process	Fact-finding/ Use of Science	Indicator/ Principle I: Are Interests balanced?	Indicator/ Principle II: Interests of Future Generations	Indicator/ Principle III: Civic Engagement	Indicator/ Principle IV: Pragmatic solutions	Indicator/ Principle V: Structure of forum	Which Principle does case best exemplify?
						represented	among other things	tions and through collaborative council, among other things			addressing problems like decline in mule deer population that cross boundaries.
20. Upper Salmon Basin Watershed Project (ID)	Restoration of fish habitat.	BLM, USFS, state agencies, local governments, Nature Conservancy, other environmental groups, tribal interests, property owners	Upstream—work forms basis of specific NEPA projects. (105 projects to date)	Consensus-based decision-making process; 2 boards—technical team consisting of subject matter aspects, and advisory board	Fact-finding performed primarily by technical team; projects are ranked by technical team	Interests are balanced	Agreement helps restore fish habitat	Technical team meets monthly; public engaged through outreach program and specific NEPA processes	Agreement allows for ecosystem management between agencies	Technical team meetings and advisory council meetings are facilitated by agency personnel	Future generations (II)—agreement is protecting health of watershed for future generations



SECTION 8:

Report on Collaborative Resource Monitoring and Environmental Conflict Resolution

Introduction

Uncertainty surrounding scientific information can be one of the most complicated issues to address in ECR because inequalities often exist in participants' access to scientific information. Often, there is a lack of trust in the existing science, the existing science is in dispute, or there is insufficient knowledge on the state of the environment and how it functions (Bingham, 2003). Additionally, most complex disputes are as much about distribution and priorities among values as they are about any dispute over "facts" that scientific information can solve.

Since science often does not provide the simple answers that parties seek in resolving complex environmental disputes, many ECR processes hinge on parties' recognition of contingency (i.e., negotiated agreements must acknowledge change and respond to changing circumstances throughout extended time frames). To the extent that agreements are contingent on change, uncertainty, emerging or different interpretations of scientific information, as well as other external events or resources, monitoring becomes an important starting point and ongoing reference point on which to base management decisions.

But deciding what to monitor is often one of the more critical challenges in these settings. Defining environ-

mental management goals and outcomes is enhanced through collaborative processes that involve an array of perspectives, and it is in this context that monitoring can provide basic ground-truthing and accountability among participants that can be integrated into durable agreements. The collaborative process provides the important context that can determine the appropriateness and the validity of the information collected.

Collaborative monitoring is emerging as an important building block and reference point in environmental conflicts, because it builds upon the collaborative decision making that is central to success in these processes, and it creates a strong foundation for mutual accountability and coordination among parties over time. Collaborative monitoring provisions are appearing in a range of important negotiated agreements concerning environmental, natural resources, and public lands conflicts, and collaborative monitoring has been conceptualized and implemented in a variety of creative ways in these agreements.

Monitoring has proven to be an invaluable element where:

- ❖ Highly complex environmental management issues are involved and particularly in high stakes or high-profile settings (e.g., issues re-

lated to waste management and facilities siting);

- ❖ A need for long-term commitment and periodic adjustment or adaptation of management approaches, as is the case in many large-scale ecosystem or watershed management efforts, exists; and
- ❖ A high degree of mutual accountability is important, (e.g., forest certification programs or the monitoring of conservation easements).

Monitoring and Its Collaborative Forms

Monitoring is the “activity of making periodic assessments of state variables reflecting system dynamics.” (Nichols, 1999); it is the “...the systematic, routine measurement of conditions over time to determine if actions have caused changes or trends—either expected or unexpected.” (CFRP, 2003). Monitoring involves two principle elements:

1. The collection of information over time, generally on a sample basis, by measuring change in an indicator or variable, to determine the effects of resource management treatments in the long term; and
2. The periodic and systematic measurement and assessment of change of an indicator (USDA Forest Service, Inventory Monitoring Institute).

Monitoring is important to environmental management and environmental dispute resolution because it:

- ❖ Is a critical aspect of contingency agreements providing reference points for regular/periodic assessment and change;
- ❖ Serves as an important accountability and trust-building mechanism among parties;
- ❖ Creates important opportunities for mutual learning and adaptation;
- ❖ Encourages greater interagency and interdisciplinary coordination; and

- ❖ Provides reliable, real-time, accessible, and relevant information to assess system dynamics.

There are a variety of types, scales, and levels of monitoring.

- ❖ Types: biophysical, economic, social/cultural, legal/administrative
- ❖ Scales: Project, program, jurisdiction (county, State, national), region, eco-region, time
- ❖ Level: Input, output, outcome; implementation, effectiveness, verification

Collaborative monitoring seeks to engage interested and affected parties as well as public agencies and science and technical experts in a more direct manner. Participants in collaborative monitoring might play a variety of roles; for example, determining target outcomes, defining criteria and indicators to monitor those outcomes, determining the appropriate system for monitoring, participating in data gathering and analysis, and data interpretation. Collaborative monitoring is implemented in a variety of program contexts and has been conducted within many different structural settings. For example:

- ❖ Formal collaborative groups (e.g., appointed commissions);
- ❖ Community- or project-based collaborative efforts (e.g., watershed coalitions);
- ❖ Citizen-based monitoring efforts;
- ❖ Third-party monitoring by NGOs, academic institutions, neutrals; and
- ❖ Independent science panels.

The experience with collaborative monitoring efforts has expanded tremendously in recent years and is again consistent with a growing interest in adaptive approaches to environmental management. Some interesting examples of collaborative monitoring include:

- ❖ Glen Canyon Dam Adaptive Management Program (AZ): Supported by a federally chartered advisory committee, and the USGS’s

Grand Canyon Monitoring and Research Center, this effort seeks to evaluate and recommend management actions to meet obligations for water delivery, hydropower generation, and resource management objectives identified in the Grand Canyon Protection Act

(http://www.usbr.gov/uc/envprog/amp/amwg/amwg_index.html).

- ❖ EPA's Volunteer Monitoring Program (national): A national network of community-based, citizen-driven programs monitoring watershed, river, and stream health (<http://www.epa.gov/owow/monitoring/volunteer/epasvmp.html>).
- ❖ Collaborative Forest Restoration Program (NM): This statewide effort, managed by the USDA Forest Service, supports collaborative, community-based forest restoration projects that address concerns for watershed conservation, forest health, and fire prevention. Multi-party monitoring is a critical feature of ongoing evaluation and adaptation within these projects (<http://www.fs.fed.us/r3/spf/cfrp/index.shtml>).
- ❖ Channel Islands National Park (CA): The Channel Islands National Park was designated a marine sanctuary in 1980; however, since recreation and commercial fishing are allowed in the park and sanctuary waters, the National Park Service and NOAA sanctuaries, working with the State of California, instituted a cooperative adaptive management approach to sustain the kelp forest ecosystems and continued fishing opportunities (<http://channelislands.nos.noaa.gov/marineres/manplan.html>).

Many collaborative monitoring efforts have matured enough to provide important lessons, including:

- ❖ The critical first step is building agreement among interested and affected parties on program objectives and the goals of monitoring, including decisions on what questions the ef-

fort will attempt to answer, what data will be collected, and how.

- ❖ The importance of identifying or creating an appropriate organizational structure, with designated resources for conducting monitoring efforts.
- ❖ The importance of investing time and resources early to define monitoring protocols: criteria and indicators, means of verification, analysis and interpretation, documentation and access.
- ❖ The need to gather and document solid baseline information on which to compare and evaluate change, including taking full advantage of existing data (e.g., from ongoing monitoring programs).
- ❖ The need for decision makers to acknowledge and use a variety of forms of knowledge and information (e.g., indigenous or traditional knowledge, knowledge of local residents and agency land managers and experiential and scientific information).
- ❖ Recognition that monitoring is an important aspect of public education and outreach.
- ❖ The importance of up-front training, education, and capacity building for participants.
- ❖ The desirability of using multiple measurement tools to ensure validity and robust results.
- ❖ The challenge of defining appropriate scales and time frames.
- ❖ Recognition of the significant costs (resources, staff, time) of effective monitoring, the need to define the costs, and an appropriate time frame for monitoring activities that is based on program objectives.
- ❖ Given the potentially high costs of long-term monitoring, it is important to identify the most cost-effective approaches and methods and fit the monitoring approach to the size and scale of the problem.

- ❖ Identify the resources and the determination for long-term commitment, where necessary, and the importance of recognizing when it's appropriate to stop.
- ❖ Seeking the appropriate integration between sound scientific method and active public participation (rigor and relevance).

Adaptive Management—An Important Programmatic Context

Since adaptive environmental management provides an important conceptual framework for discussions regarding monitoring, it is important to also offer some initial understanding of this framework.

As defined by members of the Adaptive Management Practitioners Network, adaptive management "treats management policies and actions as experiments in order to improve management by learning from the ecosystems being affected. Adaptive management links credible science, values, and experience of participants and managers for management decision making." (<http://www.iatp.org/AEAM/describe.htm>).

Adaptive management recognizes the constants of change and uncertainty and accepts the proposition that we must proceed on the basis of best available scientific knowledge interpreted through public debate among participants who link this knowledge with values and the political process to define management objectives and decisions (*Lee, K.N. and J. Lawrence, 1986*).

Experimentation - to learn more about the operation of complex systems - is the essential feature associated with adaptive management. Adaptive management has the attributes of being flexible, encouraging public input, and monitoring the results of actions for the purpose of adjusting plans and trying new or revised approaches (<http://oregonstate.edu/instruction/anth481/ecsyl.html>).

An adaptive management system has two principle elements: a monitoring system to measure key indicators and the current status and a response system that enables modification of key indicators (Hilborn and

Sibert, 1988). However, particularly in the context of ECR, a third key element of this approach is an ongoing dialogue among interested participants.

The CEQ Study of 25 years of NEPA implementation recognized the value of incorporating the adaptive management model into the NEPA process. The analysis recommended, "developing an adaptive NEPA process as an implementation tool that goes beyond the traditional 'predict-mitigate-implement' model and incorporates the 'predict-mitigate-implement-monitor-adapt' adaptive management model. This requires monitoring and considers the effects of potential adaptive measures to allow for mid-course corrections, without requiring new or supplemental NEPA review." (Modernizing NEPA Implementation, NEPA Task Force Report to CEQ, September, 2003).

The key principles of adaptive management are:

- ❖ Acknowledging uncertainty about what policy or practice is best for the particular management issue;
- ❖ Linking credible science, values, and the experience of interested participants and managers for effective decision making;
- ❖ Considering management policies and actions as ongoing experiments to improve management by learning from the conditions being affected;
- ❖ Monitoring key response indicators;
- ❖ Analyzing management outcomes in consideration of the original objectives; and
- ❖ Incorporating the results into future decisions and actions.

Roles and Opportunities for the U. S. Institute

Given a dramatically increased interest in the use of collaborative monitoring approaches within ECR processes, the U. S. Institute has a number of opportunities to contribute to this emerging area of practice.

The U. S. Institute, through its direct program experience and extensive network of practitioners, can:

- ❖ Build monitoring provisions and protocols into management plans and implementation agreements;
- ❖ Provide support for process design, facilitation, and systematic evaluation of collaborative monitoring efforts;
- ❖ Build agreement among parties on data collection, analysis, reporting, and decision making;
- ❖ Encourage elements of “irrefutability” (triangulation and validation) into ECR processes through collaborative monitoring efforts;
- ❖ Manage stakeholder concerns about access, transparency, and confidentiality;
- ❖ Build capacity among neutral practitioners, scientists, agency personnel, and the public to participate effectively in collaborative monitoring efforts;
- ❖ Educate policy makers and legal counsel to incorporate elements of collaborative monitoring into agreements;
- ❖ Work with scientists and technical experts to make technical and scientific data more accessible to the public and to strengthen the understanding of the value of public participation in environmental decision making;
- ❖ Work with key federal agencies to consider revising existing regulations or establishing new guidance to facilitate agencies’ ability to incorporate adaptive management into the NEPA process;
- ❖ Work with appropriate federal agencies and organizations to support the growing focus on collaborative monitoring and to ensure that adequate resources are designated to support these approaches; and
- ❖ Support the analysis and documentation of successful individual projects, ongoing synthesis of key lessons learned, and the

development of best practice guidance gained from project-level experience.

References:

- Adaptive Management Course Outline, Oregon State University,
<http://oregonstate.edu/instruction/anth481/ecsyl.html>
- Adaptive Management Practitioners’ Network:
<http://www.iatp.org/AEAM/describe.htm>
- Bingham, G. “When Sparks Fly: Building Consensus When the Science is Contested,” RESOLVE, Washington, D.C., 2003.
- Collaborative Forest Restoration Program, 2003. Multiparty Monitoring and Assessment Guidelines for Community-based Forest Restoration in Southwestern Ponderosa Pine Forests, CFRP website:
<http://www.fs.fed.us/r3/spf/cfrp/monitoring/index.shtml>
- Council on Environmental Quality, Modernizing NEPA Implementation, NEPA Task Force Report to CEQ, September, 2003.
- Hilborn, R. and J. Sibert, Adaptive Management of Developing Fisheries, Marine Policy, April 1988:115-116.
- Lee, K.N., and J. Lawrence. 1986. Adaptive management: Learning from the Columbia River basin fish and wildlife program. Environmental Law 16: 431-460.
- Nichols, J. D., Monitoring is Not Enough: On the Need for a Model-Based Approach to Migratory Bird Management. Biological Resources Division, Patuxent Wildlife Research Center, Laurel, MD, 1999.
- USDA Forest Service’s Inventory and Monitoring Institute web site:
<http://www.fs.fed.us/institute/monitoring/Definitions.htm> ■

SECTION 9:

Challenges and Barriers to Effective Participation of Affected Communities in Environmental Conflict Resolution Processes

The following . . .

Inadequate communication, language barriers, and cultural differences result in the lack of participation and buy-in.

Communication

- ❖ Management of decision processes
- ❖ Communicating the value of place-based knowledge
- ❖ Local communities
- ❖ Community access to information
- ❖ Ineffective public notice
- ❖ Unfamiliarity with processes
- ❖ Empowerment of affected communities
- ❖ Raise interest in affected communities
- ❖ Regulatory requirements
- ❖ Ineffective public participation
- ❖ Confusing and conflicting legal interpretations
- ❖ Agencies and politicians' tendencies to respond to "squeaky wheel"
- ❖ Affected communities identifying with an issue

- ❖ Lack of connection of environmental issues with health concerns
- ❖ What issues are considered legitimate, important or real?
- ❖ Effective community outreach and education
- ❖ Affected community familiarity with relevant laws and regulations
- ❖ Acquisition of information
- ❖ Affected community confidence in provided technical information

Culture

- ❖ Racism
- ❖ Staffing in agencies
- ❖ Border communities
- ❖ Native American communities
- ❖ Local communities
- ❖ Unfamiliarity with societal systems

Language

- ❖ Language issues
- ❖ Exchange of scientific information

Empowerment of communities and power balance and balanced, broad, and effective representation

- ❖ Difficulty defining the affected community and maintaining its legitimacy throughout a prolonged process.
- ❖ Lack of unity within the community itself; multiple views and interests
- ❖ Perceived lack of power of communities and failure of agencies and other interested parties to view affected community representatives as equal participants.
- ❖ Perceived lack of power among community members
- ❖ Continuity in representation throughout the process.
- ❖ Affected communities may be unaware of the range of available alternatives
- ❖ Affected communities lack political and jurisdictional powers of influence
- ❖ Representation at the table may not truly represent the community
- ❖ Affected community representatives are challenged to develop and maintain a connection to and interaction with constituents
- ❖ Determining if settlement is equitable
- ❖ Practitioners and parties ensuring broad (not just extremes) and balanced participation

Community sovereignty, self-determination, and involvement

- ❖ Lack of understanding of all levels of government, by other governments (tribal, state, city, county), other interested parties and observers that results in confusion about roles, jurisdiction, and rules.
- ❖ Participants' (including governments) lack understanding of tribal governance, self-determination, and self-regulation.

- ❖ Lack of understanding of the federal government's obligation to tribes to support their self-governance and the continuation of the culture.
- ❖ Failure to acknowledge air and water currents along with the migratory patterns of species has direct global connectedness to human responsibility for environmental stewardship.
- ❖ Involvement of affected communities in decision making and in ECR processes.
- ❖ Involvement and input from local communities for decision making; use of place-based knowledge.
- ❖ Can communities secure agreements that will be binding in the long-term?

Resources and economics

1. Lack of access to resources (i.e., financial and informational) for effective participation:
 - ❖ Poor access to scientific services,
 - ❖ Poor access to legal services,
 - ❖ Poor access to communications technology, and
 - ❖ Poor knowledge of and access to information regarding rights, roles, procedures, and terminology.
2. Time requirements for effective participation in ECR processes (e.g., during the workday and across several months or years, during harvest, etc.); other stakeholder representatives are paid to participate.
3. Lack of access to decision makers, policy makers, and agency personnel.
4. Lack of political support.
5. Citizens do not have access to needed information to make appropriate decisions, comments, and recommendations.

Governments are not sufficiently effective at engaging affected communities in environmental decision-making processes

- ❖ Processes are hard to understand and relate to community values, perceptions and needs.
- ❖ Processes are rigid and hard to adapt to local community concerns.
- ❖ Interpretations of legal and regulatory processes can be contradictory and frustrating to community members.
- ❖ Conflicting agency mandates and jurisdictions create barriers.
- ❖ Lack of clarity of the decision-making process and lines of authority limit proactive engagement.
- ❖ Public notice processes are rigid and not well-adapted to diverse cultures.
- ❖ The identification of concerned parties is often not well executed or is done too late in the process.
- ❖ Agencies frequently have insufficient resources to support effective community participation.
- ❖ Government agencies often do not facilitate meaningful systematic public participation; there is either no participation or it is cursory.
- ❖ Interagency internal negotiations may lead the process in a direction that decreases conflict among the agencies but increases conflict with external participants.

Decision processes do not engage affected communities early enough or in ways that lead to effective expression of the affected community's interests—as expressed by the typical agency “decide, announce, defend” syndrome as opposed to “propose, engage/partner, decide”.

- ❖ Agencies tend to develop preferred course of action before consulting affected communities

- ❖ Effective engagement with affected communities requires up front time and effort in a time of scarce resources and bad habits.
- ❖ Decision processes have been shaped by legal and procedural precedents, which make participation difficult for affected communities.
- ❖ Project proponents demand that agencies make rapid decisions, which truncates time for effective community engagement.
- ❖ Agency staff and others can be intimidated by prospect of dealing with affected communities.
- ❖ Effective participation of community representatives requires respect for community participants' time commitments and resources.
- ❖ Effective community participation requires multiple modes of communicating pertinent project information (e.g., face-to-face, print, Internet, etc.).
- ❖ Despite budget constraints, public involvement needs champions and committed and trained managers within agencies.
- ❖ Participating governments are not always engaged and involved at the point of purpose and need.

Role of science and technology

- ❖ Affected communities often do not have access to reliable scientific information from a trusted source early in the ECR process.
- ❖ Affected communities might not have the expertise to interpret scientific information.
- ❖ Affected communities might be skeptical of technology fixes.
- ❖ Affected communities do not have input into how information is interpreted, used or in the decision making based on that information—information is forced upon them.
- ❖ Dueling experts and science.

-
- ❖ Obtaining reliable information and using technology might be cost-prohibitive.
 - ❖ Traditional knowledge is not readily accepted as scientific or valid.
 - ❖ Local, place-based knowledge is not readily accepted as scientific or valid.
 - ❖ Structuring and translating science for decision makers is difficult and often insufficiently accomplished. ■



APPENDIX A:

Letter from U.S. Senators

United States Senate
WASHINGTON, DC 20510

September 20, 2000

Kirk Emerson, Ph.D.
Director
U.S. Institute for Environmental Conflict Resolution
110 South Church Avenue, Ste 3350
Tucson, AZ 85701

Dear Kirk:

We are writing to seek your assistance in investigating how pilot projects could be used to bring collaborative decision making to actions taken under the National Environmental Policy Act (NEPA). In particular, it may be useful to focus on strategies for collaboration, consensus building, and dispute resolution to achieve the substantive goals of NEPA and resolve environmental policy issues that often arise in federal land and natural resource management decisions.

As you may know, the need for consensus building and dispute resolution is vital to good collaborative decision making. This need, coupled with your organization's Congressional charter to "assist the federal government in implementing Section 101 of NEPA by providing assessment, mediation and other related services to environmental disputes involving agencies and instrumentalities of the United States" appears to make the U.S. Institute for Environmental Conflict Resolution the natural organization to pursue this investigation.

We encourage you to draw upon the expertise of knowledgeable NEPA experts, alternative dispute resolution practitioners, and other stakeholders who have an interest in establishing principles that could be, used to guide a collaborative decision making pilot project. We further encourage you to build upon the efforts of stakeholders over the last few years with regard to collaborative decision making in NEPA processes.

Collaborative decision making may allow us to improve the operation of NEPA. This, in turn, will increase public confidence in the NEPA process. Pilot projects could be a small measured step toward achieving these goals.

Thank you for your consideration of this undertaking.

Sincerely,

Mike Crapo
United States Senator

Max Baucus
United States Senator

Craig Thomas
United States Senator

Harry Reid
United States Senator

U.S. INSTITUTE FOR ENVIRONMENTAL CONFLICT RESOLUTION
Suite 3350 10 South Church Avenue (520) 670-5299 TEL
Tucson, Arizona 85701 (520) 670-5530 FAX
Kirk Emerson, Ph.D
INSTITUTE DIRECTOR

November 15, 2000

Honorable Mike Crapo
111 Russell Senate Office Building
Washington, DC 20510

Honorable Craig Thomas
109 Hart Senate Office Building
Washington, DC 20510

Honorable Max Baucus
51 1 Hart Senate Office Building
Washington, D.C. 20510

Honorable Harry Reid
528 Hart Senate Office Building
Washington, DC 205 10

Gentlemen:

Thank you for your request to explore the use of pilot projects to bring collaborative decision making to actions taken under the National Environmental Policy Act (NEPA). The US. Institute for Environmental Conflict Resolution of the Morris K. Udall Foundation appreciates the significance of this charge and shares your interest in the potential for consensus building and conflict resolution strategies to enhance the implementation of NEPA, particularly in the context of federal land and natural resource management issues.

We will pursue this undertaking over the next few months in line with your guidance to consult with other experts and stakeholders and report back to you as soon as possible. In the meantime, we will contact your staff for further clarification and recommendations and keep them posted on our progress.

Thank you for looking to the U.S. Institute for Environmental Conflict Resolution for assistance in this important matter.

Sincerely,

Kirk Emerson,
Director

APPENDIX B:

U.S. Institute for Environmental Conflict Resolution Mission and Programs

Organization

The U.S. Institute for Environmental Conflict Resolution is a federal program established by U.S. Congress to assist parties in resolving environmental, natural resource, and public lands conflicts. The U.S. Institute is part of the Morris K. Udall Foundation, an independent agency of the executive branch governed by a board of trustees appointed by the President of the United States.

Mission

The 1998 Environmental Policy and Conflict Resolution Act (P.L. 105-156) created the U.S. Institute for Environmental Conflict Resolution to assist the federal government in implementing Section 101 of NEPA by providing assessment, mediation and related services to assist parties in resolving environmental conflicts that involve federal agencies. The Institute provides a neutral place inside the federal government but “outside the Beltway” where public and private interests can reach common ground. Its primary objectives are to:

- ❖ Resolve federal environmental, natural resources, and public lands conflicts through

assisted negotiation and mediation where appropriate;

- ❖ Increase the use of ECR and improve the ability of federal agencies and other parties to engage in ECR effectively; and
- ❖ Assist and promote collaborative problem solving and consensus building in federal environmental policy design and implementation.

Services

The U.S. Institute promotes non-adversarial, agreement-seeking processes that range from large, multi-party consensus-building efforts to assisted negotiations and court-referred mediation. The U.S. Institute offers independent, impartial, non-partisan and professional services nationwide through an in-house, Tucson-based staff, augmented with a national referral system of over 250 qualified environmental facilitators and mediators. ECR services include case consultation, convening, conflict assessment, process design, facilitation, mediation, training, and dispute systems design.

Any federal agency or other stakeholder in an environmental conflict involving a federal agency or interest may call upon the U.S. Institute for assistance, either in a proactive, collaborative planning context, or in response to a more acute conflict. The Institute maintains confidentiality in all appropriate projects and processes. By law, the U.S. Institute must inform the President's Council on Environmental Quality (CEQ) of its engagement on a case and seek CEQ's concurrence on projects involving more than one federal agency.

Regardless of who initiates or pays for assistance, the U.S. Institute serves all parties involved in an environmental dispute. The U.S. Institute helps parties determine whether collaborative problem solving is appropriate for a specific environmental conflict, how and when to bring all parties to the table, and whether a third-party facilitator or mediator might be helpful in assisting parties reach consensus or resolve the conflict.

Program Sectors

The U.S. Institute provides ECR services through five program sectors:

- ❖ Protected Areas and Resources
- ❖ Public Lands and Natural Resources Management
- ❖ Energy, Transportation and Environmental Quality
- ❖ Litigation and Administrative Proceedings
- ❖ Native American and Alaska Native Environmental Program

Protected Areas and Natural Resources Management

This sector focuses on applying appropriate ECR approaches to controversial issues associated with the designation, planning, and management of protected areas, such as marine protected areas, national monuments, and wilderness areas; decisions related to protected resources, such as threatened and endan-

gered species and marine mammals; actions affecting the coastal zone or marine resources, such as shoreline development and federal fisheries management; and collaborative efforts directed towards cross-jurisdictional ecosystem and watershed-level planning, management, or restoration.

Public Lands and Natural Resources Management

The Public Lands and Natural Resource Management Sector (PLNRM) supports best practice and innovative use of ECR strategies in resolving conflicts over policies and decisions related to public lands management. In its project-based activities, PLNRM addresses a variety of substantive issues, including forest and rangeland management, fire management and restoration, recreation management, energy development and leasing, as well as broader programmatic and policy issues (e.g., land use planning, adaptive management approaches, applications of science, training and capacity building). Sector projects focus on actions related to federal land management units (principally under the jurisdiction of the USDA Forest Service and the Bureau of Land Management); the PLNRM sector also offers support for national policy dialogues and for assessment and design of dispute resolution systems.

Energy, Transportation and Environmental Quality
The focus of this sector is to increase the use of ECR (upstream collaborative processes and downstream dispute resolution) for controversies involving environmental aspects of energy and transportation development, and for other controversies significantly involving air or water quality. The emphasis is on controversies that arise from (1) federal involvement in the planning, siting, construction and operation of energy facilities and surface transportation facilities, and (2) federal actions of any kind that affect air and water quality.

Litigation and Administrative Proceedings

The Litigation Sector focuses on the increased use of ECR in complex environmental disputes that are in pre-litigation negotiation or administrative appeals. This sector additionally seeks to increase the under-

standing of parties and their attorneys about ECR and its applicability before, during and after litigation is filed.

Native American and Alaska Native Environmental Program

The Native American and Alaska Native Environmental Program serves to increase the appropriate and effective use of ECR in environmental matters involving Native American and Alaska Native communities and federal agencies. The sector also seeks to increase the awareness and understanding of ECR approaches especially applicable to Native American communities and federal agencies in the course of planning, consultation, decision making, and negotiations. The types of issues addressed by this sector include planning, government-to-government consultation, negotiations, policy development and implementation, actions under the NEPA, actions involving Section 106 consultations, and matters in litigation where an alternative dispute resolution process is being considered. Services provided through the program include case or project consultation and convening, conflict/situation assessment, process design, mediation, facilitation, and evaluation.

FY04 Update

The U.S. Institute's primary objective is to resolve environmental conflicts and improve environmental decision making by extending the reach and effectiveness of ECR services. In FY 2004, the U.S. Institute provided a broad array of ECR services on national-level projects and worked directly or through U.S. Institute roster members in 29 states and the District of Columbia, nine regions, two territories, and on a few international projects as well. Increasingly, the U.S. Institute's work is at a national or regional scale; however, seven Western states (Arizona, California, Colorado, Idaho, Oregon, Utah and Washington) represent a significant portion of U.S. Institute projects. Accordingly, a growing number of projects focused on conflicts over resource management (watersheds, fisheries, rangeland and forests, endangered species) and public land use (public access, off road vehicles, and

recreational shooting). Transportation planning and project development also continued to be an important arena for conflict management and dispute resolution activities.

Among the new projects undertaken by the U.S. Institute in FY 2004 were three Arizona projects involving recreational shooting on public lands in the Tucson basin; the impact of endangered species on flight training at the Barry M. Goldwater Range; and the Grand Canyon overflight noise controversy. Additional new projects included a controversial BLM plan revision in the Vermillion Basin in Colorado, recovery planning for the Oregon Coast Coho Salmon, and a negotiated rulemaking at Golden Gate National Recreation Area on off-leash dog management. Other significant continuing projects include a national policy dialogue on the impacts of anthropogenic sound on marine mammals, Everglades collaborative water management planning, the Lower Snake River BLM District resource management planning in Idaho, the Mount Hood National Forest recreation plan development in Oregon, and the Upper Klamath Basin Watershed restoration planning also in Oregon. Work also continued on two major national transportation projects—the St. Croix River crossing between Minnesota and Wisconsin and the Riverside County, California, community environmental and transportation acceptability process.

These projects by definition involve complex issues and multiple parties, taking at least several months, usually years, to resolve. U.S. Institute projects are typically 2-3 years in duration. Of the 24 assessments in which U.S. Institute staff was involved last year, 13 were completed in FY 2004. Of the 41 facilitations and mediations being worked on, nine were completed, among them a negotiated forest restoration plan in the Bankhead National Forest (Alabama), an inholder access mediation in the Steens Mountain Wilderness Area (Oregon), a state plan for greenhouse gas reduction (Rhode Island), a facilitation on environmental documentation for FHWA and the association of state transportation agencies (AASHTO), and a mediated land use plan for BLM's Meadowood Farm (Virginia).

In FY 2004, the U.S. Institute increased its efforts to improve the capacity of federal agencies, state and tribal governments and other non-federal parties to manage and resolve conflicts through ECR. U.S. Institute staff worked closely with several federal ECR programs and engaged in designing or implementing dispute resolution systems with the Federal Highway Administration, the Bureau of Land Management (BLM), the Interior Board of Land Appeals, and the U.S. Forest Service. In addition, U.S. Institute staff were involved in 41 training and educational activities during FY 2004.

The U.S. Institute is also committed to strengthening the capacity and performance of ECR practitioners. One particularly significant accomplishment in FY 2004 included the launching of a Native Dispute Resolution Network that promises to increase participation of American Indians, Alaska Natives, Native Hawaiians and others with experience working with Native communities in the ECR field and inform that field of valuable Native approaches to dispute resolution.

The U.S. Institute continued to provide ECR leadership at the federal level through its hosting of the Federal ECR Roundtable meetings, participation on the Interagency ADR Working Group, and the Multi-Agency ECR Evaluation Initiative (funded in large part by the Hewlett Foundation). An important development this year was the U.S. Institute's facilitation of the Interagency Initiative to Reduce Environmental Conflicts hosted by CEQ. Another significant contribution to the future role of the U.S. Institute has been the work of the National ECR Advisory Committee on how to better achieve the objectives of NEPA through the use of ECR.

Resolving Environmental Conflicts and Improving Environmental Decision making

During FY 2004, the U.S. Institute worked to extend the reach and effectiveness of its ECR services, professional screening and triage of all inquiries, providing referrals of qualified practitioners from the Roster of ECR Practitioners to project stakeholders,

providing ECR services, leveraging demonstration projects and facilitating national policy dialogues.

Screening and Triage of Inquiries

During FY 2004 the U.S. Institute continued to serve as a central source for agencies seeking conflict resolution services. By providing professional screening and triage for all inquiries, the U.S. Institute staff learned enough about the disputes and the stakeholders to provide counsel on whether the cases were appropriate for dispute resolution processes. The majority of the inquiries handled by the U.S. Institute during FY 2004 (401 recorded inquiries) came from federal agencies (headquarters and regional offices), but requests also came from state and local government agencies, environmental groups, resource users, and other practitioners. This represents a 33% increase over last year's reported inquiries.

Referrals from the Roster of ECR Practitioners

The U.S. Institute's roster continues to serve as a national resource for parties in search of qualified mediators and facilitators with environmental experience. Currently, there are 251 qualified practitioners on the U.S. Institute roster located in 41 states, the District of Columbia, and two Canadian provinces. Through an interagency agreement with the Federal Highway Administration, the U.S. Institute has assembled a sub-roster of qualified practitioners with particular experience in developing and reviewing transportation projects for assistance. The "Transportation Roster" currently includes 44 professionals.

During FY04, the roster manager provided referrals to U.S. Institute staff for 13 sector-related projects, as well as 33 consultations and referrals to external requesters. Others with direct access to the roster (e.g. EPA, DOI, roster members) conducted approximately 77 searches. The Roster's online database became directly available to the public at the end of FY 2004 and external referrals are expected to increase even more

Services Provided:

- ❖ 24 Assessments

- ❖ 42 Mediations and Process Facilitations
- ❖ 11 National Policy Dialogues and National Projects / Systems Designs
- ❖ 41 Training Workshop and Meeting Facilitations
- ❖ 73 Extended Case Consultations
- ❖ 33 Assisted Project Referrals (and 77 additional external roster searches)

Leveraging More Use of ECR through Demonstration Projects

Prior investments of staff support and financial assistance to Federal Partnership Projects (FPP) and the ECR Participation Projects continue to bear fruit and leverage additional resources. Although no new commitments have been made for three years (given funding constraints), work continued on a few of these original projects in FY 2004. Of these, the Bankhead National Forest Project, the Rhode Island Greenhouse Gas Reduction Plan, and the Skagit Basin Conflict Assessment between Tribal and Farming Communities were concluded in 2004. The Tanana Chiefs Conference Assessment, the GMUG National Forests Landscape Working Groups, the Sun River TMDL Resolution, the Mt. Hood National Forest Recreation Plan, the Willamette River TMDL Consensus Building project, the Finger Lakes National Forest Plan Revision, and the Green Mountain National Forest Plan Revision are continuing into FY 2005.

The FPP projects were initiated to provide in-kind assistance and cost sharing to federal agencies in need of support for specific ECR cases or projects. The program was designed to increase awareness and use of ECR within the federal government, provide incentives and guidance for the effective use of ECR, and encourage innovative applications and demonstration projects. The FPP has supported projects involving partnerships with several federal agencies (EPA, BLM, Bureau of Reclamation, U.S. Fish and Wildlife Service, National Park Service, the USDA-U.S. Forest Service, and the Department of Energy).

The ECR Participation projects were designed to assist non-federal parties engaged in ECR processes. The

ECR Participation Program provided guidance, technical assistance, and neutral services valued up to \$20,000 for each conflict assessment project. Those benefiting from the ECR PP include resource users such as ranchers and farmers, community groups, tribes, state and local governments, and non-governmental organizations whose participation would be needed to assure balanced stakeholder involvement in processes involving federal agencies or interests.

Experience with both of these demonstration programs led to the authorization by Congress of new funding that the U.S. Institute would use for grants to assist the participation of non-federal stakeholders in ECR processes involving federal agencies. Congress has not yet appropriated funds for this purpose. Case reports on these projects are being written up in 2005.

Increasing Capacity for all Parties to Manage and Resolve Conflicts

The U.S. Institute helps federal and non-federal parties make more effective use of ECR through program development, dispute systems design, trainings, workshops, and other educational initiatives. Capacity building initiatives target all parties and range from informal workshops for process participants to multi-agency training efforts.

