U.S. Institute for Environmental Conflict Resolution
Udall Foundation

Guiding Principles for Effective Environmental Collaboration and Conflict Resolution

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A. Basic Principles for Agency Engagement in Environmental Conflict Resolution and Collaborative Problem Solving

These principles were developed collaboratively with senior staff from the U.S. Departments of Agriculture, Commerce, Defense, Energy, Homeland Security, Interior, Justice, Transportation, Army, Navy, and Air Force, and the U.S. Environmental Protection Agency, the Federal Energy Regulatory Commission, the President's Council on Environmental Quality (CEQ) and the U.S. Institute for Environmental Conflict Resolution (U.S. Institute). These principles draw on over 30 years of collective experience and research on interest-based negotiation, consensus building, collaborative management, and environmental mediation and conflict resolution. These principles provide guidance for preventing and reducing environmental conflicts as well as for producing more effective and enduring environmental decisions. Through the Joint OMB/CEQ Memorandum on Environmental Conflict Resolution (November, 28, 2005), federal agencies were directed to put these principles into effect. (http://www.ecr.gov/Basics/Principles.aspx)

Basic Principles for Agency Eengagment in ECR and Collaborative Problem Solving

Informed Commitment - Confirm willingness and availability of appropriate department and agency leadership and staff at all levels to commit to principles of engagement; ensure commitment and availability to participate in good faith with open mindset to new perspectives.

Balanced, Voluntary Representation - Ensure balanced inclusion of affected/concerned interests; all parties should be willing and able to participate and select their own representatives.

Group Autonomy - Engage with all participants in developing and governing a process; including choice of consensus-based decision rules; seek assistance as needed from impartial facilitator/mediator selected by and accountable to all parties.

Informed Process - Seek agreement on how to share, test, and apply relevant information (scientific, cultural, technical, etc.) among participants; ensure relevant information is accessible and understandable by all participants.

Accountability - Participate in the process directly, fully, and in good faith; be accountable to all participants, as well as agency representatives and the public.

Openness - Ensure all participants and public are fully informed in a timely manner of the purpose and objectives of process; communicate agency authorities, requirements, and constraints; uphold confidentiality rules and agreements as required for particular proceedings.

Timeliness - Ensure timely decisions and outcomes.

Implementation - Ensure decisions are implementable and consistent with Federal law and policy; parties should commit to identify roles and responsibilities necessary to implement agreement; parties should agree in advance on the consequences of a party being unable to provide necessary resources or implement agreement; ensure parties will take steps to implement and obtain resources necessary to agreement.

B. Model Standards of Conduct for Mediators and Facilitators

Model Standards of Conduct for Mediators and Facilitators were adopted by the American Arbitration Association, September 8, 2005; approved by the American Bar Association House of Delegates, August 9, 2005; and adopted by the Association for Conflict Resolution, August 22, 2005.

(http://www.americanbar.org/content/dam/aba/migrated/dispute/documents/model_standards_conduct_april2007.authcheckdam.pdf)

C. General Principles for Meaningful Stakeholder Involvement Processes

The U.S. Institute has identified the following principles for creating meaningful stakeholder involvement in the context of Coastal and Marine Spatial Planning (CMSP) processes. In developing this informational resource document, the U.S. Institute reviewed current and past CMSP stakeholder processes in the United States and internationally, analyzed academic literature on stakeholder engagement best practices, and reviewed surveys and white papers about desirable stakeholder involvement mechanisms from various interest groups, including government, tribal, environmental, and ocean user groups. The principles described in this document are drawn from this research and from the U.S. Institute's experience in developing similar guidelines for a range of complex federal and regional stakeholder involvement efforts. (http://www.ecr.gov/pdf/StakeholderPrinciplesCMSP.pdf)

Many elements of the essential principles are applicable to a broad spectrum of environmental collaboration and conflict resolution processes. The CMSP principles have been generalized for potential application to similar collaborative and conflict resolution processes.

1. *Clear Goals and Avenues for Stakeholder and Public Participation*

   The goals, schedule, and reasons for the planning process are communicated publicly and include a clear map of the decision process and stakeholder input points.

   Public and stakeholder involvement is developed and implemented in consultation with the stakeholder groups.

   Roles for participating agency staff, stakeholders and the public are clearly established.

2. *Inclusiveness and Accessibility*

   Stakeholder participation and representation includes the full range of affected interests.

   Barriers to participation are identified and addressed before and during convening of the stakeholders.

