

Mediated Joint Fact-Finding as a Strategy for Resolving Environmental Policy Disputes: Facilitated Independent Scientific Review of the CALFED Agricultural Water Conservation Goals

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This brief paper describes a novel process that brought independent scientific review to the long-standing challenge of crafting agreement on prospects for water conservation. Water Use Efficiency, as it is known in the CALFED (California/Federal) process, is viewed as central to the success of the CALFED Program's objectives to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Sacramento, California Bay-Delta system.

This paper tracks the development and execution of a joint fact-finding process to review and strengthen the methodology to estimate water conservation potential. The catalysts for this independent review were:

- Strong reaction from the community of agricultural and environmental stakeholders to the initial draft of the Water Use Efficiency Program distributed early in 1998.
- A desire to de-polarize the debate, and bring objective scientific expertise to bear.
- A need to include important CALFED stakeholders in the process of scientific review.
- A recognition that neutral process design and facilitation skills could improve the value of the review and its chances for success.

Distinguishing Features of the Scientific Review Process:

Eleven distinguishing features contributed to the success of the Panel.

1. **Framing the Event as a Joint Fact-Finding Effort.** Joint fact-finding rests on a few key ideas. The first is that rather than withholding information for strategic advantage, the interested parties pool relevant information. A second feature is that joint fact-finding involves face-to-face dialogue between technical experts, decision-makers, and other key stakeholders. Usually, a nonpartisan facilitator or mediator assists in orchestrating this dialogue. Third, this process places considerable emphasis on "translating" technical information--text, graphics, videos, and oral presentations--into a form that is accessible to participants in the dialogue. Another significant aspect of the process is that while joint fact-finding is geared to building consensus, it tries clearly to "map" areas of scientific agreement and to narrow areas of disagreement and uncertainty. A fifth idea is to use a single negotiating text to record the results of the joint fact-finding process. The concept of a single text, borrowed from the arena of international diplomacy, simply means that participants in negotiation use a single document to focus discussion, rather than generating competing versions of facts and recommendations. Usually this document is revised through several working drafts and produces a tangible record to bring the joint fact-finding effort to closure.

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The joint fact-finding strategy is different from two other well-known methods for soliciting input: the blue ribbon panel and adversarial science. Under the blue ribbon panel, scientists with expertise in a field gather to review relevant information and seek a scientific consensus, or at least to summarize the current state of knowledge. The National Academy of Sciences, for example, routinely convenes expert panels to render advice on complex policy issues. Other organizations enlist the blue ribbon panel model when they convene separate citizens' advisory committees and technical advisory committees.

This model can yield valuable insights, but it suffers from several disadvantages, as well. One problem is that if grass-roots interests and other resource users with a stake in a policy decision are denied access to the deliberations of an expert panel, the panel may overlook valuable information. Moreover, scientists, left to their own devices, may become bogged down in discussions over methods and may not focus on the policy implications of their findings. Still another problem arises when those affected by a decision cannot observe or understand the deliberations of the scientists. These people may distrust or disbelieve the advice of the panel. Consequently, the alienated public does not support the scientists' policy recommendations. Finally, scientists, working alone, may not produce information in a form that can be used by decision-makers.

Another model of science advising is one in which contending interests appeal to competing experts to bolster their own positions. This "adversary science" is manifest in the "battle of the expert witnesses" in litigation, and may also occur in public hearings associated with setting standards or reviewing major projects. In the courtroom, and in administrative hearings, it is not uncommon for opposing counsel to attempt to undermine both the credibility of expert witnesses and the data or conclusions they are putting forward. Often, this process does little to clarify the scientific issues at stake.

2. **One-Day Scoping Session.** Based on last-minute requests from stakeholders, the initial session was turned into a one-day Scoping Session attended by panelists and interested stakeholders. This proved essential, providing an opportunity for stakeholders and panelists to: 1) better understand the purpose of the Panel's deliberations; 2) identify some of the key issues to be resolved; and 3) work together to reshape the questions posed to the Panel.
3. **Stakeholder Input.** This involvement made the process both more credible and relevant. Stakeholder involvement at other points in the process also contributed to producing an outcome that was extremely applicable to ongoing CALFED work. Opportunities for stakeholder involvement included: nominating technical advisors to contribute to the Panel's deliberations; providing CALFED staff with the names of possible Panel candidates; and participating in strategic planning teleconferences in advance of the Panel's December deliberations.
4. **Structured Questions.** The structure of the questions resulted from the input of and interaction among panelists, stakeholders, CALFED staff and CONCUR. As redrafted based on the Scoping Session, the questions successfully framed a conceptual discussion that was grounded in the very real policy debates taking place within CALFED.
5. **Panel Selection.** The quality and diversity of the panelists themselves also were essential in shaping the Panel's successful deliberations. CALFED staff took the lead in selecting panelists, relying on their contacts, CONCUR suggestions and recommendations from stakeholders and others within CALFED. The result was the selection of a panel that had an excellent mix of expertise and backgrounds. The Panel was comprised of five nationally recognized scientists who collectively provided expertise in the areas of irrigation science and engineering, hydrology,