Program Development and System Design During FY 2004, the U.S. Institute staff worked directly with several federal agencies to develop or implement national, system-wide efforts to make more effective use of ECR. These include such ongoing efforts as:

- ❖ FHWA Environmental Streamlining and Inter-governmental Conflict Management
- ❖ DOI Office of Hearings and Appeals, Interior Board of Land Appeals (IBLA), Pilot Program Development
- ❖ National Off-highway Vehicle Implementation Program
- ❖ USDA Forest Service Partnership Task Force, Design Considerations for the Development of Collaborative Resource Teams

- ❖ Multi-Party Negotiation Model for the U.S. Air Force

Interagency Service Agreements

To increase the efficiency of accessing U.S. Institute services and contracting for ECR practitioners, interagency agreements have been developed between the U.S. Institute and other federal agencies. In addition to numerous project-specific agreements, thirteen interagency service agreements and memoranda of understanding were in place during FY 2004. The service agreements provide the general framework of cooperation between the U.S. Institute and federal agencies in resolving environmental and natural resource conflicts and indicate the full range of the U.S. Institute's services from which the agencies may draw. The agencies with service agreements included:

1. Department of Agriculture – Forest Service
 2. Department of Agriculture – Forest Service – Collaborative Forest Restoration Program
- Department of the Interior -
3. Office of Collaborative Action and Dispute Resolution
 4. Office of Hearings and Appeals
 5. Bureau of Land Management – Arizona
 6. Bureau of Land Management – Montana/Dakotas
 7. Bureau of Land Management – Oregon
 8. Fish and Wildlife Service
 9. National Park Service
 10. Department of the Navy
 11. Environmental Protection Agency – Conflict Prevention and Resolution Center
 12. National Oceanic and Atmospheric Administration Fisheries – Northwest
 13. Department of Transportation – Federal Highway Administration

Training for Stakeholders

During FY 2004, the U.S. Institute staff was involved in a broad array of stakeholder capacity building efforts, including:

- ❖ formal training and informal stakeholder training sessions integrated into project activities,
- ❖ cross-case visits and exchanges to foster learning and capacity building,
- ❖ agency-wide capacity building efforts,
- ❖ interagency capacity building workshops, and
- ❖ field-wide capacity building efforts.

Strengthening ECR Practice

The practice of ECR is an evolving profession and the National ECR Roster Members represent the most experienced professionals in the ECR field. To build on that aggregate experience and to share it with the growing field of practitioners, the U.S. Institute identifies areas of interest from its service perspective that are in need of further development. One exemplary training effort this year focused on improving the ways in which potential ECR cases are assessed. Such third-party assessments are critical in determining if ECR is appropriate, if parties are willing to proceed with ECR, and if so, how to best design the ECR process.

The other significant contribution to the ECR field and to the U.S. Institute's capacity to work on Native American environmental issues is the formation of the Native Dispute Resolution Network. The Network provides a needed centralized, broadly accessible and valued referral system of dispute resolution practitioners, and since August 2004 the U.S. Institute has made five referrals from the Network.

Providing Leadership within the Federal Government

The U.S. Institute continued to play a leadership role within the federal government in furthering the appropriate use of ECR and its contributions to environmental decision making and policies. In addition to chartering the National Environmental Conflict

Resolution Advisory Committee, hosting of the Federal ECR Roundtable and participating on the Interagency ADR Working Group, the U.S. Institute was involved in two important initiatives: the Multi-Agency ECR Case Evaluation Project and the Interagency ECR Initiative.

Multi-Agency ECR Case Evaluation Project

The U.S. Institute partnered with six federal and state agencies to conduct a multi-agency evaluation study to understand the key ingredients and outcomes of successful ECR processes. The results of this ongoing study will shed light on performance in ECR processes and on which ECR practices are most critical for achieving success. The results will also provide information on which practices need to be employed more effectively by ECR practitioners and program managers. In January 2004, the U.S. Institute hosted 50 participants in a workshop involving state and federal ECR program managers, private-sector ECR practitioners and trainers, researchers, and evaluators. Participants reviewed the draft study results and identified ways to improve and expand the on-going evaluation. The Hewlett Foundation, a major funder of this activity, encouraged the U.S. Institute to apply for a supplemental grant to continue this work over the next two years. The grant was approved and a growing number of agencies are interested in participating in the coming years.

Interagency ECR Initiative to Reduce Environmental Conflicts

In August of 2003, Jim Connaughton, Chairman of the President's Office of Environmental Quality contacted the U.S. Institute to discuss the development of a set of principles that could be used to improve environmental decision making. The U.S. Institute was asked to plan and facilitate a meeting of top policy officials and their legal counsel to address how they can increase the use of more innovative approaches to collaborative problem solving and dispute resolution and to recognize programmatic initiatives already being undertaken by a number of departments.

In consultation with senior staff from a variety of federal departments engaged in environmental decision

making and conflict resolution, the U.S. Institute refined a set of basic principles and developed a framework for Chairman Connaughton to engage departmental leadership in a discussion on ways to more systematically prevent and reduce environmental conflict. In early June, the U.S. Institute facilitated a meeting hosted by Chairman Connaughton with top policy officials and legal counsel from 15 federal departments and agencies who are actively engaged in environmental issues. The leadership meeting provided an opportunity to review administration priorities, learn from departmental initiatives already underway, and discuss the challenges associated with reducing environmental conflicts and improving environmental decision making. At the meeting, departments were directed to continue to meet to identify ways to increase the effective use of ECR. The basic principles are being endorsed by the department heads and U.S. Institute staff are continuing to conduct senior staff meetings with the intention of reporting back to CEQ on their progress later in the fall of 2004.

The Morris K. Udall Foundation

The Morris K. Udall Foundation was established by Congress to carry out the legacy of Morris K. Udall (1922—1998), who represented Arizona in the U.S. House of Representatives from 1961 to 1991. Congressman Udall chaired the House Committee on Interior and Insular Affairs and championed the enactment of many important federal environmental laws. His career was distinguished by civility, integrity, and consensus—values embedded in the mission of the Foundation and the U.S. Institute.

The Foundation provides scholarships and fellowships to top students pursuing environmental studies, and to outstanding Native American and Alaska Native students pursuing careers in health care and tribal public policy. The Foundation also sponsors the Native American Congressional Internship Program in Washington, DC, each summer, and is a co-founder of the Native Nations Institute for Leadership, Management and Policy, which is located at the University of Arizona. In addition to sponsoring the U.S. Institute, the

Foundation provides funding for policy research and education at the University of Arizona's Udall Center for Studies in Public Policy.

A Board of Trustees, appointed by the President of the United States with advice and consent of the Senate, governs the Foundation. Terrence L. Bracy chairs the Board of Trustees. Dr. Anne Udall is vice chair. Christopher L. Helms is the Foundation's executive director.

For further information about the Morris K. Udall Foundation, please visit our website: www.udall.gov

Udall Foundation Board of Trustees

Terrence L. Bracy, Chair
Dr. Anne J. Udall, Vice Chair
Robert Lance Boldrey
Malcolm B. Bowekaty
James L. Connaughton
Eric Eberhard
Herbert R. Guenther
Dr. Peter Likins
James F. Manning
Richard P. Narcia
D. Michael Rappoport
P. Lynn Scarlett
Brad Udall

APPENDIX C:

National Environmental Policy Act of 1969

Title I

Congressional Declaration of National Environmental Policy

Sec. 101 [42 USC 4331]

- (a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.
- (b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs and resources to the end that the Nation may –
- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
 - (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
 - (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
 - (4) preserve important historic, cultural and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
 - (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
 - (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
- (c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

APPENDIX D:

Committee Charter and Bylaws

Committee Charter

1. **Name.** The name of the committee will be the National ECR Advisory Committee.
2. **Objective and Scope.** The Committee will provide advice to the director of the U.S. Institute for Environmental Conflict Resolution (the Institute) and to the Board of Trustees of the Morris K. Udall Foundation regarding future program directions, including the Institute's role in connection with implementation of Section 101 of the National Environmental Policy Act of 1969 (42 U.S.C. 4331).
3. **Duties.** The Committee will advise the Institute director and the Foundation board of trustees regarding program directions for the Institute, including: its role in implementing section 101 of the National Environmental Policy Act of 1969 (42 U.S.C. 4331); identification of critical environmental, natural resources, and public lands issues; opportunities to further the use of collaborative processes; areas in which conflict resolution services are needed; new directions in the field of conflict resolution; and evaluation of services and programs.
4. **Duration.** The Committee will terminate two years from the date of this charter unless sooner terminated or renewed by the Institute director.
5. **Official to Whom Committee Reports.** The Committee reports to the Institute director, who shall serve as the Designated Federal Officer (DFO).
6. **Administrative Support.** The Institute will provide administrative support for the Committee.
7. **Estimated Annual Budget.** The estimated annual operating costs are \$190,000, including 1.4 FTEs per year for staff support.
8. **Membership.** The Committee shall have no more than 30 members, appointed by the director of the Institute. Each member shall be appointed to a two-year term and may be reappointed to a second term, in the discretion of the Institute director. Any vacancies shall be filled by appointment of the Institute director.

Members shall be chosen to provide a balanced cross-section of viewpoints concerning environmental issues and the field of environmental conflict resolution. Accordingly, representation may include but not be limited to the following: environmental advocates, resource users, affected communities, state and local governments, tribes, federal environmental and resource management agencies, the conflict resolution and legal communities, and academic institutions.

Members serve without compensation but will be reimbursed for travel and per diem expenses at current rates for government employees in accordance with 5 U.S.C. 5703.
9. **Officers.** An initial chair and vice-chair shall be chosen from among the membership by the Insti-

tute director to serve for the first year of committee operation. The committee members shall elect a chair and vice-chair to serve the second year. Thereafter, the committee members shall elect a chair and vice-chair every two years. The vice-chair shall serve as chair in the chair's absence.

10. **Meetings.** The Committee shall meet at least twice a year. Meetings may be called more often by the DFO. Consistent with the provisions of the Federal Advisory Committee Act, no meeting shall be held in the absence of the DFO or an agency employee alternate named by the DFO. An agenda for each meeting must be approved in advance by the DFO or a designated alternate, who may cancel or adjourn any meeting when he/she determines that to do so is in the public interest.

Meetings will be open to the public, except when the Foundation Committee Management Officer determines that the meeting or a portion of the meeting will be closed to the public in accordance with the Government in the Sunshine Act or that the meeting is not covered by the Federal Advisory Committee Act. Any organization, association or individual may attend meetings, file a statement with the Committee or appear regarding topics on a meeting agenda. The chair may require prior notification by those desiring to be heard, set presentation time limits, or require that presentations be reduced to written materials and copies filed with the Committee.

The committee shall seek to reach consensus when providing advice and recommendations. If the committee determines that consensus is not possible, it shall determine whether to vote and whether to provide majority and minority opinions.

11. **Subcommittees.** The chair is authorized to establish subcommittees or task groups from among the membership or the public to perform specific assignments, with the approval of the DFO. A subcommittee chair shall be a Committee member.
12. **Reports.** All Committee and subcommittee reports and recommendations will be submitted by the chairperson to the Institute director. Minutes of

each meeting will be kept, showing those present, an accurate summary of matters discussed and conclusions reached, and copies of all documents received by the Committee. The chair and DFO shall certify the meeting minutes. Subject to 5 U.S.C. 552, the records, reports, minutes, agenda and other documents made available to the Committee will be available for public inspection in the offices of the U.S. Institute, 110 S. Church Avenue, Suite 3350, Tucson, AZ 85701, at reasonable times.

13. **Termination Date.** The Committee is subject to the provisions of the Federal Advisory Committee Act, 5 U.S.C. Appendix 2, and shall take no action unless the charter filing requirements of Section 9 of FACA have been complied with. The Committee is subject to biennial review and will terminate two years from the effective date, unless prior to that time the charter is renewed in accordance with section 14 of FACA.

14. **Effective Date.** The effective date will be the filing date.

Christopher L. Helms
Executive Director
Morris K. Udall Foundation

August 30, 2002

Date signed

October 1, 2002

Date filed

Bylaws and Operating Procedures

(Adopted November 12, 2003)

Section I: Purpose

The purpose of the National ECR Advisory Committee the (Committee) is to provide advice to the director of the U.S. Institute for Environmental Conflict Resolution, as well as the Board of Trustees of the Morris K. Udall Foundation, regarding future program directions,

including the Institute's role in connection with implementation of Section 101 of the National Environmental Policy Act.

Section II: Authority

The executive director of the Morris K. Udall Foundation has determined that the establishment of the Committee is in the public interest. The Committee is subject to the Federal Advisory Committee Act (FACA), as outlined in its Charter, filed with the Congress on October 1, 2002.

Section III: Membership Selection and Appointment

Members of the Committee are appointed by the director of the U.S. Institute for Environmental Conflict Resolution (the Institute) for two-year terms. Members will be selected based on specific needs of the Institute to represent a wide range of perspectives on environmental issues, particularly in relation to use of collaborative processes in environmental decision-making and dispute resolution.

Membership includes the responsibility to attend Committee meetings personally. A member may in unusual circumstances designate a representative to participate on the member's behalf after conferring with the chair and designated federal officer (DFO).

Section IV: Meeting Procedures

The Committee will meet at least twice a year. Meetings will be called by the designated federal officer in consultation with the chair, and will proceed in accordance with the following considerations:

A. Agenda: The DFO will approve the agenda for all meetings, in consultation with the chair. The Institute will distribute the agenda to the members prior to each meeting and will publish a summary of the agenda with the notice of the meeting in the Federal Register. Agenda items may be submitted to the DFO and/or the chair by any member of the Committee. Agenda items may also be suggested by non-members, including members of the public.

B. Minutes and Records: The DFO will prepare minutes of each meeting and distribute copies to each

Committee member. The chair shall certify the minutes. Minutes of open meetings will be available to the public upon request. Minutes of closed meetings will also be available to the public upon request, subject to the withholding of matters about which public disclosure would be harmful to the interests of the Government, industry, or others, and which are exempt from disclosure under the Freedom of Information Act (FOIA). The minutes will include a record of the persons present (including the names of Committee members, staff, and any members of the public from whom written or oral presentations were received), a complete and accurate description of the matters discussed and conclusions reached, and copies of all reports received, issued or approved by the Committee.

All documents, reports, or other materials prepared by or for the Committee constitute official government records and must be maintained according to federal policies and procedures.

C. Open Meetings. Unless otherwise determined in advance, all meetings of the Committee will be open to the public. Once an open meeting has begun, it may not be closed (for the reason that advance notice must be given to the public if any portion of a meeting will be closed). All materials brought before, or presented to, the Committee during the conduct of an open meeting, including the minutes of the proceedings of an open meeting, will be available to the public for review or copying at the time of the scheduled meeting.

Members of the public may attend any meeting or portion of a meeting that is not closed to the public and may, at the determination of the chair, offer oral comment at such meeting. The chair may decide in advance to exclude oral public comment during a meeting, in which case the meeting announcement published in the Federal Register will note that oral comment from the public is excluded and will invite written comment as an alternative. Members of the public may submit written statements to the Committee at any time.

D. Closed Meetings: Meetings of the Committee will be closed only in limited circumstances and in accordance with applicable law. In addition, requests for

closed meetings must be approved by the Committee Management Officer (CMO) 30 days in advance of the session.

Where the DFO, with approval of the CMO, has determined in advance that discussions during a Committee meeting will involve matters about which public disclosure would be harmful to the interests of the Federal Government or others, an advance notice of a closed meeting, citing the applicable exemptions of the Government in the Sunshine Act (GISA), will be published in the Federal Register. The notice may announce the closing of all or just part of a meeting. If, during the course of an open meeting, a matter inappropriate for public disclosure arises, the chair will call for such discussion to cease and will schedule the matter for closed session. Notices of closed meetings will be published in the Federal Register at least 15 calendar days in advance.

E. Bylaws Amendments: These bylaws may be amended by the Committee with the approval of the DFO.

Section V: Consensus Decision-Making; Voting; Quorum

A. Decisions During Meetings. The Committee will seek to reach consensus on any advice and recommendations that it is asked to provide. Recommendations or other documents can be considered to have achieved consensus if members (or their official designees) who are present fully support or can accept or “live with” the decision or recommendation. In striving to achieve consensus, Committee members should consider all relevant perspectives and the interests and concerns of all Committee members.

The presence of 50% of the Committee membership (or their official designees) will constitute a quorum for voting or consensus decision-making.

If the chair, in consultation with the DFO, determines that a consensus will not be reached, the chair will request a motion for a vote on the issue. A motion may be approved by a simple majority of those voting, given the presence of a quorum. If a vote is taken, the members voting in the minority shall have the right to provide a minority opinion to the U.S. Institute.

B. Decisions Between Meetings. If the Committee determines, at a meeting, that a work product must be completed prior to its next meeting, the Committee may direct that the following procedure be followed. A draft of the work product will be posted on the U.S. Institute’s NECRAC web page, and an email notification and request for approval will be sent to all Committee members. Committee members will be given a minimum of two weeks to respond. If no dissent is received by the conclusion of the review period, and at least 50% of the Committee has responded affirmatively, the work product will be considered approved by consensus of the Committee.

Section VI: Role of Committee Officials

Chair: The Institute director shall appoint a chair and vice-chair from the Committee membership to serve for the first year. The Committee members shall select a chair and vice-chair from among the membership to serve the second year. Thereafter, the membership shall select a chair and vice-chair to serve every two years.

The chair presides at Committee meetings and works with the DFO to establish priorities, identify issues that must be addressed and assist in determining the appropriate level and types of staff and financial support. (The DFO shall have final decision-making authority regarding staffing levels and financial support provided to the Committee by the Institute.) In addition, the chair is responsible for certifying the accuracy of Committee minutes.

The chair may establish subcommittees from among the membership or the public, with the approval of the Designated Federal Officer (DFO). Each subcommittee shall be chaired by a Committee member.

The vice-chair shall carry out the duties of the chair in the chair’s absence.

Designated Federal Officer: The DFO serves as the government’s agent for all matters related to the Committee’s activities. By law, the DFO must: (1) approve or call the meeting of the Committee; (2) approve agendas; (3) attend all meetings; (4) adjourn the meetings when such adjournment is in the public interest; and (5) chair meetings of the Committee when so di-

rected by the executive director of the Udall Foundation.

In addition, the DFO will provide adequate staff support to the Committee, including staff to perform the following functions: (1) notify members of the time and place for each meeting; (2) maintain records of all meetings, including subcommittee or working group activities, as required by law; (3) maintain the roll; (4) prepare the minutes of all meetings of the Committee's deliberations, including subcommittee and working group activities; (5) attend to official correspondence; (6) maintain official Committee records and file all papers and submissions prepared for or by the Committee, including those items generated by subcommittees and working groups; (7) act as the Committee's agent to collect, validate and pay all vouchers for pre-approved expenditures; and, (8) prepare and handling all reports, including the annual report as required by FACA.

Steering Committee: The DFO, in consultation with the chair, may establish a Steering Committee of not more than eight members, including the chair, vice chair, and DFO, to assist with organizational and administrative matters, such as meeting planning. Steering Committee meetings will not be open to the public, and the Steering Committee will not consider substantive matters or provide advice directly to the Institute.

Section VII: Expenses and Reimbursement.

Expenses related to the operation of the Committee will be borne by the Institute. Expenditures of any kind must be approved in advance by the DFO, who will ensure compliance with FACA and other related federal policies and procedures.

The Institute will pay travel and per diem for Committee members at a rate equivalent to that allowable for federal employees.

APPENDIX E:

Committee Members Biographies

DONALD J. BARRY THE WILDERNESS SOCIETY

Donald Barry has spent 28 years working on legal and policy matters affecting the conservation of national parks, fish and wildlife. Upon graduation in 1974 from the University of Wisconsin Law School, Mr. Barry accepted a job in the Honors Program for the Solicitor's Office in the Department of the Interior. He subsequently served as a staff attorney for the U.S. Fish and Wildlife Service (Service) from April of 1975 until January of 1980, at which time he was promoted to the job of Chief Counsel for the Service. He served in that capacity until December 1985, at which time he accepted an offer to work for the House of Representatives' Committee on Merchant Marine and Fisheries as the Committee's General Counsel for Fisheries and Wildlife. In June 1991, Mr. Barry left the Hill to assume a position with the World Wildlife Fund (WWF) as its Vice President for U.S. Land and Wildlife. In this capacity, he was in charge of all of WWF's domestic programs involving wildlife conservation and private and public land use. On May 1, 1993, Mr. Barry left WWF to become Counselor to the Assistant Secretary for Fish and Wildlife and Parks at the Department of the Interior where he focused on the programs of the Fish and Wildlife Service and National Park Service. He was promoted to the Deputy Assistant Secretary for Fish and Wildlife and Parks in July of 1996 and served as Acting Assistant Secretary for 17 months prior to his confirmation to Assistant Secretary in June of 1998. In July 2000, Mr. Barry left the Interior Department to take the position of Executive Vice President

and General Counsel with the Wilderness Society, Washington, D.C.

DINAH BEAR THE COUNCIL ON ENVIRONMENTAL QUALITY

Dinah Bear is the General Counsel of the Council on Environmental Quality (CEQ), in the Executive Office of the President. CEQ has the statutory responsibility for advising the President on environmental matters, developing environmental policy and coordinating interagency implementation of policy. CEQ oversees agencies' implementation of the National Environmental Policy Act (NEPA), which is the statutory basis for the environmental impact assessment process. CEQ monitors federal agencies' compliance with NEPA, and helps to resolve issues brought to the Council's attention by federal, state, and local agencies, as well as by public interest organizations and private citizens.

Ms. Bear joined CEQ as Deputy General Counsel in 1981, and was appointed General Counsel in 1983, serving in that capacity through September 1993, and resuming that position in January of 1995. She has chaired the Standing Committee on Environmental Law of the American Bar Association, and the Steering Committee of the Environment, Energy and Natural Resources Division of the District of Columbia Bar. She has received the Distinguished Service Award from the Sierra Club, and the Chairman's Award from the Natural Resources Council of America.

Ms. Bear graduated from the McGeorge School of Law in Sacramento, California, in 1977, and received

a Bachelors of Journalism degree from the University of Missouri at Columbia in 1974. The State Bar of California, the District of Columbia, and the U.S. Supreme Court have admitted her to practice.

ALEX BEEHLER

U.S. DEPARTMENT OF DEFENSE (ATTENDING FOR RAYMOND DUBOIS)

Alex A. Beehler commenced as Assistant Deputy Under Secretary of Defense (Environment, Safety and Occupational Health) on January 5, 2004. Mr. Beehler serves as the principal assistant and advisor to Deputy Under Secretary DuBois for all environmental, safety, and occupational health policies and programs in the Department of Defense. Those programs include cleanup at active and closing bases, compliance with environmental laws, conservation of natural and cultural resources, pollution prevention, environmental technology, fire protection, safety and explosive safety, and pest management and disease control for Defense activities worldwide. He also advises Mr. DuBois on international military agreements and programs pertaining to environmental security.

Mr. Beehler's priorities includes the implementation of the Department of Defense's environmental readiness initiative in response to challenges of encroachment, the Defense Environmental Restoration Program, unexploded ordnance management, explosive safety, and pollution prevention.

Mr. Beehler comes to the department from Koch Industries where he served as Director of Environmental and Regulatory Affairs and concurrently served at the Charles G. Koch Foundation as Vice President for Environmental Projects. Mr. Beehler maintains a strong background in federal environmental policy having served in the Department of Justice as a senior trial attorney for environmental enforcement and at the Environmental Protection Agency as a special assistant for legal and enforcement counsel.

Mr. Beehler is a member of the District of Columbia, State of Maryland and Commonwealth of Virginia bar associations. He received a bachelor's degree from Princeton (1975) in public and international affairs and a law degree from University of Virginia (1978).

GAIL BINGHAM
RESOLVE

Gail Bingham is President of RESOLVE, a non-profit, public policy dispute resolution organization founded in 1977, with offices in Washington DC; Denver, Colorado; and Portland, Oregon. She has mediated environmental, natural resources, community planning and health disputes since the late 1970s, and is a nationally recognized pioneer in promoting consensus-building tools in public decision making.

She is known for producing results in challenging situations and brings to her work an in-depth understanding of consensus-building processes; knowledge of natural resources and other public policy issues; the dynamics of the policy making process; political and cultural differences in a wide variety of settings; and how to integrate complex, scientific and technical information into policy dialogues and negotiations. Ms. Bingham has served as a mediator for a wide variety of local, state and federal agencies and private parties on such diverse subjects as: wetlands policy, watershed management and TMDL policy, allocation of water rights, endangered species, drinking water regulations, funding infrastructure costs for water and wastewater utilities, groundwater protection, hydroelectric relicensing, children's environmental health issues, risk assessment, chemicals policy, solid waste source reduction, hazardous waste management, oil spill contingency plans, pesticides policy, NEPA, environmental justice, and local community land use and infrastructure issues.

Ms. Bingham is the author of numerous publications, including:

- ❖ *Resolving Environmental Disputes: A Decade of Experience*, (the first, comprehensive, empirical study of the use of mediation in environmental issues);
- ❖ *Seeking Solutions: Alternative Dispute Resolution and Western Water Issues* (for the Western Water Policy Review Advisory Committee);

- ❖ a chapter on “Alternative Dispute Resolution in the NEPA Process,” for a book entitled *Environmental Policy and NEPA*; and
- ❖ “The Environment in the Balance: Mediators are Making a Difference,” in an issue entitled “The Geography of Hope” *ACR Resolutions*.

Ms. Bingham attended Stanford University and received a B.S. from Huxley College of Environmental Studies in Washington State. She did her graduate work in environmental planning at the University of California, Berkeley. Ms. Bingham also worked as a planner in local government in the State of Washington and in India.

Ms. Bingham was the founding chair of the environment and public policy section of the Association for Conflict Resolution; served two, three-year terms on the national Board of Directors of its predecessor (the Society of Professionals in Dispute Resolution); and was the President of the Washington DC chapter. She also has served in numerous other leadership positions, including the first National Commission on Mediator Qualifications and current task forces on the “Unauthorized Practice of Law” and to establish Advanced Mediation Practitioner membership, and has testified before Congress on several occasions, on topics such as the Administrative Dispute Resolution Act and the Negotiated Rulemaking Act. Currently, she serves on the roster working group for the U.S. Institute for Environmental Conflict Resolution, and on the advisory committee for the North Carolina Natural Resources Leadership Institute.

BRENT BLACKWELDER
FRIENDS OF THE EARTH

Brent Blackwelder has served as an environmental advocate in Washington for three decades. A former Chairman of the Board for the League of Conservation Voters and a founder and first Chairman of the Board of American Rivers, Brent co-founded the Environmental Policy Institute, which merged with Friends of the Earth and the Oceanic Society in 1989. Brent currently serves on the Board of Directors of 20/20 Vision, the League of Conservation Voters Educational Fund and the Citizens Trade Campaign.

Brent has worked with citizen organizations to ensure the protection of 150 rivers in the National Scenic River system, and to eliminate more than 200 destructive dams and stream channelization projects throughout the world. As an initiator of the campaign to reform the World Bank, Brent was instrumental in persuading Congress to enact a series of significant reforms directing the Bank and other multilateral lending institutions to pay more attention to the environment. He has also played a key role in the passage of many laws enacted in the U.S. to ensure environmental protection.

Brent has written extensively on a broad range of environmental issues, and has been featured in The New York Times, USA Today, and The Washington Post. Brent has co-authored several publications including *Disasters in Water Development*, *Bankrolling Successes* and *A Water Conservation Program for the Nation*. Most recently, he has appeared as an expert environmental commentator on NBC Nightly News, ABC World News Now, CNN and the BBC. Brent graduated summa cum laude from Duke University, and he holds an M.A. in Mathematics from Yale, and a Ph.D. in Philosophy from the University of Maryland. He lives in Washington, DC, with his wife Terry. They have two children.

LORI BROGOITTI
OREGON WHEAT GROWER’S LEAGUE

Lori is the fourth generation of an eastern Oregon farming family and has been involved in production agriculture and other natural resource-based industries for most of her life. She has background in irrigated and dry land crop production and cattle ranching, which gives her a first-hand understanding of the challenges facing agricultural producers when trying to meet evolving environmental criteria.

Lori is a founder and officer of Northwest Agricultural Services, Co., a crop insurance agency and agricultural consulting firm, located in Pendleton, Oregon. She is an insurance agent licensed in Washington, Oregon, and Idaho specializing exclusively in crop and livestock insurance products. She is a member of the Oregon Wheat Growers League board of directors and

chair of the environmental regulations committee. She is committed to bringing the environmental and agricultural community together to find common ground and workable solutions to economic and social issues associated with complex and controversial environmental policies.

When Lori is not working she is playing music. Lori plays upright bass, guitar and sings in two different acoustical bands.

HOOPER BROOKS
SURDNA FOUNDATION

Over the past 30 years, Mr. Brooks has worked with a spectrum of environmental, land planning, open space preservation organizations, projects and initiatives. He is currently the Program Director for the Environment at the Surdna Foundation in New York City, which is a family foundation with assets of over \$600 million, and an 80-year history. Since 1991, he has directed the Foundation's Environment program, which makes over \$7 million in grants annually to organizations working on transportation, energy, biological diversity, and urban/suburban land use issues throughout the United States.

Prior to joining Surdna, Mr. Brooks worked at Regional Plan Association, serving as Vice President from 1989 to 1991. There, among other things, he conceived and directed a multi-year regional open space program. He also directed the Gateway Citizens Committee, and helped to establish the Friends of Gateway to advocate for adequate funding and planning of the Gateway National Recreation Area.

Pursuant to his tenure at RPA, Mr. Brooks served as the Executive Director of the Brookline Conservation Commission, the town official responsible for environmental and open space protection in a suburb of Boston with over 56,000 residents. He also served as the Development Director for the Boston Natural Areas Fund, an open space preservation and management assistance organization. Further, Mr. Brooks has carried out numerous private consulting projects on issues ranging from landscape architecture to land use, and is the author of various publications.

In addition to his professional responsibilities, Mr. Brooks is a co-founder and Chairman of the Management Board of the Funders' Network for Smart Growth and Livable Communities and also serves on the board of Scenic America. Previous advisory and board positions include: the external Advisory Board to the Rutgers Department of Landscape Architecture; the Neighborhood Open Space Coalition; Green Guerrillas; and Management Committee, Environmental Grant makers Association.

Mr. Brooks received a B.A. degree from Harvard College and a Masters degree in Landscape Architecture from the Harvard Graduate School of Design.

CYNTHIA J. BURBANK
FEDERAL HIGHWAY ADMINISTRATION (ATTENDING
FOR MARY PETERS)

Cynthia J. Burbank is the Associate Administrator for Planning and Environment, Federal Highway Administration and has worked for the U.S. DOT for 28 years, at FAA, FTA, OST, and FHWA. A member of the Senior Executive Service since 1991, she currently serves as Associate Administrator for Planning and Environment for the FHWA. In this capacity, she supervises a staff of over 100, and oversees federal policies, programs, and guidance for the acquisition of real property by all federal agencies; FHWA's statewide, international, and metropolitan planning programs; and FHWA environmental programs and policies, including air quality conformity, wetlands, water quality, endangered species, livable communities, noise, historic preservation, environmental justice, NEPA, 4(f), ZMAQ, Transportation Enhancements, TCSP, Scenic Byways, and Recreation Trails.

From 1994-1997, Ms. Burbank was Chief of FHWA's Legislation and Strategic Planning Division. She managed FHWA's activities in reauthorization of the Federal-aid Highway Program, which culminated in enactment of the Transportation Equity Act for the 21st Century (TEA-21) in 1998. In addition, she oversaw strategic planning and investment analysis for the FHWA, as well as FHWA's Innovative Finance Program.

From 1991 to 1994, Ms. Burbank served as Chief of FHWA's Environmental Analysis Division, during the initial years of implementing the conformity provision in the 1990 Clean Air Act Amendments and the CMAQ program.

From 1974 to 1991, Ms. Burbank served in various roles and organizations as Staff Director for the DOT National Transportation Policy Team; Manager of Industry Affairs for FAA; Special Assistant to the Deputy Secretary; Program Analyst for OST; Economist for UMTA; and Program Analyst for the Naval Facilities Engineering Command.

She is a graduate of Georgetown University, with a degree in Economics, Phi Beta Kappa, and magna cum laude. She also attended Duke University and Boston University.

At USDOT, Ms. Burbank has received over 20 awards, including the SES Meritorious Executive Award in 1997, the DOT Silver Medal (twice), and the Eisenhower Medal. She is a native of Vermont, and now lives in Alexandria, Virginia, with her husband and two children.

CHRISTINE CARLSON
POLICY CONSENSUS INITIATIVE

Ms. Carlson is the Executive Director of the Policy Consensus Initiative (PCI). PCI works with state leaders to establish and strengthen consensus building and conflict resolution in states. Formerly the Executive Director of the Ohio Commission on Dispute Resolution and Conflict Management, Chris has been active in the conflict resolution field for over twenty years, serving as mediator, facilitator, trainer, and consultant.

Prior to her work at the Ohio Commission, Chris was Program and Legal Officer at the Kettering Foundation. She is presently an adjunct Professor in the Masters in Conflict Resolution Program at the McGregor School of Antioch University. She was Adjunct Professor at Wright State University where she taught water law for eight years. Chris is the author of several articles and publications in the field of public policy dispute resolution. Chris has served as a local

elected official and on state and federal advisory committees.

LARRY CHARLES, SR.
HARTFORD, CT

Larry Charles was the Executive Director of ONE/CHANE from 1993 to 2004 and organized over \$20 Million in development in North Hartford alone in the past 8½ years. This included high quality ownership housing affordable for working poor families in the community. This also includes a new \$5 million day care center for Mt. Olive.

He is Vice President of the Connecticut Rivers Council of Boys Scouts of America, and in the last week of the Clinton Administration, he was appointed to advise the U.S. EPA Administrator on Environmental Justice in America. He is a member of the NEJAC Executive Committee and the International Sub-Committee.

He opened an office of ONE/CHANE in South Africa for five years and Louisiana over the past three years. Larry is also Chairman of the Board of Directors of the Long Island Soundkeeper Fund based in Fairfield County, and Treasurer of the Board of Directors of the Hartford Behavioral Health Community Mental Health Agency.

A graduate of Southern University in New Orleans, and like Dr. Martin Luther King, Jr. he is a member of the Alpha Phi Alpha Phi Alpha Fraternity, Inc. Through his fraternity, he was Chief of Staff of the Alpha Million Dollar Fund Drive that raised \$1.2 million for the NAACP, the Urban League and the United Negro College Fund.

He is also the proud father of 18-year-old Larry Charles, Jr.

SALLY COLLINS
USDA FOREST SERVICE

Sally Collins was named Associate Chief for the USDA Forest Service in August 2001. Prior to her selection as the Associate Chief, Collins had served as the Associate Deputy Chief for the National Forest System since April 2000, and prior to that she was the Forest Supervisor for the Deschutes National Forest in

Oregon for seven years. During her 25 years in public service and resource management, Collins has worked for both the Forest Service and the Bureau of Land Management in Oregon and Colorado. In addition to serving as Forest Supervisor she has held positions as Deputy Forest Supervisor, Assistant Planner, Wilderness Specialist, Environmental Coordinator, and Mineral Leasing Coordinator.

Collins was born in Ames, Iowa. She holds a Master's Degree in Public Administration with an emphasis in natural resource management from the University of Wyoming, and a Bachelor's Degree in Outdoor Recreation from the University of Colorado.

Her spouse, John, is an oceanographer and their daughter, Casey, graduated from the University of New Hampshire with a degree in Hearing and Speech Pathology in May of 2003. Interests include many outdoor activities such as skiing, hiking, canoeing and cycling.