   Engagement processes accommodate those stakeholders with varying levels of interest and resources through a variety of effective engagement mechanisms.

3. *Transparency and Openness*

   Information about the decision process and supporting information are made available as appropriate.

   Stakeholders have access to the convening/facilitating/lead entity through consistent and appropriate communication channels.

   Decision makers are open to learning from stakeholders and take their ideas into consideration.

   Decision makers provide feedback to stakeholders about how their input has been taken into consideration and describe how that input has shaped interim and final products.

4. *Informed Engagement*

   Quality, informed discussion and engagement occur throughout all phases of the process.

   Stakeholders and planners engage in a process of mutual education to improve overall knowledge about the process and subject matter, and to enhance substantive discussions.

   Interactive and informed discussions take place among agencies and stakeholders.

   Technical information is provided in an appropriate format for stakeholder and public use.

   Stakeholders have access to technical experts and input into scientific and technical aspects of the planning process.

   Stakeholder knowledge and data is evaluated for possible inclusion into the plan.

5. *Timeliness*

   Participation occurs at a time that allows stakeholder input to be used in the development of the products of the planning process.

   Stakeholders have sufficient notice of meetings and advance materials to realistically and effectively participate.

6. *Process Integrity*

   Stakeholders have confidence in the value of the process.

   Participating agencies and other stakeholders hold themselves accountable for meaningful participation in the process.

7. *Adaptability and Flexibility*

   As needs and issues evolve, additional options for stakeholder engagement are developed.

   Engagement methods take into consideration unique national, regional, and local features.

   Stakeholder processes are monitored and evaluated on a regular basis.

D. Considerations for Independent Science Panels

When selecting independent science advisors, consideration should be given to resources such as the National Academy of Science's "Policy and Procedures on Committee Composition and Balance and Conflicts of Interest for Committees Used in the Development of Reports" (2003) (http://www.nationalacademies.org/coi/bi-coi_form-0.pdf), and the Office of Management and Budget's "Final Information Quality Bulletin for Peer Review" (2005) (http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2005/m05-03.pdf).

Generally, independent science advisory panels should strive to demonstrate:

> *Expertise*. Varied knowledge, experience and skill.
>
> *Balance*. A diversity of scientific perspectives.
>
> *No Conflict of Interest*. No financial or other interest that impairs the panel's objectivity or gives an unfair competitive advantage to a person or organization.

The above sample guidance is drawn from the Missouri River Independent Science Advisory Panel, a project assisted by the U.S. Institute. More information on this effort is available at (http://projects.ecr.gov/moriversciencepanel/AdvisoryPanelists.aspx)

E. Guiding Principles for the Use of Technology in ECR Processes

Created by the Technology and ECR Coordinating Committee, with support from the U.S. Institute and the U.S. Department of the Interior's Office of Collaborative Action and Dispute Resolution (June 30, 2011) (http://www.ecr.gov/pdf/GuidingPrinciplesforUsingTechnologyinECRProcesses(ForDistribution06302011).pdf)

The following principles are designed as a general guide for facilitators, technologists, process sponsors, and others working to integrate emerging technologies (e.g., visualization tools, decision-support systems, internet polling, collaborative authoring tools) into environmental conflict resolution (ECR) processes. The guidelines are based on generally accepted foundational principles of alternative dispute resolution and ECR, and the premise that the use of technologies should not compromise these foundational principles. The guidelines also serve to highlight where the ECR and technology disciplines intersect and the resulting implications including: new responsibilities for practitioners; budget considerations for project sponsors; and stakeholder engagement considerations for technologists. While the principles outlined in this document are tailored toward process practitioners (e.g., facilitators and mediators), the majority of issues addressed (e.g., inclusivity, impartiality, timeliness, privacy, transparency, accountability) are equally applicable to process sponsors, technologists, and others working to effectively use new technologies in ECR processes.

Overarching Guidance

- Principled conflict resolution is built on process impartiality. Whether a process is facilitated by a third-party neutral, or is self-organized, the process itself should offer equal consideration to all parties and should not offer advantages to any one party over

another, nor should it be biased to a particular outcome. In these processes, therefore, sponsoring parties, third-party neutrals and others providing process assistance should ensure that the use of technology does not give unfair advantage to certain parties at the expense of others.

