

Implementation of the Bay-Delta Solution:
Draft Framework for Analysis of Institutional Arrangements and Assurances

Developed by Stuart Cohen

There is a growing need to move forward on issues of assurances and institutional arrangements for the long term Bay-Delta solution, yet the complexity of these issues has proved a significant obstacle. While a variety of innovative ideas have been developed, they have not been presented as part of an overall framework. The result has been a confusing flow of ideas in which phrases such as assurances, institutional arrangements, tools and approaches are used almost interchangeably. For example, programs such as drought water banks have been listed as assurances, instead of as tools or mechanisms.¹

This draft framework delineates four essential levels of implementation for the Bay-Delta solution and is intended to facilitate discussion on this topic as well as clarify certain implementation issues. The levels are delineated as follows:

- 1) Formulation and Enactment – The details of the long-term Bay-Delta solution -- including governance structures, financing mechanisms, program goals and specific assurances -- are formulated at this level. The solution will then be enacted through a combination of legislation, contract(s), and bonds. Enacting an agreement that is difficult to alter or repeal will increase confidence in the long-term solution and reduce concern over the staging of benefits.
- 2) Institutions and Approaches – At this level of implementation are the institutions, tools, programs, and specific approaches (e.g. market-oriented, regulatory) which are the *means* for achieving the goals of the Bay-Delta Program. Effective institutional arrangements and approaches will increase the *likelihood* that the program goals will be achieved. But institutions, in and of themselves, do not represent assurances.

¹ B.J. Miller's Draft white Paper, dated July 8, 1996, begins to sift through the layers and untangle some of the confusion between so-called guarantees, assurances, institutional-legal changes. B.J. points out that "the "assurance" issue and the legal institutional issue.... are two different issues with some possible overlap."

- 3) Assessment and Triggers – Outcomes are assessed and compared to program goals. If certain goals are not met, then pre-designated responses, or triggers, are activated. It is at this level that “assurances” are actually implemented i.e. if a goal is not met then appropriate and effective triggers should assure (or at least increase the likelihood) it will be achieved in the future.
- 4) Enforcement and Conflict Resolution – Providing clear enforcement mechanisms as well as appropriate and effective arenas to resolve conflicts will be of vital importance, given the potential volatility of such a far-reaching program. However, this level of implementation has received scant attention.

Using this type of framework can assist the current debate in numerous ways, for example:

- Analysis of a particular implementation level becomes possible while *holding the other levels constant*. This can be particularly useful if levels which have agreement can be held constant while others, in which there is still uncertainty or conflict, can be discussed and modeled separately.
- Players can more easily understand issues such as assurances and institutional arrangements as part of the entire implementation process. For example, during the Three-Way Process the assurances group primarily focused on developing assurances at the formulation and enactment level.² This framework makes it apparent that strong enactment is just the first step in the *assurance process* and that the assessment and triggers level can also be critical.
- Using this framework can illuminate some confusing concepts, such as the certainty vs. flexibility dichotomy. How can both certainty and flexibility be achieved? At what level of implementation are these characteristics desirable? Answers to these questions become more apparent when this framework is used (some examples are provided in the following section).