PLÁCIDO DOS SANTOS

ARIZONA DEPARTMENT OF ENVIRONMENTAL
QUALITY

Plácido dos Santos is the manager of the U.S.-Mexico Border Environmental Program at the Arizona Department of Environmental Quality (ADEQ). In this capacity since 1996, Plácido coordinates the implementation of water quality, air quality, waste management and emergency response activities along the border with a focus on transboundary environmental issues. He also spent 10 years with the Arizona Department of Water Resources (ADWR) working on various water management issues including water rights administration, aquifer recharge projects, water conservation for regulated industries including mines, and transboundary water management issues on the Mexican border. Plácido served as ADWR's Director of the Santa Cruz Active Management Area, which is part of a transboundary watershed shared by Arizona and Mexico.

Plácido is an environmental delegate for the Border Governor's Conference, which is an annual gathering of the governors from the U.S. and Mexican border states. He also serves as one of Arizona's delegates for

the Ten States organization, which is an environmental coalition of the four U.S. and six Mexican border state governments. He also serves as chairman of the Good Neighbor Environmental Board (GNEB), which is administered by the U.S. Environmental Protection Agency (EPA) and advises the U.S. President and Congress on border environmental issues. The U.S. EPA's Region IX has presented Plácido with an Earth Day Award in recognition of accomplishments and leadership on U.S.-Mexico border environmental issues.

Before entering public service, Plácido spent two years as a mining geologist in the early exploration phase of what is now the world's largest copper mine, La Escondida, in Chile, South America. A former U.S. Marine and native of Brooklyn, New York, he studied geology at the University of Colorado and performed graduate work in geosciences at the University of Arizona.

RAYMOND DUBOIS, JR.

U.S. DEPARTMENT OF DEFENSE

In May 2001, Ray DuBois was appointed as the Deputy Under Secretary of Defense for Installations & Environment. He is responsible for oversight and policy guidance for all Department of Defense Installations and Environmental Programs. This includes integrating installations and environmental requirements in the weapons acquisition process; privatization and outsourcing initiatives; ensuring greater reliance on commercial products and practices; managing infrastructure budgets and policies, including housing, energy, historic properties, base realignment and reuse, and economic adjustment. He also has responsibility for safety, and occupational health; environmental restoration at active and closing bases; conservation of natural and cultural resources; pollution prevention; environmental research and technology, fire protection, and explosives safety. Worldwide, Department of Defense Installations have a land area covering over 46,000 square miles, and containing 600,000 structures valued at over \$600 billion.

From January to May 2001, he served as Special Assistant to the Secretary and Deputy Secretary of Defense. His wide-ranging portfolio of responsibilities in support of Secretary Rumsfeld's transition team and the early policy and management decisions included focusing on issues of organization and personnel, housing and services privatization, energy and environment, logistics, training and readiness, and the '01 supplemental and '02 budget amendment. From 1995 to 2000, Mr. DuBois was President of Potomac Strategies International, providing strategic management and financial support to high technology companies worldwide in the aerospace, electronics, telecommunication, and telemedicine industries. From 1990 to 1995 he was with Digital Equipment Corporation serving first as the Director of Strategic Plans and Policies of the Aerospace, Defense Electronics and Government Group and then as the Worldwide Marketing Director for the Defense Industries Group. From 1987 to 1990, Mr. DuBois was the Director of Government Affairs for the National Education Corporation and concurrently a Managing Director in its largest subsidiary, Applied Learning International, a leading computer-based training and education company.

From 1973 to 1977, he served as Staff Assistant to the Secretary and Deputy Secretary of Defense and then as Deputy Under Secretary of the Army where he was awarded the Civilian Distinguished Service Medal. Mr. DuBois served in the U.S. Army from 1967 to 1969, including thirteen months in Vietnam as a Combat Intelligence Operations Sergeant in the central highlands, where he was awarded the Army Commendation Medal. He is married to Helen Runnells DuBois. They have a son, Pierre, and a daughter, Mary. Mr. DuBois graduated from Princeton University with an A.B.

MENCER DONAHUE EDWARDS
JUSTICE AND SUSTAINABILITY ASSOCIATES, LLC

Don Edwards is the principal and CEO of Justice & Sustainability Associates, LLC, an alternative dispute resolution and public participation firm based in Washington, DC. Don is an accomplished facilitator, mediator and process designer. Over the past 10 years, he has designed and managed many consensus based

agenda-setting and decision-making processes primarily related to land use, sustainable community development, smart growth and environmental justice.

Don is a member of advisory committee of the National Environmental/Public Policy Case Database project funded by the Hewlett Foundation as well as the Professional Consensus Practice Advisory Committee of the U.S. Consensus Council. He also serves as a member of the Affected Communities Subcommittee of the National Environmental Conflict Resolution Advisory Council, the federal advisory council of the U.S. Institute for Environmental Conflict Resolution. He is a member of the Global Environmental Advisory Council of Dow AgroSciences and the Corporate Environmental Advisory Council of The Dow Chemical Company. Don also sits on the Citizens Advisory Committee of the Metropolitan Washington Transportation Planning Board and the board of the Keystone Center, Keystone, CO.

He earned a BA from Duke University and an MPH and MSN from Yale University. In 1990, as the executive director of the "Americas branch" of the Panos Institute, Don began promoting policies related to environmental justice and sustainable development. He also helped found the U.S. Citizens Network for the UN Conference on Environment and Development and represented it on the official U.S. delegation to the "Earth Summit" in 1992.

In 1994 and 1995 respectively, he was the national U.S. organizer for the UN International Conference on Population and Development in Cairo in 1994 and the Second UN Conference on Human Settlements in Istanbul in 1996. From 1993-96, he also served as chair of the Environmental Justice Working Group of the Sustainable Communities Task Force of the President's Council on Sustainable Development from and Washington Representative and National Co-Chair of the Citizens Network for Sustainable Development. Edwards also designed the program setting process of the groundbreaking National Town Meeting for a Sustainable America held in Detroit in May 1999.

He is the father of four children - Jonathan DuBois Edwards, Kharam Clayton Edwards, Jacob Henry "Che" Guevara Edwards and one daughter, Asha

Johnette Beatrice Spann Edwards. He worships at the Union Temple Baptist Church located in the historic Old Anacostia neighborhood of Washington, D.C.

JOHN R. EHRMANN, PH.D.
THE MERIDIAN INSTITUTE

Dr. Ehrmann is a founder and Senior Partner of the Meridian Institute. He has pioneered the use of collaborative processes for over two decades, applying innovative problem solving approaches to a wide range of complex and controversial public policy issues and site-specific disputes. He has led projects at the international, national and local levels. His work has involved projects focusing on legislative development, negotiated rulemakings and Federal Advisory Committees as well as organizational management and strategic planning for a wide diversity of organizations including Fortune 500 companies, government agencies and local, national and international NGOs. For the most part, he has focused on environmental and natural resources issues including the economic and social challenges associated with developing sustainable practices for communities and industries.

In addition to his extensive involvement in designing and facilitating collaborative processes, Dr. Ehrmann also works to promote the use of collaborative decision making. He gives lectures and has published on the use of collaborative decisions in public policy issues. He also serves as an adjunct faculty member for the University of Wyoming and provides advice to the Ruckelshaus Institute and School of Environment and Natural Resources on the use of collaborative problem solving in natural resource decision making.

Dr. Ehrmann received his undergraduate degree from Macalester College and his Masters and Ph.D. in Natural Resource Policy and Environmental Dispute Resolution from the University of Michigan, School of Natural Resources. His doctoral dissertation involved developing a practice-based model of the policy dialogue, which can be applied to both practice and research. Between 1983 and 1997, Dr. Ehrmann was executive vice president at the Keystone Center, Keystone, Colorado. In September 1997 he left Keystone to found the Meridian Institute.

DWIGHT H. EVANS
SOUTHERN COMPANY

Dwight H. Evans is executive vice president of Southern Company, and president of the company's External Affairs Group, directing environmental policy, regulatory affairs, legislative affairs, corporate communication, and procurement.

Southern Company is a super-regional energy company with more than 32,000 megawatts of electric generating capacity in the Southeast and one of the largest producers of electricity in the United States.

Previously, Evans was president and CEO of Mississippi Power Company, a Southern Company subsidiary serving southeast Mississippi. Prior to going to Mississippi Power in 1995, Evans was executive vice president of external affairs at Georgia Power Company, and vice president of governmental affairs for Southern Company.

Evans joined Georgia Power in 1970, and served as a design engineer, and an environmental engineer before moving to the external affairs organization.

A native of Newington, GA., Evans holds a bachelor's degree in civil engineering, and a master's degree in environmental engineering from the Georgia Institute of Technology, and a juris doctorate degree from Atlanta Law School. He is a graduate of Harvard University's Program for Management Development, and The Wharton School's Executive Accounting and Finance Program.

Evans is president of the Southeastern Electric Exchange, and serves on the public, and governmental affairs policy committee of the Edison Electric Institute. He is a member of the board of trustees of Piedmont College, and the Georgia Tech Foundation, and a member of the board of directors of the Southern Center for International Studies. Evans was recently elected as a member of the Board of Directors of the United States Chamber of Commerce.

Evans is a past chairman of the Mississippi Economic Council, the Mississippi Partnership for Economic Development, the Mississippi Coast Chamber of Commerce, Mississippi Technology Inc., and the Insti-

tute for Technology Development. He has also served as president of the University of Southern Mississippi Foundation Board, and as chairman of the Mississippi chapter of the Nature Conservancy and the New Orleans branch of the Atlanta Federal Reserve Bank.

Other past board positions include those with Mississippi Power Company, Southern Communications, Southern Energy Solutions, and Hancock Bank. Evans is also a past member of the Georgia Board of Regents.

STAN FLITNER
DIAMOND TAIL RANCH

Stan Flitner has spent his lifetime in Greybull, WY, on his family ranch. Diamond Tail Ranch was established as a family-owned cow-calf business in 1906, and has operated continuously by the Flitner family since that time. It is presently a family business partnership comprised of Stan, wife Mary, and two sons, Tim and Dan. The ranch utilizes private, state, Forest Service, and Bureau of Land Management rangelands, and has been deeded acreage in the Shell Valley, raising primarily feed crops such as hay and corn. The Flitners have significant experience in backgrounding light cattle for grass operations. The Flitners also own and operate a ranch-based hunting business, with mainly deer and elk hunting in the Big Horn Mountains along with a successful Quarter Horse breeding and production sideline, specializing in useful and versatile ranch horses.

Stan is married to Mary Budd Flitner, and has 4 adult children Carol Bell, Sara Flitner, Tim Flitner, Dan Flitner, and 8 grandchildren. He is the immediate past President of Wyoming Stock Growers Association. Pertinent issues included brucellosis, brand inspection, range reform, environmental stewardship, product marketing and open dialogue for open spaces project.

Stan is a graduate of the University of Wyoming, College of Agriculture. He has served as a leader of a cooperative discussion group of wildlife, conservation, and agricultural advocates. He is the recipient of the “Outstanding Co-Operator Award” from South Big Horn County Soil Conservation District. Stan has received recognition for outstanding contribution to the

State of Wyoming, by the Wyoming Department of Agriculture in July of 1997. He is the recipient of the “Wyoming Livestock Roundup Award for Outstanding Agriculture Citizen” in 1998. Stan is a recipient of the “Outstanding Alumni Award”, in the College of Agriculture, at the University of Wyoming and is also the recipient of the “Excellence in Grazing Award” from the Society of Range Management.

GARY L. GALLEGOS
SAN DIEGO ASSOCIATION OF GOVERNMENTS

Gary Gallegos is the Executive Director of SANDAG (San Diego Association of Governments). SANDAG is the regional Council of Governments and the Metropolitan Planning Organization for the San Diego region. As the Executive Director, he also serves as the Chief Executive Officer of the San Diego County Regional Transportation Commission, the Regional Growth Management Review Board, and the Congestion Management Agency. He is CEO of SourcePoint, the non-profit public benefit corporation chartered by SANDAG. Previously he held the position of District Director for Caltrans District 11. In this capacity he represented the State of California on Binational transportation issues and served on various Committees. He is recognized as a leader in the areas of transportation and binational cooperation. He holds a B.S. in Civil Engineering from the University of New Mexico.

HARRY EDWARD GRANT
RIDDELL WILLIAMS, P.S.

Mr. Grant’s practice emphasizes corporate transactions involving environmental, energy and natural resource issues, as well as environmental counseling and regulatory compliance. He assists domestic and international companies in structuring transactions that involve environmental problems and regulatory planning issues. In addition to real property transactions, he often assists clients on environmental issues affecting mergers, stock purchase and asset purchase transactions and in the financing of such transactions. Mr. Grant has been involved in public policy issues concerning restoration of salmon habitat in the Pacific Northwest. He also represents businesses in federal

and local air quality regulation and compliance. Mr. Grant has worked on natural resource, trade and trans-actio- n- al issues in Mexico, Chile, Argentina, Brazil and Uruguay.

Mr. Grant received his undergraduate science degree from Western Washington University, *magna cum laude*, in 1979, and his J.D. from the University of Oregon in 1983. He is admitted to practice in Wash- ington, and before federal courts, including the U.S. Supreme Court.

Representative Projects and Transactions

- ❖ Counsel to U.S. affiliate of international paper company in numerous legal and governmental relations issues, including federal and state natural resource controversies and projects. Assisted counsel to U.S. Senate Energy and Natural Resources Committee in early draft- ing of Elwha River Ecosystem and Fisheries Restoration Act, P.L. 102-495. Strategic advi- sor to company for legal issues in obtaining series of subsequent congressional appropri- ations and in related administrative agency negotiations.
- ❖ Counsel for environmental compliance and long-range regulatory planning. (1987- present)
- ❖ Counsel to Fortune 500 investor-owned utility in environmental projects involving cleanup of hazardous substances at prime urban sites in cities throughout Pacific Northwest; in managing litigation and in negotiation of set- tlements with regulatory agencies and other parties. (1989-present)
- ❖ Counsel to nation's largest manufacturer of expanded polystyrene (EPS) plastic foam in- sulation and structural building panels, produced at eleven locations in the U.S. Rep- resentation involves Clean Air Act permitting and regulatory matters in both attainment and non-attainment air quality control regions and involves both the U.S. E.P.A. and local air quality management agencies. (present)

- ❖ Outside general counsel to Irvine, California- based small-cap manufacturing company traded on NASDAQ with operations in Wash- ington, Maryland and The Netherlands, in- cluding lead negotiation in settlement of putative class action filed in 2002. (1999- present)
- ❖ Environmental counsel to wireless telecom systems developer to establish ISO 14000 en- vironmental management system. (2003)
- ❖ Counsel to Washington and Idaho ski areas for federal and state environmental law compli- ance and special operating permits with state and federal resource agencies, Clean Water Act compliance and related environmental is- sues. (1998-present)
- ❖ Counsel to various real estate developers on acquisitions and financings of properties im- paired by historic hazardous substance contamination, including \$190 million financ- ing for one of the nation's leading redevelopers of environmentally impaired properties. (1997-present)
- ❖ Regional counsel to major U.S. airline, advis- ing on federal and state air quality compliance and related regulatory matters. (1992-present)

Publications

- ❖ "World-Scale Problem," Seattle Post- Intelligencer, April 2001.
- ❖ "Making Brownfields Part of a Greener Envi- ronment," The Seattle Times (January 9, 1997).
- ❖ "The Implications for Companies on a U.S. – Chile Free Trade Agreement," AMCHAM, Santiago, Chile (1994).
- ❖ "The Elwha River Ecosystem and Fisheries Restoration Act – A Case Study in Sustaining Economic Development and Protecting the Environment," IABA (1993).

-
- ❖ Co-author, “When Do Warrantless Environmental Searches Violate Business’ Liberties?” Legal Backgrounder (1993).

THOMAS C. JENSEN

SONNENSCHN NATH & ROSENTHAL LLP

Tom Jensen practices natural resource and environmental law in Washington, DC, with the firm of Sonnenschein, Nath & Rosenthal LLP, where he is a partner in the firm. Mr. Jensen previously served as the Associate Director for Natural Resources for the President’s Council on Environmental Quality; Majority Counsel to the U.S. Senate Committee on Energy and Natural Resources, Subcommittee on Water and Power Executive Director of the Grand Canyon Trust; Deputy Executive Secretary of the U.S.-Canada Pacific Salmon Commission; and Policy Analyst for the Columbia River Inter-Tribal Fish Commission.

Mr. Jensen serves on the Leadership Council of the Pew Institute for Ocean Science, and on the Board of Trustees of the William D. Ruckelshaus Institute of Environment and Natural Resources, University of Wyoming.

Mr. Jensen counsels and represents business, government, educational, and non-profit organizations before state and federal agencies and legislatures, in litigation, and with respect to strategic and transactional matters. He is a certified mediator. His clients have included electric utilities, independent power producers, pipelines, universities, trade associations, commercial fishing interests, conservation organizations, investment banking firms, other law firms, federal and tribal government agencies, health care providers, and international certification bodies.

Mr. Jensen earned his law degree from the Northwestern School of Law of Lewis and Clark College, and received the school’s first Distinguished Environmental Law Graduate Award. His undergraduate degree is from the University of Southern California. He resides in Northern Virginia with his wife, Sarah Londeree Jensen, and his sons Sam and Henry.

CHRISTOPHER B. KEARNEY

U.S. DEPARTMENT OF THE INTERIOR (ATTENDING FOR P. LYNN SCARLETT)

Christopher B. Kearney is the Deputy Assistant Secretary for Policy and International Affairs in the Office of the Assistant Secretary for Policy, Management and Budget at the Department of Interior. He joined the Department in January 2001 and assumed his current position in July 2001. He is the principal advisor to the Assistant Secretary – Policy, Management and Budget on Departmental policy. In addition, he oversees work performed by the Offices of Natural Resource Damage Assessment and Restoration, Policy Analysis, Environmental Policy and Compliance, and Managing Risk and Public Safety.

Prior to joining the Administration, Mr. Kearney served as a professional staff member for the House Committee on the Budget as their Agriculture and Environmental Specialist from March 1997 to January 2001. While on the Hill, he also served as professional staff member for the House Committee on Resources from 1991 to 1997. From 1990 to 1991, he worked for the Department of Energy as Congressional Affairs Liaison and was a Senior Research Analysis for the Republican National Committee from 1987 to 1989.

He holds a Master of Arts degree in International Transactions from George Mason University (1996) and a Bachelor of Arts degree in Political Science at Roanoke College. (1984).

Mr. Kearney, his wife, and their two sons reside in Burke, Virginia.

BRUCE E. MEYERSON

BRUCE MEYERSON, P.L.L.C.

Bruce E. Meyerson is a full-time mediator, arbitrator, trainer, and facilitator in Phoenix, Arizona. He is a graduate of the Georgetown University Law Center (1972), where he was an editor of the Law Journal. Mr. Meyerson began his practice as the Executive Director of the Arizona Center for Law In the Public Interest. He served on the Arizona Court of Appeals for five years, and has been General Counsel of Arizona State University. From 1990 through 2000, Mr. Meyerson

practiced commercial and employment litigation with Meyer, Hendricks, Victor, Osborn & Maledon, and Steptoe & Johnson.

In his ADR practice, Mr. Meyerson regularly serves as a mediator and arbitrator. Mr. Meyerson has served as a mediator and arbitrator in virtually all aspects of commercial, employment, construction, real estate, and personal injury litigation, in cases ranging in value of up to \$1.5 billion. Mr. Meyerson has resolved successfully over 1200 cases in mediation. He has been selected by the Equal Employment Opportunity Commission to be one of a small number of neutrals hired to mediate EEOC charges in Arizona.

He is the Chair of the American Bar Association Section of Dispute Resolution, and leads an ABA task force examining standards for the use of ADR in resolving e-commerce disputes. He has served as the Chair of the State Bar of Arizona Committee on Alternative Dispute Resolution, and served as the Chair of the Arizona Supreme Court ADR Advisory Committee for seven years.

He is a frequent trainer on the subject of ADR, providing training to a mix of private sector groups, and public entities such as the Equal Employment Opportunity Commission, and the United States Department of Justice. He was selected by the Arizona Court of Appeals, and the Maricopa, Pima, and Coconino County Superior Courts to train judges in settlement conference skills. Mr. Meyerson's practice also includes the design and implementation of ADR systems. Mr. Meyerson serves as a facilitator, most frequently for public agencies, where he is called upon to assist in, and improve deliberations in-group decision-making processes.

He teaches arbitration, mediation, ADR and employment law, and alternative dispute resolution at the Arizona State University College of Law. He has been a visiting professor at the Pepperdine University Institute for Dispute Resolution, where he taught negotiation and settlement advocacy. He was invited by the Institute to be one of a small group of mediators and arbitrators to present a program at its first-ever Masters Forum. Mr. Meyerson has written extensively on the subject of alternative dispute resolution, includ-

ing a monthly feature article on ADR for The Daily Journal Corp., which has appeared in business law publications in four western states.

He is one of two attorney members of the Ninth Circuit Committee on Alternative Dispute Resolution Programs. He is a member of the Law Committee of the American Arbitration Association, which advises the Association on policy issues, and strategies to address legislative initiatives in the area of arbitration and mediation. He is also a member of the Commercial and Employment Panels of the AAA.

PAULINE H. MILIUS

U.S. DEPARTMENT OF JUSTICE

Ms. Milius is the Chief of the Law and Policy Section of the Environment, and Natural Resources Division, Department of Justice, a position she has held since December 1993. Prior to assuming that position, Ms. Milius was a trial attorney in the General Litigation Section of the Environment Division where she litigated cases under a variety of environmental statutes including the National Environmental Policy Act, mining and mineral leasing statutes, and forest planning and land management statutes.

Ms. Milius also handled a number of takings cases in the Court of Federal Claims. Before coming to the Justice Department, Ms. Milius clerked for the late Judge Barrington D. Parker of the U.S. District Court for the District of Columbia. Prior to attending law school, Ms. Milius worked at the Brookings Institution for the then Director of the Governmental Studies Program, Gilbert Y. Steiner. She assisted him on several books involving federal programs and policies affecting the poor and children, including *The State of Welfare* and *The Children's Cause*. Ms. Milius has a B.A. in history from Barnard College, an M.A. in history from Yale University, and a J.D. degree from The Georgetown University Law Center.

ANNE N. MILLER

U.S. ENVIRONMENTAL PROTECTION AGENCY

Anne Miller is the Director of the Environmental Protection Agency's (EPA) Office of Federal Activities. This office is responsible for working with other fed-

eral agencies, and coordinating EPA's reviews of major federal actions for their potential environmental impact under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. OFA also oversees EPA's own compliance with NEPA and related crosscutting laws, such as the National Historic Preservation Act and the Endangered Species Act, administers the official NEPA filing system for the Council on Environmental Quality, and coordinates the agency's international enforcement and compliance program.

In her years with EPA, Ms. Miller has been involved with a number of programs at the field, regional and headquarters levels, including:

- ❖ EPA NEPA compliance, including the preparation of environmental impact statements (EIS's);
- ❖ The EPA review of other agencies' EIS's;
- ❖ Selected international initiatives in the field of environmental impact assessment;
- ❖ EPA's implementation of its 1984 Indian Policy;
- ❖ The wetlands protection, clean lakes, non-point source, and federal facility compliance programs; and,
- ❖ Water quality standards development, sole source aquifer designation, laboratory analysis, and field investigations.

Ms. Miller is a graduate of Earlham College with an A.B. in Biology, and graduated from The Ohio State University with an M.Sc. in Microbiology.

MARY E. PETERS
FEDERAL HIGHWAY ADMINISTRATION

Mary E. Peters was sworn in as the 15th Federal Highway Administrator on Oct. 2, 2001. As administrator, she leads efforts by the Federal Highway Administration (FHWA), an agency of the U.S. Department of Transportation, to improve safety and security, reduce congestion, and enhance mobility on America's roads and bridges.

Before her appointment, Ms. Peters was the director of the Arizona Department of Transportation (ADOT). She provided leadership to more than 4,800 employees in administering the state's transportation program. Ms. Peters joined ADOT in 1985, working her way up through the ranks to serve as contract administrator, deputy director for administration, and deputy director Gov. Jane Hull appointed her director in 1998.

Ms. Peters served on the board of directors for the Arizona Quality Alliance, Women Executives in State Government, and Project Challenge, an arm of the National Guard that helps troubled teens to become productive citizens. She also chaired the Highway Expansion Loan Program Advisory Board and was a member of the Greater Arizona Development Authority as well as the Governor's Diversity Advisory Council. In addition, she was a member of the Arizona Governor's Growing Smarter Commission, the Governor's CANAMEX task force, and the Governor's Transportation Vision for the 21st Century task force.

In addition to her work in Arizona, Ms. Peters has been involved in transportation activities at the national level. She served on the board of directors for ITS America, chaired the Standing Committee on Planning and the Asset Management Task Force for the American Association of State Highway Officials (AASHTO), and served as a member of the AASHTO 2001 Reauthorization Steering Committee. She also hosted the 2001 meeting of the Western Association of State Highway Transportation Officials.

Ms. Peters has received numerous awards, including the Women's Transportation Seminar's Person of the Year Award, and has been recognized as the Most Influential Person in Arizona Transportation by the Arizona Business Journal.

A fourth-generation Arizonan, Ms. Peters holds a bachelor's degree from the University of Phoenix and attended Harvard University's John F. Kennedy School of Government Program for State and Local Government Executives. She and her husband, Terry, have three grown children.

JOHN RAIDT
CONSULTANT

John Raidt is a public affairs and government relations consultant. Mr. Raidt served as Policy Coordinator of the McCain 2000 presidential campaign, as Chief of Staff of the U.S. Senate Committee on Commerce, Science and Transportation (1996-1998), and as Legislative Director to U.S. Senator John McCain (1994-1996). He holds a Master of Public Administration degree from Harvard University, and a Bachelor of Arts degree in Journalism from Arizona State University.

JULIA RIBER
USDA FOREST SERVICE (ATTENDING FOR SALLY COLLINS)

Julia Riber works for the United States Forest Service, National Headquarters, as a National Environmental Policy Act (NEPA) specialist. She has over 18 years of experience working with NEPA, ranging from rural field-level analyses to her more recent work developing national NEPA guidance and policies.

She started her career with the Forest Service in Southeast Alaska preparing timber sales, and providing NEPA guidance on district projects. She then moved to Northern California where as coordinator for the 400,000 acre Hayfork Adaptive Management Area, she championed innovative management techniques including collaborative decision making, adaptive management, research/public partnerships, value-added small-diameter timber utilization and stewardship contracting. While in the National Headquarters, she has worked on numerous national policies including the Roadless Area Conservation Rule, the Healthy Forests Initiative, and the proposed Off-Highway Vehicle Rule. Prior to working for the Forest Service she worked for Battelle Memorial Institute where she prepared environmental analyses for the Department of Defense and Department of Energy.

Julia received her undergraduate and master of sciences degrees from the Ohio State University. She is President Elect for the Five Valleys Land Trust, and volunteers for the city of Missoula on their Open Space Advisory Committee. She also volunteers for a

local elementary school, teaching literature once a week. She lives with her husband and two young children in Missoula, Montana where they enjoy hiking, biking, skiing and horseback riding.

P. LYNN SCARLETT
U.S. DEPARTMENT OF THE INTERIOR

Lynn Scarlett is Assistant Secretary of Policy, Management, and Budget at the Department of the Interior. Prior to joining the Bush Administration in July 2001, she was President of the Los Angeles-based Reason Foundation, a nonprofit current affairs research and communications organization. For 15 years, she directed Reason Public Policy Institute, the policy research division of the Foundation. Her research focused primarily on environmental, land use, and natural resources issues.

Ms. Scarlett is the author of numerous publications on incentive-based environmental policies, including, most recently, a chapter in *Earth Report 2000* (McGraw-Hill) on “dematerialization.” She co-authored a report, *Race to the Top: State Environmental Innovations*, which examines state environmental programs that utilize incentives, private partnerships, and local leadership in addressing environmental problems.

Ms. Scarlett served on President George W. Bush’s environmental policy task force during his presidential campaign. She was appointed by former Governor Pete Wilson to chair California’s Inspection and Maintenance Review Committee, a position she held for 6 years. Ms. Scarlett served as an Expert Panelist on the U.S. Environmental Protection Agency’s full-cost accounting and “pay-as-you-throw” projects. She chaired the “How Clean Is Clean” Working Group of the National Environmental Policy Institute from 1993-98 and served at the request of former EPA Administrator William Ruckelshaus on the Enterprise for the Environment Task Force, which examined new directions for U.S. environmental policy.

Ms. Scarlett received her B.A. and M.A. in political science from the University of California, Santa Barbara, where she also completed her Ph.D. coursework and exams in political science and political economy.

MARK SCHAEFER
NATURESERVE

Mark Schaefer is presently President and CEO of NatureServe, an international nonprofit scientific organization dedicated to providing data and tools to inform conservation decision-making. From 1996 to 2000 he served as Deputy Assistant Secretary, and later Acting Assistant Secretary, of the Interior for Water and Science. In this position he provided policy guidance to the U.S. Geological Survey and the Bureau of Reclamation. He also oversaw the Federal Geographic Data Committee, the federal government's coordinating body for geospatial data. In addition, he served as chair of the National Science and Technology Council's Ecological Systems Subcommittee, which is responsible for coordinating ecosystem science activities across federal agencies.

He is presently serves on the Board on Earth Sciences and Resources of the National Research Council, the National Commission on Science for Sustainable Forestry, and the Science Advisory Board of the Department of the Interior's Bureau of Land Management. He was a trustee of the Morris K. Udall Foundation from 1996 to 2000.

Dr. Schaefer was Acting Director of the USGS from October of 1997 to February of 1998. He previously served for three years as Assistant Director for Environment in the White House Office of Science and Technology Policy, where he was responsible for a variety of environmental science, technology, and education issues, including a major initiative to advance the development and diffusion of environmental technologies.

From 1989 to 1993, he served as senior staff associate and director of the Washington Office of the Carnegie Commission on Science, Technology, and Government, an activity of the Carnegie Corporation of New York. While with Carnegie he contributed to a number of studies related to U.S. environmental and science policy. He was a staff member at the congressional Office of Technology Assessment (OTA) from 1987 to 1989, initially as a congressional science fellow. For five years beginning in 1988, he taught an environmental policy seminar for Stanford University's

Stanford in Washington program. A biologist by training, he received a B.A. from the University of Washington, and Ph.D. from Stanford University. After completing his undergraduate degree in 1977, he worked for five years in the U.S. Environmental Protection Agency's Office of Research and Development.

He and his wife Jo Ann have two children.

GREG SCHILDWACHTER
ENVIRONMENT AND PUBLIC WORKS COMMITTEE

Dr. Greg Schildwachter [shild – wok – ter] is the Staff Director of the Water, Fisheries & Wildlife Subcommittee of the Environment and Public Works Committee in the Senate. He was appointed last year by Idaho Senator Michael Crapo. Before his position as Staff Director, he served as Policy Advisor in Idaho Governor Kempthorne's Office of Species Conservation. The OSC is charged with developing state policies and programs for species listed under the Endangered Species Act. Greg covered issues that promoted incentive-based roles for landowners in species conservation

Greg holds a Ph.D. in Wildlife Biology from the Boone and Crockett research program at the University of Montana, where he studied agreements to conserve endangered species on private land. He earned a Master of Science degree at the University of Tennessee, where he studied the reintroduction of red wolves in Great Smoky Mountains National Park. Greg earned a Bachelor of Science, Forest Resources, degree at the University of Georgia.

Greg formerly managed the wildlife program for the Intermountain Forest Association, which covered public and private forestlands in Montana and Idaho. Greg has studied at the Political Economy Research Center in Bozeman, Montana, and worked with the Caesar Kleberg Wildlife Research Institute in Kingsville, Texas. He has also worked with the U. S. Fish and Wildlife Service, the Southeastern Cooperative Wildlife Disease Study, and the National Wildlife Federation.

Greg enjoys outdoor recreation, people, the arts, and athletics. He learned to hunt and fish on his family's

property in Watkinsville, Georgia, where he advises and assists in managing the forest resources. He has held several leadership positions in and outside of conservation and professional groups. His favorite hobbies include basketball and cowboy poetry.

JAMES M. SOUBY
OQUIRRH INSTITUTE

Jim Souby is the President and Chief Executive Officer of the Oquirrh Institute, a private think tank of corporate CEOs and former governors headquartered in Salt Lake City. The Institute focuses on public-private policymaking and demonstrates new programs in education, environmental management and health research. It was founded by Utah Governor Mike Leavitt and is chaired by William N. Shiebler, CEO of Deutsche Asset Management in New York City. Mr. Souby began his new position November 15, 2003.

Previously, Mr. Souby was Executive Director of the Western Governors' Association, which comprises the governors of 18 western states and 3 U.S. flag islands in the Pacific. On behalf of the 21 governors he directs public policy research by staff, state working groups and contractors; develops proposed regional policy positions; and, oversees projects that demonstrate more efficient and effective approaches to policy implementation. He previously served as Executive Director of the Council of Governors' Policy Advisors, a national association of state policy and planning directors. In state government he served as the Director of Policy Development and Planning and Chairman of the Coastal Policy and Energy Policy Councils for the Governor of Alaska and as an administrator in the Alaska Department of Labor.

In the private sector he served as managing partner in a geological and geophysical consulting firm in Alaska. His other business interests included a commercial radio station, a remote wilderness lodge, and a construction and real estate development firm, all in Alaska.

DEAN B. SUAGEE
HOBBS, STRAUS, DEAN & WALKER , LLP

Mr. Suagee is Of Counsel to the law firm of Hobbs, Straus, Dean & Walker, LLP, Washington, D.C., a firm that specializes in serving as legal counsel for American Indian and Alaska Native tribal governments and tribal organizations. His practice emphasizes environmental law and cultural resources law. He is also an adjunct professor at Cornell Law School, where he teaches Federal Indian Law.

From 1998 to 2002 he was the Director of the First Nations Environmental Law Program at Vermont Law School. His experience also includes positions with the National Congress of American Indians and the U.S. Bureau of Indian Affairs.

Mr. Suagee is the author of a number of law journal articles on environmental and cultural resources law in Indian country. His most recent publication is "Indian Country Environmental Law," a chapter in the multi-volume treatise *Environmental Law Practice Guide* (Matthew Bender). For a list of published articles, see www.hsdwlaw.com/attorneys/bio-suagee.htm. He has been involved in many continuing legal education programs in this field, both as an instructor and as an organizer. As a member of the American Bar Association, Section of Environment, Energy & Resources, he serves as a Vice-Chair of the Committee on Native American Resources and an Assistant Editor for *Natural Resources & Environment*, an ABA quarterly journal. As a member of the District of Columbia Bar he is the chair of the Indian Law Committee in the Environment, Energy and Natural Resources Section.

Mr. Suagee received his B.A. from the University of Arizona in 1972, J.D. from the University of North Carolina in 1976, and LL.M. in international legal studies from the American University in 1989. He is a member of the Cherokee Nation.

MICHAEL J. SULLIVAN

ROTHGERBER JOHNSON AND LYONS LLP

Mr. Sullivan is a third-generation Wyomingite born in 1939 to a legal family with deep roots in the state. His grandfather was a lawyer in Laramie and his father was a lawyer in Douglas, where Mike grew up. He earned a B.S. in Petroleum Engineering (1961) and his J.D. with honors (1964) from the University of Wyoming. He practiced at the Casper firm of Brown, Drew, Apostolos, Massey & Sullivan (1964-1986) and was elected to two terms as Wyoming's Governor (1987-1995). His reelection was by the largest margin in the state's history.

While Governor he chaired the Western Governors' Association (1992-1993) and the Interstate Oil and Gas Compact Association (1991), and served on the National Governors' Associations' Executive Board. He was a fellow of the Institute of Politics at Harvard's Kennedy School of Government (1996) and served as U. S. Ambassador to Ireland (1999-2001), returning to Casper in September, 2001, where he joined the regional law firm of Rothgerber Johnson & Lyons as special counsel.

