
SOLUTION PRINCIPLES

INTRODUCTION

Solution principles are the fundamental principles which guide development and evaluation of the Program alternatives by the CALFED Bay-Delta Program. The solution principles provide an overall measure of the acceptability of alternatives and guide the design of the institutional part of each alternative.

DEFINITIONS AND CRITERIA FOR SOLUTION PRINCIPLES

The six principles are an integral part of the CALFED Bay-Delta Program mission statement and are intended to be used collectively. Following are draft definitions for each solution principle and draft criteria for their application:

Reduce Conflicts in the System

A solution will reduce major conflicts among beneficial users of water. A solution should:

- significantly reduce each of the four major conflicts which have been identified for the Bay-Delta system. Most of the problems in the Bay-Delta are embodied in one or more of these conflicts. They are:
 - fisheries and diversions
 - habitat and land use/flood protection
 - water supply availability and beneficial uses
 - water quality and land use

Equitable

An equitable solution will focus on solving problems in all problem areas. Improvements for some problems will not be made without corresponding improvements for other problems. Equitable considerations include:

- satisfy some portion of each of the 4 primary and 14 secondary objectives which have been identified for the Program.
- provide a reasonable balance of reliability weighted¹ improvements for the four resource areas. Balance does not necessarily require an equal level of improvement for each resource area (e.g. water exporters might be willing to accept less improvement in water supply reliability if water quality is significantly improved).
- result in costs allocated to the economic users of water based on the benefits they receive from the solution. However, there is no obligation to provide benefits to those unwilling to contribute towards the solution.
- result in net benefits and burdens balanced across stakeholder groups.

Affordable

An affordable solution will be one that can be implemented and maintained within the foreseeable resources of the Program and stakeholders. An affordable solution should:

- have identifiable revenue and financing provisions which are adequate for implementation and continued maintenance of the solution.
- be among the least expensive solutions, for a given level of implementation, which achieve the Program objectives.
- minimize the negative effects on the credit rating of those funding the solution.

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In order to recognize the potential for uncertainty and differences in timing in the receipt of benefits, benefits may be weighted by the degree of probability that the benefit will be received as anticipated. Benefits which appear more certain would have a higher weighted value, while those with less certainty due to timing or technical issues would have a lower weighted value.

Durable

A durable solution will have political and economic staying power and will sustain the resources it was designed to protect and enhance. A durable solution should:

- be adaptive, flexible to changing needs and potential future conditions, and able to address biological uncertainty to sustain the resources it was designed to protect and enhance.
- provide ecosystem improvement using a variety of mechanisms to better face biological uncertainty rather than relying on any single theory of ecosystem improvement.
- accommodate hydrological and other physical uncertainties (e.g. increased storage would hedge against the unknown, or consideration of impacts of potentially higher sea levels on the various alternatives could strengthen durability).
- have adequate legal, operational or physical provisions to ensure that objectives continue to be met in an equitable way for the long-term.
- include a financial plan which has provisions to ensure that the solution will be implemented as intended, while providing flexibility to alter revenues to respond to changing future needs.

Implementable

An implementable solution will have broad public acceptance, legal feasibility and will be timely and relatively simple to implement compared with other alternatives. An implementable solution should:

- have legal or practical precedents or have a clearly identified series of reasonable steps which could be taken to enable implementation.
- have institutional feasibility.
- include as few major legal and institutional changes as necessary while meeting Program objectives.
- have broad acceptance across the various geographic areas and interest groups

as well as the state as a whole.

- be timely (can be implemented relatively quickly) and is relatively simple compared with other potential solutions.

No Significant Redirected Impacts

A solution will not solve problems in the Bay-Delta system by redirecting significant negative impacts, when viewed in its entirety, in the Bay-Delta or other regions of California. A solution should:

- minimize negative long-term economic impacts at the regional level.
- compensate for or mitigate unavoidable negative impacts to the greatest extent practicable.