Joint Fact Finding in a Land Use Context

Rocky Mountain Land Use Institute 2007 Land Use Conference



A Hypothetical Scenario



- You are member of a regional advisory committee appointed by the elected officials of 15 neighboring jurisdictions
- Your job is to change the rules regarding allowable land uses along a river that runs through the multiple jurisdictions
- Federal and state scientists have noted that:
 - Existing (allowable) uses have directly and indirectly harmed water quality
 - There is a limited supply of water to support proposed commercial and residential developments
- Every proposed modification to the rules to better integrate land and water use decisions is opposed by some interest group or one of the participating jurisdictions
- Many of the groups involved can cite scientific evidence to refute the basic claims of the federal and state officials and to contest the claims of experts working for the other groups

Overcoming the Myth of Science



"A myth has grown up in the midst of natural resource decision making [that] good science can, by itself, somehow make difficult natural resources decisions for us and relieve us of the necessity to engage in the hard work of democratic deliberations that must finally shoulder the weight of those decisions."

Mark Rey, Assistant Secretary, USDA

Sources of Disagreement



- Inadequate information
- Facts and values not clearly distinguished
- Participants use "advocacy" science
- Ineffective communication between experts and citizens
- Different ways of knowing and learning
 - Scientific method
 - Hypothesis testing and peer review
 - O Indigenous knowledge
 - Place-based stories and anecdotes
 - O Legal method
 - Precedent and rules of evidence

Options to Resolve Science-Intensive Disputes



Research-oriented Responses

- Invest in additional research
- Seek the input and advice of outside technical experts
 - Multi-disciplinary panels
 - Independent fact finder
 - Peer review

Institutional Responses

- O Defer to agency expertise
- Administrative appeals
- Courts
- Science courts
- Court-ordered/mandated mediation

Collaborative Response

Joint fact finding

What is Joint Fact Finding?



- A collaborative process that allows stakeholders (including decision-makers and experts) to seek agreement on:
 - O Nature of the problem
 - What we know, don't know, and need to know
 - O How to collect, analyze, and present information
- Produces information that is:
 - Scientifically credible
 - Politically legitimate
 - Relevant (useful or salient)
- An approach to resolve scientific disagreements and maximize public participation

The Pyramid of Responses

Jointly Conduct Research Citizens and experts work together

Jointly Frame Questions

Citizens frame questions & experts conduct research

Independent Fact Finder

Stakeholders agree to use one or more independent experts

Technical Advisory Committee

Multiple experts, representing diverse views, provide information and advice

Conventional

Research performed by Interdisciplinary Teams and presented to the public

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Four Key Principles of JFF



- 1. Jointly frame the research questions
- 2. Focus on decision-relevant information
- 3. Clarify the role of science and experts
- 4. Use contingent agreements

Principle # 1 Jointly Frame Research Questions



Problem

- OEven when data exists, people often feel their questions are not being addressed
- OPeople are not always clear about what questions each other care about

Solution

- OGather stakeholders together
- OFocus on what you know, what you don't know, and what you would like to know and why
- OJointly frame a set of research questions that meet the interests and concerns of different people

Principle # 2: Focus on Decision-relevant Information

Problem

- O There are likely to be many questions and lots of uncertainty
- Not everything people want to know may be needed to make an informed decision
- O How to focus and prioritize?

Solution

- Focus on <u>what information is needed</u> to make the pending decision – determined by people's interests
- O Build on existing information and focus further data collection and analysis on filling agreed-upon gaps

Principle # 3: Clarify the Role of Science and Experts

- JFF acknowledges the essential role of scientific information and technical experts
- JFF distinguishes scientific from political issues, which leads to more credible scientific alternatives
- Generating such alternatives allows citizens and decision-makers to:
 - Understand technical trade-offs
 - Clarify political consequences

The Role of Experts



- Maintain the Credibility of Science
 - O Develop procedures to gather and analyze information
 - O Monitor trends
 - Build and test theory
- Generate Policy-relevant Information
 - O Help frame issues
 - O Generate options
 - O Analyze consequences
 - Communicate findings and conclusions to non-scientists

Principle # 4: Use Contingent Agreements



- Acknowledge and accept the inevitability of uncertainty
 - The search for perfect, complete knowledge and understanding is futile
- Agree to move forward based on what you know
 - Create experiments and learn as you go
 - Modify your plan accordingly
 - Be clear about what you don't know and/or where there are disagreements
 - Adopt a learning, adaptive attitude the theory of adaptive management
- Develop protocols to jointly monitor implementation, document lessons learned, and adapt the plan of action

JOINT FACT FINDING: KEY STEPS IN THE PROCESS