He is a member of the Wyoming and American Bar Associations, a director of Allied Irish Bank Group and of the Ireland-American Alliance, also a member of the North American Advisory Board of Dublin's Smurfit Business School. He received the Wyoming National Guard's Distinguished Service Medal, the University of Wyoming Outstanding Alumnus Award and the Wyoming Heritage Society's Award of Merit.

He is a passionate fly-fisherman, hunter, and golfer. He and his wife, Jane, have three grown children, Michelle, Patrick and Theresa, and five grandchildren.

TERRY WILLIAMS

TULALIP TRIBES OF WASHINGTON

Terry Williams has been employed with Tulalip Tribes Natural Resources for 19 years as the Fisheries and Natural Resources Commissioner. Terry was appointed for two years by Ms. Carol Browner, Administrator of EPA to establish a new office with EPA to specifically address environmental issues of Indian tribes nation-

wide. After consulting with tribes throughout the US he developed, operating procedures and agenda and managed the budget.

He was also appointed to the Northwest Indian Fisheries Commission since 1985 and Vice-Chairman from 1992-95. Pacific Salmon Commission, Southern Panel from 1985 to present. He has chaired the panel for six of these years. He was selected by Washington and Oregon Treaty Tribes and appointed by the United States Department of Interior to represent tribal interest in the United States-Canada Salmon Interception Treaty annual salmon harvest management and allocation deliberation at negotiations. Participate in all preparation and negotiation session of the Southern Panel and Pacific Salmon Commission. He is a representative since 1986 to present on the Pacific Management Council for the Tulalip Tribes United Nations Conference on Biodiversity- United States Delegate since 1997. Appointed by the Secretary for Policy and International Affairs office Department of the Interior to represent Indigenous Peoples of the United States delegation to the United Nations Conference on Biodiversity. International Association of Impact Assessment Indigenous Peoples Committee where he is co-chair since 1997.

He participated in the development of Treaty of Indigenous Peoples International for protecting the culture and economics of members of Native peoples. He was appointed to the Regional Interagency Executive Committee by President Clinton in 1993 to respond to the Endangered Species Act by developing a regional forestry implementation plan for the Pacific Northwest. He was appointed by the Governor 1985-1995 to the Puget Sound Water Quality Authority to represent Washington Tribes in developing plans to improve the quality in Puget Sound. He is a member of the Timber, Fish and Wildlife Advisory Group since 1986 and was co-chair from 1992-1993. A tribal representative from 1987-1991 on the Governor's Wetlands Forum. A member of the Tribal Caucus from 1990 to 1994 for Water Resources Forum. He is on the Board of Directors in 1988 for the Center for Streamside Studies.

Terry served on the Board of Directors for Institute of Environmental Studies, on the Board of Directors for Adopt a Stream Foundation, as a Board member of Native American Fish & Wildlife Society, and as a Forum member of Agricultural Forum and the Board of People for Puget Sound and currently for Central Washington University on the Law & Justice Committee. Terry is also on the Executive Committee of Tri-County ESA forum and the Multi-Jurisdictional shared strategy forum.

He received his A.A. degree in 1977 from Everett Community College in Criminal & Law Enforcement. He graduated with a B.A. 1979 from Central Washington University in Law & Justice.

Among his achievements is the Washington State Environmental Excellence Award in 1988, selected by the Governor to receive an award recognizing dedication and contribution in improvement of the state's environmental quality. He was honored with the Washington State Environmental excellence award in 1990 and also selected by the Governor of Washington to receive an award for work on developing the Chelan Agreement and the implementation plan for the Chelan Water Resources Forum.

JOHN PAUL WOODLEY, JR.
U.S. DEPARTMENT OF DEFENSE (ATTENDING FOR
RAYMOND DUBOIS, JR.)

On October 2, 2001, Deputy Under Secretary of Defense (Installations and Environment) Raymond F. DuBois, Jr., announced the appointment of John Paul Woodley, Jr. as Assistant Deputy Undersecretary of Defense (Environment).

Mr. Woodley is the principal assistant and advisor to Deputy Under Secretary DuBois for all environmental, safety, and occupational health policies and programs in DoD. Those programs include cleanup at active and closing bases, compliance with environmental laws, conservation of natural and cultural resources, pollution prevention, environmental technology, fire protection, safety and explosive safety, and pest man-

agement and disease control for Defense activities worldwide. He will also advise DuBois on international military agreements and programs pertaining to environmental security.

Prior to his appointment, Mr. Woodley served as Secretary of Natural Resources in the Cabinet of Virginia Governor Jim Gilmore from January 1998 until October 2001. As Secretary of Natural Resources, Mr. Woodley supervised eight Virginia agencies responsible for environmental regulation, permitting and enforcement, natural and historic conservation, and outdoor recreation, including fisheries and wildlife management.

Prior to his appointment as Secretary of Natural Resources, Mr. Woodley served as Deputy Attorney General of Virginia for Government Operations beginning in 1994. The Government Operations Division of the Attorney General's Office represents all state agencies assigned to the Secretaries of Administration, Finance, Transportation, Commerce and Trade, and Natural Resources, in addition to the Virginia Alcoholic Beverage Control Board, the Workers' Compensation Commission, the Virginia Lottery and the Virginia Retirement System.

Mr. Woodley attended Washington & Lee University in Lexington, Virginia, on an Army R.O.T.C. scholarship. He received a Bachelor of Arts degree from Washington & Lee in 1974, and was elected to Phi Beta Kappa. Mr. Woodley also attended the Law School at Washington & Lee, where he received his juris doctor degree cum laude in 1977.

Mr. Woodley served on active duty with the U.S. Army Judge Advocate General's Corps from 1979 until 1985 and holds the rank of Lieutenant Colonel in the Army Reserve, and has been awarded the Army Achievement Medal, the Army Commendation Medal (1st Oak Leaf Cluster), and the Meritorious Service Medal (2nd Oak Leaf Cluster). Mr. Woodley, is a native of Shreveport, Louisiana. He and his wife, Priscilla, have three children, Elizabeth, Cornelia, and John Paul III.

APPENDIX F:

NEPA/ECR Case Reports

1. Applegate Partnership Case Report

I. Background

The Applegate Watershed is located in Jackson and Josephine counties in Oregon, and Siskiyou County in California. Land ownership is 70% federal (Bureau of Land Management and Forest Service); the rest is mostly private and also includes some State and county lands. About 3,000 people live in southwest Grants Pass, which is part of the watershed; the other 9,000 or so people live in mostly rural areas with no incorporated towns.

The Applegate Watershed is home to people asserting a variety of interests; loggers, ranchers, environmentalists, and many others. In the early 1990's two individuals with seemingly divergent interests, Jack Shipley, an avid environmentalist, and Jim Neal, a long time logger, decided that a forum was needed to provide for structured discourse about Watershed issues. The two men formed the Applegate Partnership. The Partnership is open to the public, and meets weekly. The Partnership did initially have representatives from the BLM and Forest Service, but these individuals withdrew from the Partnership because of FACA concerns. The Partnership is now completely private in its membership. The board members of the Partnership include the following: environmental group representatives, agriculture representatives, a timber industry representative, a mining/geology representative, a representative from Southern Oregon University or Rogue Community College, and mem-

bers at large representing geographic areas. Other members of the partnership serve on one or more subcommittees that deal with fire and fuels, forestry, and transportation. During its early years, the partnership used facilitators for its meetings. The Partnership has since decided to have its members facilitate most meetings. Controversial topics, however, are still facilitated by an outside party.

The goal of the Partnership is to develop proposals to promote the health of the Applegate Watershed and the communities therein. This successful collaboration process has yielded proposals for many ecologically appropriate projects and management recommendations. Many of the projects focus on restoration while also creating opportunities for local employment. Examples include riparian planting on private lands, installation of fish screens, fencing off streams, and reducing the risk of wildfire. The largest proposal to date now being implemented is the Applegate Fire Plan, a comprehensive fire and fuels reduction strategy for the Applegate Valley developed by the partnership with National Fire Plan funding. The Applegate Fire Plan has 26 different agency partners, including the Oregon Department of Forestry; county planning, GIS and emergency services departments; and others. Development and implementation of the Applegate Fire Plan has received over \$2 million in funding, including \$250,000 per year for three years as incentive funding for project implementation on private lands. Another two successes of the Partnership are that federal agen-

cies have acceded to its request to end the practice of clear cutting on federal land within the Applegate watershed, and agreed to do full environmental review of salvage harvests despite the applicability of a statutory waiver at that time.

The group has moved from consensus to a supermajority (can have two dissenting votes) for making decisions. The Applegate Partnership works closely with the Applegate River Watershed Council, which is funded by the State and often provides funding to carry out Partnership proposals.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The Partnership proposes projects that will be ecologically appropriate, economic beneficial, and socially acceptable. The collaborative process gives agencies a sounding board for a cross section of interests, and often brings middle-ground solutions to the table.

Future Generations: This collaboration process yields ecologically appropriate projects benefiting future generations. The long-term impacts of decisions are always considered by the Partnership.

Dissemination of Information: Learning is shared through outreach and education by board members. The Applegate Fire Plan has been presented to and endorsed by the Western Governor's Association, and has been used by agencies as a model. The agencies made a flyer about the fire plan. Presentations have also been made to the Yale School of Forestry and other universities, and the Federal Emergency Management Administration. A newsletter (the "Applegator") is published and distributed to all households in the watershed about resource and community issues; its editor frequently attends partnership meetings.

How use of science enhanced process: A researcher at the Forest Service's Pacific Northwest Research Station first provided research assistance to the partnership; now Southern Oregon University, Oregon State University, Yale, and Northern Arizona University have taken on part of the role and provide fire and fuels reduction research, computer modeling, and other

research activities. As one of ten Adaptive Management Areas, the Applegate depends on a strong monitoring program. The Partnership also utilizes field trips to discover the facts relating to on-the-ground issues. Also, the merging of maps across all ownership through Geographic Information System (GIS) has reinforced the perspective that this place is unique and merits a comprehensive integrated approach.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Balanced representation of all essential interests
- ❖ Short-term and long-term implications of decisions explored and weighed
- ❖ Responsible and sustained engagement of all parties
- ❖ Process is voluntary, informal and flexible (not overly prescriptive)
- ❖ Structure allows for constructive discourse—agendas circulated beforehand, ground rules developed and enforced.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The partnership made a conscious decision to work with the agencies pre-NEPA. Their input is used to help develop purpose and need, and proposed actions. One person interviewed commented that by the time NEPA happens, the public process is too late to make significant changes; the agencies already have a year or more of investment.

National/Local: While the Partnership is primarily local in focus, it has worked on specific projects with the World Wildlife Fund, Defenders of Wildlife, and the Environmental Defense Fund. For example the Environmental Defense Fund is partnering with the Applegate Partnership on a project to integrate requirements of the Endangered Species Act and the Clean Water Act. Board members need to have time to stay informed to stay on the board.

Legitimacy of forum: Although the Applegate Partnership operates under a formal agreement, that agreement is very general and the group has more of a constituency than a membership. Meetings are open, and the consistency of participants over time helps avoid conflicts.

Decision-making authority: The Partnership develops proposals; it is not in a decision making or even an advisory role.

2. Channel Islands Marine Reserve Working Group Case Report

NOTE: This was a “consensus-building” effort, not a conflict resolution process.

I. 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 and convened through the Sanctuary’s Federal Advisory Committee Act (FACA)-exempt Sanctuary Advisory Council (SAC). The sanctuary is managed by the National Oceanic and Atmospheric Administration (NOAA) and surrounds Channel Islands National Park (a unit of the National Park Service). Fisheries within the state waters of the sanctuary are managed by the California Department of Fish and Game. In addition to these agencies, interested parties included the National Marine Fisheries Service, and representatives of environmental organizations; consumptive and non-consumptive recreational and commercial interests.

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 came before the start of the environmental analysis process, which in this case was a state (California Environmental Quality Act-CEQA) process rather than the federal NEPA process, since the state had jurisdiction over fisheries management. 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 third party neutrals

engaged in considerable between meeting communications and 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.

The group reached agreement on a problem statement, goals and objectives, and 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 sizes of a network of marine reserves within the sanctuary. They also reached agreements regarding monitoring approaches and recommendations for implementation. The group improved productive working relationships, and generated a significant knowledge base relevant to scientists, decision makers, resource users and the public. Although the group did not reach full consensus on a proposal for marine reserves, the issues in dispute were narrowed. Some participants returned to their original positions on issues and litigated the eventual state agency decision.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The process resulted in a more informed and higher quality decision 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. It spoke of “developing new management strategies that encompass an ecosystem

perspective and promote collaboration among competing interests”. 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.

Future Generations: 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 their kids to share the same experiences that they had known.

Dissemination of Information: A very positive outcome 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. They developed a better understanding of both the substance and process of marine resource policy making. The working group members realized that bringing along their constituents was key to building broad support and they developed individualized outreach plans to help ensure that this occurred.

Pragmatic Solutions: 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 be developed to address enforcement requirements.

How use of science enhanced 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 participating agencies. Although the Science Panel included a range of natural scientists, one critique was that the

perspectives of applied scientists, especially fisheries management scientists, were not included on the Science Panel. 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, some participants did not always view them as credible and impartial. When using scientific advisory panels, it is important to be clear about roles, responsibilities and relationships between technical experts and stakeholder advisory groups. A GIS-based decision support system tool was developed by the sanctuary’s staff and used extensively by the working group. Numerous iterations of GIS maps were used to help the working group build common ground on a recommendation and obtain feedback from their constituencies and the general public.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Balanced representation of all essential and affected interests and values
- ❖ Participants have access to best available information
- ❖ Use of decision-support technology to facilitate engagement and evaluate alternatives

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This was an “upstream” effort, before the start of the NEPA/CEQA process, but much of the group’s work was later used in the environmental analysis process. Since the state environmental analysis process followed the dispute resolution process, this provided another forum to the participants who were dissatisfied to pursue their interests.

Legitimacy of forum: Working under the Sanctuary’s FACA-exempt advisory council added legitimacy and made the working group exempt from FACA also.

Decision-making authority: The Sanctuary Advisory Council was committed to passing on the working group's agreements essentially intact to the Sanctuary management. 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.

3. Collaborative Environmental and Transportation Agreement for Streamlining (CETAS) Case Report

I. Background

After the passage of the Transportation Equity Act for the 21st Century (TEA-21), the number of transportation projects in Oregon doubled. To streamline the review process, in 1996 Oregon merged its NEPA and Section 404 processes. However, ODOT's increased workload prevented the merger from being fully implemented until 2000. 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.

Agencies scope projects to determine if they are Major Transportation Projects likely to require an Environmental Assessment or Environmental Impact Statement. For these projects, 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 endangered species listings occur.

Streamlining efforts for minor transportation projects focuses on broadening the use of programmatic agreements and implementing wetlands and habitat banking. Once a programmatic agreement is in place, it can be applied to elements of larger projects as well.

Transportation and resource agencies in Oregon discuss issues early in the NEPA process through regular working group meetings, fostering 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 group does not have a neutral facilitator; meetings are led by ODOT participants.

Participating agencies include the federal and state Departments of Transportation, as well as a variety of other State and Federal agencies. Early resource agency involvement accelerates the NEPA process by avoiding agency conflicts and subsequent permit delays during final design, allowing projects to be completed in budget and on time. Efficiency in the project permitting process is achieved without compromising agency missions. Obstacles had to be overcome. For example, some resource agencies did not have the staff to participate. ODOT now funds three TEA-21 coordinator positions at NMFS, one position at FWS, and three positions at the Oregon State Department of Fish and Wildlife.

An example of success: ODOT was able to obtain permits in one week to build a temporary culvert in place of a failing bridge, allowing emergency equipment such as fire trucks to reach a part of eastern Oregon. The culvert was removed in time for local endangered fish to spawn, and the bridge repaired in an environmentally sound manner.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: CETAS 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.

Future Generations: 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 the CETAS meetings, and by suggesting issues for and working out programmatic agreements.

Information Dissemination: This occurs through consultations between agency participants and peers within their respective agencies, for both projects at various NEPA steps, and programmatic issues. The agency representative interviewed felt that there was still room for improvement in this area.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Clear goals, objectives, and expectations defined
- ❖ Responsible and sustained engagement of all parties
- ❖ Structured process design to facilitate timely productive and effective engagement
- ❖ Process consistent with existing laws and regulations, agency missions, policies and legislative parameters

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The CETAS process covers the whole “midstream” spectrum, 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.

Legitimacy of forum: Operating under a formal agreement gives the group credibility and helps ensure that it 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.

Decision-making authority: The group operates by consensus, which has worked well with the one exception described under “Upstream/Downstream”. For this disagreement, an elevation process was developed whereby the next level of decision-makers within the agency attempts to reach consensus; this process will now be used if lack of consensus occurs in the future.

4. Coconino National Forest Antelope Herd Management Plan Case Report

I. Background

This collaborative effort occurred during the NEPA process for management of two grazing allotments on Anderson Mesa in the Coconino National Forest in northern Arizona. In 2000-2001, an environmental assessment was being prepared with the involvement of the Diablo Trust, a collaborative stewardship group that included the permittees for these two allotments in its membership. The group included the Forest Service as well as a variety of State agencies, and environmental groups. Because of the broad scope of projects being proposed, the Forest Service decided to prepare

an Environmental Impact Statement rather than an environmental assessment. With the help of the U.S. Institute for Environmental Conflict Resolution and a contracted neutral, parties who had previously opted out of the earlier collaborative process then joined the group. The group’s purpose was to reach agreement on the possible causes of the decline of antelope populations in the area, and approaches to management that would prevent further decline in herd size.

This was a collaborative stakeholder group with neutral facilitator. The group met intensively for about a year and a half in large groups as well as in small groups. The meetings were open to all who were inter-

ested and meetings were periodically attended by the media. Parties continue to meet twice a year in the context of implementing adaptive management strategies. The group also communicates more often via electronic mail.

Agreements were reached on a draft management plan, which included proposals for vegetation treatments and fencing, grazing recommendations, ephemeral wetlands projects, nutritional supplements, plans for drought and winter emergencies, predator control, monitoring, and adaptive management. These agreements were incorporated into the Anderson Mesa Pronghorn Plans developed by the Arizona Fish and Game Department, and an EIS for the two grazing allotments on National Forest lands. Other key outcomes were that this process is being adapted for use on other planning efforts undertaken by this National Forest; and although litigation was not avoided, the issues in dispute have narrowed, and the litigants continue to have a working relationship with the Forest Service.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Enhancing the quality of wildlife habitat and wildlife health were key features of this effort. While the group recognized that “no cattle was not an option”, ranchers were willing to reduce numbers grazed to meet environmental values, to the extent economics would allow (reductions were in the 5-10% range). This effort was natural science-based, but social issues were also addressed.

Future Generations: A sustainable resource base for wildlife and ranching was a goal. Some parties feel the goal was fulfilled, and some feel that the efforts did not go far enough. The Diablo Trust, an existing multi-stakeholder group that this effort built on, is committed to principles of ecological sustainability. Arizona Department of Game & Fish organizes the Adaptive Management meetings and has worked with the Forest Service in implementing land-based management strategies outlined in the antelope management plan. Representatives from other participating interests have provided volunteer support to the land-based activities. The collaborative group adopted an adaptive manage-

ment plan in their recommendations, and representatives of the group continue to be involved in implementation and monitoring.

How use of science enhanced process: Scientific reports relating to the antelope were critical to developing proposals for discovering the cause of decline in the antelope population.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Balanced representation of all essential and affected interests and values
- ❖ Responsible and sustained engagement of all parties
- ❖ Structured process design to facilitate timely productive and effective engagement
- ❖ Third-party neutral assistance

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This collaborative effort could be considered mid-stream in terms of NEPA because it occurred after starting an environmental assessment and before beginning an environmental impact statement. Some, but not all, of the parties to this effort also collaborated on the EA. The agency slowed down the NEPA process until all interested parties were brought in, which was helpful.

Participant factors: The group included federal and state agencies, the Diablo Trust, ranchers, and representatives of state and national wildlife organizations. The national wildlife organization appointed the representative from the state organization to represent the national group in the process. Differences in power and influence were leveled by working in small teams and through one-on-one conversations with the neutral facilitator for the purposes of capacity building.

Legitimacy of forum: This process was able to build on an existing multi-stakeholder group, in this case the Diablo Trust, whose members were already comfortable with collaboration. Additional parties were

engaged to assure full balanced representation of affected interests. After an initial private organizing meeting, the meetings were held regularly in public.

Decision-making authority: In this case, the decision authority rested with the Forest Service. The Forest

Supervisor made a commitment to consider incorporating elements (if not all) of the group's work into the alternatives analysis of the EIS. There was not a guarantee that it would be the preferred alternative.

5. Corridor H Case Report

I. Background

Road construction began in the 1960's on a 13-state corridor system for the Appalachian Mountains. However, the proposed Corridor H highway through West Virginia was not built due to the mountain topography, construction costs, and estimates of traffic volume. By the early 1990's all of West Virginia's corridors were open with the exception of Corridor H east of Elkins.

At the heart of the conflict over the highway were disputes regarding economic development, highway safety, and preserving historic resources. Some area residents, tourist businesses, and environmental groups opposed the construction. They raised questions about whether Corridor H would indeed bring the intended economic benefits, and whether it would also negatively impact historic and recreation areas. A variety of citizens' groups throughout the state formed a coalition that opposed the state's plan and successfully halted construction of most of the highway. They (environmental, historic preservation, property owner groups) brought a lawsuit against the Federal and State Departments of Transportation based partly on the alternatives requirements of NEPA and partly on the historic preservation process requirements of Section 4(f). After a mediation attempt failed to reach settlement, the Court of Appeals decided that the NEPA alternatives were appropriate, but that the agencies had not done a proper job on the Section 106 (historic preservation) process, and sent the case back to District Court. After the parties reached agreement, the agencies had to do a supplemental Environmental Impact Statement and a new Record of Decision for agreed-to changes in alignment. This case represents a melding of what can be done in the litigation process with what occurs with the NEPA process.

Following a ruling by the Federal Court of Appeals for the District of Columbia that allowed construction to proceed at a slower pace than the state proposed, the case was co-mediated by a contracted mediator and the Director of the District of Columbia Federal courts' alternative dispute resolution program between late 1999 and early 2000. The mediators organized and led discussions on issues that ranged from ways to protect historic and scenic resources (including alternative routes and designs for the highway), to use of public rights-of-way for signs. Issues mediated included the Section 106 process, how to address the NEPA process, and substantive issues around historic preservation, the environment, economic development in the corridor, and highway alignment. All parties to the litigation were represented in the mediation, although some participants represented more than one organization. Through mediation the participants were able to look at the underlying issues, which couldn't be done in litigation. The mediation effort was a six-month process.

With the mediators' leadership, the parties reached an agreement that settled the lawsuit and allowed construction of the highway to move forward. The agreement spelled out changes to the sequencing and timing of construction as well as the route and design of the highway. It also established mechanisms for dealing with disputes that might arise during construction of the highway with regard to endangered species, historic resources, and requirements of NEPA. The subsequent NEPA decision was not litigated and is being implemented.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Ecological health was addressed in the location and design of the highway by

considering the impact of construction on endangered species. Economic well being of several towns along the highway was addressed in the settlement, although not every economic interest was represented among the participants. The procedural interests of participants were balanced by establishing within the agreement a process for resolving disputes that arise during construction of the highway.

Future Generations: As noted above, ecological health was addressed by taking into account the impact of construction on endangered species

Dissemination of Information: Each participant at the table took back information to their constituencies. However, this was a confidential process and the agreement was not revealed until the settlement was signed. The public process was the supplemental NEPA analysis done afterwards.

Pragmatic Solutions: Various options were considered around the location and design of the highway. These were worked through with practicality as a factor as well as economic, ecological, social, and cultural factors.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ **Clear goals, objectives and expectations defined**
- ❖ **Structure process design to facilitate timely productive and effective engagement**
- ❖ **Representatives keep their constituents informed and have authority to negotiate on their behalf**

- ❖ **Scope of issues for negotiation narrowed for practical resolution**
- ❖ **Usage of a neutral mediator**

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Litigation process is the “downstream” end of the NEPA process. The NEPA and Section 106 processes had to be redone as a result of the late resolution.

Participant factors: Mediated litigation does not necessarily involve a balance of all interests. Most of the stakeholder groups involved were statewide organizations, one was a local chapter. An issue arose at the end of the process, as the group was ready to sign the settlement. There was a question of one the participating groups being able to sign off on the settlement because it was a local chapter of the national organization. The national group did sign off after modifications were made to the preliminary agreement. A knowledge imbalance existed in regard to traffic modeling, engineering and cultural resources, so time was spent educating the participants. Power was given to participants by virtue of being in the litigation process, and was somewhat equalized in this case since the court had found for each side on some issues.

Legitimacy of forum: The formality of going through the judicial process, and a formal agreement to mediate, provided legitimacy to the forum.

Decision-making authority: This authority was shared in reaching a settlement within the mediation process, but the State and FHWA were the ultimate decision-makers for the subsequent NEPA decision.

6. Everglades Case Report

I. Background

In early 2001, the U.S. Army Corps of Engineers contacted the U.S. Institute for Environmental Conflict Resolution to inquire about neutral assistance in resolving a long-standing interagency conflict over the use and interpretation of hydrologic modeling results

related to emergency water management decisions designed to protect the endangered Cape Sable seaside sparrow. The Corps was working on an EIS for an Interim Operational Plan (IOP) to protect the endangered sparrow until a longer-term plan could be completed. The Corps had already completed a Draft

Environmental Impact Statement, but it had not been well received by other agencies. The other agencies involved included Everglades National Park (ENP), U.S. Fish and Wildlife Service (USFWS), and the South Florida Water Management District (SFWMD), whose concurrence the Corps needed to implement a viable decision. Because the interagency collaboration was initiated after the issuance of the draft EIS, which did not include cooperating agencies, the lead agency did not formally designate the other three agencies as cooperating for the subsequent Supplemental EIS. However, once engaged, they functioned essentially as cooperating agencies. (They have since negotiated a Memorandum of Understanding together and have been designated cooperating agencies for a subsequent EIS process for the longer-term plan.)

Several months of negotiations were facilitated by the U.S. Institute and two Florida-based contractors. Differing agency cultures and institutionalized negative attitudes towards each other's agencies were major challenges noted in the conflict assessment. The collaborative process was specifically designed to help address these difficulties; neutral facilitation was a key part of the process design. Ongoing neutral facilitation assistance has been provided to deal with implementation challenges that have been addressed through ad hoc interagency negotiation teams.

Negotiations led to an interagency agreement on a preferred alternative, which was incorporated into a Supplemental DEIS that was then issued for public comment. The preferred alternative continued to be refined based on stakeholder comments for the FEIS and up until the ROD was issued. The collaborative group also agreed on protocols for monitoring. The agencies were generally satisfied that a higher quality decision resulted, which is currently being implemented despite subsequent litigation initiated by a federally recognized tribe. During implementation, some additional facilitated discussions were needed to clarify and interpret the agreement. The four agencies are currently involved in a multi-stakeholder EIS process for the longer-term plan that will actively involve other state, local, and tribal governments, as well as concerned participants and nongovernmental organizations.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Ecological values, including protection of endangered species and other wildlife habitat, were incorporated along with economic and social concerns regarding agricultural and residential flooding. Feedback was obtained from external groups who were not directly involved in the process. Some felt that the single-species approach of the Endangered Species Act made it more difficult to meet this goal. Natural scientists and engineers were involved, but not economists or sociologists. In this case, flooding impacts served as the primary surrogate for socioeconomic concerns.

Future Generations: Participants acknowledged the importance of their efforts to help restore the Everglades ecosystem for future generations. Recovery of an endangered species was of particular concern to the U.S. Fish and Wildlife Service. All the agencies sought to ensure the sustainability of the ecosystem while minimizing immediate economic impacts. Specific on-the-ground improvements have already resulted with the Corps expediting the construction of some features to enhance the existing water delivery system.

How Process enhanced Use of Science: The participants are now working to establish measurable performance standards for the ecosystem being restored. Modeling was used to predict effects on flood protection and establishment of the desired hydrologic conditions for the endangered sparrow. Refinements were made to existing models, which were originally designed for use at different scales. Results had to be extrapolated, taking into account the limitations of the models. An interagency team collaboratively developed a Scope of Work for the development of a new hydrologic model to be used for the longer-term planning process

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Initial assessment determines appropriateness of ECR approach and process design
- ❖ Process design addresses relevant inter- and intra-governmental relationships
- ❖ Responsible and sustained engagement of all parties
- ❖ Structured process design to facilitate timely productive and effective engagement
- ❖ Skilled neutral facilitation
- ❖ Agency leadership engaged.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This case could be considered mid-stream in that agencies collaborated on an interim plan that preceded a longer-term planning ef-

fort but only after arriving at an impasse following release of the draft Environmental Impact Statement. While the draft EIS prepared by the lead agency provided a starting point for negotiations, it might have saved time overall if they had worked together from the beginning of the NEPA process.

Legitimacy of forum: Some interested parties wanted more transparency of the interagency negotiations and direct involvement in the decision-making process than was available through the interagency/inter-governmental NEPA process.

Decision-making authority: Interagency negotiation teams reached agreements by consensus on recommendations that were then forwarded to agency leaders for their review and ratification. An “elevation process” was used, whereby if consensus could not be reached by the group, the issue along with areas of agreement and disagreement would be taken up by State or Regional level officials of the participating agencies for further negotiations and resolution.

7. Fire Island National Seashore Case Report

I. Background

Fire Island is a narrow, 32 mile island located off of the south shore of Suffolk County, New York, approximately 40 miles from New York City. The Fire Island National Seashore (FINS), administered by the National Park Service (NPS), makes up 26 miles of the island. FINS was established by Congress in 1963 to conserve and preserve the unspoiled and undeveloped beaches, dunes, and natural features of the area. The seventeen communities within FINS have a combined summer population of 25, 000 residents. In addition, the Department of Transportation estimates that there are over 4 million recreational visits to FINS each summer. Visitors overwhelmingly arrive at the park by ferry, as there are no roads that go through FINS. However, there are two causeways that connect Long Island to the east and west portions of FINS.

Driving on Fire Island is a subject of high emotion. Most driving occurs in the island interior on concrete

or wooden boardwalks pursuant to the NPS off-road driving regulations. These regulations have been a source of controversy since they were implemented in 1987. The regulations allocate a set number of permits to year-round residents, utility companies, and contractors. They allow a certain amount of driving on the beach, in areas that are habitat for rare, threatened, or endangered species, such as the Piping Plover, a small bird that became listed as an endangered species in 1986.

In 1998 the Superintendent of FINS reviewed the regulations, and came to the understanding they were unpopular with a wide variety of user groups on the island, and at the same time, might not be doing an adequate job of protecting rare, threatened, or endangered species, or promoting public safety. NPS partnered with the U.S. Institute for Environmental Conflict Resolution, and hired two experienced mediators to carry out a Conflict Assessment (CA) to determine if the dissatisfaction with the regulations

was a problem that could be solved by a conflict resolution process. The CA contains the results of over 50 interviews and concluded, essentially, that a negotiated rulemaking was likely to succeed if conducted according to the best practices of ECR. The NPS took this recommendation and formed a federal advisory committee (FACA) up of representatives of all the parties that had an interest in Island driving, and included the 17 communities on the island, park visitors, Suffolk County, (including its police force), and other groups. Altogether, 24 interests were represented on the FACA committee. The NPS hired the mediators who performed the CA to facilitate the workings of the committee.

Committee meetings were facilitated through a formalized structure that allowed the parties to agree on a set of ground rules for operation, a “process map”, and a set of principles to underlie the substance of their work. The principles consisted of 14 points, with the first point being that the regulations must protect FINS, including its natural resources, and its communities.

From June 28, 2002, to August 16, 2003, the FACA Committee met five times—four two-day sessions, and a one-day session. The integrity of the process was threatened in the early going when NPS proposed a solution to the problem without seeking any input from the group. This caused several members of the group to question the transparency of the process, and their ownership of the process. The group eventually got beyond their concerns by following the ground rules and the process map, which enabled the parties to work on solutions to the problem. Indeed, when the NPS ran out of funding for the collaborative, local communities made up the funding difference to keep the process going. The group reached consensus on approximately 75 percent of the issues that it considered. These consensus agreements will be reflected in the draft rule. The ground rules allow NPS to take into account the partial consensus reached on the remaining 25 percent of the issues in developing the regulation. Among other things, the Committee developed definitions of permit categories; agreed on the closing of certain federally-owned beaches on a year-round basis, advocated allocating permits on existing practice and

previous regulations, and advocated requiring permittees to go through training in order to qualify for a permit. The Committee also advocated for the establishment of a permanent collaborative body to deal with driving issues.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The participants represented interests that sought access to the beach year-round, and those who sought a greater degree of protection of the parks’ fragile resources. The draft regulations will attempt to balance these interests by protecting the habitat of the fragile environment and wildlife, by promoting public safety, and by allowing for permanent and seasonal residents to enjoy the resources of the island.

Future Generations: One of the central concerns of the process was the health of the six rare, threatened, or endangered species on the island, and how they were impacted by driving. The agreements reached should allow for their protection, enabling them to be enjoyed by future generations. In addition, future generations should have the opportunity to enjoy the Island’s unique character and lifestyle as a result of the balances struck in the agreement.

Fact finding/ use of Science: The process brought together individuals who had never met, despite living on the same island. The process forced these individuals to think of driving in terms of its effect Island-wide, rather than just on their particular communities. This led to more of an ecosystem-wide approach to the crafting of solutions.

How Information was disseminated: Because this effort took place under the auspices of a FACA Committee, all the meetings were open to the public. Minutes and notices of meetings were made available to the public through the FINS website, and other sources. In addition, through regular interaction with the media, many stories about the process appeared in the local and New York City print and television media.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Formal structure of committee
- ❖ Establishment of ground rules, guiding principles
- ❖ Emphasis on interests
- ❖ Use of conflict assessment
- ❖ Use of mediators
- ❖ Establishment of subcommittees for fact finding
- ❖ High degree of autonomy
- ❖ Commitment by Park to adopt consensus recommendations
- ❖ Formation of participant group to continue collaborative effort
- ❖ Commitment by participants to fund collaborative
- ❖ Transparency of Process

IV. How Case Responds to Other Themes of Interest

Upstream/downstream This is upstream—an Environmental Assessment will be issued to accompany the rule making.

Participant factors: Although this was primarily a local issue, there were some clashes that were heightened by the local or national perspective of the particular parties to the dispute. The NPS, for instance must act nationally (particularly in its enforcement role), as well as locally, (as a member of the community). The Suffolk County Police Department, on the other hand, is more concerned about local law enforcement. This divergence of missions led to some conflict during the collaborative process, as the existing regulations restrict to some extent the County Police Department's ability to patrol on the beaches.

Legitimacy of forum: The formal structure provided by the mediators, (and mandated to some extent by FACA), which led to the adoption of a process map, ground rules and a set of principles, gave the parties ownership of the process, and a belief that the process would afford them a fair opportunity to be heard.

Decision-making authority: The NPS noted at the outset that it would be the ultimate decision maker on the content of the regulations. However, it informed the committee at the beginning of its work that it would make all consensus recommendations that were within its legal authority, and consider the majority opinion of the group on all other issues.

8. Glen Canyon Dam Adaptive Management Case Report

I. Background

The Glen Canyon Dam is located in Arizona, and is the last reservoir to store water before it enters the Lower Colorado River Basin. Arizona, Nevada, and California receive most of the water stored by the reservoir, but the basin also includes parts of Utah, Colorado, New Mexico, and Wyoming under the Colorado River compact. Since Glen Canyon Dam was completed in 1963, increasing concern was expressed by the public and federal and state agencies regarding how dam operations may be adversely affecting the downstream environment. In November 1989, the

Secretary directed an Environmental Impact Statement (EIS) be prepared on the operation of Glen Canyon Dam, and the Secretary designated the Bureau of Reclamation (BOR) as the lead agency. This Final EIS, completed in March 1995, received broad and intense interest from water and power users, environmental and conservation groups, federal and state agencies, Indian tribes, and private citizens across the country.

