



CHAPTER  
**FOUR**

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OTHER NEPA  
CONSIDERATIONS

## 4 OTHER NEPA CONSIDERATIONS

### 4.1 INTRODUCTION

NEPA requires that the impacts to resources from proposed federal actions include the perspectives of cumulative impacts, relationship between short-term uses of the environment and long-term productivity, and irreversible and irretrievable commitments of resources. While an attempt was made to incorporate those considerations in the discussion for each resource, they are discussed further here in recognition of the emphasis they are given in NEPA and the CEQ Regulations.

### 4.2 CUMULATIVE IMPACTS

A cumulative impact is an impact that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

As discussed in Chapter 3, effects that could occur within the United States as a result of interim surplus criteria are each associated with potential changes in the probabilities for Lake Mead and Lake Powell surface elevation reductions and changes in Colorado River flows from Glen Canyon Dam to the SIB. Generally, other actions that could result in cumulative impacts when considered in tandem with the effects of interim surplus criteria (as identified in Chapter 3) have been incorporated into modeling of future system conditions. Such actions include future increases in consumptive use of Colorado River water in the Upper Division states, intrastate water transfers in the Lower Division states and various requirements and constraints applied to the operation of the Colorado River system.

The environmental effects of the various components of the CA Plan, including the various intrastate storage facilities (such as Cadiz, Hayfield/Chuckwalla, and Desert/Coachella projects), and the other related and ongoing actions are undergoing separate compliance. Where there is a federal nexus to actions in California, a combined CEQ/NEPA compliance document is being prepared.

Potential cumulative effects to the resources affected by surplus criteria were analyzed within the 100-year floodplain of the lower Colorado River from the full-pool elevation of Lake Powell to the Gulf of California in Mexico through year 2050. Only the issue area of “transboundary impacts” was identified as possibly experiencing cumulative effects.

No past, present, or reasonably foreseeable actions in the United States are expected to result in cumulative impacts to the issue area of transboundary impacts. In addition to

the direct and indirect effects on the physical and natural environment in Mexico from actions identified by Mexico that are discussed in Section 3.16, it is recognized that some future actions taken by Mexico may have a cumulative effect. Exactly what these actions are is not known at this time. Any impacts of these projects are the responsibility of Mexico.

In addition, Reclamation is consulting with the Service on potential adverse effects to species found in both Mexico and the United States. For potentially affected species found only in Mexico, Reclamation is consulting with the National Marine Fisheries Service. Concurrent with these consultations, Reclamation is also continuing dialog with Mexico, through the IBWC's Fourth Technical Work Group, to reach mutually agreeable solutions to address cumulative impacts.

### **4.3 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY**

Because the implementation of interim surplus criteria is a management action that would require no direct physical change to the environment, for the purposes of this discussion, short-term uses of resources are limited to potential changes in the probability for certain environmental effects to occur as a result of changed system conditions. Also for the purposes of this discussion, long-term productivity refers to the benefits that would be realized during and following the period in which interim surplus criteria would be in place.

As stated in Section 1.1.3, Purpose of and Need for Action, the benefit sought by means of the interim surplus criteria alternatives consists of increasing the efficiency of the Secretary's annual decision-making process regarding the availability of Colorado River water. This would afford the mainstream users of this water a greater degree of predictability which would assist them in their water resources planning and operation.

The resources that may be affected in the short-term would be primarily those affected by lower reservoir levels. The effects of the interim surplus criteria on those resources would depend on the alternative selected for implementation. The Flood Control Alternative would result in insignificant changes in reservoir levels from baseline conditions. The other four alternatives would tend to cause lower average water levels than baseline conditions by 2016 and for a limited period of time thereafter. However, these alternatives would have a greater probability of surplus water than the Flood Control Alternative or baseline conditions through the year 2016. Long-term benefits that would be realized due to interim surplus criteria would include increased opportunities for making more efficient use of Colorado River water supplies.

#### 4.4 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible commitments are decisions affecting renewable resources such as soils, wetlands and waterfowl habitat. Such decisions are considered irreversible because their implementation would affect a resource that has deteriorated to the point that renewal can occur only over a long period of time or at great expense or because they would cause the resource to be destroyed or removed.

The application of the interim surplus criteria would include reviews at five-year intervals to consider the workability of the criteria in light of the multiple purposes served by the operation of the Colorado River system, including environmental maintenance. Based on those reviews, interim surplus criteria could be revised or eliminated as needed. If California fails to meet its water conservation and management goals throughout the stipulated term of implementation of the criteria (through 2016), the Secretary may choose to terminate the interim criteria and revert to the 70R Strategy. Finally, after 2016, determinations of the availability of surplus will revert to the AOP process.

None of the resources assessed in this FEIS would experience a deterioration in condition such that the resource would be destroyed or removed as a result of implementation of interim surplus criteria or under the No Action Alternative. The Colorado River System may also reset at any time in the future, due to high inflows, resulting in full reservoirs. There would be no construction of facilities needed to facilitate the Secretary's determination of surplus water under the criteria.

Irretrievable commitment of natural resources means loss of production or use of resources as a result of a decision. It represents opportunities foregone for the period of time that a resource cannot be used.

All of the resources assessed in the FEIS would continue to be available for production or use under any of the alternatives; however, application of the interim surplus criteria may result in a determination for any given year that surplus water is available from the Colorado River. That water could also have been determined to be surplus in the absence of interim surplus criteria through the AOP process. Although water is a renewable resource, the delivery of surplus water under all of the alternatives, including no action, would irretrievably commit (to beneficial consumptive uses) the water declared to be surplus, but authorized by the *Law of the River*.