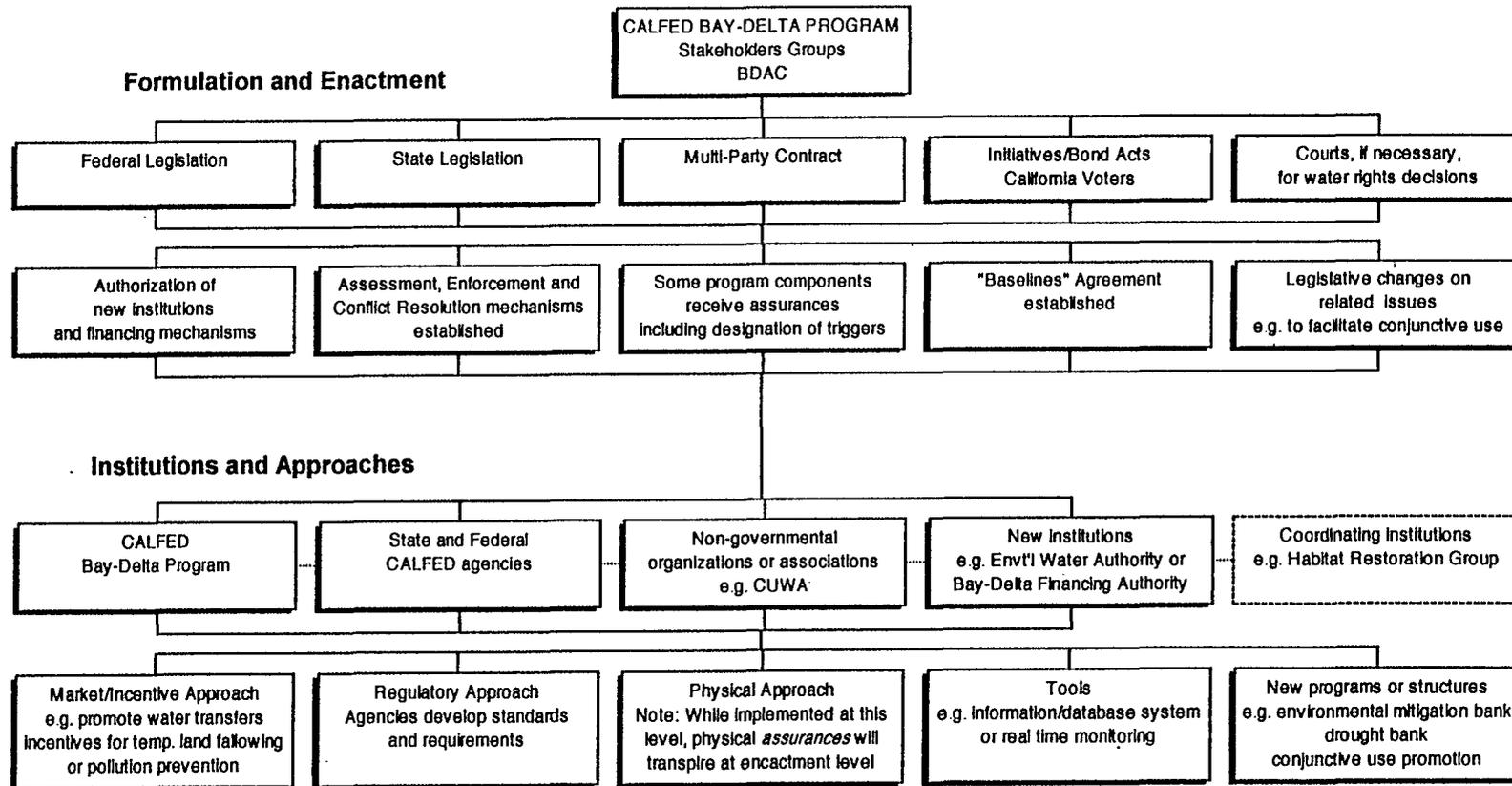
² The group concluded that the assurances with the highest degree of permanence can be achieved with a multi-tiered approach. First a multi-party contract would be signed by state and federal agencies, and at least one party representing each category of stakeholders. Second, federal and possibly state legislation would also authorize the agreement.

This framework is a model. It does not intrinsically provide any answers. Rather, the framework is intended to facilitate discussion and allow players to focus on specific levels of implementation.

The following chart ("Draft Framework for Assurances and Institutional Arrangements") presents an overview of the framework. The chart can also serve as a "skeleton" into which specifics can be added. (For a sample scenario of financing assurances using this framework and chart please contact Stuart Cohen.)