Findings from the EIS indicated that many uncertainties still exist regarding the downstream impact of water releases from Glen Canyon Dam on water, sediment, fish, vegetation, wildlife and habitat, endangered and other special status species, cultural

resources, air quality, recreation, hydropower, and non-use value. In compliance with the Grand Canyon Protection Act (Act) of 1992 (Public Law 102-575), the EIS proposed a process of "adaptive management" whereby the effects of dam operations on downstream resources would be monitored and assessed. The Act and the EIS are the guiding documents for development of the Adaptive Management Program.

The Record of Decision was signed by the Secretary of the Interior in October 1996, and in 1997, Interior Secretary Babbitt established the Glen Canyon Dam Adaptive Management Work Group (AMWG), a Federal Advisory Committee. The AMWG consists of the Bureau of Reclamation, U.S. Fish and Wildlife Service (USFWS), National Park Service, as well a variety of other federal, state, and Tribal agencies, along with environmental groups, user groups, and energy industry representatives. The AMWG makes recommendations to the Secretary on how to protect the resources and meet the requirement of the law. Three proposed changes in management have undergone separate NEPA analyses to date. For example, in the spring of 1996, a weeklong extra release of water was done with an Environmental Assessment (tiered to the EIS). More recently, in 2002, changed operation of experimental flows, and mechanical removal of non-native fish (mainly trout that had been introduced by USFWS years ago) to benefit the endangered humpback chub, were approved with an Environmental Assessment.

The AMWG held its first meeting in September 1997, and officially formed the Glen Canyon Technical Work Group (TWG) as a subgroup to provide detailed guidance on technical and scientific issues and objectives. The Grand Canyon Monitoring and Research Center (GCMRC) conducts the research and monitoring needed to evaluate operations.

The Secretary of the Interior designee chairs meetings of the AMWG. GCMRC brings science to TWG, who brings recommendations to the AMWG. AMWG approves recommendations by two-thirds vote, if needed, after extensive efforts to achieve consensus.

Since November 1999, a mediator/facilitator has participated in those parts of the meetings when sensitive

or contentious issues are discussed. Since October 2002, all AMWG meetings have been facilitated. The facilitator also helps with ad hoc committees, where contentious and thorny issues are often worked through. Ad hoc committees can be formed by AMWG or TWG and there are nine or ten at this time; there is no process for disbanding them.

The group's facilitator started out as an AMWG member, and was contracted to provide "facilitation with a strong mediation component" after having left the member organization. The facilitator helped them form consensus around a mission, vision, and principles, and work through many of the complex and numerous issues. As participants gain trust in the process, they look beyond the dam to other issues in the watershed. AMWG selects members for subcommittees from the larger group in a way that if the small group agrees, the larger group is also likely to agree. Processes to assist the group in difficult decision making, such as process mapping and paired comparisons, have also been used.

Annual agreements on work plans and budgets (the program is funded through hydropower revenues) have been achieved after lengthy discussions. There have been agreements on experiments that will be done, but few policy recommendations thus far. A strategic plan has been completed and sent to the Secretary. Three reports and recommendations have been forwarded to the Secretary. The group reached consensus on vision, mission, principles, goals and management objectives, and has prioritized over 250 information needs in sequence order to guide the work of the research center.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The committee has a balanced make-up; a deliberative process is in place among interested parties whose interests represent a full cross section of interests.

Future Generations: The process should produce better quality decisions about the operation of the dam, and its effect on the Colorado River. This should benefit future generations.

Dissemination of Information: This has been a challenge for the program. An ad hoc group has been formed on public outreach, with funding, but they have not settled on an outreach process. Outreach has been more event-based so far, especially when negative public reactions are expected. Websites, newspaper articles, and magazine articles reach the broader public.

How use of science enhanced process: The GCMRC conducts the research and monitoring needed to evaluate operations; independent review panels conduct the outside review necessary to provide credible science; and protocol evaluation panels are convened at five-year intervals, and then disbanded.

A Science Advisors Board of about 10 high level scientists is a standing body to provide advice on an ongoing basis. It is made up of experts on particular resources and on adaptive management. Outside experts are brought in often. Other approaches that help with scientific issues include issue-focused subcommittees and face-to-face meetings.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Structured, independent forum
- ❖ Use of facilitator (promotes structured discourse)

- ❖ Balanced representation of all essential interests at the table
- ❖ Appropriate use of scientific information
- ❖ Draft agreements are tested to ensure future contingencies are planned for

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Multi-stakeholder collaboration should have occurred earlier (“upstream”). BOR spent \$85-100 million dollars avoiding NEPA according to one person interviewed. It is critical to use a collaborative process at the monitoring and adaptive management stage. An ECR-related structure is needed for this.

Local/National: Representation is local/regional.

Legitimacy of forum: FACA committee meetings, public notices, websites, minutes and reports are available to the public. There is an opportunity for public input at AMWG meetings prior to all recommendations and motions.

Decision-making authority: This group is advisory to the Secretary of the Interior, which issues decisions back down to its agencies, so it is not a threat to individual agencies. Attorneys participating in the process remind the group that these are only recommendations

9. Hanford Comprehensive Land Use Plan Case Report

I. Background

The 586-square mile Hanford Nuclear Site is located in Washington State. The decision to be made was how lands at the Hanford Nuclear Site would be used after clean up, including potential changes in land ownership from the Department of Energy to others. A Federal Advisory Committee, the Hanford Future Site Uses Working Group, was convened before the scoping stage of NEPA. As the lead agency, DOE developed the Purpose and Need for an Environmental Impact Statement (EIS). Cooperating agencies in-

cluded U.S. Fish & Wildlife Service (USFWS), Bureau of Land Management, Bureau of Reclamation, Benton County, Franklin County, and Grant County, and the city of Richland. Consulting governments (the interpretation of NEPA at the time limited cooperating agency status for tribes to tribal lands – this has since changed) included the Confederated Tribes of the Umatilla Indians and the Nez Perce Tribe. The Yakama Nation, an ex-officio participant, was represented at most meetings.

Contracted neutrals facilitated a group of about 50, including those from agencies and the public. Input

from this group, along with public comments from scoping, was used for first Draft EIS. The FACA group was re-chartered as the Hanford Advisory Board under EMAB (Environmental Management Advisory Board) to work on the clean-up aspects. The intergovernmental group continued to work on the Land Use Plan. There was a lot of controversy over the north slope of the river; some wanted it in farm production, others wanted to keep it in federal ownership to maintain treaty rights and expand a National Wildlife Refuge or transfer it to the Bureau of Indian Affairs to be placed in trust for the Tribes who had ceded the land. Some former landowners from before the nuclear site was created wanted their places back. A contractor compiled the EIS with significant assistance from DOE, the Counties and the Tribes. DOE facilitated the intergovernmental group with help from one of the contractor's staff, but different agencies took leadership of issues at different points. The process used was to attempt consensus, with the option for agencies to make their own alternatives -- which is what occurred.

Some of the cooperating agencies and consulting tribal governments strongly favored mutually incompatible future land uses, particularly regarding industrial and agricultural development versus environmental preservation. To provide fair opportunities to analyze competing interests, these agencies developed their own alternatives for consideration in the EIS, using guidelines to yield technically comparable information. All agencies involved also worked on the framework for environmental analyses, and on the land use plan's policies and implementing procedures. The procedures, that became part of the Record of Decision, include continued participation of the consulting and cooperating agencies in future land use decisions. More than one draft EIS was completed. The first one, the Hanford Remedial Action EIS included clean-up actions along with the land use plans, in an attempt to look at the whole picture. The clean-up scenarios were removed at the request of the Environmental Protection Agency, which had jurisdiction over the clean up. A revised draft, the Hanford Comprehensive Land Use Plan EIS, was issued and it included the cooperating agencies. DOE tried to incorporate aspects of the other alternatives in the Preferred Alternative, and DOE

made the decision (DOE's decision-making authority was clear among all parties from the start).

Substantial agreement was reached on the framework for environmental analyses, and for the land use plan's policies and implementing procedures. Part of the decision was trumped by subsequent designation of a national monument for half of the area, using the EIS as the basis for the decision. As a result, one county did not get anything they wanted. (This county is very rural, with orchards and vineyards, and hoped to reduce their fixed water costs as originally envisioned in the 1940's Grand Coulee Dam development. This county is angry with the federal government and no longer participates much in the ongoing groups.) DOE's Record of Decision currently guides the rest of the area. Now USFWS is doing another EIS and Comprehensive Conservation Plan for management of the monument and a wildlife refuge. This new CCP/EIS process is being advised by another DOI chartered FACA group. Currently there are two FACA committees giving advice to two different federal agencies on the same land, which is now under joint administration between DOE and USFWS.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: Half the site went into preservation and is now a National Monument, with the involvement of DOE's Office of Science. The land use designation for much of the rest of the site is Conservation with Mining, which also includes grazing as a tribal reserved treaty right (parties agreed to disagree on that in the EIS). The actual waste site is zoned Industrial Exclusive and has a lower brownfields based clean-up standard. There is another Industrial designation also where local government could expand industry using the existing infrastructure at the site. There was a transfer of 768 Acres of land to Port of Benton during the EIS process and some of the land was sold to industrial companies, and some to the city of Richland for industrial development. Overall, the outcome is a compromise between environmental preservation and social/economic concerns.

Future Generations: A National Monument has been put in place, with good complete information. The

Hanford Reach salmon run has been protected; this is the main run for all of the Pacific Northwest including Canada and Alaska and is under federal treaty with Canada. Native American cultural sites have been protected. An Agency (USFWS) will address access for the public, tribes, research, etc. with a mission more oriented to dealing with public access. There is noting that there is an outlier among the counties that is unsatisfied with the scope of the agreement. The counties' disaffection may be a factor in the future dynamics affecting this area.

Dissemination of Information: This is occurring through the two ongoing federal advisory committees.

Pragmatic Solutions: Allowing each group to write their own alternative, in standard format for EIS analysis, resulted in practical options. The EIS was prepared in a way that Records of Decision could be made no matter which agency ended up administering the land.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Process design addresses relevant inter- and intra-governmental relationships

- ❖ Balanced representation of all essential and affected interests and values

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: Bringing people in at the very beginning, before there is a proposal, works well. Don't be selective; invite your "enemies".

National/Local: Though the parties were mostly local, the EIS received comments from all over the country due to efforts of national environmental organizations. Designation of the area as a National Monument shows that it was clearly a national issue. A factor that helped participation was having a speaker-phone at all meetings, with an open line for whoever wanted to call in. This also helped partners who were 100 to 200 miles away from the meeting place.

Decision-making authority: Although the collaborative groups were advisory to DOE, some on the original FACA committee thought it was more than an advisory group. The Assistant Secretary of Energy was the decision-maker and national headquarters were involved at each step. The parties were aware that some lands could have been transferred to other agencies or private ownership, as ultimately occurred.

10. Karner Blue Butterfly Case Report

I. Background

The Karner Blue Butterfly is a federally listed endangered species that in its larval stage feeds on disturbance-dependent wild lupine plants. The largest populations in the United States occur in Wisconsin. A multi-stakeholder group involving the U.S. Fish and Wildlife Service (USFWS) (joint lead agency), Wisconsin Department of Natural Resources (WDNR) (joint lead agency), state departments of Agriculture and Transportation, five forest products companies, nine utility companies, eight county forests, four county highway departments, five town governments, and a non-profit land trust began meeting to develop a combined Habitat Conservation Plan (HCP)/Environmental Impact Statement (EIS). Various partners combined with independent and academic

scientists to form standing and ad hoc teams, to work through issues and make recommendations. USFWS served in an advisory role, with participation from their biological, managerial, legal, and law enforcement staffs.

The planning process began when three forest products companies approached the USFWS about developing an HCP, and requested that the process be led by WDNR. WDNR recruited the partners. The group had to figure out how to do a HCP and get organized. These partners wanted to do a completely different kind of HCP, not typical of other HCPs. There was a lot of conflict and distrust at first. Articles of Partnership, which included goals, roles, and procedural rules, took a year to develop. Another key product, the Effectiveness Monitoring Protocol, took two years to

develop and will ultimately determine whether or not the plan works. Negotiations included identification of issues at a group meeting, assignment of individuals to write position papers to bring back to the group for discussion, assignment to a team to make recommendations, and back to the large group for decisions. Critics of a proposal were charged with finding a better answer, and often did. Parties to whom the issue did not apply were encouraged to leave it alone. Participants had input throughout and were involved in major decisions. Participants and the public were invited to all partner meetings, which were daylong meetings held monthly for four to five years. The stakeholder group developed the plan, which became the preferred alternative and the basis for the Record of Decision. A lot of alternatives were explored during the process; all alternatives in the EIS had been discussed by the group.

The process resulted in the first statewide HCP in the nation, now recognized as a national model. WDNR got a 10-year incidental take permit in 1999 on behalf of all landowners. The agreed-to program is working well. The landowners are applying adaptive management rigorously. The multi-stakeholder group plus a biological team spent two years developing a monitoring system. Data has now been gathered for five years, and management is being adapted according to the findings. Partners continue to be actively involved.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The driving forces for this conservation program were economic and social. There are a lot of the butterflies in this area and they need continued disturbance, so they depend on coordinated timber and open area management. A key question was how landowners could continue what they're doing and consider the butterfly's needs at the same time. The EIS and first chapter of the HCP have a discourse on this integration. Two sets of objectives were developed: land managers for recreation and forestry will modify their management practices (social and economic needs considered); landowners managing for diversity such as the Nature Conservancy and the State will focus on meeting habitat needs.

Future Generations: Future conservation efforts might use this innovative plan as a model. The parties have signed binding agreements to do habitat conservation. Monitoring shows their progress on both the shifting mosaic strategy and the permanent habitat strategy. There are now 37 partners and the number keeps growing. The partners take turns on a Partners' Implementation Oversight Committee (chairing as well as membership); the committee develops adaptive management solutions and resolves any disputes that come out of implementation.

How Process enhanced use of Science/fact finding: Adaptive management is a key part of this effort and is now required for all HCPs. Experts were brought in from outside the group including university researchers, giving the group free assistance. For example, a monitoring study was commissioned, and resulted in valid recommendations that were ultimately determined to be unaffordable.

How Information was disseminated: Outreach and education is guided by an information plan. In general, the 20% of the landowners who own 80% of the land make up the membership. The outreach channels include the Tree Farm Families (through timber industry), and the USFWS Private Lands program for creating or expanding Karner Blue habitat. Project Wild has put information on Karners on their interactive website, with help from the partnership. Also, public scoping meetings, media interviews, public presentations, and publication of a brochure helped increase public understanding during the planning process. A recent three-year review report to USFWS documents that 18 partners have been involved in over 250 outreach and education activities with an estimated 8 million contacts. Activities included a display along Interstate Highway 94, a conservation video that aired extensively on public television, staffed displays at festivals, partner-guided tours of restored sites, and volunteer work parties.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Rigid ground rules and Meeting structure

- ❖ Responsible and sustained engagement of the parties
- ❖ Options for integrating mutual gains into the agreement explored.
- ❖ All parties plan for implementation and clarification of responsibilities and roles

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The effort started before the NEPA process began, and continued through the EIS to implementation, monitoring, and adaptive management.

Legitimacy of forum: At first, some parties and some people within WDNR thought the effort was contrived because it was initiated by timber industry. However, the USFWS had the credibility as a regulating agency to get others to participate.

Decision-making authority: WDNR served as the leader/facilitator but was also an equal partner in the group. FWS didn't participate, but sat at the table and let them know the sideboards, because they were the ultimate decision maker. The group felt confident their plan would be accepted by the agencies.

11. Las Cienegas National Conservation Area Case Report

I. Background

The Sonoita Valley, Arizona, is about 50 miles southeast of Tucson, and is known for its sweeping vistas, rolling grasslands, and watershed, that provide habitat for rare native fish and a rich diversity of other wildlife. A large portion of the Valley was transferred to the BLM in 1988 by Pima County. Shortly thereafter, BLM began a planning effort for the area, which soon came to a halt due to the divisiveness that surfaced at the first few public meetings.

In 1995 BLM restarted its planning process, by helping to form the Sonoita Valley Planning Partnership. The Partnership was open to the public, and contained a balance of interests, with representatives from a variety of communities in southern Arizona, organized user groups (mountain bikers, off-highway vehicle clubs, hikers), grazing and mining interests, and conservation organizations, among others. The BLM hired a professional facilitator to organize and run the meetings.

Through the help of the facilitator the Partnership designed a framework for process, agreeing to meet monthly and to establish sub groups that would report to the group as a whole. The group agreed that decisions would be made by consensus whenever possible. Where a consensus could not be reached after lengthy discussion and fact finding, the group would resort to a

vote, with the majority determining the course of action on these issues. The products of the Group—"Desired Condition Statements", would be submitted to BLM as recommendations.

The partnership functioned so well that after two years the facilitator advised the group that his services were no longer needed. Meetings have since been facilitated by the BLM.

From 1995 to 2001 the Partnership developed Desired Condition Statements for the area, as well as alternative management strategies, going through a variety of issues relating to grazing, off-road vehicle use, protection of cultural resources, vegetation, minerals, among others. The effectiveness of the group was acknowledged by Congress in the 2001 Act that designated the area as a National Conservation Area. The EIS for the area was issued in 2003, and relies on many of the agreements reached by the group during its 1995-2001 planning process.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The consensus process encouraged a balance of interests. For example, several groups were initially adamantly opposed to continued grazing in the area. The four ranchers with permits for the area resisted an all-or-nothing solution and under-

standably, wished to continue their livelihood. The partnership process allowed for these concerns to be aired, and encouraged fact finding (group and face-to-face meetings, field trips) about the issue, which led to the groups opposed to grazing eventually coming to the understanding that this activity was consistent with the health of the resource if it was managed responsibly.

Future Generations: The policies implemented by the plan should ensure the health of the Las Cienegas NCA for the enjoyment of future generations. These policies were captured by the legislation creating the NCA.

Dissemination of Information: The partnership actively engaged the media and other sources to inform the community about the development of the plan. Notices of meetings, meeting minutes, and other documents were transmitted to Congressional staff, as well as State and county officials.

Changes in Behavior: By participating in the process, parties agreed to accept the responsibility of coming together as a group to learn about the resources, and the impact of various activities. This was a tremendous shift in attitude from the false start in 1989, when the process had to be halted because the atmosphere in the initial meetings was so divisive.

How Process enhanced use of Science: The process structure enabled parties to focus on issues from an ecosystem perspective. The “Arizona Trail” (a proposed non-motorized Trail running north to south through the area) as one example, was plotted based on its effect on the entire resource. The plan ensured that it would run on existing roads wherever possible, and

that it would be adequately policed by proponents of the Trail. In addition, the process enabled the parties to learn more about the ecosystem-wide impact of grazing, causing several parties to reverse their initial positions on this issue.

How Science enhanced the Process: The partnership relied heavily on GIS applications as well as scientific studies to develop Desired Condition Statements for the area.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well thought-out design
- ❖ Structured forum with group autonomy
- ❖ Modified consensus-based decision-making process
- ❖ Facilitated meetings
- ❖ Subcommittees established
- ❖ Emphasis on fact finding

IV. How Case Responds to Other Themes of Interest

National/Local: This was primarily local in nature, although there was significant outreach to entities that had a national perspective.

Decision-making authority: The Partnership was advisory, but was informed by BLM that its recommendations would be given great weight in developing management alternatives under NEPA.

12. National Elk Refuge Case Report

I. Background

The bison herd population that winters in the National Elk Refuge (the Refuge) has grown dramatically over the past 20 years, increasing from about 50 animals in the 1980’s to over 800 at present. The bison population ballooned since the late 1980’s after discovering the supplemental winter feed that is provided to elk on the

Refuge by the U.S. Fish and Wildlife Service (FWS). In the late 1980’s bison began displacing elk on the established winter feed lines forcing the Refuge to create a separate line of feed for the bison.

The increased bison population has adversely impacted the Refuge by diminishing the amount of forage and vegetation available to elk and bison, and by increas-

ing the potential for transmission of disease between bison, elk, and privately owned cattle on neighboring lands. Since the 1980's the FWS has been working on a plan that would attempt to satisfy the strongly held interests involved in this dispute. Among other interests, conservationists are concerned about habitat degradation, animal rights groups oppose hunting as a means to reduce the number of buffalo, ranchers are concerned about disease transmission, local businesses are concerned about the effect that any measures taken to manage the herds will have on the local economy, and Indian tribes would like a plan that takes into account the role that bison have played in their culture and traditions.

The present EIS process follows a previous NEPA effort to develop a bison and elk herd management plan that was successfully challenged in federal court (*Fund for Animals.v. Clark et.al*). The National Park Service and Fish and Wildlife Service are co-leads on the preparation of this EIS. The U.S. Forest Service, USDA/APHIS, and the Bureau of Land Management serve as cooperating agencies. The State of Wyoming Game and Fish Department is serving as a "partner." Other interests contributing to the development of the EIS include Indian tribes, ranchers, hunters, local businesses, environmental groups, and animal rights groups.

Because of the interests that have clashed in the development of the herd management plan, the FWS and NPS decided to work with the U.S. Institute for Environmental Conflict Resolution to conduct a Situation Assessment of the conflict. The U.S. Institute partnered with the Meridian Institute of Dillon, Colorado and the Institute for Environment and Natural Resources at the University of Wyoming. The assessment team interviewed over 175 individuals in the spring of 2000 to ascertain all of the interests at play in the conflict.

The assessment concluded that there was considerable common ground amongst those interviewed. The commonalities included a shared vision of healthy herds of elk and bison; a general understanding of the importance of the herds to the Jackson area economy and way of life; a recognition of the national signifi-

cance of the herds; a desire for change, both in the way the state and federal agencies manage the herds and work with each other; and finally, a strong desire for more and better information, especially scientific data, upon which to base management decisions.

The assessment also found, however, that there were strongly held divergent opinions on optimal herd size, disease management, artificial feeding, and additional herd management tools such as hunting, increasing forage by irrigation, and controlled burning. The Assessment also identified a low level of trust amongst several parties in the way the lead federal agencies were carrying out their plan.

The Assessment recommended that FWS/NPS look more closely at interests involved in herd management in designing alternatives for an EIS. It recommended a transparent public participation process that would include a science advisory board to address the science issues. It was also recommended that decisions be made by participants through a consensus-based process.

The FWS/NPS followed many of these recommendations and designed a process that would allow the EIS to better reflect the interests at issue. While the agencies determined that a consensus-based process was not a viable option because of FACA constraints, they did understand the need to get a better understanding of particular interests, and to educate the public about the science and facts underlying these issues. The co-lead agencies increased their understanding of the public concerns and interests in 20 facilitated public meetings, and have closely vetted each proposed alternative to ensure that all interests are fairly represented. The FWS/NPS also set up a three scientist panel to evaluate the effects of winter feed on the Refuge habitat, and contracted with Texas A and M University for scientific research services. Initial drafts of the EIS are being reviewed by academic researchers, among others, to determine if the alternatives reflect a fair view of the interests. The draft EIS is scheduled to be issued for public comment in December of 2004.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The goal of the EIS development process is to balance the interests (animal rights, conservation, ranching, tourism, tribal, livestock, others) that bear on this conflict within the parameters of legal authority. The EIS will take into account the Conflict Assessment, as well as the information it has learned from the more than 20 meetings it has conducted in the scoping and alternative development process for the present EIS. As noted above, the draft versions of the EIS have been rigorously reviewed by FWS/NPS, as well as academicians, to ensure that alternatives accurately reflect the interests that have been expressed in this process.

Future Generations: The overwhelming majority of people interviewed for the Situation Assessment believed that elk and bison in the Refuge need to be managed in a manner that promotes their good health and ensures their continued viability. If the final EIS reflects this sentiment, and is effectively implemented, future generations will be given the opportunity to observe these healthy herds in National Elk Refuge habitat.

How Process Enhanced Use of Science: One of the fundamental findings of the Situation Assessment was that participants were unsure of the science involved in the development of the bison and elk herd management plan. FWS/NPS has attempted to remedy this in the EIS process by, among other things, establishing a 3-person scientific panel to examine the impact to habitat, and by contracting with Texas A and M University to review scientific literature pertaining to herd management issues. FWS/NPS has also engaged the service of other academics to study the alternative development process to determine it accurately the range of interests that have been expressed through the public process. In addition, by working together, the government agencies grappling with these issues have come to the understanding that the herd management issues are in need of an ecosystem-wide solution, as the herd travel across several federal and state boundaries.

How Science has Enhanced use of Process: FWS/NPS has used computer modeling, and GIS ap-

plications in developing proposals for the elk and bison herd management plans.

Practical Problem Solving: Leading up to the present EIS process, the FWS/NPS agreed on a vaccination plan (as part of an Environmental Assessment) for elk that contains several practical options. The plan delineates the times of the year during which elk can be vaccinated (only during feeding season), the means of vaccination, and contains a 3-year sunset clause.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Situation assessment undertaken.
- ❖ Interest identification
- ❖ Resources devoted to fact-finding and science.

ECR Problems:

- ❖ Parties do not own forum, and are not autonomous
- ❖ Potential lack of trust by public (according to Situation Assessment)

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This is upstream and downstream NEPA, following two lawsuits from the mid-late 1990's, but preceding the issuance of an EIS. The Situation Assessment undertaken in 2001 has been the driving force behind the present effort of carefully ascertaining all interests to ensure the alternatives fairly represent all interests at stake, within the parameters of existing legal authority.

Local/National: The herd management plan involves local and national interests. The health of the herd concerns organizations that are local, and national in focus. The economic interests, such as tourism, tend to be more local in focus.

Legitimacy of forum: The EIS process was undertaken pursuant to an agreement between FWS and NPS to work as co-leads in developing the EIS. The Forest Service, the Bureau of Land Management, and

USDA/APHIS agreed in writing to serve as to cooperating agencies. The State of Wyoming agreed in writing to serve as a partner in developing the agreement. These formalized relationships have enabled the parties to work together in developing the draft EIS.

Decision-making authority: Interested parties, and the public at large, have primarily played a consultant role in the EIS process. Their respective views have been solicited, and are being taken into account in the development of the draft EIS.

13. Paris Pike Case Report

I. Background

The Paris Pike Highway, a road which links Lexington, KY and Paris, KY, is part of a turnpike established as a private toll road in 1830. It is within the Paris Pike Historic District in the bluegrass region of Kentucky. Paris Pike is lined with historic rock fences, springhouses, large trees, and picturesque horse farms.

In the mid-1960s, planning began to address growing traffic and safety concerns along the Paris Pike Highway. By 1973, a plan calling for a four-lane divided highway with a uniform 40-foot median was developed. Public debate over the proposed project's impact on the historic nature of the corridor, however, led to a civil suit in 1977 and a court injunction halting the project in 1979. After several more corridor studies and a series of fatal automobile crashes in the mid-1980s, the Kentucky Transportation Cabinet (KYTC) worked with FHWA, the State Historic Preservation Officer, the Kentucky Department of Natural Resources, the Bluegrass Trust for Historic Preservation, and other state and local agencies and organizations to develop a memorandum of agreement (MOA). In 1991 another EIS was completed and the MOA was signed regarding historic preservation and mitigation. The MOA outlined a basic vision for the corridor and created an advisory task force. The advisory task force included the aforementioned agencies, as well as a variety of other state and local agencies, as well as environmental, historic preservation, landowner, and other citizen groups.

The Paris Pike project took a collaborative, interdisciplinary approach that involved all interested parties. Taking a Context Sensitive Solutions (CSS)-based approach - that is, considering the entire context in which the project would exist - enabled KYTC to ex-

ceed normal project requirements. Elements of CSS include:

- ❖ Fit the road to the land. Look at the landscape to determine how best to make a project blend with its physical features and its cultural context.
- ❖ Work with groups of residents who share similar concerns.
- ❖ Incorporate community feedback into the final design.
- ❖ Involve contractors in constructibility reviews to stress design sensitivities outlined in project documents.

In response to initial public opposition to the project, KYTC used a variety of techniques to encourage community involvement, foster consensus among interested parties, incorporate community values and feedback into the final design, and ensure the effective delivery of environmental commitments. The stakeholder group process included education on road design, field trips/hayrides, traffic counts by the group, and sharing of personal accident histories. A firm was contracted to manage public participation. The public was kept informed with public meetings, property-owner workshops, and monthly newsletters to educate and solicit feedback from community members. 3-D computer models of roadway designs (alignments draped over aerial photographs to create realistic imagery) were displayed at meetings and workshops to facilitate understanding of the project. In addition, KYTC introduced electronic polling as a means to measure stakeholder opinions on design issues. These methods succeeded, resulting in the issuance of the 1993 Paris Pike Committee Report. The report was signed by all participants, and sets forth guidelines for

design and development. The issuance of the Report led to the lifting of the court injunction in 1993, and KYTC began construction in 1999. The new four-lane divided highway is now completed.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The project was designed to balance mobility and safety issues with natural and human environmental concerns. Safety issues included, among other things, a dangerous combination of high-speed commuter traffic, high-speed tractor-trailers, slower horse trailers, and very slow farm equipment. The plan took into account environmental, social (cultural, historic, and aesthetic), and economic (road was widened and is a primary travel route from Paris to Lexington) outcomes.

Future Generations: This highly traveled road has environmental and social resources left in place for future generations to enjoy. Example benefits include: an interpretive center that was developed and turned over to the Bourbon County Historical Society (this included restoration of the historic Wright House that houses the center); and the rock wall project – old ones were torn down and identical walls were built along the new road alignment.

Dissemination of Information: KYTC developed exhibits, kiosk-type displays, and a driving-tour brochure to identify and explain interesting local features along the corridor. Observation points have been created along the corridor, and a historic farmhouse has been designated for use as a visitor interpretive center. KYTC has made countless presentations; the project has been highly covered in print media; and the project has been used in many FHWA training courses as a showcase. Mitigation measures developed for this project have spread to be used in other projects.

How process enhanced use of science/fact finding: A big factor in this project was integration of local knowledge, as indicated by the adoption of the CSS-based approach discussed above. This led to, among other things, the use of natural landscape patterns as a guide for fitting the roadway geometry, grading, landscaping, and materials into the surrounding cultural,

historic, scenic, and natural environment; the creation of an alignment and cross-section structure that moves with and around the hilly terrain instead of through it; and a natural landscape pattern with less cut and fill, which reduced earthwork costs.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well thought-out conflict resolution process
- ❖ Use of facilitator
- ❖ Interest identification
- ❖ Participants have access to best available information
- ❖ Use of appropriate technology to facilitate engagement

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This type of post-NEPA, design phase effort has potential to work well for other transportation projects where the location has already been decided.

Local/National: While the parties involved were local, national level landscape architects and design engineers assisted, and the State Historic Preservation Officer was closely involved. The group polling process allowed the public to air their issues and concerns anonymously, and tabulation was almost instantaneous.

Legitimacy of forum: The process was fairly formal and was spelled out in a Memorandum of Agreement. Hierarchies of teams were created such as an executive team and various working teams. Membership remained open and all who wanted to be involved were accepted for participation in the appropriate teams. The project agreement shaped the process, and outlined conditions under which they could receive funding.

FHWA approved a special experiment in order to secure the involvement of top quality contractors. A rigorous unique quality based prequalification process

was developed, and the five firms that qualified were exclusively allowed to submit bids for the project's work phases.

Decision-making authority: For NEPA this ultimately rested with FHWA and KYTC, with other agencies and stakeholder groups in an advisory role. However, the

Task Force was the decision-maker on the design in that they had veto power. The process used governmental participants to come up with options that were then taken to the public for their rejection or concurrence.

14. Park Overflights Case Report

I. Background

In 1987, Congress passed the National Parks Overflights Act of 1987, which directed the National Park Service (NPS) and the Federal Aviation Administration (FAA) to study the effect of aircraft overflights on the National Park System. The act was motivated by the sense that the increase in sightseeing flights over National Parks adversely impacted the ability of park visitors to enjoy the quiet and solitude of parks, and also created unsafe conditions in the air (the legislation was introduced following a collision of sightseeing flights over the Grand Canyon).

In 1994, NPS and FAA released their report on park overflights. The report recommended the development of a process to identify, measure, and limit overflight-produced problems in the National Park System. In 1997 President Clinton responded to the report, and to several bills before Congress, by directing the FAA and NPS to form a workgroup consisting of industry, environmental, and tribal representatives to develop a plan to regulate air tours over National Parks. Senior leadership in the Department of the Interior, National Park Service, Department of Transportation, and FAA, then met and developed a general plan for the group. They decided that the group would function as a subcommittee to the National Park Advisory Board, a standing FACA committee.

The members of the group, called the National Parks Overflights Working Group, (NPOWG), were selected by the NPS and FAA, and represented a variety of industry, and environmental interests. NPS and FAA decided they would not sit on the group, but would instead be its advisors. The NPS and FAA contracted with a mediator to facilitate meetings of the NPOWG.

At the initial meeting there was discernable tension between several of the representatives. The industry representatives were concerned in general that the effort might put existing air tour operators out of business. Representatives from environmental organizations were similarly distrustful of the ability of industry to approach these issues in a fair-minded way that would allow for the protection of quiet and solitude in parks. Even the two government agencies convening the process, the FAA and NPS, had fundamental philosophical differences that needed to be worked out before an agreement could be reached.

The group determined that it would make decisions based on consensus. It also adopted a set of ground rules for proceeding and decided that all meetings would be facilitated. The entire process took place over six to eight meetings, from 1997 to 1999.

The group was able to work through its initial tension and reach consensus on all of the issues that it took under consideration. Its work was used as the basis for legislation which was signed into law in April of 2000, called the National Parks Air Tour Management Act of 2000. The legislation essentially calls for the FAA and the NPS to develop Air Tour Management Plans for air tour flights over national parks. There have, however, been problems and delays associated with implementing this law. To date, four years after the passage of the Act, no ATMPS have been implemented. Individuals in both the FAA and NPS believe the main reason for this is that the agencies have differences over the meaning of terms in their initial agreement.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The agreement would allow the FAA and NPS to determine appropriate routes, the times of the day during which flights would be appropriate, and possible caps on the numbers of flights. The agreement also sets up a process that allows existing operators to operate at existing levels until a particular plan is approved, and standards under which to judge the applications of new operators who seek to operate in parks without an existing plan.

This regulatory scheme balances the environmental interest of ensuring that Air Tour Management Plans reflect the values of National Parks while taking into account the economic interests of the air tour industry, in particular, the interests of existing operators, who were fearful at the start of the process that the agreement would severely curtail their ongoing business.

Future Generations: Future generations will benefit from the agreement because it will allow them a much better opportunity to experience quiet and solitude when they visit National Parks.

How Process Enhanced Use of Science: Through the structure of the process, the Committee was able to receive reports on how the NPS had developed methods of measuring aircraft noise in parks. This gave the Committee a degree of confidence in NPS's ability to carry out this function.

How Process Changed Mindset: Going into this process, there was a great deal of concern that an agreement would result in the NPS having control of the airspace over National Parks. As the process played out it became clear that this possibility was as unacceptable to the Park Service as it was to the FAA and the air tour and general aviation industry. The agreement explicitly provides that the FAA would retain its regulatory authority over park airspace.