Guidance for Consideration during Process Design and Convening Phases

- Encourage process participants to work collaboratively to determine if the use of technology tools could be beneficial to achieving the goals of the ECR process.
- Encourage process participants to work collaboratively to define clear objectives of the technology application.
- Ensure that process participants have a general understanding of the strengths and limitations of technology options, how a technology will be used to assist with the process deliberations, and the extent to which technology products will be used in decision-making.
- Ensure that process participants and sponsors understand the time and cost implications of using technology tools in their process, and can dedicate the resources necessary to accomplish the desired goals.
- Encourage process participants to work collaboratively to select the technology provider.
- Ensure full disclosure of any relationships between the technologist and the process convener and/or other participants/stakeholders.
- Choose a technologist[1] with an appreciation of the working principles of ECR, or a commitment to gaining an appreciation of the working principles prior to the initiation of the process.
- Ensure the process facilitator has the skills and time needed to interface with the process technologist and effectively guide the technology-enhanced process.
- Define and ensure clear understanding by all (i.e., the participants, convener, facilitation, and technology team) of the role of the technologist, technology/facilitator team, and technical experts or advisors, if applicable.
- Strive to match the level of complexity of technology with the necessary products for a successful process.
- Ensure that the process participants, sponsors, and the technology team agree upon protocols for data acquisition, security, privacy, confidentiality, access, monitoring, reporting, dissemination, and ownership of all relevant inputs and outputs.

Guidance Principles for Consideration during a Collaborative Process

[1] In this context, a technologist is defined as a specialist in the creation and/or use of electronic or digital products or systems that analyze information, create visualizations, facilitate communication, or otherwise support collaborative problem-solving.

Effective Engagement

- Ensure that technologists engage with participants and introduce products in ways that are consistent with ECR principles of increasing participants' understanding of each other's views and perspectives; helping build trust among participants; and identifying options and solutions that meet the needs of all participants.
- Explain technology inputs, processes, uncertainties, and products using everyday terms and language understandable to all participants.
- To the extent possible, ensure that technology interfaces (e.g., user screens, reports) are user friendly, or compensate with user assistance and tutorials to ensure all participants are effectively engaged.
- Ensure the design of technology applications (e.g., models and simulations) and technology products (e.g., resource maps, fly-over visualizations) reflect balanced representation of all affected interests and concerns.
- Continually evaluate and take measures to mitigate the impact of differences in stakeholder understanding and comfort levels with the technology component of the process and related products.
- Work to ensure the participants level of engagement related to the technology component of the process does not create a barrier to achieving the overall goals of the collaborative effort.

Data and Model Specifications

- Ensure all data are accompanied by standard metadata[2] as well as transparent documentation of the methods of collection and analysis, assumptions, biases, resolution, definitions of technical terms, and an assessment of quality, uncertainty, and known confidence or error levels associated with input data and output products.
- Ensure that all technology applications considered for an ECR process are accompanied by full documentation (e.g., software specifications, model parameters), including disclosure of any known limitations (e.g., the number of variables a modeling program can accommodate or the potential impact of the resolution of one or more data inputs on all associated outputs).

Technology Products and Uses

- Work to ensure that process participants commit to consider technology products in good faith with an open mindset to meeting the common goals of the group.

[2] Metadata is data that serves to provide context or additional information about other data. For example, information about the title, subject, author, typeface, enhancements, and size of the data file of a document constitute metadata about that document. It may also describe the conditions under which the data stored in a database was acquired, its accuracy, date, time, method of compilation and processing, etc. (BusinessDirectory.com). Whenever possible metadata should meet government standards (i.e., Federal Geographic Data Committee standards for spatial data http://www.fgdc.gov/metadata), and if not possible, the standards used should be documented and openly available to all participants.

- Prompt participants to evaluate the strengths and limitations of technology products to ensure of the products are used appropriately.

- If key decisions or recommendations are based on technology products, work with the participants to ensure they have the materials (e.g., design documents, methods, products) needed to effectively brief their constituents and leadership.

- Consider when it may be appropriate to use technology tools (e.g., project websites, RSS feeds) for reporting and product dissemination throughout the lifecycle of the project, and ensure that all reporting and information dissemination follows any protocols agreed upon by the process participants.

- Throughout the process, ensure that process participants understand the relationship between technology products and process outcomes (e.g., will a preferred alternative generated by a collaboratively developed and employed decision-support system be automatically adopted as the process outcome, or are technology products informational resources to inform deliberations and decision-making).

- Prompt process participants to discuss and agree upon appropriate measuring and monitoring activities if applicable, including the role of technology.

- Consider engaging participants in “lessons learned” debriefings on how future technology-enhanced ECR processes could be improved. Document and make debriefings available as a resource to others.