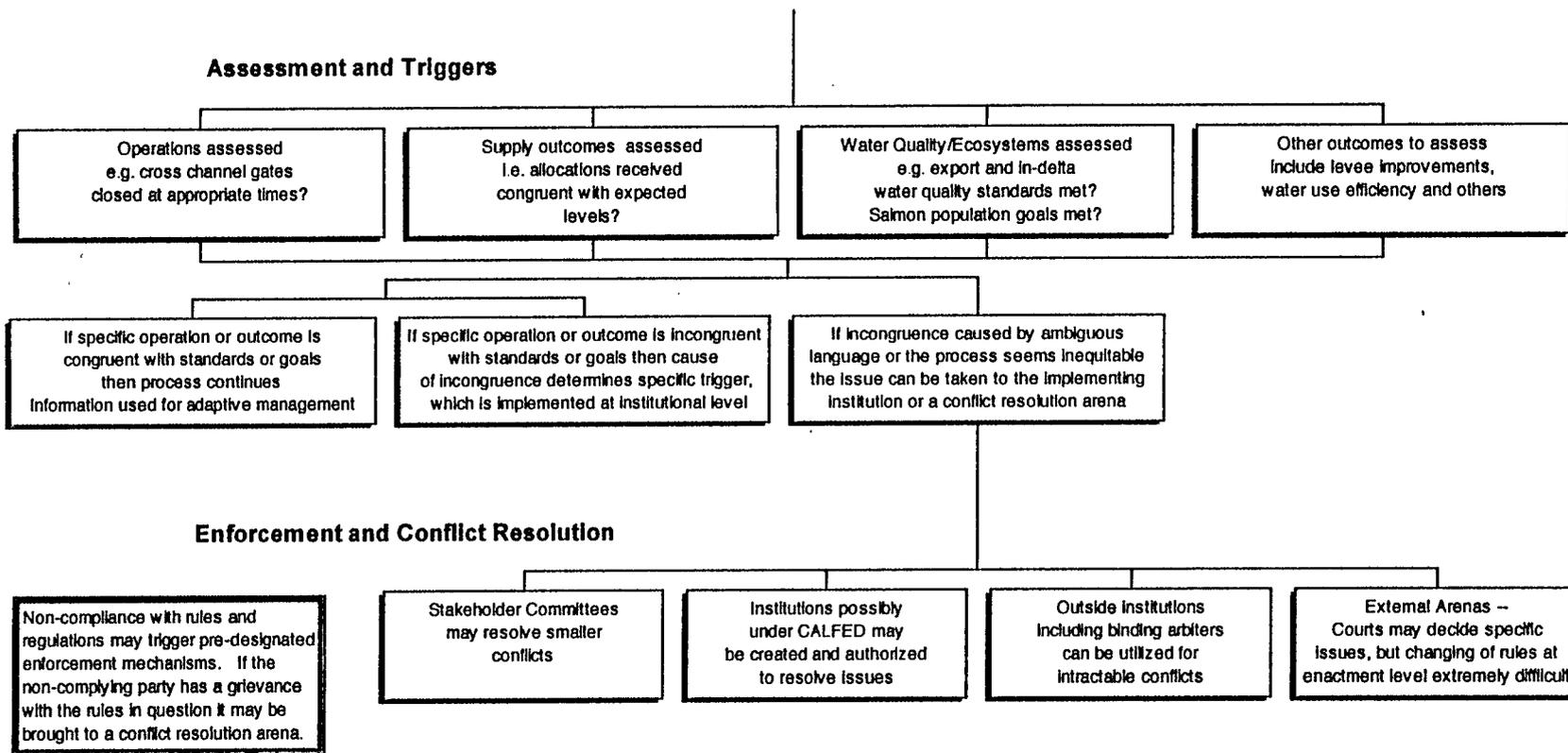
Following the chart the four levels of implementation are examined in greater detail. The framework is still in draft form and comments would be sincerely appreciated. Please contact Stuart Cohen, at (510) 841-6681 or stucohen@violet.berkeley.edu.

Draft Framework for Analyzing Bay-Delta Assurances and Institutional Arrangments
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The Four Levels of Implementation

Formulation and Enactment

At this level, the overall objectives and goals of the program are formulated, governance and management structures are authorized, baselines levels are agreed upon, component assurances are detailed, and financing mechanisms are established.

The CALFED Bay-Delta Program is primary in formulating the overall program but, as can be seen in the chart, is dependent on other parties to support the solution. The state and federal governments will play a key role in this arena via legislation and possibly financing. The courts may also play a role, in such matters as water right decisions. Stakeholders may be involved at this level if they sign a multi-party contract. Finally, the electorate of California may participate in a vote on a general obligation bond or initiative.

The overarching goal at this level (besides formulating a sound program) is to create a high degree of certainty that the constitutional and legislative basis for the Bay-Delta solution is extremely difficult to alter or revoke. Obstacles to altering the constitutional rules will increase the confidence in the long term solution and assure strong investment in program implementation.³ Such obstacles may also reduce the concern over the staging of benefits, since parties are confident that the major components of the program will eventually be executed. The multi-tiered approach recommended during the Three-Way Process is one way of creating that confidence, since this approach makes it difficult to alter the constitutional rules.

³ Reference to constitutional rules does not imply that the contracts or agreements need to be part of a formal "constitution". Rather that the agreements developed at this level determine the decision-making rules and operating systems that will be used thereafter.

Generally speaking, the vital “assurances” of certain outcomes or operations will be authorized at this level. These assurances need to include specific responses (or triggers) in the event that the component goal is not initially reached.

It is at the formulation and enactment level that stakeholders should strive for certainty -- certainty that the constitutional rules are extremely difficult to change.