Also, the process enabled parties representing seemingly adverse interests to find common ground, and form alliances. Several participants in the process have noted that leaders in the Group often "policed" other members with similar interests to ensure that their actions were taken in good faith, in accordance with the interests of the group as a whole.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well-designed process
- ❖ Independence of group, allowing for easy identification of interests
- ❖ Transparency—meetings open to public
- ❖ Group autonomy
- ❖ Consensus-based
- ❖ Emphasis on fact finding
- ❖ Interest identification allowed for creative solutions—regulation of flights by route and by time of day

ECR Problems:

- ❖ NPS and FAA have had difficulty implementing agreement.
- ❖ NPS and FAA not members of NPOWG—significant interests not represented.
- ❖ NPOWG did not completely own process.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: This was upstream NEPA. The agreement served as the basis for the Air Tour legislation. The legislation requires a NEPA process for each Air Tour Management plan.

Local/National: Every side to this issue involved local and national interests. The air tour industry catered to people from around the world, who wished to take sightseeing tours over parks. At the same time, many of these businesses were made up individuals who were local to a particular park. The environmental interests National Parks and Conservation Association (NPCA), Grand Canyon Trust) involved were primarily national in scope.

Legitimacy of forum: The forum had the imprimatur of Congress, and the Clinton administration. This gave comfort to the participants that their work would be taken seriously.

Creative approaches: The group agreed that all Records of Decision emanating from Air Tour Management Plans (ATMP's) should be signed jointly by the FAA Administrator and the Director of the National Park Service. This was a creative way of dealing with technical issues, ensuring that both agencies' perspectives would be represented in the ROD.

Also, the parties agreed to think of tours in terms of the time and spatial aspects of overflights. ATMP's

could regulate aircraft routes, as well as the times of day in which they were allowed. This was a creative way of opening areas for agreement.

Decision-making authority: The group essentially served as an advisory body, whose advice was eagerly sought (and embraced) by the administration and Congress.

15. San Juan National Forest Case Report

I. Background

This multi-stakeholder process was convened by the USDA Forest Service along with county governments, the Ft. Lewis College Office of Community Services (OCS) and others, for the purpose of developing a land use plan for the San Juan National Forest in southwestern Colorado. While the process was open to the public at large, the Bureau of Land Management (BLM), as well as several State and local agencies have been involved in the effort. The process built on an earlier collaborative effort for ponderosa pine restoration that involved many of the same partners.

The process began during the pre-NEPA and scoping stages, and is continuing to evolve all the way through the NEPA process for the San Juan National Forest Plan revision. Two types of working groups were formed—three groups that addressed geographically focused issues, and eight groups that addressed topical areas (timber, old growth, prescribed fire, recreation management, travel management, wildlife, range and aquatic issues). All groups were facilitated by the Fort Lewis College Office of Community Services. Working groups recommended ideas to include in one or more NEPA alternatives. Those with wide support would appear in more alternatives, those with fewer advocates in only one. People kept showing up for the study groups. Afterwards, many of them joined the working groups for another six months to a year. Many have gone on to participate in project level analyses and decisions, and volunteering to help with implementation. Participants are also willing to come back to the table after a long hiatus. This effort helped

spawn a great deal of public participation in a later Fire Plan effort. A National Monument was recently designated in this area, and though many in the community were opposed, planning for the new monument has been a productive community process in part due to all of the collaborative efforts that preceded it.

The process aims to build knowledge and understanding of issues and the interactions between the community and public land management, along with encouraging commitments to stewardship. The meetings had a roundtable format, and all input was recorded.

The process promoted community-based stewardship. When the National Fire Plan came along, the same partners developed community fire plans in the five counties. The plans are very comprehensive, including an integrated Regional strategy, a strong education component, and collaborative mapping of interface areas. The capacity to do this was developed during the pine restoration and forest planning efforts.

II. How NEPA Section 101 was furthered by the case:

Balance of Interests: The NEPA Section 101 concept of “productive harmony” was discussed during this process. People will take care of the environment and its habitats if it makes sense to them and meets their needs. There was more emphasis on social (especially) and economic analysis than the typical Forest Plan revision process that focuses heavily on biological resources. The community considered providing information on social and economic resources to be their

“field work”. A social/economic assessment was drafted, built around productive harmony. It included things not generally included such as the relationship of settlement patterns to public lands, and correlations of changes in the local economy with changes in public land management.

Future Generations: Both the short- and long-term were considered throughout the process, seeking solutions that will benefit future generations. Improved understanding of the relationship between local communities and public lands leads to improved stewardship of the resources. As in the fire plan example above, capacity built through the collaborative process extends into new directions and will continue to in the future. One focus is to understand the trends that are at work, e.g. new development occurring against the Forest boundary - two counties now require fire hazard mitigation plans in order to get approval for subdivisions.

Pragmatic Solutions: Immediate suggestions for on-the-ground improvements were passed on and implemented. In one example, a request from the District Ranger for people to not use a specific trail, to help the elk during a hard winter, was complied with even without regulation and enforcement. As noted above, an economic/social assessment was also performed by one of the working groups. Another example of a pragmatic solution is the manner in which the group analyzed sage grouse management. After all the factors were considered the group realized that it was not cattle grazing that had caused a decline in Sage Grouse, but rather that the brush component had been removed by land managers over the years. This led to trying some reintroduction of sage grouse in likely places as a first step in adaptive management.

Dissemination of Information: An extensive mailing list, newsletter updates (including progress reports from the study groups), and web-based applications served as a mechanism for people who couldn't take part in the groups. The website southwestcoloradofires.org will serve as prototype for forest plan revision website (but the new website will be more interactive). Participants talked to others in the community to bring in other ideas and opinions and then

brought new information back out. The agency solicited input from broader mailing list at various points in the process.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Participants have access to best available information
- ❖ Process is voluntary, informal, and flexible
- ❖ Process design is transparent to parties
- ❖ Neutral facilitation

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: While stakeholder collaboration is potentially valuable throughout the NEPA process, starting early is better than starting later. The San Juan Initiative conveners now know how to do the front end, and are still learning how to follow it all the way through to an outcome that incorporates all the perspectives. The key will be not throwing out the baby with the bathwater at later stages of the process. Once the NEPA work has been done, it should not be used just for that plan or project; agencies need to carry forward what was learned to future issues and decisions. Another suggestion is not to start on the hardest, most complex project. In this community, the process was used on more localized projects first, which led to confidence in the process when it was then applied to the highly complex plan revision.

Participant factors: Local organizations were well positioned with national counterparts. State level environmental groups declined to participate based on request of the local groups, who kept them informed of progress. Mailings and web updates included non-locals. Resources flow to strong collaborative efforts with a broad spectrum of participants. Each party has access to the system in a different way. There is fear among participants that national groups will appeal and litigate even after all their hard work.

Legitimacy of forum: County and Ft. Lewis College participation in the convening granted a lot of legiti-

macy to the process: the college is institutionally neutral, and the county is highly accessible and credible to constituents and to the political chain. Because of the success of the preceding ponderosa pine restoration initiative, this kind of collaborative effort had legitimacy with the local public from the start.

Approaches to scientific and technical issues: This group tries to stay away from “dueling scientists” and instead builds a common knowledge base and common set of accepted facts. The meeting structure focused on a particular scientific or technical issue; outside experts were brought in to explain the state of scientific knowledge, then facilitated small groups would dis-

cuss how it applied to this plan revision. Field trips sometimes followed these meetings, such as one on fire ecology. The eventual intent is for outcomes will be openly monitored to adapt management when necessary.

Decision-making authority: The Forest Service (Regional Forester) has final decision authority: the role of the community process is to make sure the agency has the best biological information and has knowledge of community values, and considers social and economic as well as ecological impacts. Individuals gave advice but the group was not FACA charged – ideas and building blocks were provided.

16. Sequoia National Forest Appeals Case Report

I. Background

In 1988, the US Forest Service issued an EIS and Record of Decision for a land use and resource management plan for the Sequoia National Forest. The Forest Service received 21 appeals on the plan, through its administrative process. The appeals covered the gamut of issues addressed by the plan. Some appellants opposed the plan’s treatment of grazing in the Forest, several complained about logging, and others discussed the plan’s treatment of off highway vehicles.

Several of these appeals, notably those dealing with wild and scenic river issues, were dealt with separately. The remaining 15 appeals made such disparate demands for change that the forest supervisor decided face-to-face problem solving in a single process offered the only avenue for resolution.

The Forest Service hired a mediator to attempt to work through the divergent interests represented by the appeals. The mediator worked with the parties to set up ground rules and a map of how the group would accomplish its goals. This work on process was critical, as there was a great deal of distrust among the parties at the outset. Groups opposing timber harvesting believed that Sequoia groves had been abused and over harvested throughout the 1970’s and 1980’s. Groups opposed to grazing believed the plan would allow for

over-grazing, which would impair riparian areas. Groups favoring grazing and timber harvesting were concerned that the Forest Service might unnecessarily curtail these activities, and adversely impact the economies of the communities surrounding the Forest.

Through the structured discourse promoted by the ground rules, the parties came to a general understanding of the importance of ensuring the ecological health of Sequoia National Forest, and of allowing for reasonable uses, such as grazing, timber harvesting, and off road vehicle use, that did not unduly impair forest resources. The parties agreed to learn as much as they could about issues, setting up sub committees to dig deeply into particular areas, and designing protocols for the reception of scientific information. The parties agreed to make decisions based on consensus.

The effort took approximately 18 months to complete, and resulted in a 150 page mediated settlement agreement (MSA) that was signed by 17 of 19 parties to the mediation. The 150-page agreement set a standard for multiparty environmental mediations in its in-depth treatment of the full range of issues dealt with in a forest plan. Among other things, it defined the criteria for drawing boundaries of Sequoia groves; developed a comprehensive set of riparian area management standards and guidelines; determined the general locations for appropriate off highway vehicle use; called for a forest-wide trail plan; and required further scien-

tific study of fur-bearing mammals because it was agreed that such knowledge was necessary to making sound resource management decisions in the future.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The process encouraged the parties to tackle issues in minute detail to develop solutions that balanced all interests. For instance, the sub group on riparian area management spent a great deal of energy and time analyzing the effects of grazing, logging and trail use in riparian areas. After receiving several presentations on the scientific aspects of activities in riparian areas, the group came to agreement on a new set of riparian area management standards and guidelines to ensure the health of riparian areas. These dealt with such topics as the width of streamside management zones and the grazing utilization rate of meadow grasses. These new standards and guidelines were satisfactory to ranchers, loggers, recreational users and environmental groups, thereby representing a balance of interests and thus promoting both ecological and economic health.

Another subgroup tackled the issue of how to define and map a giant sequoia grove. This was of critical importance to all parties and had never been done before using a consistent set of criteria. In this case, the science was inconclusive, so reasonable criteria for drawing boundaries were negotiated and a committee representing all interests was established to monitor the boundary location process and literally sign off as each grove boundary was posted. This was a successful approach that resulted in all groves being mapped and posted for the first time using a single consistent set of criteria.

Future Generations: Much of the spirit of the group's work made its way into the Presidential Proclamation of 1992, which proclaimed that the giant sequoia groves of the Sequoia, Sierra, and Tahoe National Forests were to be set aside for the benefit of future generations. This was followed in 2000 by a second, farther reaching Presidential Proclamation creating the Giant Sequoia National Monument within the Sequoia National Forest. Future generations should be able to look back on these events as measures that

enable them to enjoy these magnificent giant sequoia groves and their surrounding ecosystems.

How Process Enhanced Use of Science/fact finding: In addition to the work noted above, the group saw a need for detailed studies that were beyond its own capacity to perform. For instance, the information received by the group suggested that grazing activities could impair the health of Blue Oak trees. The MSA thereby required that this issue be studied further. The study was carried out and completed in the early 1990's, concluding that grazing activity did not appear to have a damaging impact on the Blue Oak. A second example, a panel was established consisting of neutral scientists to help the parties understand watershed issues. The panel was a great help in increasing understanding of the cumulative effects of management activities on the watersheds, and in developing an agreed upon approach for assessing cumulative effects.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well thought-out design
- ❖ Consensus-based process encouraging relationship building
- ❖ Durable solutions due to time spent on rigorous analysis
- ❖ Group autonomy—parties own process
- ❖ Sub committees established
- ❖ Emphasis on fact finding
- ❖ Use of mediator to bring parties together
- ❖ Parties agree on common goals and principles—the health of the Forest

ECR Problems:

- ❖ Less than 100 percent agreement

IV. How Case Responds to Other Themes of Interest

Upstream/Downstream. This is downstream application of NEPA—a mediation that was basically an effort to settle appeals of the Record of Decision. Be-

cause it was a settlement process, it was open only to the parties that filed appeals. This aspect enabled parties to focus on discrete sets of issues.

Local/National: There were local and national interests at stake. Ultimately, the local and national interests all agreed to submit to the mediation process, which acted as the means for leveling power imbalances, giving all voices an opportunity to express their interests.

Legitimacy of forum: As this was a settlement process, it had the legitimacy of being part of the

administrative/judicial process. Formal mediation process enhanced its legitimacy.

Decision-making authority: The Forest Service was the decision-making body for this dispute. However, the Forest Service empowered the parties to develop proposals through the mediation that were within its legal and policy parameters. The Forest Service made a commitment that would it would take these proposals forward through future NEPA processes.

Future Dispute Resolution: The MSA provided a process for resolution of disputes over implementation of the various MSA provisions going forward.

17. Spring Mountains NRA Case Report

I. Background

In 1994 the Forest Service began the process of developing a Habitat Conservation Plan for the Spring Mountains National Recreation Area on the Toiyabe National Forest in Nevada. At the same time that the Forest Service needed to do a Forest Plan amendment for the newly designated Spring Mountains National Recreation Area. Multi stakeholder groups were formed to accomplish both of these tasks.

The lead agency for the Forest Plan Amendment was the USDA Forest Service; parties included the U.S. Fish and Wildlife Service, the Nature Conservancy (TNC), and a variety of state, local, and tribal agencies, as well as other environmental and user groups.

The Forest Service and the Fish and Wildlife Service entered into an Interagency Agreement to work together on a plan amendment for management that would meet the needs of all of the species, followed by a conservation agreement to tie the amendment to each individual species needs. Many of the stakeholder organizations were involved in pre-NEPA data collection. The agencies developed the Purpose and Need and performed scoping, then convened a multi-stakeholder group to draft alternatives. The principal issue negotiated was the restriction on public uses of the National Recreation Area as a consequence of conservation measures. The group drafted thirteen alternatives that met their various recreational needs

along with the species' needs, including actual wording for standards and guidelines. The group reached consensus on a preferred alternative, which was selected by the Forest Service, and served as the basis for the Conservation Agreement. The Conservation Agreement was "piggy-backed" on to the Plan Amendment, thus negating the need for a second NEPA process.

The Forest Service acted as facilitator, and wanted others to work out their conflicting needs and desires. There were large group meetings, as well as many subgroups. Participants were reminded of the sideboards at all meetings, that all laws must be met including NEPA, National Forest Management Act, Endangered Species Act, and the Archaeological Resources Protection Act. Participation at meetings was open to the public, but the same individuals continued to represent the various stakeholder groups. There was no formal consensus process, but there was a commitment to reaching consensus on a preferred alternative. A coalition of moderate groups developed what became the preferred alternative.

Consensus was reached on a preferred alternative, which became the Forest Service decision. The Conservation Agreement was based on the selected alternative, and has become part of the Clark County Habitat Conservation Plan (HCP), which includes all land ownerships in the area. The Conservation Agree-

ment is intended to provide long-term protection for all rare and sensitive species in the Spring Mountains, such that future listing under the Endangered Species Act will be unnecessary. The Spring Mountains agreement addresses the needs of 68 species of plants and animals, including at least 27 that occur nowhere else in the world and two that are threatened or endangered, on approximately 316,000 acres. The decisions were well accepted by the public, although a local community group disagreed with the fire management measures, and a few user groups felt there was too much curtailment of resource use.

II. How NEPA Section 101 was furthered by the case

Balance of interests: Based on negotiations and collaboration, the participants came up with alternatives that met the needs of species and provided access and recreational opportunities for the public. Species needs were prioritized so that there could be some give and take on the amount of protection. Economics and recreation concerns were considered along with ecological needs.

Future Generations: Many of the species dealt with in the agreement are found nowhere else. The agreement protects these species so future generations can appreciate them. The agreement allows recreation to continue for future generations. Much energy and funding has gone into education and partnerships, which will help shape how people use the area and protect species in the future.

Dissemination of Information: Strong education/partnership relationships are being maintained between the agencies and interested groups. For example, rock-climbing interests participate in education about the sensitive plants on the rock cliffs and are involved in designating routes to protect them. OHV groups patrol and educate other OHV users, and have adopted specific roads and trails for maintenance. The Clark County HCP Implementation and Monitoring Committee continues to provide a public forum for information dissemination about issues and proposals that affect species and habitat. Still, much of southern Nevada's human population remains uninformed or unengaged.

How process enhanced use of science/fact finding:

A great deal of raw data existed on species locations and recreational use patterns. TNC developed a predictive model that was accepted by all. Agreement was also reached on data related to historic use of the area, which was sometimes disputed by biologists. In addition, near the beginning of the process, the Forest Service and USFWS developed an "information needs assessment", and contracted the other science entities to collect new data in their respective fields of expertise. The review of the data was an open process, including any interested biologists, and resulted in many changes in the plan. A group of scientists was periodically convened to discuss information gaps, and propose studies to fill the gaps.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Appropriate use of scientific information
- ❖ All key issues, concerns, and perspectives addressed
- ❖ Options for integrating mutual gains into agreements explored
- ❖ Responsible and sustained engagement of parties
- ❖ Process is voluntary, informal and flexible
- ❖ Process is consistent with existing laws and regulations, agency missions, policies and legislative parameters.

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The collaborative effort was "mid-stream" in terms of NEPA, at the alternative development and preferred alternative stage. It could be considered "upstream" in terms of developing the Conservation Agreement. The timing of combining a Forest Plan amendment and Conservation Agreement was much more efficient than trying to do it more site-specifically. This could work well in other locations with similar issues.

National/Local: Most participants were local or perceived as local (e.g. those from Reno or Stanford). It was a positive perception in this case, as the effort did not have a high profile nationally.

Legitimacy of forum: The Forest Plan Amendment process was a legitimate forum for this process. Not only did this group have open membership, but most meetings were called by outside groups, taking turns, to address Federal Advisory Committee Act concerns.

Decision-making authority: Going through the Forest Plan amendment process, it always clear that the For-

est Service was the decision-maker; all others were told they were on equal footing. The USFWS authority on the Conservation Agreement was also clear. The stakeholder group had no real authority, yet their consensus agreement was accepted and is being implemented by the agencies. Parties appreciated the shared leadership approach between the Forest Service and USFWS, where the public saw that the Forest Service was not initiating all of the restrictions on recreational users.

18. Swan Valley Conservation Agreement Case Report

I. Background

Swan Valley lies between the Mission Mountain range and the Swan Mountain range of the Bob Marshall Wilderness. Each range supports a number of grizzly bears. The number of bears in the Mission range, however, has dwindled over the years to fewer than ten. Biologists believe their survival is dependant on their ability to cross Swan Valley and link up with the far greater number (approximately 200) of grizzlies that live in the Bob Marshall Wilderness.

The problem is that much of the Swan Valley is suitable for timber harvesting, and is owned by Plum Creek Timber Company (Plum Creek). Plum Creek's holdings are extensive, making it the largest owner of grizzly habitat in the lower 48 states. In the early 1990's Plum Creek approached the United States Fish and Wildlife Service to initiate discussions on how to manage the Swan Valley in a manner that would protect the threatened grizzlies. Plum Creek sought to develop a plan that would be consistent with Section 7 of the Endangered Species Act by protecting the grizzlies but also enabling Plum Creek to harvest timber on its land. The State of Montana (Department of Natural Resources) and Flathead National Forest were soon brought into these talks, as the parties began the process of developing an agreement for managing the Swan Valley area as an ecosystem that would enhance the ability of the Mission Mountain Range grizzlies to traverse Swan Valley. The process was especially diffi-

cult because the ownership pattern of Swan Valley lies in a checkerboard pattern. Plum Creek's holdings trace back to the company that built the first railroad line through this part of Montana, and thus consist of discontinuous square sections of land that alternate with sections of Flathead National Forest.

Despite the complexity of dealing with a checkerboard pattern of land ownership, and the potential for clashes between the interest of timber harvesting and the interest of grizzly protection, the group found common ground, and completed the Swan Valley Conservation Agreement in 1995. According to one of the parties to the discussions, the agreement "provided a process and understanding whereby commercial activities proceed and protection persists."

In developing the agreement the parties had many face-to-face negotiations that were unassisted. The final few sessions that resulted in much of the language of the agreement, were facilitated. The main issues tackled by the agreement are road density, timber harvest, and coordination of forest management activity. The agreement accomplished its main objective, the goal of enabling grizzlies to travel safely from the Mission Range to the Bob Marshall wilderness, by setting up "linkage zones"—areas through which bears could travel without coming across human activity. Several Environmental Assessments, and one EIS, have used the agreement as a foundation for setting policy and guidelines for timber sales, grazing permits, and private road access. The process has also spawned

other collaborative ventures. In the past several years Plum Creek has sold over 24,000 acres of its land to the Trust for Public Land, for the purpose of protecting these resources.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The outcome reflects a balance of interests by, as stated above, “providing a process and understanding whereby commercial activities proceed and protection persists”. Timber harvesting was able to continue, but in a well-thought manner that enhanced the protection of the endangered grizzlies of the Mission range.

Future Generations: Future generations will benefit by the fact that the agreement enhances the chances of survival of the Swan Valley grizzlies.

How Process enhanced use of Science: The process encourages fact-finding and rigorous scientific research. Plum Creek, for instance, has hired a full time biologist to work cooperatively with scientists from the state and federal agencies, and has recently funded the purchase of collars for grizzly bears, enabling the bears to be more accurately tracked.

How Science enhanced use of Process: The process has relied heavily on GIS applications, aerial surveillance, and other technological methods to implement the agreement. The use of science in this manner has enabled the Forest Service and Plum Creek to manage the land as an ecosystem.

How Information has been disseminated: Learning has been shared through the Flathead National Forest website, public meetings, and through the involvement of the local community. The Swan Valley Conservation Center, for example, although not involved in the agreement, has played a major role in educating the public on the issues faced by the Swan Valley grizzlies.

How Process Changed Mindset: Through the process, the parties were able to come to an understanding the Swan Valley had to be managed as an ecosystem in order to maximize the chances of grizzly survival.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well thought-out design
- ❖ Structured meeting process
- ❖ Facilitated, interest-based negotiation leading to design
- ❖ Consensus-based process
- ❖ Independent structure of forum—group ownership of process.
- ❖ Agreed upon ground rules, and principles to start process
- ❖ Science committee engages in cooperative, ongoing research
- ❖ Well funded

ECR Problems:

- ❖ Closed Process/ Some parties not engaged (law suits filed).

IV. How Case Responds to Other Themes of Interest

Upstream/downstream: The development of the agreement was upstream NEPA—the parties understood that it could form the basis of future NEPA processes.

Local/national: The local versus national balance of interests has resulted in some friction. A few national environmental groups have been critical of the agreement and expressed skepticism about Plum Creek’s commitment to saving this habitat for the grizzlies.

Legitimacy of forum: The closed nature of the forum did affect the process. As a closed forum with few players, parties were able to succinctly focus on interests, and reach an agreement. However, the closed process also provoked skepticism from outside groups. One of these groups has sued the government over the agreement (unsuccessfully).

Decision-making authority: The group has advisory decision-making authority. However, its recommendations have been accepted by each of the parties. The group makes its decisions by consensus.

19. Uncompahgre Plateau—UP Partnership Case Report

I. Background

Throughout the 1990's the mule deer population declined by about 40 percent on the Uncompahgre Plateau in southwestern Colorado. The Colorado Department of Natural Resources became aware of this, and brought it to the attention of the major federal land managers on the Plateau, the Bureau of Land Management and the United States Forest Service. The agencies concluded that the decline in the mule deer population was indicative of broader, more systemic problems that affected the entire regional ecosystem. In 2001 the agencies formed the UP partnership, to systematically deal with ecosystem issues. Soon after the initial formation of the group, the Public Lands Partnership, an entity representing the interests of the Colorado counties of Delta, Ouray, San Miguel, and the town of Montrose) became a member of the UP Partnership.

The partnership established its own identity by setting up a Technical Council comprised of representatives from each of the partners to operate and manage the partnership. The Council meets every month to discuss ongoing projects, receive reports on the health of the ecosystem, and to explore new opportunities to enhance the health of the ecosystem. Decisions of the Technical Council are made primarily through a consensus process; with votes taken on the rare occasion that consensus cannot be reached. The partnership also established a "Collaborative Council" that is open to all members of the public. The Collaborative Council meets on a quarterly basis and provides recommendations to the Technical Council.

Through private grants (Ford Foundation, Rocky Mountain Elk Foundation, others), the partnership hired a staff to run the partnership. The partnership has produced several successes, including a Landscape Assessment, a Fuels Reduction Plan, a Fire History project, a Landscape Dynamics Report, a GIS study for grazing allotments, a Native Seed program, and an on-the-ground vegetation enhancement program, as

well as the groundwork for several Environmental Assessments.

II. How NEPA Section 101 is furthered by the case

Balance of Interests: The bifurcated process design provides for a balance of interests. The members of the Technical Council represent interests of the federal and state agencies, and the local communities. In addition, the Collaborative Council, by being open to the general public, has focused on a variety of issues, and its recommendations to the Technical Council also incorporate economic, social, cultural, as well as environmental interests.

Future Generations: Future generations will benefit from the agreement by virtue of the change in mindset—from managing the area as distinct resources divided by arbitrary boundaries, to a seamless area that shares common features, that happen to spill over these boundaries. The sharing of data, and the ability to act expeditiously and concertedly through the Technical Council, will help preserve the interests of future generations.

Dissemination of Information: The partnership disseminates information and encourages community involvement through the work of its staff. Its educational coordinator visits schools, attends community meetings, and performs general outreach. The Partnership also has a well maintained website.

How Process enhanced use of Science: By employing a cooperative approach the scientists discovered that fire, livestock grazing, and invasive trees were all playing a role in the decline of the mule deer population. This has enabled the partnership to manage the area as an ecosystem. Prior to the partnership, scientific data was rarely shared, so it unlikely that these findings could have been made without this cooperation. The partnership relies heavily on GIS applications, as well other technological means (internet, computer modeling,) to accomplish its goals.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Well thought-out process design
- ❖ Independent structure—allowing for group autonomy
- ❖ Venue for public through collaborative council
- ❖ Best science encouraged through technical council
- ❖ Subcommittee established
- ❖ Emphasis on fact finding.
- ❖ Interest identification allows for better ecosystem management

IV. How Case Responds to Other Themes of Interest

Creative Management: The partnership has been creative in finding ways to solve problems. For instance, it was able to obtain funding from private sources for the positions that administer the partnership, and carry out its day-to-day activities. These positions are critical to the partnership, not only because of the work they accomplish, but also because they underscore the partnership's existence as an entity that is independent of any one of its members.

Decision-making Authority: The Collaborative Council has advisory authority; the Technical Council has the authority to make decisions. This structure has allowed for interests to be aired (through the Collaborative Council and the Technical Council) while also enabling partnership to take action. It has promoted the achievement of outcomes.

20. Upper Salmon Basin Case Report

I. Background

The Upper Salmon Basin covers a 6300 square mile area (4 million acres) in central Idaho, of which 90% is public land and 10% private land. Most of the anadromous fish habitat in the basin occurs within private lands. In the late 1980's drought completely dewatered the Lemhi River of the Upper Salmon River Basin. Landowners worked with Forest Service and Idaho Fish and Game biologists to figure out an inexpensive way to allow fish migration to occur at the critical periods

As one of several similar initiatives, in 1991 the Bonneville Power Administration and the Northwest Power Planning Council (which oversees mitigation for the Columbia River system) initiated community-based restoration for anadromous fish habitat for the Lemhi River watershed. The parties included the Lemhi Irrigation District, Idaho Fish and Game, and the Forest Service. The Pahsimeroi River and East Fork of the Salmon River basins were added to the Lemhi to make up the model watershed area. Three years ago all of the Upper Salmon Basin was included

in the scope. The project includes cross-jurisdictional issues on federal, state and private lands.

Though "project" is part of the title, this is really a program of fish habitat restoration to mitigate the impact of hydroelectric dams on the Columbia and Snake Rivers. The program includes many site-specific projects. The project is coordinated by the Idaho Soil Conservation Commission and has an Advisory Board, which includes representatives from the Bureau of Land Management, USDA Forest Service, and a variety of State, local, and tribal agencies, as well as environmental, landowner, and user group interests. The Advisory Board sets policy and has final approval on projects. Proposed projects are ranked by a technical team of scientists from the above agencies plus others such as the Bureau of Reclamation, National Oceanic and Atmospheric Administration-Fisheries, U.S. Fish and Wildlife Service, Idaho Department of Environmental Quality, Idaho Soil Conservation Commission, and irrigation district representatives.

When this collaborative effort was expanded to the model watershed project, its purpose expanded to improving habitat as well as to improving passage for

anadromous fish (salmon and steelhead). The model watershed project began before the start of the NEPA process. The Bonneville Power Administration completed an Environmental Impact Statement for the program in 1998. Also, the Bureau of Reclamation is a big contributor of funding for fish passage projects and has completed its own EIS for projects they are involved in throughout the Columbia River Basin. The advisory board and technical team do not collaboratively address the NEPA process.

The Upper Salmon Basin Watershed Project is unique in the great degree of coordination between agencies. The technical team meets monthly to collectively prioritize proposed projects in order to end up with the most effective strategy to meet the goal of improving fish habitat and migration. The team developed a rating system and criteria for screening proposals, and does a quarterly review of all projects (in the office and on the ground). Prioritized projects to send on to the advisory committee are selected by discussion and consensus. The advisory committee relies on the Conservation Districts to review the projects for them and finalize a contract for implementation with the landowner. The advisory committee provides policy guidance on the larger picture and is the main vehicle for involving others besides government participants. Advisory committee decisions are also consensus-based. The committee's facilitator is from one of the agencies involved, not a neutral third party. In this case relationships are cooperative enough that participants don't feel the need for outside facilitation.

Agreements/outcomes: Restoration projects have included installation of riparian fencing (51 projects protecting over 52 miles of stream), implementation of pasture management programs, irrigation diversion structure modifications, irrigation efficiency improvements, and irrigation ditch consolidation and elimination.

II. How NEPA Section 101 was furthered by the case

Balance of Interests: The management plan written in 1995 guiding the watershed project attempted to balance interests. Implementation of projects ties to that plan and thus serves the greater good. This program is

an example of showing that people and high-quality aspects of nature can co-exist in a way that allows a high standard of living and a functioning environment. The program moves toward the goal of improved fish habitat and migration while still maintaining the economic base.

Future Generations: If implementation is successful, there will be excellent fish habitat that is compatible with human use of the land for ranching, logging, mining, and recreation; this legacy will be handed down to future generations.

How process enhanced use of science: The technical team developed processes for evaluation of habitat conditions and a prioritization process for proposed projects.

How was Information Disseminated: Outreach is done through newsletters, many newspaper articles have been written, and interpretation is being developed for the Sacajawea Interpretive Center in Salmon. Technical team members make presentations at professional society meetings, Idaho Cattlemen Association meetings, and other conferences. Program staff and partners participate in school programs including the Envirothon program in central Idaho.

III. Linkage Between ECR Practices and Outcomes

Key ECR Practices for this Case:

- ❖ Responsible and sustained engagement of all parties
- ❖ Structured process to facilitate timely productive and effective engagement
- ❖ Process addresses relevant inter- and intra-governmental relationships
- ❖ All parties plan for implementation and clarification of responsibilities and roles

IV. How Case Responds to Other Themes of Interest

Participant factors: Landowners tended to support local agency and interest group involvement.

Legitimacy of forum: Participation of the conservation districts and continued support from landowners gives this program legitimacy with the general public.

Decision-making authority: The advisory committee and technical team do not have any decision-making

authority in terms of NEPA. However, they have a great deal of influence on private and public lands in terms of proposing and prioritizing projects for implementation.

APPENDIX G:

Report on NEPA 101 Survey of Federal Agency NEPA Liaisons

Prepared by Howard Levine

Executive Summary

During the fall of 2003, the U.S. Institute for Environmental Conflict Resolution, on behalf of the National Environmental Conflict Resolution Advisory Committee, surveyed federal agencies about the implementation of Section 101 of NEPA of 1969. Specifically, agencies were asked how Section 101 had been integrated into their strategic plans, discussed during NEPA training classes and seminars, linked to EIS alternatives, and connected to other agency policies, mission statements or regulations.

Information from the survey will be used to test the hypothesis that ECR contributes to the achievement of the policy objectives articulated in NEPA Section 101. This hypothesis is also being tested by compiling and analyzing case studies from a variety of agencies and situations.

Twenty-one federal departments and independent agencies responded to the survey. Although the survey reveals that Section 101 is not a foremost consideration in agency NEPA programs, its principles have been included in strategic plans, training and cross walked into other policies. While the survey presents valuable information about agency perceptions, it does not provide sufficient underlying detail to determine

whether Section 101 has made a substantial impact on agency operations and behavior.

Introduction

One of the purposes of the U.S. Institute for Environmental Conflict Resolution is to help the federal government in the implementation of Section 101 of NEPA. In 2002, the Institute formed the National Environmental Conflict Resolution Advisory Committee (NECRAC), which in turn formed the NEPA Section 101 subcommittee. This report represents the subcommittee's findings and conclusions on the implementation of Section 101, including how well agencies have integrated it into their NEPA processes and other policies and staff training.

In August 2003, letters were sent to NEPA coordinators in applicable federal departments, independent agencies and commissions to gather basic information about NEPA Section 101 and related subjects. The purpose of the inquiry was to gather information and not to measure performance or compare agencies.

This report summarizes the responding agencies' answers to the following five questions:

1. What aspects, if any, of the NEPA Section 101 concepts are covered in your agency's strategic (GPRA) plan?

-
2. Has NEPA Section 101 been included as a topic in any of your agency's seminars or training sessions that focused on NEPA Section 102 (the procedural requirements for environmental analysis for proposed actions); if so, how was it incorporated?
 3. During national and/or regional reviews of Section 102 implementation over the past three decades, do your agency records document any review of implementation of the broad environmental policy goals in Section 101?
 4. How has your agency implemented the Section 102 requirement for addressing how each alternative in an Environmental Impact Statement addresses the goals of NEPA Section 101?
 5. Does your agency have any other policies, mission statements, or regulations that have a direct connection to Section 101 goals?

Summary and Analysis of Responses

The survey reveals a wide disparity in agency understanding and implementation of NEPA Section 101. In general, agencies with more experience with NEPA have gone further to integrate Section 101 into their respective strategic plans and training courses. The survey did not, however, reveal whether these agencies' environmental documents reflect the principles and objectives of Section 101.

Twenty-one agencies responded substantively to the survey request (Table 1). Six other agencies replied that they rarely, if ever, become involved in NEPA: Department of Justice, Farm Credit Administration, Federal Reserve System, Federal Trade Commission, National Indian Gaming Commission and the Committee for Purchase From People Who Are Blind or Severely Disabled.

Table 1. Federal Departments, Bureaus and Commissions Responding to Survey

Department/Independent Agency	Agency/Bureau
Agriculture (USDA)	Animal and Plant Health Inspection Service Forest Service
Commerce (DOC)	Economic Development Administration
Defense (DOD)	Installations and Environment (Army)
Energy (DOE)	
Environmental Protection Agency (EPA)	
Federal Communications Commission (FCC)	
Federal Emergency Management Agency (FEMA)	
Federal Energy Regulatory Commission (FERC)	
General Services Administration (GSA)	
Health and Human Services (HHS)	Div., Real Property Policy and Management Programs
Homeland Security (DHS)	Immigration and Customs Enforcement
Interior (DOI)	Bureau of Land Management Bureau of Reclamation Fish and Wildlife Service Geological Survey Minerals Management Service National Park Service Office of Surface Mining
National Aeronautics and Space Administration (NASA)	
Nuclear Regulatory Commission (NRC)	
State (DOS)	Intl Boundary and Water Commission
Tennessee Valley Authority (TVA)	
Transportation (DOT)	Federal Aviation Administration Federal Highway Administration Federal Motor Carrier Safety Administration Federal Transit Administration

The subcommittee has hypothesized that Section 101 and ECR share important linkages, which might improve Section 102’s procedures and outcomes. Increasingly, agencies are using ECR to prevent resource management and environmental conflicts (upstream). ECR is also used to mediate on-going conflict situations (downstream). Both upstream and downstream activities might be seen as ways to further

Section 101’s goals and objectives. The subcommittee prepared case studies in which ECR has been used, which it is believed will further Section 101’s goals and objectives.

