

## Multilateral Negotiations, Coalition Formation and California Water Policy

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### Executive Summary:

Beginning with the Three-Way Negotiations in the early nineties, California water stakeholders have utilized direct negotiations in order to lessen the intensity of conflict over water allocation and quality issues. Compared to centralized decisionmaking, direct negotiations increase the accountability of stakeholders for their negotiating positions and encourage them to contribute to the success of the negotiation process. We propose to utilize a multilateral bargaining framework to assess the State Water Resources Control Board (SWRCB) hearings regarding the implementation of the 1995 Central Valley Project Improvement Act (CVPIA). The objectives of the project are threefold: to describe how stakeholders interact in this negotiation, to use this particular case study and multi-lateral bargaining theory to analyze how the legal and regulatory environment affects stakeholder negotiations, and to use the results of this analysis to formulate suggestions for institutional and policy reform that will increase the effectiveness of the water policy implementation process.

The goal of multilateral negotiations is to reach a compromise solution that significantly improves the outlook for some stakeholders, without imposing significant hardship on the remainder. However, the conflicts involved in water policy are highly technical and complex, as shown by the VAMP debate in the San Joaquin Basin. (The relationship between environmental benefits and water flows was a key point in this debate.) Unfortunately, the actual scientific parameters are not well-known. This combination of complexity and scientific uncertainty increases the costliness of identifying compromise solutions and their effects on stakeholders in terms of both time and money. One strength of the multilateral bargaining framework lies in its capacity to identify compromise solutions to complex problems given the current state of scientific knowledge. The other strength of the multilateral bargaining model lies in its capacity to evaluate the effects of the institutional setting on the outcome of the negotiations. For example, we can evaluate whether the SWRCB's decision to encourage stakeholders to negotiate among themselves and bring proposed solutions to the Board aided or actually harmed the efficiency of the eventual outcome, in a social welfare sense.

We will construct a simulation model of the SWRCB hearing using information obtained in the case study. WE will compare the solution to the base run to the alternatives under consideration by the SWRCB in terms of stakeholder welfare. WE will perturb the scientific parameters of the water problem and evaluate how it changes the effects of the model's solution and the alternatives considered by the SWRCB. Similarly, we will evaluate the effect of changing various institutional features of the negotiation process.

This proposal will provide funding to complete an analytical case study of a California water policy problem. By completing such a case study of a current problem, we hope to demonstrate further the usefulness of this framework for modeling negotiations over policy design and implementation. Our ultimate objective in this line of research is to participate in an actual policy negotiation process; that is, to construct a model of a negotiation in cooperation with the actual stakeholders involved in the process. Then, the model could be used to simulate the effects of stakeholder proposals and to determine potential compromise solutions. In this way, the model's ability to analyze complex problems could be used to reduce the costs of the negotiation process. In order to position this technique as a useful negotiation component, however, it is essential that we establish its applicability to policy negotiations. Studies such as this will aid us in doing so.