plant physiology and evapotranspiration, agricultural economics, and aquatic ecosystem restoration. The deliberations also included eight stakeholder technical representatives with specific expertise in the Bay-Delta system. This unique mix of participants produced many strengths: 1) a mix of in-state and out-of-state panelists; 2) a range of technical expertise; 3) well-respected individuals with strong professional and academic credentials; and 4) involvement of one panelist who had participated in an earlier CALFED panel convened by CONCUR.

6. **Pre-Panel Background Materials.** The materials – designed to provide both relevant technical information and context within the broader CALFED program – were essential in ensuring panelists arrived ready to engage the agenda. Additionally, the use of these materials ensured that all the participants shared a common base of information.
7. **Blend of Independent Experts with Local Expertise.** The panelists themselves, coming from both California and out-of-state, provided a mix of on-the-ground knowledge and more detached perspectives and lessons. As well, each of the three main stakeholder groups – agriculture, environmentalists and agency – were invited to nominate three Technical Advisors to participate in the Panel’s deliberations. This interaction between the Panel and the Technical Advisors proved very important, with the Technical Advisors adding yet another layer of local expertise and opinions.
8. **Real-Time Synthesis.** The Panel’s deliberations were structured to provide several opportunities for – and layers of – real-time synthesis. This was crucial. After each question, CONCUR Principal Scott McCreary synthesized the Panel’s deliberations, highlighting key points covered and conclusions reached. This synthesis was essential in helping both the Panel and stakeholders recognize and incorporate lessons as they emerged. Additionally, after its public deliberations, the Panel met separately to further synthesize its discussions, crystallizing two days of deliberations into ten overarching recommendations. This synthesis – shared with the public the following day – was essential in helping summarize the value of the Panel’s overall deliberations.
9. **Final Report Preparation.** The Final Report, though primarily authored by CONCUR, incorporated valuable contributions from panelists and CALFED staff. This involvement was important in ensuring the Final Report: 1) accurately captured the flavor and outcome of the deliberations, and 2) provided a document that was relevant to CALFED work.
10. **CALFED-CONCUR Team Work.** Undoubtedly, the smooth interactions between CALFED and CONCUR were essential in helping shape the Panel’s successful deliberations. In every facet of the project – from strategic planning and logistics, to meeting facilitation and report preparation – CONCUR and CALFED staff worked as a seamless team. We shared and critiqued documents. We conducted strategic planning teleconferences – at times, on a daily basis – to ensure tasks were being identified, assigned and carried out. We worked collaboratively on both planning and facilitation. The team proved an excellent blend of process expertise and technical know-how.
11. **Dual Expertise.** Though CALFED staff took the lead on technical issues, CONCUR’s dual expertise in both the process of environmental dispute resolution and substance of environmental management also contributed to the panel’s success. This dual expertise enabled us to engage the panelists and technical advisors as peers on the substantive deliberations, yet translate complex discussions into language and concepts accessible to all stakeholders.

Substantive Outcomes

The Panel yielded a number of important findings, recommendations and suggested next steps during its deliberations. The panel spent much of the first day discussing the Agricultural Section of

CALFED's Report on the Water Use Efficiency Program (known as Chapter 4). This chapter offers important insights regarding the magnitude of agricultural water conservation potential in the CALFED Solution Area. Based on the Panel's findings and its extended discussion of the methodology, the panelists recommended a series of actions that they believe will make Chapter 4 even more useful to the CALFED program and more creditable to stakeholders. The Panel's findings on Chapter 4 include:

- Chapter 4 provides a reasonable initial estimate of overall agricultural water conservation potential.
- Chapter 4's methodology offers an important starting point.
- Chapter 4's methodology can be strengthened to make it more defensible, more accurate, and more prescriptive.

In addition to these findings and recommendations, the Panel found that the Agricultural Water Use Efficiency program requires greater definition as well as specific strategies to meet its objectives. The Panel developed nine detailed recommendations related to Program Development and Implementation to provide additional specificity.

More broadly, the results of the Independent Review Panel again confirmed the value of a joint fact-finding process. These lessons will be discussed in greater detail during CONCUR's session on: "Mediated Joint Fact-Finding as a Strategy for Resolving Environmental Policy Disputes."