Allowable Uses of Surplus Waters Must Be Limited

Although not discussed in the DEIS, the allowable beneficial uses of the surplus waters will, to an extent, dictate the future availability of surplus waters and thus warrant comment. For example, under some circumstances a state may dedicate considerable amounts of surplus water to groundwater banking rather than municipal and industrial (M&I) uses, thus lowering reservoir levels to the point where space-building or flood control releases are not necessary. Any interim surplus criteria must limit the uses of its water to M&I, particularly in California where the aim of the surplus declaration is to keep the Colorado River Aqueduct full. Likewise, any surplus criteria must limit the declaration of available surplus to that necessary to keep the CRA full to meet MWD’s 1,212 maf entitlement, and no more. Thus, the 7 States proposal, IV.B.2.a, calling for 1,250 maf for the CRA during a Full Domestic Surplus, must be amended to supply no more than 1,212 maf.

Affected Environment and Environmental Consequences

Assumptions

Reclamation makes three assumptions relating to the operation of the baseline and the alternatives. These assumptions need elaboration before issuance of the Final EIS. The first, assumption of implementation of the 4.4 Plan, is discussed above.

Next, according to the assumptions common to all, Mexico will receive a surplus declaration of 200 kaf only under Lake Mead flood control releases (3.3-9). As stated earlier, the Treaty sets only a minimum delivery requirement, not a maximum. Mexico is eligible to receive surplus waters in years other than flood control releases; to assume otherwise may tie the U.S.’s hands in future negotiations under the Treaty. This DEIS may not de facto establish a Mexico surplus declaration trigger.

Lastly, at the August 15 Hydrologic Modeling Meeting, Reclamation announced that operation of the Yuma Desalting Plant beginning in 2015 is an assumption common to all alternatives. Yet, it was not included in the DEIS and thus there is no clarification as to why it is an assumption. Its omission is doubly troublesome because operation of the plant will have significant environmental impacts on the delta, particularly the Cienega de Santa Clara. Section 3.16.D.1, POTENTIAL EFFECTS TO HABITAT IN MEXICO, summarizes concludes that this action will not affect the Cienega without observing that operation of the plant would cut return flows to the

12: Reclamation agrees that the use of surplus water for groundwater recharge when storage in Lake Mead and Lake Powell have been partially depleted increases the risk of subsequent shortages and intensifies the effects on other resources. This is recognized in the derivation of the permitted amounts of surplus water to be made available to the Lower Division states with the lower Lake Mead water level surplus triggers. As can be seen in the surplus water quantities cited in Chapter 2, the surplus water available would be lower at lower Lake Mead water levels. However, such provisions are not included in the Shortage Protection Alternative because that alternative represents an extreme that helps to define the range of options for interim surplus criteria.

13: The purpose of this action, as stated in Section 1.1.1 of this FEIS, is to adopt interim surplus criteria for delivery of surplus water to Arizona, California and Nevada. This proposed action is NOT intended to identify conditions when Mexico may schedule this additional 0.2 maf, as stated in Section 1.1.4 of this FEIS. Delivery of surplus water to Mexico during Lake Mead flood control releases is strictly a modeling assumption as stated in Section 3.3.3.3.

14: Operation of the Yuma desalting plant was strictly a modeling assumption. It should be noted that the U.S. recognizes that it has an obligation to replace, as appropriate, the bypass flows. The assumptions made herein, for modeling purposes, do not necessarily represent the policy that Reclamation will adopt for replacement of bypass flows. The assumptions made with respect to modeling the bypass flows are intended only to provide a thorough and comprehensive accounting of Lower Basin water supply. The U.S. is exploring options for replacement of the bypass flows, including options that would not require operation of the Yuma Desalting Plant.

5
Cinega to a third of their current flows, while tripling their salinity.

Scope

The potentially affected area should not end at the NIB. NEPA directs federal agencies to analyze the effects of proposed actions to the extent that they are reasonably foreseeable, regardless of where those impacts may occur. The DEIS includes a transboundary analysis, in accordance with CEQ Guidance on NEPA Analysis for Transboundary Impacts, yet limits the affected area to the NIB between the U.S. and Mexico. This is inconsistent with the scope of the connected and ongoing actions – the Lower Colorado River Multi-Species Conservation Program and Biological and Conference Opinion on Lower Colorado River Operations and Maintenance – and with the scope of the actual impacts.

Water Quality

A more liberal declaration of surplus will lower Lake Mead and adversely affect the water quality of the Colorado River. It is a violation of NEPA simply to assume that the Colorado River salinity control program will maintain the Clean Water Act’s water quality criteria. NEPA requires that Reclamation take a hard look at the potential impacts of a project and perform a rigorous analysis based on the best available information.

One author has theorized that a 9 maf drawdown would permanently increase salinity by 96 mg/L below Hoover Dam and by 72 mg/L at Parker and Imperial Dams. This increase would likely offset the impact from any salinity control projects. In addition, any beneficial impacts from a temporary increase in flows would be minor compared to this permanent increase, and would only benefit flows to Parker because the largest diversions are at Parker and Imperial. TDS levels would fall 6 mg/L for each 1 maf released for each three-year average, which requires a 3 maf release over three years and a permanent increase of 32.1 mg/L at Hoover Dam and 23.7 mg/L at Parker and Imperial Dams with a temporary reduction of 6 mg/L. See Salinity of Colorado River Water: Causes, Consequences, and Remedies, “Water Strategist,” vol.10, no.1 (Spring 1996). The Mexican section of the IBWC has also cited the increase in downstream salinity as an impact. (Att. Q.) Reclamation cannot in good faith dismiss these, and other, concerns. (3.16-3.)

While the effects of interim criteria on water quality among the various alternatives may be accounted for in the modeling, the effects of the surplus declarations themselves are not. As a result, this section requires elucidation. For example, the DEIS estimates that 1,478,000 tons of salt will need to be removed from the Colorado River system, (3.5-6), but provides no source or rationale for that number. Does this estimation take into account a drawdown of Lake Mead, or only current and planned projects?

15: The FEIS includes an analysis of impacts for the Limotrope Division (from the NIB to the SIB). The area of potential effect described in Section 3.2 is associated with areas in the U.S. The transboundary analysis considers potential effects in Mexico consistent with NEPA and CEQ guidelines. The area considered in Mexico is described fully in Section 3.16.

16: The seven state Colorado River Basin Salinity Control Forum, in cooperation with Reclamation, USDA, BLM, the US Fish and Wildlife Service and EPA has, since 1972, been overseeing the plan of implementation to maintain the salinity at or below the adopted criteria. Maintenance of the criteria is the result of rigorous analyses. The plan is reviewed every three years and approved by EPA.

17: The basis for the 1,478,000 tons of salt control is described in the "1999 Review - Water Quality Standards for Salinity Control Colorado River System" prepared by the Forum.