Institutions and Approaches

Institutions refers to CALFED, involved State and Federal agencies, new institutions that may be developed such as a Bay-Delta Financing Authority, and associations or organizations that may play a role such as CUWA. Approaches is a broad term which encompasses tools such as real time monitoring, programs such as a drought water bank, as well as the three major approaches that have been discussed to attain assurances; regulatory, market/incentive, and physical. References to *institutional arrangements* generally focus on this level of implementation.

Institutions and approaches can be seen as the *vehicles or means* for achieving the goals of the Bay-Delta Program, (whereas the broader *ends* are developed at the constitutional level and measured or assessed at the next stage of implementation).⁴ This framework makes it easier to see that institutions and approaches, whether existing or to be created, are not of themselves assurances. Rather, effective institutional arrangements can increase the *likelihood* that specific goals (including those which are assured) will be achieved in a timely fashion or at all. In one sense, the most vital aspect of assurances occurs when institutional arrangements *fail* to meet their objectives i.e. whether the trigger is sufficient to reach the objectives in the long run.

⁴ This draft framework does not truly represent the complexity of this level for two reasons. First, the framework would potentially become too detailed to be useful. Second, institutions and approaches already receive significant attention and to move ahead with the issue of assurances there must be increased focus on the other three levels.

While institutions and approaches are closely linked, it may be analytically useful to separate the institutions from potential approaches. For example, it may be possible to get stakeholders to agree that market mechanisms (with certain controls) are a preferred approach to source pollution programs. Once agreement is reached on such an approach, a look at the most appropriate institutions to oversee it can be conducted.⁵

Assessment and Triggers

At various points during program implementation specific components will be assessed or measured. Assessing *outcomes or results* typically requires the use of measurement units, such as the concentration of a given pollutant or the quantity of water exported to a water user. Assessing *operations*, on the other hand, typically requires confirmation of specific actions, for example whether cross channel were closed at the appropriate times, whether certain fish screens were installed etc.

At this stage of implementation specific goals, standards and assurances made at the constitutional level will be compared to actual operations and outcomes e.g. are the X2 levels taken during a specific month congruent with the established standards? Designating assessment as a separate and important step in the implementation process, may prompt players to focus on how, when and by whom the measurement or monitoring of components will occur. Agreement and clarity on the details of assessment will increase confidence in the ultimate solution and reduce the frequency of conflicts caused by vague language.

Triggers are automatic, pre-determined responses which “kick-in” if an outcome or operation is determined to be incongruous with a specific component which has been assured. Since the Bay- Delta Program will be rife with uncertain external events, triggers

⁵ The relationship between institutions and approaches is more complex than is represented in this example.

are an important way to create *response* certainty. To prepare triggers, deviations from the expected course are modeled and specific responses are prepared. For example, shortfalls in revenue to an "environmental restoration fund" may have four possible triggers. In the case of a severe drought agricultural users fees are automatically waived, and reserve environmental funds compensate for the revenue shortfall. During a moderate drought the triggers may be entirely different.

Enforcement and Conflict resolution

If there is disagreement regarding operation or outcome measurement or if particular parties feel that outcomes are not equitable, then conflict resolution mechanisms –which will have been authorized at the formulation and enactment level – will be utilized. In the case of non-compliance with program components, enforcement may be necessary. At this level *certainty* of procedure and fairness, combined with *flexibility* in enforcement methods, is desirable.

This level of implementation often receives insufficient attention. Given the extended timeline and the uncertainty inherent in the Bay-Delta Program, implementation will be a process with numerous iterations. Effective resolution mechanisms will increase the stability of the solution.

For fairly simple grievances, conflict resolution mechanisms can be devised to provide rapid access and quick responses at a low cost. Major issues, or issues which are not resolved satisfactorily at these first levels, should be provided higher level internal arenas.

If these mechanisms do not resolve the conflict, then external arenas are always available. Bring issues to court creates uncertainty and fosters adversity. Yet this will likely remain an option for stakeholders and, in cases where small issues are being decided, may not greatly impact the stability of the larger agreement.

Changing the essential portions of the original agreement would require actions from the institutions which enacted the agreement. An agreement that is enacted with the multi-tiered approach would be extremely difficult to change. Operating at the enactment level can be extremely expensive, provides slow (if any) responses, and may have uncertain outcomes. These obstacles are desirable insofar as they encourage stakeholders to resolve conflict at the institutional level.

Closing Comment

This framework is meant to be a starting point and can be altered or elaborated upon. Various concepts and principles were not included in this draft for the sake of brevity. Please contact Stuart Cohen with any comments or questions.