Table 2 indicates a generally positive response to the five questions. Question 3’s largely negative response is due to the fact that few agencies have conducted formal reviews of Section 102 implementation.

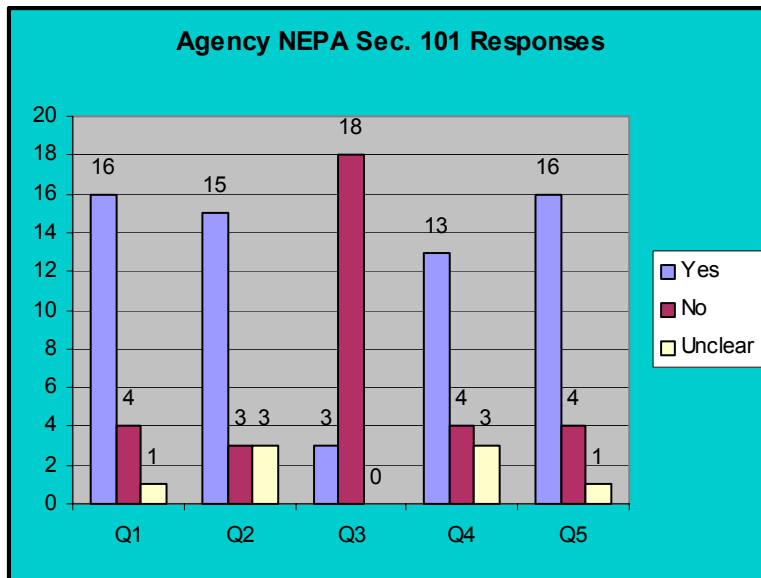


Table 1. Agency NEPA Sec. 101 Responses

Question 1. What aspects, if any, of the NEPA Section 101 concepts are covered in your agency’s strategic (GPRA) plan?

Agencies responded in a variety of ways to illustrate how NEPA Section 101’s goals and objectives have been covered in their respective strategic plans. Some verbatim examples from the strategic plans include:

Understand the condition of the public lands, restore and maintain the health of the public lands, provide opportunities for environmentally responsible commercial activities, preserve natural and cultural heritage, and restore at-risk systems and maintain functioning systems. (BLM)

Preserve natural and cultural resources; develop knowledge about natural and cultural resources; provide for visitor safety and satisfaction; educate visitors about the resource; conserve natural and cultural resources through formal partnership programs; assist others in providing a nationwide system of parks, open space, rivers, and trails; and ensure availability of lands for public recreational use. (National Park Service)

To protect the environment by providing a responsible resolution to the environmental legacy of the Cold War and by providing for the permanent disposal of the Nation’s high-level radioactive waste. (Department of Energy)

Ensure that US residents have a reliable, affordable, diverse, and environmentally sound energy supply that will help guarantee every American a continued high quality of life. (DOE National Energy Technology Laboratory)

GSA carries out social, environmental, and other responsibilities as a federal agency. GSA integrates environmental considerations and pollution prevention into products, services, and business decisions. As part of its strategic plan, GSA will establish itself as the preferred source for environmental services and products. Customers will be assured that when they come to GSA they not only buy with the environment in mind, but they will be in compliance with all federal, state and local environmental regulations and mandates. (General Services Administration)

TVA’s strategic goals are to improve the quality of life by supplying low-cost reliable power, supporting a thriving river system, and stimulating economic growth. Examples of GPRA performance measures include: TVA’s Environmental Index, which tracks environmental impacts (detrimental and beneficial) of TVA’s operations in the areas of air, water, land, waste, and energy); TVA’s Economic Development Index, which tracks effectiveness in supporting job attraction and retention, stimulating capital investment by public and private partners, and attracting quality jobs; and fossil plant emissions. (Tennessee Valley Authority)

The first goal in DHHS’s Strategic Plan for 2001-2006 is to:

“Reduce the Major Threats to the Health and Productivity of All Americans”. The eighth objective under this goal is to “Reduce the impact of environmental factors on human health.” DHHS also fulfills the federal responsibility of paragraph (b)(2) of Section 101 to assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings. Strategic Plan objective number 2.7 mirrors Section 101: “improve the economic and social development of distressed communities.” (Department of Health and Human Services)

The Department of Transportation’s Strategic Plan (2003-2008) calls for a balance between environmental challenges and the need for a safe and efficient transportation network. The Plan’s stewardship objective relates to the government’s role as “trustee of the environment.” The Federal Motor Carrier Safety Administration referenced Strategy 4 under the environmental stewardship objective as especially pertinent: “Work proactively with government, industry and public interest groups in the U.S. and internationally to set environmental policies and standards and enforce environmental laws pertaining to transportation.” (DOT)

Although not specifically identified, Section 101 concepts were included in FHWA’s performance plan. For example, “Environment” is one of five strategic goals in FHWA’s performance plan:

The FHWA is committed to ensuring that highway improvement projects are delivered that preserve and enhance communities and protect the natural environment. Transportation plans and operations must address community concerns and the social impacts of transportation facilities. As part of the effort to serve as a steward of the environment, the FHWA is adopting a heightened focus on encouraging innovative mitigation strategies to address ecosystem and habitat conservation needs in areas where federal-aid and Federal

Lands projects are planned or underway. In addition, we work closely with the U.S. EPA to reduce transportation –related emissions from on-road motor vehicles, which are a major source of ozone, carbon monoxide, and particulate matter.” There are associated performance objectives and targets. (Federal Highway Administration)

The four goals of [Forest Service’s] Strategic Plan (2000 Revision) address ecosystem health, multiple benefits for people, scientific and technical assistance, and effective public service (pp. ii-iii). The strategic plan addresses all of the objectives outlined in Section 101 (b) 1-6 including research and technology on recycling. (Forest Service)

Question 2. Has NEPA Section 101 been included as a topic in any of your agency’s seminars or training sessions that focused on NEPA Section 102 (the procedural requirements for environmental analysis for proposed actions); if so, how was it incorporated?

- ❖ Nearly three-quarters of the agencies responded that Section 101 was a topic in agency training courses and seminars. Most stated that the policy statement was included as part of larger training or workshop presentations that dealt with NEPA procedures. One agency developed a series of courses that uses Section 101 as the basis to help build local communities’ capacity to engage in collaborative planning. Most other agencies training courses covered Section 101 in much less detail. Some examples of the responses follow:
- ❖ Interior offers several NEPA courses to its employees. None of the classes focus solely on Section 101, although modules do cover it in varying degrees. The BLM’s “Partnership Series” courses have been developed specifically to train both agency and other governmental and non-governmental partners in BLM land use planning and major NEPA projects. Section 101 plays a larger role in this training than in traditional NEPA procedural

-
- courses. These courses stress the social and economic elements of the human environment in addition to the natural resource impacts of agency proposals and programs. (DOI)
- ❖ NEPA training is provided to all NASA centers on a three-year rotating basis. In the introductory material, the genesis of NEPA, Section 101 and its meaning are discussed. Throughout the training, it is emphasized that NASA uses, to the maximum extent practicable, the NEPA process to both meet the broad goals of Section 101 and as an overall environmental planning tool that takes into account the mandates of other federal environmental statutes, regulations, and Executive Orders. (NASA)
 - ❖ NEPA Section 101 is included as a focal point in TVA's "NEPA Overview and Categorical Exclusions" training course. This course is required of all TVA personnel that complete categorical exclusion documentation and is also used as an executive overview, as it serves as a four-hour introduction to NEPA concepts. (TVA)
 - ❖ "NEPA and the Transportation Decision Making Process" is the basic NEPA training course used by Federal Highway Administration and Federal Transit Administration provided by the National Highway Institute. The main goal of the course is to focus on decision making to "result in projects that will fit harmoniously into the environment (natural, social, and physical)". Even though the course deals mostly with Section 102, the goals of Section 101 are stressed and used to set the context for the course. The first instruction block of the course covers the federal responsibility under NEPA, essential elements of NEPA, and environmental stewardship. The FHWA Resource Centers have similar training course on the procedural elements of Section 102 that also focuses on Section 101 goals and objectives. (DOT)
 - ❖ Environmental Compliance Training includes discussion of both substantive and procedural compliance with NEPA. The primary focus has been the ability of NEPA compliance to direct APHIS to better decision making and thereby preserve and improve environmental quality. Agency seminars on environmental justice and disease emergency response programs have also included discussions of the substantive intent of NEPA Section 101. (APHIS)
 - ❖ Several courses for FEMA program managers focus on NEPA compliance and documentation procedures. Addressing the spirit of NEPA as reflected in Section 101 is integrated throughout these courses. (FEMA)
 - ❖ Forest Service training on implementing Forest and Resource Management Plans introduces the students to Forest planning and NEPA. Excerpts of Section 101 are provided to students to read. (Forest Service)
 - ❖ The Immigration and Naturalization Service launched a comprehensive training program that integrated the procedural requirements of NEPA as well as substantive requirements of the Clean Water Act, National Historic Preservation Act, the Clean Air Act, and the Endangered Species Act. The goals, objectives and requirements of Sections 101 and 102 are key components of this course. To date over 250 facilities, maintenance, and law enforcement personnel have completed this training. (INS)
 - ❖ FAA's Office of Environment and Energy recently developed a NEPA training course that includes materials and discussions related to the goal and policy objectives of Section 101. FAA has also infused Section 101 goals into training session discussions on two related NEPA topics: (1) adaptive management, and (2) environmental management systems. (Federal Aviation Administration)

Question 3. During national and/or regional reviews of Section 102 implementation over the past three decades, do your agency records document any review of implementation of the broad environmental policy goals in Section 101?

Most agencies have not conducted Section 102 reviews, so the results for this question are inconclusive. Some agencies misunderstood the question. For the three agencies that had conducted comprehensive reviews, only one or two Section 101 goals had been met through Section 102 implementation.

Question 4. How has your agency implemented the Section 102 requirement for addressing how each alternative in an Environmental Impact Statement addresses the goals of NEPA Section 101?

Agencies were asked how they had addressed the requirement (40 CFR 1502.2(d)) that each alternative achieved or did not achieve the requirements of Section 101. Many agencies were either unaware of the regulation or felt that the goals were incorporated by EIS purpose and need statements. Even so, 75 percent stated that the goals had been addressed by each alternative. It may be instructive to reemphasize the regulation.

- ❖ The Department of Energy supplied a crosswalk between specific Section 101 goals and impacts analyzed for alternatives in their Environmental Impact Statements. (DOE)
- ❖ Although Section 101 comports to elements that EPA would use in evaluating alternatives during the NEPA process, EPA does not have any specific guidance that directly addresses distinguishing among alternatives with regard to Section 101. (EPA)
- ❖ The GSA NEPA Desk guide highlights the NEPA Section 102 requirement for indicating how each alternative in an EIS addresses the goals of NEPA Section 101. (GSA)
- ❖ NASA requires that all alternatives address the goals of Section 101 in its EIS's. (NASA)

- ❖ Generally, TVA requires a discussion of Section 101 in the alternatives comparison section of EIS documents. In addition, when adopting another agency's EIS, TVA usually discusses how the alternatives considered by the other agency meet the goals of Sections 101 and 102(1). The requirement for a Section 101 discussion is included in the list of project management steps provided to each EIS project. (TVA)
- ❖ In general, Forest Service EIS alternatives do not specifically address the goals of Section 101. The Forest Service Environmental Policy and Procedures Handbook, however, defines the Environmentally Preferable Alternative as the alternative that best meets the goals of Section 101 of NEPA. (Forest Service)
- ❖ The National Park Service requires that EIS's contain summaries that indicate how alternatives achieve the requirements of Sections 101 and 102 of NEPA. (NPS)

Question 5. Does your agency have any other policies, mission statements, or regulations that have a direct connection to Section 101 goals?

Sixteen of the 21 responding agencies provided additional policies and other guidance that are directly connected to Section 101's goals. A review of these materials is needed to confirm the extent to which these documents connect agency policies connect to NEPA Section 101. This question elicited the most response from the agencies. Examples of agency mission statements, policies and regulations are provided below:

Mission Statements

- ❖ To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. (BLM)
- ❖ The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the en-

joyment, education and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world. (NPS)

- ❖ Our mission is to provide sensitive, timely, and fiscally responsible boundary, water, and environmental services along the United States and Mexico border region. We pledge to provide these services in an atmosphere of binational cooperation and in a manner responsive to public concerns and our stakeholders. (US International Boundary and Water Commission)
- ❖ The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations (Strategic Plan 200 Revision p. 4) and its motto is “Caring for the land and serving people.” Both of these embody the principles of NEPA Section 101, as do the principal laws governing Forest Service mission, programs and activities. The Organic Administration Act authorized the creation of the Forest Service to improve and protect federal forests. In the Multiple Use Sustained Yield Act (MUSYA) the Congress again affirmed the application of sustainability to a broad range of resources including outdoor recreation, range, timber, watershed, wildlife and fish, over which the Forest Service has responsibility. The National Forest Management Act requires management of National Forest System land according to land and resource management plans that provide for multiple uses and sustained yields in accordance with MUSYA. (Forest Service)
- ❖ As part of our environmental stewardship, the Army protects and maintains thousands of historic properties, manages endangered species habitat, recycles wastes, develops engineering standards for sustainable facilities, allows multiple use of land where feasible, develops

“green” ammunition, and emphasizes quality of life for soldiers, their families, and surrounding communities – all of which tie to Section 101. (DOD Army)

Policies

- ❖ [The Bureau of] Reclamation will use all practical means and measures to create and maintain water development and management conditions under which people and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations. (Bureau of Reclamation)
- ❖ To conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations (NPS)
- ❖ Department of Energy’s Office of Science issued a “Statement of Goals and Objectives for Adherence to the Principles of the National Environmental Policy Act”, which explicitly calls for recognition of Section 101 goals by all components of the organization as they carry out their missions. (DOE)
- ❖ Western [Area Power Administration] will conduct its business in an environmentally sound manner, efficiently and effectively complying with the letter, spirit, and intent of applicable environmental statutes, regulations and standards. We believe in protecting and enhancing the environment and that these investments are sound business practices. Western will use effective planning to eliminate, lessen, or mitigate the environmental impacts of its actions. Western will enhance the environment through cleanups, pollution prevention, and waste minimization. Environmental protection is everyone’s responsibility. (DOE Western Area Power Administration)

- ❖ In all its decision making, GSA will attend carefully to the National Environmental Policy set forth in Section 101 of NEPA. To the maximum extent practicable, GSA will ensure that its actions protect and where possible improve the quality of the human environment, including the built and sociocultural environments of the nation's urban areas. GSA decision makers will use the NEPA review process prescribed in CEQ regulations as a practical planning tool, and integrate both the NEPA review process and the Section 101 National Environmental Policy into decision making in an efficient, cost-effective manner. (GSA)
- ❖ TVA's current Environmental Policy and Principles, part of its Environmental Management System, emphasizes environmental protection and stewardship, pollution prevention and control, partnerships and public involvement, and technology development involving new and better solutions for environmental protection. (TVA)
- ❖ All DHHS policies and programs will be planned, developed, and implemented so as to achieve the policies declared by NEPA and required by CEQ regulations to ensure responsible stewardship of the environment for present and future generations. (DHHS)

Excerpts from FEMA Director policy letter to management in 1998 that stresses the importance of looking for ways to enhance the environment as the agency carries out its mission of disaster recovery and mitigation.

“But beyond living by the letter of the law, we have a unique opportunity to carry out the spirit of the law. Part of our mission is to help communities restore themselves. Our commitment to mitigation indicates that we not only want to help them restore themselves, but to actually restore themselves to a safer condition than before – more disaster resistant. Using this same philosophy there are often existing environmental problems that we can

address with little effort as we go about our normal business. For example, we are already looking for ways of restoring the natural floodplain and we are careful to avoid project sites that could pass on toxic waste problems to future generations.

“As we plan for and respond to disasters we should not only ask how we can meet the immediate needs of the community but we must also ask which approaches address the longer term environmental commitments and plans of the state or local community, such as watershed, air quality, or urban renewal goals. Often the selection of the type of solution, the placement of a facility, or the method of stream construction can make a long-term difference in the quality of the environment and sustainability of the community.”

Regulations

- ❖ Permits from the USDI Office of Surface Mining are required to maximize the extraction of coal from old, previously disturbed sites. (Abandoned Mine Land Enhancement rule – relates to NEPA Section 101(b)(6)). (OSM)
- ❖ The Fish and Wildlife Service's NEPA revised guidelines promote the consideration of the principles of Section 101. These guidelines (550 FW 1-2) are currently undergoing Departmental clearance for publication as final guidelines in the Federal Register. (USFWS)
- ❖ The DOE Acquisition Regulation (48 CFR 970) states that:

“DOE policy is to acquire items composed of the highest percentage of recovered/recycled materials practicable (consistent with published minimum content standards), with adversely affecting performance requirements; consistent with maintaining a satisfactory level of competition; and consistent with maintaining cost effectiveness and not having a price premium paid for products containing recovered/recycled materials.” (DOE)

- ❖ The FHWA provided four regulation citations and eighteen guidance documents that connect to Section 101 goals. These cover program area such areas as noise, wetlands, endangered species, migratory birds, mitigation, intrastate waters, roadside vegetation, invasive species, aesthetics, transportation enhancements, environmental justice, and scenic byways. (FHWA)
- ❖ FEMA provided its NEPA compliance regulations (44 CFR Part 10), which reiterate several of the NEPA Section 101 objectives in the policy section. (FEMA)
- ❖ Streamlined natural gas pipeline and hydroelectric rules directly promote the goals of Section 101 of NEPA. The rules encourage the hydroelectric and gas pipeline industries to engage in early project-development involvement with stakeholder groups as contemplated by NEPA. (FERC)

Programs

- ❖ The Department of Energy has a National Environmental Policy Act Compliance Program (DOE O 451.1B), which assigns responsibilities for reporting on lessons learned during each NEPA process, encouraging continuous improvement, and tracking/reporting on progress on and effectiveness of implementing mitigation commitments. These provisions support an effective and efficient NEPA process, which in turn promotes Section 101 goals.
- ❖ In 1993, DOE became the first federal department to make its environmental impact analyses available as a permanent, collective, searchable library using Internet technologies.
- ❖ The Department of Health and Human Services' Healthy People 2010 program identifies environmental quality as one of the ten leading indicators in the set of national health objectives.
- ❖ FHWA has a knowledge exchange website called "Re: NEPA Community of Practice". Included in the opening statement on the web-

site: "The goal of Re: NEPA is to provide users additional opportunities to explore the transportation decision-making process through discussion, research, assistance, and education that is directed toward a better, streamlined, and solution oriented process for balancing transportation need and the social, economic, cultural, and natural environment."

Findings and Conclusions

The subcommittee finds that, although the survey provides useful insight of agencies' use and understanding of NEPA Section 101, it is unclear whether the policy statement plays a significant role in NEPA Section 102 implementation. Nearly all the agencies have paid attention to Section 101 to some extent. The analysis reveals, however, that Section 101 is not a foremost consideration for agencies regardless of a plain reading of the responses. For example, 75 percent of the agencies stated that they had "covered Section 101 concepts" in their strategic plans. A positive response might or might not translate in altered behavior at the field level unless it forced changes in how NEPA projects or on-the-ground decision making were being conducted. Over time, it might be that GPRAs strategic goals will effect changes in NEPA implementation by rewarding project teams that incorporate "NEPA 101 principles and objectives".

Some agencies indicated that they believe Section 101's objectives are integral to the NEPA (Sec. 102) process and, therefore, do not need to be addressed separately. A few agencies have gone further to promote better appreciation of Section 101 internally with their staff and externally with stakeholders.

Most agencies have incorporated NEPA's goals and objectives into their respective strategic planning documents. They have exposed their employees to Section 101 through agency-sponsored training courses and workshops. Assessment of Section 102 implementation has been sporadic, so it is unclear whether Section 101's broad environmental goals have been considered in EIS and EA preparation. Most agencies stated that their EIS alternatives were tied – explicitly or implicitly – to Section 101. This finding merits additional study. Finally, most all of the agen-

cies have promulgated regulations and policies and other guidance that purport to connect directly to Section 101.

While the survey provided valuable information, it was not an end unto itself. The subcommittee is also interested in how Section 101 melds into collaboration and ECR as a whole. To that end, the subcommittee has requested the Institute (with the assistance of the DOI-Office of Collaborative Action and Dispute Resolution) to collect case studies of NEPA projects that have used ECR. The case studies, which met some or all of nine evaluation criteria (See Section 8 of the NECRAC report), will serve as a useful guide to determine when and how ECR reinforces the intent of Section 101.

In conclusion, although agencies have largely adopted the plain language of Section 101, it appears that it has not been given a great amount of attention. Given the choice to emphasize Section 101's lofty, yet indefinable goals and the now-comforting procedures of Section 102, agencies have understandably opted for the latter.

Section 102's procedures, now so well understood by potential collaborators and litigants, have become effectively the only NEPA that agencies know. The single-minded focus on following NEPA's procedures may have disconnected agencies from its original intent: to provide a safe and healthy environment while balancing the needs of current and future generations.

Attachment 1 – Summary of Agency Responses

Table 2. Summary of Responses

Agency	Q1	Response			Q5
		Y-yes Q2	N-No Q3	U-Unclear Q4	
Dept of the Army, Installations and Environment	U	N	Y	Y	Y
DHHS, Food and Drug Administration	Y	N	N	Y	Y
Real property					
DHS, Immigration and Customs Enforcement	N	Y	Y	Y	N
DOC, Economic Development	Y	Y	N	U	U
DOE	Y	N	N	Y	N
DOE, FERC	Y	Y	Y	Y	Y
DOI, incorporating BLM, BOR, FWS, MMS, NPS, OSM	Y	Y	Y	Y	Y
DOJ	<i>Agency has minimal involvement in NEPA</i>				
DOT, Federal Aviation Administration	Y	Y	Y	N	Y
DOT, Federal Motor Carrier Safety Administration	Y	U	N	N	Y
DOT, Federal Highway Administration	Y	Y	Y	Y	Y
DOT, Federal Transit Administration	Y	Y	N	U	Y
Environmental Protection Agency	Y	Y	Y	N	Y
Farm Credit Admin.	<i>Agency has minimal involvement in NEPA</i>				
FCC	N	N	N	N	N
Federal Reserve System	<i>Agency has minimal involvement in NEPA</i>				
FEMA	N	Y	N	N	N
FTC	<i>Agency has minimal involvement in NEPA</i>				
GSA	Y	Y	N	Y	Y
International Boundary and Water Commission	Y	U	Y	Y	Y
NASA	N	Y	N	Y	Y
National Indian Gaming Commission	<i>Agency has minimal involvement in NEPA</i>				
Nuclear Regulatory Commission	Y	Y	Y	Y	Y
Tennessee Valley Authority	Y	Y	N	Y	Y
USDA, Animal Plant Health Inspection Service	Y	Y	N	U	Y
USDA, Forest Service	Y	Y	N	Y	Y

References:

- Center for Collaborative Policy. 2003. Success Story: What is Success? Evaluating Collaborative Local Planning in Portugal. (The Collaborative Edge. April.
- Colby, Bonnie G. 2000. Evaluating Environmental Conflict Resolution: What Constitutes Success? (in prep.) Department of Agricultural and Resource Economics, University of Arizona. May 28.
- Innes, Judith E. and David E. Booher. 1999. Consensus Building and Complex Adaptive Systems – A Framework for Evaluating Collaborative Planning.
- Orr, P. 2003. Evaluating ECR Processes: Project Level Report Template (draft). U.S. Institute for Environmental Conflict Resolution. June 23
- Society of Professionals in Dispute Resolution. 1997. Best Practices for Government Agencies: Guidelines for Using Collaborative Agreement-Seeking Processes, Report and Recommendations of the Environment/Public Disputes Sector Critical Issues Committee, adopted by the SPIDR board. January
- Susskind, Lawrence, Sarah McKearnon, and Susan Carpenter Eds. Evaluating Consensus Building” by Judith E. Innes, chapter of Consensus Building Handbook,
- Todd, Susan. 2001. Measuring the effectiveness of environmental dispute settlement efforts, in: Environmental Impact Assessment Review 21(2001) 97-110.
- U.S. Institute for Environmental Conflict Resolution. N.d. Program Evaluation questionnaire for Environmental Conflict Resolution Parties. OMB No. 3320-0004
- _____. 2002. Guiding Principles For ECR Processes: Best Practice Considerations for Participants and Neutrals Engaged in ECR. November 8.
- _____. N.d.. Draft documents of the National Environmental Conflict Resolution Advisory Committee NEPA Section 101 Subcommittee.

APPENDIX H:

Five Elements of A Successful Agreement Addressing Environmental Justice Issues

Environmental Justice (EJ) conflicts are emerging throughout the country as Affected Communities experience “awakenings” as the connections are being made between health effects and the polluting effects that environmentally risky projects disproportionately place in their communities. Generally, these EJ communities lack the legal and scientific capacity to wage battle; therefore, many EJ communities resort to the method they know best—political confrontation and conflict. Managing these conflicts has been an enormous challenge to federal, tribal, state and local regulators. This document was developed as a tool to help disputing parties and the government regulators find a way to resolve EJ disputes through negotiation, mediation or facilitation while respecting the interests of all parties and staying within the statutory confines of the law.

Many EJ communities have seen legal and political tactics as their only road to justice on the questions in dispute; that thinking is evolving (and must continue to evolve) to accept negotiation/mediation as an effective alternative to political and legal machinations.

After “Setting The Table” right, the next step is to gain agreement from the disputing parties around the “Elements of a Successful Agreement.” The first concern of Affected Community members is usually to correct the problem. Parties must agree that unless the issue of health/environmental impact is addressed, there is no need to negotiate anything else. Once an agreement addresses this impact, then other options are available

for negotiation and the five elements of a successful EJ agreement are as follows:

1. Maximum implementation of technology and modern procedures in the operation of the facility to fully address the incorporation of environmental values along with economic, community, tribal, cultural and other social considerations. (Where zero emissions are possible, that should be the goal);
2. Series of testing completed to prove to the Affected Community’s total satisfaction that health/environmental impact issues have been fully addressed;
3. On-going testing and monitoring are in place and controlled by the Affected Community to assure continuous compliance with safe operations standards;
4. When applicable, the private operator is given a fair opportunity to make the case for capacity increase in light of #1-3; and
5. In consideration of possible capacity increase, the Affected Community gains host community benefits to fund improvements to health and economic viability.

In the end, the inclusion of these five elements might transform a facility that has been the burden on a community into a safe economic engine to drive the revitalization of that community. For existing facilities,

this model provides the means to “clean-up” the facility and stops its perceived polluting affects. For new facilities, it creates the best possible opportunity for the operator to obtain permit approval with community support.

All together, the primary issues are health, social, cultural, and economic impacts; unless these issues can be addressed as stated in element 1, then all bets are off

and the conflict is on. Also note, elements 4 & 5 are optional and are to be pursued only if the Affected Community members agree to consider this option.

(Chairman’s Note: This document was prepared by the Subcommittee on Affected Communities in connection with its report to the full Advisory Committee. The document was not, however, specifically considered or voted upon by the full Advisory Committee.)

APPENDIX I:

Report on ECR and Collaboration Training Survey

Training Needs for Interagency Environmental Cooperation and Conflict Resolution – Summary of Agency Responses

The National Environmental Conflict Resolution Advisory Committee (Capacity Building for ECR and Collaboration Subcommittee) considered the need to develop federal interagency training on the use of consensus-based collaboration and conflict resolution processes to address environmental, natural resources, and public lands issues. This need surfaced in the subcommittee's discussions about the role that interagency conflicts play in federal environmental decision making and the importance of developing collaborative practices among agencies and interested parties within the context of NEPA reviews.

Such training is envisioned to assist managers in recognizing when various ECR tools would be helpful and how to obtain assistance in applying ECR rather than training in mediation or facilitation. In order to assess the need for this kind of interagency training, the subcommittee gathered information on training already being offered to agency employees and others in this arena and whether such training would be of use.

An inquiry was sent to the 37 members of the Interagency Alternative Dispute Resolution working group

and the 67 members of the Environmental Conflict Resolution Roundtable (there is some overlap in membership). A wide variety of federal agencies participate in these groups, including most or all of those with environmental regulatory and public land management missions. Here is a summary of the six responses received to date.

1. Current agency-sponsored training courses, seminars, or segments thereof that cover the use of ADR in environmental or other policy issues, NEPA-related interagency cooperation, or other relevant skill development.

The **Federal Highway Administration (FHWA)** sent information on their Alternative Dispute Resolution Problem Solving Workshops to support environmental streamlining and stewardship. Objectives include: to increase knowledge of the application of ADR strategies to manage conflicts that arise during the NEPA and transportation development processes; to learn how to negotiate desired outcomes for environmental reviews, permits, and approvals using collaborative decision making and interest based negotiation principles; to apply conflict management skills to topics most controversial and germane to each Region; and to increase understanding of participants' respective roles and responsibilities in the NEPA and project development processes. The workshops are 2 ½ days long.

The Department of the Navy said they only sponsored one course covering the use of ADR for

environmental issues. It is the Environmental Negotiation Workshop, a three-day course taught by the Naval School, Civil Engineering Corps Officers Environmental Division. The course provides negotiation and communication skills necessary to achieve productive agreements with regulatory and public stakeholders. Both interpersonal and organizational aspects of negotiation and communication are covered, and the course includes case studies and role-playing. The Navy provided course information and a sample agenda.

The Department of Energy does not sponsor any ADR courses for environmental Issues. Brief training on collaborative processes is occasionally provided to community groups involved in site cleanup issues, when requested.

The Federal Energy Regulatory Commission (FERC) has conducted training including:

- ❖ Hydroelectric Alternative Process training (series of pilot training programs in productive collaboration was held in 2001)
- ❖ Interest-based negotiation training /ADR for long-term multi-party hydroelectric relicensing processes (3-part training; third part is 2 ½ days and has been lead by a facilitator from the Consensus Building Institute)
- ❖ Interest-based negotiation regional workshops focused on natural gas pipeline disputes
- ❖ Interest-based negotiation stakeholder workshops at the beginning of collaborative hydroelectric re-licensing processes
- ❖ Mediation training at the Michigan State University Institute of Public Utilities, in coordination with the New York State Commission mediation service (June 2003)
- ❖ ADR workshop at the annual National Association of Regulatory Utility Commissioners Studies Program (August 2003)
- ❖ “Hydropower Re-licensing Negotiation Training” provided by the Natural Resources Leadership Institute at North Carolina State University at the beginning of one hydroelectric re-licensing process

- ❖ Interactive workshop on effective consultation with Indian tribes during hydropower re-licensing

In addition, FERC’s Dispute Resolution Service has collaborated with the National Energy Board of Canada to exchange information on how the ADR Programs of each work.

The Department of Interior’s Office of Collaborative Action and Dispute Resolution (CADR) has worked closely with the Department’s training organization, DOI University, and the Interior Dispute Resolution Council comprised of an ADR representative from each bureau and office of the Department, to provide awareness and educational forums, workshops, and on-line and classroom skills training. In addition, several well-known and notable interagency training efforts in the bureaus include: joint fact-finding by the US Geological Survey; the partnership series by the Bureau of Land Management; collaboration training at the Fish and Wildlife Service’s training center; and interest-based negotiation training by the Bureau of Reclamation.

The following are examples of CADR capacity building efforts:

Educational Forums and Workshops:

- ❖ **Brown Bag ADR speaker series** co-sponsored at DOI each month with the DC Chapter of the Association for Conflict Resolution on topics of interest across federal agencies.
- ❖ **DOI Dialogue Series on Collaborative Conservation and Cooperative Resolution** is co-sponsored with DOI University 3 times each fiscal year and feature nationally recognized speakers in the field. It is intended to provide a forum for honest discussion of the challenges and benefits of using collaboration, consensus building and conflict resolution to address environmental, natural resource and public lands conflicts.
- ❖ **Workshops on Integrating Scientific and Technical Information into Collaborative Processes.** This workshop was co-sponsored

with the Science Advisor to the Secretary, and developed in collaboration with RESOLVE, Inc. and utilized a hypothetical case study, which highlighted the types of inter-bureau conflicts and challenges often confronted in DOI's work.

- ❖ Workshop on **Building Consensus to Get Your Mission Accomplished**. Co-sponsored with USGS ADR office.

Awareness and Orientation Training:

- ❖ Past **Office of Hearings and Appeals Training** was a pre-cursor to the design of an ADR pilot program for the Interior Board of Land Appeals. It included: Presentation on the ADR Program of the U.S. Court of Appeals for the 11th Circuit; Conflict Assessment Workshop using cases pending on Appeal before the Interior Board of Land Appeals; and Collaboration and Environmental Conflict Resolution provided by the Bureau of Land Management to demonstrate the upstream efforts by the BLM prior to cases filed at OHA.
- ❖ **Supervisory awareness training** on effective conflict management entitled: Conflict Happens: How To Make it Work for You? This on-line awareness/orientation training is delivered via internet and CD Rom and is the first in a series of online training which will become an online training library which can be searched by any DOI employee for general information on the types of tools and resources available to assist them in determining whether a collaborative approach or a conflict resolution process appropriate and how to initiate and participate in such processes.
- ❖ **Solicitor's office Early Case Assessment orientation training** was developed to provide an introduction to an Early Case Assessment Pilot Program for use by attorneys to make an early determination with their clients on when ADR might be appropriate.

Skills Training Courses:

- ❖ **Interagency Collaborative Conservation Course**. CADR has entered a cooperative agreement with the University of Michigan's School of Natural Resources Ecosystem Management Initiative to continue development and promotion of this training course fully designed, developed and supported by a steering committee comprised of approximately 14 federal agencies, including most DOI bureaus. Each course offering is place-based and intended to be specifically tailored by the course sponsors and participants (representatives of federal, state, local, and tribal governments) to ensure that the weeklong course meets their specific needs and circumstances.
- ❖ **Hydro Re-Licensing Course**
- ❖ **Public participation modules** for IAP 2 certification

The Environmental Protection Agency (EPA) conducts several relevant courses:

- ❖ **Public Involvement in Regulation Development at EPA** – this is a one-hour module included in a 2 ½ day regulation development class. The module includes discussions of how to identify the most appropriate public involvement process for obtaining the input of outside parties. The categories of public involvement include: Information Exchange Processes, Recommendation Processes, and Agreement Processes. Participants become familiarized with ways to identify interested parties, with the situation assessment process and with good practices (based loosely on the ACR Best Practices for Agreement Seeking Processes).
- ❖ **Overcoming Fear of FACA** – EPA presented this one-day course at the 2002 National Environmental Conflict Resolution conference in Tucson. This course covers the basics of when FACA is applicable to public involvement processes, how to operate public involvement or consensus building processes under FACA

and what types of public involvement processes can be conducted without invoking FACA.

