

Metropolitan Water District of Southern California

**Perspective Paper on
Long-Range Planning Concepts for Managing Future Water Supply**

1. Strategic Reliability Planning

Metropolitan supports the "strategic reliability planning" (SRP) concept described in BDOC's second paper - Long Range Planning Concepts for Managing Future Water Supply (Decision Theory Paper). We note that in the Decision Theory Paper your primary objective is selecting for recommendation a preferred Delta alternative. Metropolitan supports a decision process that looks at a broad base of resources options and the associated economic, environmental, social and reliability costs. We also agree that the process needs to involve as wide a range of interested parties as practical. In fact, Metropolitan is engaged in an integrated resource planning process with its member agencies and regional groundwater basin management agencies. We would like to take this opportunity to share some of the lessons learned during our own process of evaluating alternative resources options and ultimately determining a preferred water resources plan for Metropolitan's service area.

Your giving prominence to the environmental costs associated with the selected Delta alternative is very important. As stated in the Decision Theory Paper, SRP comprises least-cost planning and requires the explicit recognition of environmental quality consequences. To the extent possible, measuring the environmental costs will be essential to approach a least-cost plan for the Delta watershed.

2. Local Agency Studies

As identified in the Decision Theory Paper, SRP involves a very broad framework and it is important to define a realistic scope if BDOC uses this methodology for evaluating Delta alternatives. We are encouraged that the paper recommended using existing studies done by local agencies or water project managers as the basis for determining water management options. Metropolitan learned in its process that local needs and institutional constraints must be recognized and respected. The

BDOC work group involved in the process should not appear to "second guess" local plans or impose options that are not considered feasible at the local level. The BDOC work group must also recognize that many local water agencies use the principles and concepts of SRP to determine their water resources plan while they may not have a formal integrated resources planning process that involved many stakeholders.

3. Evaluation Criteria

The Decision Theory Paper also recognizes that many of the economic, physical, and biological relationships between resource management options and the outcomes are presently not well understood. It is, therefore, important for the BDOC work group to agree on the evaluation criteria before performing any analyses. The BDOC work group must also agree whether the evaluation criteria should be applied qualitatively or quantitatively. In the conclusion of the paper, it is stated that the SRP process reduces bias and helps to insure that an equal burden of "proof of need" is placed on all affected parties. The BDOC work group must agree on how much "burden of proof" would be necessary for each component to be evaluated. The BDOC work group may not be able to efficiently discuss options and perform analyses if it is constantly looking for more information. Furthermore, urban California has gone through an extensive process, utilizing substantial financial and human resources, to identify Best Management Practices (BMPs). The environmental community, State agencies including the Department of Water Resources and local agencies came together to deal with efficient urban water use. Many urban agencies and environmental groups have produced a product widely recognized as valid and signed BMP agreements accordingly. We believe that it would be inappropriate for BDOC to invest further resources to reinvent the BMP process and refine estimates of urban water "needs".

4. Local Options to Manage Reliability

The Decision Theory Paper recognizes that different regions in California use different water shortage contingency plans and that these local choices "influence the size and frequency of shortages" as well as the costs and losses associated with those shortages. Metropolitan strongly believes that local areas who pay the costs for water ultimately should determine acceptable risks and reliability for their region. Areas which choose to invest in reliability through integrated plans of water conservation, wastewater reclamation, groundwater recovery and water transfers ought to experience less severe shortages. Areas choosing to save money with increased risk of shortages ought to experience greater shortages.

5. Screening of Delta Alternatives

Metropolitan supports BDOC's goal of finding ways to limit the scope of studies, primarily by concentrating on issues specific to the Delta, as discussed above. One caution about limiting the scope, however, is that the BDOC work group should not make judgements that rule out alternatives (stated in the Decision Theory Paper as "the use of infeasible options", "unacceptable outcomes", and "politically infeasible") on the basis of appearing to be politically sensitive. The essence of decision-making under existing environmental legislation is a willingness to address a broad range of alternatives without prejudging the merits on political or financial bases. BDOC is encouraged to consider a broad range of innovative solutions, and this clearly will be necessary to get to closure on the sensitive issues of the Delta watershed. The politics of the past, which resulted in stalemate, must not bar us from the creativity needed to define workable solutions in the future.

6. Investigations Needed

In selecting a preferred Delta alternative, Metropolitan believes the following questions and issues of fisheries biology and drinking water quality must be addressed in detail.

Fisheries Biology

Given the physical structure of the Delta and the location of State and Federal water project diversions in the Delta, these water project operations have likely contributed to a decline of various fisheries in the Delta. Although many other factors adversely affect the fisheries, finding environmentally and economically responsible ways to resolve fishery and habitat issues arising from State and Federal project operations is emerging as a central challenge for BDOC. Some issues that must be addressed when evaluating Delta alternatives include the following:

- a. Anadromous Downstream Migrating Young Fish: What are the effects of the Delta alternative on newly spawned fish migrating downstream through the delta?
- b. Anadromous Upstream Migrating Adult Fish: What are the effects of the Delta alternative on adult fish that migrate through the Delta to upstream rivers for spawning?
- c. What are the effects of the Delta alternative on native fishes residing in the Delta?

- d. Does the Delta alternative solve or greatly reduce entrainment problems at diversion facilities in the Delta?
- at Banks Pumping plant
 - at Tracy Pumping plant
 - at the Contra Costa Canal Intake
 - at the North Bay Aqueduct Intake
- e. Does the Delta alternative address non-water project impacts on fisheries? For example, does the alternative reduce fish entertainment caused by non-water project diversions in the Delta? Also, is fishing rearing habitat improved by the alternative?

Drinking Water Quality

The Delta is the source of 40 percent of the drinking water supplies in California. The Delta provides drinking water to over 20 million people in the State. Because projects such as the State Water Project must be diverted from the "bottom" of the Delta, the source quality of State Project drinking water is unacceptably low. Poor quality source water makes it increasingly difficult to meet more stringent drinking water quality standards and poses the risk of billions of dollars in unnecessary treatment costs for urban customers.

In anticipation of the U.S. Environmental Protection Agency's intent to lower the maximum contaminant level of disinfection by-products, urban water agencies have coordinated efforts to develop new technologies and demonstration treatment facilities, and have increased monitoring programs. The cost of these efforts emphasizes the need to ensure quality source water from the Delta. For Northern and Southern California urban water agencies, the quality of Delta water represents special problems. The contamination on freshwater flows with seawater, agricultural herbicide and pesticide drainage, and decomposing organic peat soils creates difficulties in meeting federal drinking water standards.

The following questions affecting the Delta source of drinking water should be addressed in evaluating and selecting a Delta alternative:

- a. What is the effect of the selected Delta alternative on the chemical and microbiological quality of water, including the impacts on disinfection by-product precursors, Total Organic Carbon, Bromide concentration, and levels of arsenic?

- b. What is impact of the selected Delta alternative on the load of microorganisms in the Delta, including giardia, cryptosporidium, and viruses?
- c. What is the cost of drinking water treatment in urban areas for the selected Delta alternative?

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