- ❖ Using ADR to Maximize Your Effectiveness as an Advocate – This training was created through a collaborative process by an HQ/Regional ADR specialists working group. Using a modular design, where each region can select those aspects of the training most appropriate for their region, this training is building capacity to use ADR in enforcement cases in the regions where the training has been given. Through this training, Agency staff can develop their capacity to be advocates for Agency enforcement actions while at the same time using ADR. Case studies from the region receiving the training illustrate points addressed in the modules and provide an opportunity for case consultation follow up as an adjunct to the training. The training is given by an EPA enforcement ADR specialist/contractor team and has been successfully delivered in four regions; more regional trainings are scheduled, and training will also be given at headquarters. Other federal agencies will be invited to attend headquarters training. Manual available upon request.
- ❖ Environmental Mediator Skills Training – This 5-day (40 hour) course is designed to train new employees and interns the basics of being an environmental mediator. The course covers conflict theory, interest based negotiations, definitions of ADR, conflict assessment, and various mediator skills. The course is interactive with exercises for most of the skills modules. The course was piloted in Bangkok, Thailand for the Department of Environmental Quality Promotion. EPA intends to finalize the materials this fall and present it for EPA and other summer interns, Summer 2004.
- ❖ International Association of Public Participation Certification Training – EPA has presented this 5-day (40 hour) training in the basics of public participation in its head-

quarters office and at its annual Community Involvement Conference. In 2003/2004 EPA will be sponsoring this training in up to 6 state environmental offices in an effort to reduce the number of Title VI complaints filed which reference poor public involvement process implementation. This training is off the shelf, well tested, and consistent. We recommend it to other federal agencies. Course offerings and contact points can be found at www.iap2.org

- ❖ A Practical Guide to Consensus – Policy Consensus Institute – EPA staff have presented parts or all of this training over the past 4 years. It is well thought out and documented.
- ❖ Other commercial sources of appropriate courses which have been used over the years by EPA ADR and program staff include: CDR Associates, Boulder, CO; CDS Associates, Washington, DC; Concur, Inc., Berkeley, CA; Resolve, Inc., Washington, DC; and Consensus Building Institute, Cambridge, MA. A good listing of the various reputable sources of these courses would be a valuable resource. In addition, many local jurisdictions have mediation centers, which offer training (Northern Virginia Mediation Association, for instance).
- ❖ USDA Graduate School, Washington DC has a certificate program in dispute resolution and courses in environmental dispute resolution.

2. What is the target audience for each course or seminar listed in question 1?

The initial round of FHWA's ADR Problem Solving Workshops is aimed at a balanced representation of FHWA, federal land management agencies, federal environmental review and permitting agencies, Native American tribes, State Departments of Transportation, State Historic Preservation Officers, and state resource agencies. The course is targeted to agency personnel at the practitioner level and includes those involved in early coordination of transportation projects and those who review and comment on environmental documents.

The target audience for the Navy’s Environmental Negotiation Workshop is military and civilian personnel in environmental compliance, installation restoration, natural resources and planning that are responsible for communicating and negotiating with environmental regulators or with the public regarding environmental matters.

For FERC’s list of courses above, the target audiences include:

- ❖ Federal and state regulatory agencies and utility applicants for FERC hydro licenses
- ❖ FERC technical staff
- ❖ Natural gas pipeline companies
- ❖ Interested parties for collaborative hydroelectric re-licensing processes
- ❖ Federal, state, and international utilities’ regulatory personnel (electric, gas, telecommunications, and water)
- ❖ State and federal regulatory commission staffs
- ❖ All interested parties in a collaborative hydroelectric re-licensing process
- ❖ Hydropower license applicants

Brown Bag ADR speaker series (DOI) are open to all federal employees and the Association for Conflict Resolution chapter’s mailing list. The target audience for the Dialogue Series on Collaborative Conservation and Cooperative Resolution is Departmental management including decision-makers from all bureaus and offices. Other federal agency managers and ADR coordinators and managers are invited as appropriate depending on the speaker’s topic. Workshops on Integrating Scientific and Technical Information into Collaborative Processes are for managers of all DOI bureaus at the Department level in DC to attend together. The workshop was also replicated in several bureaus for managers in the field utilizing bureau specific case studies. Target audience for Building Consensus to Get Your Mission Accomplished was scientists and managers from all bureaus and other federal agencies including EPA and the Forest Service. OHA training is targeted to judges and attorneys, as is

the Solicitor’s office Early Case Assessment orientation training. Conflict Happens: How To Make it Work for You? is intended as an introductory training for all DOI supervisors across all bureaus and offices. This training is being shared for use by other federal agencies including the Department of the Navy. Target audience for the Interagency Interactive Conservation course includes federal, tribal, and state resource professionals. Courses have been targeted to specific locations or watersheds, such as Puget Sound, the Missouri River Basin, and Western Colorado.

In addition, DOI CADR training and presentations have been developed for the SES Candidate Development Program; Team Leadership program; and other management and leadership training programs. Presentations are made on request for office and bureau teams, e.g. regional environmental officers of the Office of Environmental Policy and Compliance.

Target audiences for EPA’s regulation development training and “Using ADR to Maximize Your Effectiveness as an Advocate” course are EPA headquarters and regional staff. The advocacy effectiveness course is also appropriate for other federal regulatory agencies. Target audience for “Environmental Mediator Skills Training” is new EPA employees and interns. The IAP2 certification training is recommended for EPA and other federal agency staff, and also state environmental office staff.

3. Approximately how many agency employees (and also employees of other agencies and/or public groups) have attended each course or seminar listed in question 1, in the past five years?

FHWA’s ADR workshops are designed for about 35 participants, with ten workshops planned initially. Three states are now planning to hold similar workshops in their state. Each workshop includes several FHWA employees, one from each State DOT and SHPO, 2-3 from EPA, 2-3 from USACE, and 2-3 from USFWS. Some of the workshops also involved representatives from tribes, USFS, NMFS, TVA, and USCG.

The Navy’s Environmental Negotiation Workshop is appropriate for and available to all Department

of Defense components, and may be hosted by any of them. Most attendees are from the host Division or Activity, but representatives of other activities and divisions are encouraged to facilitate sharing of information and ideas. About 500 employees have taken the course in the past five years, including about 350 from the Navy, 75 from the Army, 25 from the Air Force, and the rest from the Marines, Coast Guard, EPA and other federal agencies.

FERC does not have attendance information for the courses listed above.

EPA's regulation development training has been presented 2-5 times a year for 10 years to classes averaging 30 participants. "Using ADR to Maximize Your Effectiveness as an Advocate" has been presented to 120 EPA employees (averaging 30 per session) and will be given to 60 more, including some from other federal agencies, within the next few months. Approximately 100 people attended the Environmental Mediator Skills Training in Thailand. EPA has sent approximately 20 employees per year to the IAP2 Public Participation training, and will train approximately 120 state agency employees in six states in the next two years.

DOI's Brown Bag ADR monthly speaker series are consistently attended by approximately 40-50 employees from a variety of federal agencies.

4. Which other agencies do you work with on environmental issues, and which other agencies might experience similar public disputes that your employees could learn from?

FHWA : EPA, USFWS, USACE, SHPO, USFS, NPS, NOAA, USCG, BLM, TVA, state DOT's, state resource agencies, tribes, local agencies, MPO's.

DOE : EPA, State pollution control and environmental agencies, USFWS.

Navy: The other branches of the Armed Services plus the Coast Guard and Environmental Protection Agency.

FERC : Department of Interior (Fish and Wildlife Service, Bureau of Indian Affairs, National Park Service, Bureau of Land Management); Department of Agriculture (Forest Service); Department of Commerce (National Marine Fisheries Service); the National Oceanic and Atmospheric Administration; and comparable state and local environmental agencies.

DOI: EPA, USDA Forest Service, Defense agencies, FERC, DOT, and the National Marine Fisheries.

EPA: FERC, DOJ (Superfund), state regulatory agencies, DOI, tribes, USFS, DOD, and DOE.

5. Does your agency have interest in or a need for interagency training? If so, could you briefly illustrate the substantive context in which such training would help (e.g. specific policy or program area or application) and the potential nature and size of the target audience?

FHWA : Yes, that is why they have invested so much effort into developing and conducting the ADR workshops. An important part of the efforts is getting all agencies involved to negotiate timeframes for the environmental review process, in response to Congressional mandate. FHWA would like to further partner with State DOT's to continue their interagency training efforts.

DOE: The representative I talked to did see a need but said that it would be a "tough sell" with agency management to sponsor this kind of training and for agency employees to get them to attend.

Navy: They have a specific need for training in negotiating interagency (federal facility) agreements with EPA; this involves about 250 employees and is included in the Environmental Negotiation Workshop course.

FERC : Yes, for hydroelectric licensing and gas certificate processes.

EPA: Yes – tribal issues, natural resource damage disputes, training in how to be a participant in ADR processes for scientists and

engineers, also for others in how to become agents for environmental justice.

6. What further needs do you see for related training in the use of collaborative processes and ECR that are not covered by your current offerings? Please list these along with the nature and size of the potential target audience.

FHWA: Continued need for training in negotiating timeframes for the environmental review process. There is an expressed need to address the state-local relationship and conflict resolution, and timeframes for local projects.

Navy: There is a need for an intermediate/advanced environmental negotiation course that would focus on case studies and role-playing. Potential target audience would be about 60-80 employees/year from the same agencies that attend the current course.

FERC: A general tutorial in interest-based negotiation would be beneficial at the beginning of every alternative hydroelectric re-licensing process, for all interested parties including federal, state and local agencies; landowners; affected Indian tribes; recreational, cultural, and environmental groups; and the licensee's representatives. Another suggestion is to periodically bring together representatives from all agencies with regulatory responsibilities that generally participate in hydroelectric and gas collaborative processes.

EPA is finalizing a series of brochures outlining good practices in public involvement: watch for them on the Internet site www.epa.gov/publicinvolvement EPA is also finalizing an extensive manual on public involvement in rulemaking, policy development and national scale issues. This 100-page manual co-authored by Phil Harter and Deborah Dalton will be a primary resource in presenting future training modules. The manual will be posted on EPA Conflict Prevention Center and Resolution Center's Internet site: www.epa.gov/adr. EPA also distributes the ACR Best Practices for Agreement

Seeking Processes to EPA staff that are involved or considering using consensus-building processes for development of rules, policies or programs.

DOI:

- a. DOI is currently working to identify core competencies and training courses to support the recent environmental directive on training for NEPA.
- b. The next Interior Board of Land Appeals training will be skills training in support of implementation of the ADR pilot program.
- c. Curriculum is under development with DOI University and the Interior Dispute Resolution Council for a conflict management course series to be initiated by DOI University in 2005, to include Negotiation Skills Training; Introduction to Conflict Management Tools; FACA and the 4 C's Approach; Negotiated Rulemaking; Best Practices in Collaborative Agreement Seeking Processes; and additional courses.

7. What current forums for training does your agency use? Include any inter-agency forums in which your agency participates to which the use of ADR might be added.

FHWA: National Highway Institute courses; interagency review process streamlining workshops for all federal partners and for EPA, USACE, and USFWS.

DOE: Does not have current agency or inter-agency forums for environmental training; ADR training is currently limited to training in addressing/mediating workplace disputes.

Navy: The Interservice Environmental Education Review Board - a "virtual" forum.

FERC: FERC has used regional and local forums as well as university-based training and industry association meetings. EPA has a "Community Involvement University" that could provide an interagency forum.

DOI provides awareness and educational forums, workshops, and on-line and classroom skills training. The CADR office sponsors and develops workshops and training, but delivery is generally contracted out to the most experienced and recognized private training providers with expertise in a particular subject matter. There are also a variety of interagency courses offered by the training centers of individual bureaus, including the Bureau of

Land Management's national training center in Phoenix, Arizona, the Fish and Wildlife Service's National Conservation Training Center in Shepherdstown, West Virginia, the National Park Service's Training Center in Grand Canyon National Park, the US Geological Survey's Office of Employee Development, and the ADR office in the Bureau of Reclamation.

**Training Needs for Interagency Environmental Cooperation and Conflict Resolution
Summary of Agency Responses-Draft 3/04**

I. CURRENT TRAININGS

AGENCY	COURSE (S)	OBJECTIVE	AUDIENCE
FHWA	-ADR Strategies -Negotiation -Collaborative Decision making -Interest Based Negotiation	-Transportation development -Environmental Streamlining/Stewardship -Environmental reviews/permits/approvals	Agency personnel at the practitioner level
Navy	-ADR/Environmental Issues -Environmental Negotiation -Interpersonal/Organization Aspects of Negotiation -Communication	Achieve productive agreements w/ regulatory & public participants personnel in environmental	Military and civilian compliance, installation restoration, natural resources, and planning
DOE	Collaborative Process	Site clean up	Community Groups
FERC	-Productive Collaboration -Interest Based Negotiation -Mediation Training -Hydropower Re-Licensing Negotiation -Effective Consultation w/Indian tribes	-Hydroelectric Relicensing -Natural gas pipeline disputes -Stakeholders workshop	Fed/State regulatory agencies utility applicants/hydrolicense, technical staff, natural gas pipeline, hydro-electric re-licensing, Fed/State International regulatory utilities, Personnel, commission's staff, participants in collaborative hydro-electric re-licensing, hydropower licensing staff
DOI	-Joint Fact Finding -Interest based Negotiation -Collaboration -Conflict resolution for Environmental/ Public Land and natural resources -Conflict Assessment Workshop -Conflict Happens/Awareness Training -Integrating Scientific/Technical Information into Collaborative Process -Collaborative Conservation -Hydro Re-Licensing Course -Public participation -SES Candidate Development -Interagency Interactive Conservation -Early Case Assessment	Support missions USGS, BLM OHA, Solicitors Office, BIA, Supervisors, senior leadership Managers, employees, federal state, local, tribal governments	Departmental/bureau mngrs ADR coordi-nators, decision, makers, scientist, judges, attorneys, tribal/ state resource professionals, SES candidates, supervisors
EPA	-Public Involvement in Regulatory Dev (Information exchange, recommendation & agreement processes) -Overcoming fear of FACA -Using ADR to maximize Effectiveness As Advocate -Environmental Mediator Skills -Conflict Assessment -International Public Participation Certification Training -Practical Guide to Consensus	-Identify appropriate public involvement process -Situation assessment -Identify types of public involvement processes w/o involving FACA -EPA enforcement	HQ/Regional staff, EPA employees and interns, Federal/State environmental staff

II. AGENCY INTEREST OR NEED FOR INTERAGENCY TRAINING

Overall response: Yes (One agency identified potential “tough sell” due to agency management)

Course subjects identified as:

- ❖ Negotiated timeframes for environmental re-view process
- ❖ Negotiated Interagency (federal facility) agreements with EPA
- ❖ Hydroelectric licensing and gas certificate processes
- ❖ Tribal issues
- ❖ Natural Resource damage disputes
- ❖ How to be a participant in ADR process for scientist and engineers
- ❖ How to become agents for environmental justice for affected parties

III. FURTHER NEED FOR RELATED TRAINING IN THE USE OF COLLABORATIVE PROCESSES AND ECR THAT ARE NOT COVERED BY CURRENT OFFERINGS

Course subjects identified:

- ❖ Negotiating timeframes for the environmental review process
- ❖ Intermediate/advanced environmental negotiation focusing on case studies/role-playing
- ❖ General tutorial in interest-based negotiation
- ❖ Hydroelectric and gas collaborative processes w/ representation from all agencies w/ regulatory responsibilities in this area.

IV. CURRENT FORUM FOR TRAININGS USED:

- ❖ FHWA: National Highway Institute courses
- ❖ Navy: The Interservice Environmental Education Review Board/virtual forum
- ❖ FERC: Regional and Local forums, university-based training, industry association meetings.
- ❖ EPA: Community Involvement University was suggested. Other commercial sources include:

- ❖ CDR Associates, CDS Associates, Concur, Inc, Resolve, Inc, Consensus Building Institute, local jurisdiction mediation center training i.e. Northern Virginia Mediation Service, USDA Graduate School
- ❖ DOI: BLM National Training Center, Fish and Wildlife National Conservation Training Center, National Park Service Training Center, USGS Office of Employee development, BOR ADR Office, Other commercial sources include: University of Michigan’s School of Natural Resource Ecosystem Management Initiative (Interagency Collaborative Conservation Course)

V. IDENTIFIED INTERAGENCY RELATIONSHIPS /OTHER AGENCIES THAT MIGHT EXPERIENCE SIMILAR PUBLIC DISPUTES WHICH EMPLOYEES CAN LEARN FROM (SEE TABLE 1)

- ❖ **FHWA:** EPA, USFWS, USACE, SHPO, USFS, NPS, NOAA, USCG, BLM, TVA, state DOT’s, state resources agencies, tribes, local agencies, MPO’s
- ❖ **DOE:** EPA, State pollution control and environmental agencies, USFWS
- ❖ **Navy:** Other branches of the Armed Services plus Coast Guard and EPA
- ❖ **FERC:** DOI: Fish and Wildlife Service, BIA, NPS, BLM, Department of Agriculture/Forest Service, Department of Commerce (National Marine Fisheries Service), NOAA, and comparable state and local environmental agencies
- ❖ **DOI:** EPA, USDA Forest Service, Defense agencies, FERC, DOT, National Marine Fisheries
- ❖ **EPA:** FERC, DOJ (Superfund), state regulatory, agencies, DOI tribes, USFS, DOD, DOE

Table 1. Interagency Work Relationships

	FHWA	DOE	Navy	FERC	DOI	EPA
EPA		X	X	X		X
USFWS	X	X		X		
USACE	X					
SHPO	X					
USFS	X					X
NPS	X			X		
NOAA	X			X		
USCG	X		X			
BLM	X			X		
TVA	X					
DOT	X				X	
USDA				X		
NMF				X	X	
BIA				X		
DOJ						X
DOD					X	X
DOE			X			X
MPO	X					
State Agencies	X	X		X		X
Local Agencies	X			X		
Tribes	X					X
FERC					X	X

V. OTHER POINTS OF INTEREST:

EPA is finalizing a series of brochures outlining good practices in public involvement: watch for them on the Internet site www.epa.gov/publicinvolvement. EPA is also finalizing an extensive manual on public involvement in rulemaking, policy development and national scale issues. The manual will be posted on EPA Conflict Prevention and Resolution Center's site: www.wpa.gov/adr.

EPA recommended the International Association of Public Participation Certification Training, to all federal agencies. More information can be found at www.iap2.org.

DOI is currently working to identify core competencies and training courses to support recent environmental directive on training for NEPA. Curriculum is under development with DOI University and the Interior Dispute Resolution Council for conflict management course series to be initiated by DOI University in 2005, to include Negotiation Skills Training, Introduction to Conflict management Tools, FACA and the 4C's Approach: Negotiated Rule Making, and Best practices in Collaborative Agreement Seeking Processes.

ATTACHMENT 1
Memo Regarding Interagency Training Needs

MEMO

To: Agency ADR Coordinators and Managers

From: Kirk Emerson, Director
U.S. Institute for Environmental Conflict Resolution

Re: Training Needs for Interagency Environmental Cooperation and Conflict Resolution

Date: September 8, 2003

The National Environmental Conflict Resolution Advisory Committee (Best Practices subcommittee) is considering the need to develop federal interagency training on the use of consensus-based collaboration and conflict resolution processes to address environmental, natural resources, and public lands issues. This need has surfaced in the committee's discussions about the role that interagency conflicts play in federal environmental decision making and the importance of developing collaborative practices among agencies and interested parties within the context of NEPA reviews.

Such training is envisioned to assist managers in recognizing when various ECR tools would be helpful and how to obtain assistance in applying ECR rather than training in mediation or facilitation. In order to assess the need for this kind of interagency training, the committee is gathering information on training already being offered to agency employees and others in this arena and whether such training would be of use.

We are sending you this inquiry so that you will have a chance to talk with others in your agency and gather information to answer the following questions. We will call you to set up a time to discuss these questions with you. We would very much appreciate it if you would talk with those in your agency responsible for ECR and training, and respond in as much detail as possible to the following questions:

1. Does your agency currently sponsor training courses, seminars, or include segments in other training sessions that cover the use of alternative dispute resolution in environmental or other policy issues, NEPA-related interagency cooperation, or other relevant skill development? Please list any that are relevant and gather sample agendas to share with us.
2. What is the target audience for each course or seminar listed in question 1?
3. Approximately how many agency employees (and also employees of other agencies and/or public groups) have attended each course or seminar listed in question 1, in the past five years?
4. Which other agencies do you work with on environmental issues, and which other agencies might experience similar public disputes that your employees could learn from?
5. Does your agency have interest in or a need for interagency training? If so, could you briefly illustrate the substantive context in which such training would help (e.g. specific policy or program area or application) and the potential nature and size of the target audiences)?

-
6. What further needs do you see for related training in the use of collaborative processes and ECR that are not covered by your current offerings? Please list these along with the nature and size of the potential target audience.
 7. What current forums for training does your agency use? Include any interagency forums in which your agency participates to which the use of ADR might be added
 8. Please provide the name of a contact within your agency for further dialogue and follow-up in assessing needs and development of appropriate sessions.

Please send your agency's response to Jo Barnier at the U.S. Institute for Environmental Conflict Resolution (job@ecr.gov). Your response by October 15, 2003 will help the committee complete an assessment before its mid-November meeting where a decision will be made as to how to proceed. We will send a copy of the assessment and an update on this project to the contact you provided, in December.

APPENDIX J:

Science Questions for Committee Consideration

Proposed Study Questions from NEPA Section 101 Subcommittee on: Practices to Improve Credibility and Acceptance of scientific information for use in the context of ECR.

- ❖ Does ECR have potential to better bring science into, and enhance the acceptance of applicable information, and ultimately of the ECR outcome? If so, how? What differentiates "sound science" from "best available science"? Can durable ECR outcomes be based upon either?
- ❖ How can parties involved in ECR achieve a common understanding of the scientific information applicable to their dispute? Does scientific information include traditional knowledge (e.g. tribal knowledge), experiential knowledge (e.g. know-how of farmer, rancher, logger), as well as findings from the environmental and life sciences or should traditional and experiential knowledge be valued and applied differently than scientific information?
- ❖ Is it practical/possible to apply "peer review" to the scientific inputs to the ECR process? Are there differences between academic peer review and concepts of peer-reviewed science that may be used in ECR?
- ❖ How should scientific participants to ECR be selected? How can ECR participants define the scientific procedures and applications? When should that occur in the ECR process?
- ❖ Under what circumstances are scientific review panels appropriate in the ECR process and under what format are they most effective? In ECR, what is the proper balance between the independence and expertise of scientific reviewers to maintaining impartiality throughout the ECR process?
- ❖ How can scientific findings and conclusions be "translated" so that participants and/or policy makers understand and effectively apply them?
- ❖ What practices can increase trust in the use of scientific information in the ECR process?

APPENDIX K:

References

Selected References Referring to Section 101 of the National Environmental Policy Act

- Bingham & Langstaff, *Alternative Dispute Resolution in the NEPA Process*
- Caldwell, *Beyond NEPA: Future Significance of the National Environmental Policy Act*
- Houck, *Is That All? A Review of The National Environmental Policy Act, An Agenda for the Future*
- Yost, *Environmental Regulation, Are There Better Ways?*
- O'Connor Center and IENR, *Reclaiming NEPA's Potential: Can Collaborative Processes Improve Environmental Decision Making*
- Congressional White Paper on a National Policy for the Environment: Submitted to the United States Congress under the auspices of the Committee on Interior and Insular Affairs, United States Senate, and the Committee on Science and Astronautics, United States House of Representatives, 90th Congress, 2nd Session, October, 1968.*

Selected References on Best Practices, Resource Guides and/or Standards for Practice of Environmental Conflict Resolution*

- Bingham, G. (1986). *Resolving environmental disputes: A decade of experience*. Washington, DC: The Conservation Foundation.
- Carpenter, S. L., & Kennedy, W.J.D. (1988). *Managing Public Disputes*. San Francisco: Jossey-Bass.
- Society of Professionals in Dispute Resolution. (1997, January). *Best practices for government agencies: Guidelines for using collaborative agreement seeking processes* (Report and recommendations of the SPIDR Environment and Public Policy Sector Critical Issues Committee). Washington, DC: Author.
- Stone-Molloy, M., & Rubenstein, W. (2000). *Principles of Alternative Environmental Dispute Resolution: Abstracted, Restated, and Annotated*. Gainesville, FL: University of Florida, Levin College of Law, Conservation Clinic.
- Susskind, L., McKearnan, S., & Thomas-Larmer, J. (Eds.). (1999). *The Consensus Building Handbook*. Thousand Oaks, CA: Sage Publications.
- Susskind, L., Amundsen, O., Matsuura, M., Kaplan, M., & Lampe, D. (1999). *Using Assisted Negotiation to Settle Land Use Disputes: A Guidebook for Public Officials*. Cambridge, MA: Lincoln Institute of Land Policy.

U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. (1999, May). *Constructive Engagement Resource Guide: Practical advice for dialogue among facilities, workers, communities, and regulators* (EPA 745-B-99-008). Washington, DC: Author.

Yarn, D. H. (2002). Transnational conflict resolution practice: A brief introduction to the context, issues, and search for best practice in exporting conflict resolution. *Conflict Resolution Quarterly*, 19(3), 303-319.

Selected References Referring to Mediation

Blackburn, J. W., & Bruce, W. M. (1996). *Mediating environmental conflicts: Theory and practice*. Westport, CT: Quorum Books.

Moore, C. W. (1996). *The Mediation Process* (2nd ed.). San Francisco: Jossey-Bass.

Taylor, M., Field, P., Susskind, L., & Tilleman, W. (1999). *Using mediation in Canadian environmental tribunals: Opportunities and best practices*. Cambridge, MA: Consensus Building Institute.

Tonkin, E. (2001, May). *ADR training notes* based on a debriefing of Region I case experiences. Unpublished, U.S. Environmental Protection Agency, Region I. Boston, MA.

United States Postal Service. (n.d.) *Standards of practice for postal service mediations*. Retrieved February 27, 2002, from <http://www.usps.com/cpim/ftp/pubs/pub102.html>

Selected References Referring to Negotiation

Baugh, V. (n.d). *Interest based processes for labor/management negotiation*. Unpublished manuscript, U.S. Internal Revenue Service.

Godschalk, D. R. (1992). Negotiating intergovernmental development policy conflicts practice-based

guidelines. *Journal of the American Planning Association*, 58(3): 368-378.

Lobel, I. B. (2000). Lessons to be learned in regulatory negotiations. *Alternatives*, 18, 9.

Pritzker, D. M. & Dalton, D. S. (1995). *Negotiated rulemaking sourcebook*. Washington, DC: Office of the Chairman Administrative Conference of the United States.

Raiffa, H. (1982). *The art and science of negotiation*. Cambridge, MA: The Belknap Press of Harvard University Press.

Susskind, L. (2000). *Negotiating environmental agreements*. Washington, DC: Island Press.

Selected References Referring to Consensus Building

Adler, P. S., & Birkhoff, J. E. (2002). *Building trust: When knowledge from "here" meets knowledge from "away"*. Portland, OR: Portland State University, Mark O. Hatfield School of Government, The National Policy Consensus Center.

Arthur, J., Carlson, C., & Moore, L. (1999). *A practical guide to consensus*. Santa Fe, NM: Policy Consensus Initiative.

Godschalk, D. R., Parham, D.W., Porter, D.R., Potapchuk, W.R., & Schukraft, S.W. (1994). *Pulling together: A planning and development consensus-building manual*. Washington, DC: Urban Land Institute.

Innes, J. E., & Booher, D. E. (1999). Consensus building and complex adaptive systems. *American Planning Association (APA) Journal*, 65(4): 412-423.

Montana Consensus Council. (1999, February). *Responding to growth: Building consensus on land-use issues*. Helena, MT: Author.

National Round Table on the Environment and the Economy, Ottawa Canada. (1993). *Building consensus for a sustainable future: Putting principles into practice*. Re-

trieved July 18, 2002, from the Mediate.com web site:
<http://www.mediate.com/articles/consen.cfm>

Selected References Referring to Collaboration

- Belden Russonellow & Stewart Research and Communications. (2001, July). *Collaborative processes: Better outcomes for all of us* (Communications, recommendations and analysis of 54 interviews with decision makers on environmental issues in the western U.S for the Emily Hall Tremain Foundation and partners). Retrieved August 14, 2002, from the Meridian Institute web site: http://www.merid.org/PDF/BRS_Report.pdf
- Brunson, M. W. (2000). Observing vs. doing: A researcher learns about collaboration. *Chronicle of Community*, 4(2): 47-52.
- CDR Associates. (1998). *The Boulder principles for effective collaborative processes on sustainable development and environmental policy: A work-in-progress*. Boulder, CO: Author.
- Dukes, E. F., & Firehock, K. (2001). *Collaboration: A guide for environmental advocates*. Charlottesville, VA: University of Virginia, The Wilderness Society, & National Audubon Society.
- Florida Conflict Resolution Consortium. (n.d.). *User's guide to collaborative dispute resolution*. Retrieved November 4, 2002, from http://consensus.fsu.edu/mediation/UG2/FCRC_Users_Guide.pdf
- Giffen, R. A., & Eickenberg, K. (1996, February). *A framework for collaborative processes in hydro-power licensing: Building on the history*. Hallowell, ME: Land & Water Associates.
- Lange, J. I. (2000). Exploring paradox in environmental collaborations. In P. Brick, D. Snow & S. Van De Wetering (Eds.) *Across the great divide: Explorations in collaborative conservation and the American west* (pp. 200-209). Washington, DC: Island Press.
- Oregon Dispute Resolution Commission. (2000, August). *Collaborative approaches: A handbook for public policy decision-making and conflict resolution*. Retrieved November 4, 2002, from www.ordc.state.or.us/ppdrp.htm
- U.S. Bureau of Land Management & The Sonoran Institute. (2000). *A desktop reference guide to collaborative community-based planning*. Missoula, MT: Sonoran Institute.
- U.S. Institute for Environmental Conflict Resolution. (2002, September). *Comments on federal and inter-governmental collaboration* (In response to the Council on Environmental Quality NEPA Task Force request for comments Federal Register/Vol. 67, No. 131/July 9, 2002/Notices). Tucson, AZ: Author.
- U.S. Environmental Protection Agency. (2001, August). *Improved science-based environmental stakeholder processes: A commentary by the EPA Science Advisory Board* (EPA-SAB-EC-COM-01-006). Washington, DC: Author.
- U.S. Environmental Protection Agency, Indigenous Peoples Subcommittee of the National Environmental Advisory Council. (2000, November). *Guide on consultation and collaboration with Indian tribal governments and the public participation of indigenous groups and tribal members in the environmental decision making*. Retrieved April 18, 2002, from http://www.epa.gov/Compliance/resources/publications/ej/ips_consultation_guide.pdf
- Weiland, C. (2002, February). *Getting together in Idaho: A survey of six collaborative efforts on public lands*. Boise, ID: Boise State University, Andrus Center for Public Policy.
- Western Consensus Council, The. (2001). *Collaborative problem solving: Strategies for western legislators*. Helena, MT: Author
- Wondolleck, J. M., & Yaffee, S. L. (2000). *Making collaboration work: Lessons from innovation in natural resource management*. Washington, DC: Island Press.

Selected References Referring to Public Involvement and Participation

International Association for Public Participation. (n.d.). *IAP2 core values of public participation*. Retrieved November 4, 2002, from <http://www.iap2.org/corevalues/index.html>

U.S. Environmental Protection Agency, Common Sense Initiative Council. (1998, June). *Report of the EPA common sense initiative council's stakeholder involvement work group*. Washington, DC: Author.

U.S. Environmental Protection Agency, Office of Environmental Justice, National Environmental Justice Advisory Council, Public Participation and Accountability Subcommittee. (1996, November). *The model plan for public participation*. Washington, DC: Author.

U.S. Environmental Protection Agency, Office of Policy Economics and Innovation. (2001, January). *Stakeholder involvement & public participation at the U.S. EPA: Lessons learned, barriers, & innovative approaches* (EPA 100-R-00-040). Washington, DC: Author.

U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. (2000, April) *Social aspects of siting RCRA hazardous waste facilities* (EPA 530-K-00-005). Washington, DC: Author.

U.S. Environmental Protection Agency, Office of Solid Waste. *RCRA public participation manual*. Retrieved April 18, 2002, from <http://www.epa.gov/epaoswer/hazwaste/permit/pupart/manual.htm>

Selected References Referring to Conflict Assessment and Process Design

Eng, M. (2002, August). *Improving policy and practice*. In M. Eng (Moderator), *Assessing*

assessments. Panel presentation at the meeting of the Association for Conflict Resolution, San Diego, CA.

Hoben, M. (2002). Is a consensus building process feasible? How we decide. *CBI Reports*, 7(1): 2-3.

Kaner, S. (1996). *Facilitator's guide to participatory decision-making*. Gabriola Islands, BC: New Society Publishers.

Kartez, J. D., & Bowman, P. (1993). Quick deals and raw deals: A perspective on abuses of public ADR principles in Texas resource conflicts. *Environmental Impact Assessment and Review*, 13, 319-330.

Kinlaw, D. (1996). *The ASTD trainer's sourcebook: Facilitation skills*. New York: McGraw-Hill.

McCreary, S., Harty, J.M., Raiffa, H., Sobel, G., & Tonkin, E. (2002, May 16). *Analyzing conflicts for diagnostic consultation and conflict assessment*. Panel presentation at the conference Environmental Conflict Resolution: The State of the Field and Its Contribution To Environmental Decision-Making. Tucson, AZ: U.S. Institute for Environmental Conflict Resolution.

McKinsey & Company, Inc. (1996). *Interpersonal and interactive skills*. Durango, CO: Self-Management Institute, Inc.

Sander, F. E. A., & Goldberg, S. B. (1994). Fitting the forum to the fuss: A user-friendly guide to selecting an ADR procedure. *Negotiation Journal*, 10(1): 49-67.

Schwarz, R. M. (1994). *The skilled facilitator: Practical wisdom for developing effective groups*. San Francisco: Jossey-Bass.

Selected References Referring to Neutral Skills and Selection

Montana Consensus Council. (1998, September). *A consumer guide to selecting a facilitator or mediator*. Helena, MT: Author.

Society of Professionals in Dispute Resolution. (1992, January). *Competencies for mediators of complex public disputes* (An overview developed by the Environmental/Public Disputes Sector). Washington, DC: Author.

Society of Professionals in Dispute Resolution. (1995, April). *Ensuring competence and quality in dispute resolution practice* (Report No. 2 of the SPIDR Commission on Qualifications). Washington, DC: Author

U.S. Environmental Protection Agency, Conflict Prevention and Resolution Center. (2000, May). *Resource guide: Resolving environmental conflicts in communities* (EPA 260-F-00-001). Washington, DC: Author.

U.S. Institute for Environmental Conflict Resolution, National Roster of Environmental Dispute Resolution and Consensus Building Professionals. (2002, October). *Choosing an appropriate neutral*. Retrieved November 5, 2002, from: <http://www.ecr.gov/roster/search/neutral.htm>

Selected References Referring to Neutral Ethics

CPR-Georgetown Commission on Ethics and Standards of Practice in ADR. (2002, May). *Principles for ADR provider organizations*. Retrieved November 1, 2002, from <http://www.cpradr.org/finalProvider.pdf>

International Association of Facilitators. (May 22, 2002). *Draft statement of values & code of ethics for group facilitators*. Retrieved September 29, 2002, from <http://www.iaf-world.org/iafethics.htm>

Johnson, J. L. (2002). Environmental justice for all: Principles and practices for conflict resolvers. *ACRESOLUTION*, 1(4): 24-27.

Society of Professionals in Dispute Resolution. (1986). *Ethical standards of professional responsibility*. Retrieved November 1, 2002, from <http://www.acresolution.org/research.nsf/articles/6CC4296D791D451485256C1C00657E59>



**U.S. Department
of Transportation**
**Federal Highway
Administration**

FHWA-HEP-05-040

U.S. Institute for  **Environmental Conflict Resolution**
Morris K. Udall Foundation