

THE SECRETARY OF THE INTERIOR WASHINGTON

RECORD OF DECISION

COLORADO RIVER INTERIM SURPLUS GUIDELINES

FINAL ENVIRONMENTAL IMPACT STATEMENT

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Approved

Secretary of the Department of the Interior

16,20 Date

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I. Introduction

This document constitutes the Record of Decision (ROD) of the Department of the Interior, regarding the preferred alternative for Colorado River Interim Surplus Guidelines (Guidelines). The Secretary of the Interior (Secretary) is vested with the responsibility of managing the mainstream waters of the lower Colorado River pursuant to federal law. This responsibility is carried out consistent with applicable federal law. Reclamation, as the agency that is designated to act on the Secretary's behalf with respect to these matters, is the lead Federal agency for the purposes of National Environmental Policy Act (NEPA) compliance for the development and implementation of the proposed interim surplus guidelines. The FEIS was prepared pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended, the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), Department of Interior Policies, and Reclamation's NEPA Handbook. Colorado River Interim Surplus Criteria is the subject of the Final Environmental Impact Statement (FEIS), filed with the Environmental Protection Agency (FES-00-52) on December 8, 2000 and noticed by the Environmental Protection Agency and Reclamation in the Federal Register on December 15, 2000.

The FEIS was prepared by Reclamation to address the formulation and evaluation of specific interim surplus guidelines and to identify the potential environmental effects of implementing such guidelines. The FEIS addresses the environmental issues associated with, and analyzes the environmental consequences of various alternatives for specific interim surplus guidelines. The alternatives addressed in the FEIS are those Reclamation determined would meet the purpose of and need for the federal action and represented a broad range of the most reasonable alternatives.

The National Park Service (NPS) and the International Boundary and Water Commission United Stat es and Mexico (IBWC) are cooperating agencies for purposes of assisting with the environmental analysis in the FEIS. The NPS administers three areas of national significance within the area potentially affected by the proposed action: Glen Canyon National Recreation Area (GCNRA), Grand Canyon National Park and Lake Mead National Recreation Area (LMNRA). The NPS administers recreation, cultural and natural resources in these areas and also grants and administers recreation concessions for the operation of marinas and related facilities at Lake Powell and Lake Mead, while the elevation of each of these reservoirs is controlled by and subject to Reclamation operations. The IBWC is a bi-national organization responsible for administration of the provisions of the U.S.-Mexico Water Treaty of 1944 (Treaty), including the Colorado River waters allocated to Mexico, protection of lands along the Colorado River from

floods by levee and floodway projects, resolution of international boundary water sanitation and other water quality problems, and preservation of the river as the international boundary. The IBWC consists of the United States Section and the Mexico Section which have their headquarters in the adjoining cities of El Paso, Texas and Ciudad Juarez, Chihuahua, respectively. These and other federal, state and local agencies are expected to use the FEIS and ROD in their planning and decision-making processes.

II. Recommended Decision

The recommendation is the approval of the following Federal action: the adoption of specific interim surplus guidelines identified in the Preferred Alternative (Basin States Alternative) as analyzed in the FEIS. These specific interim surplus guidelines would be used annually to determine the conditions under which the Secretary would declare the availability of surplus water for use within the states of Arizona, California and Nevada. These guidelines would be consistent with both the Decree entered by the United States Supreme Court in 1964 in the case of *Arizona v. California* (Decree) and Article III(3)(b) of the *Criteria for Coordinated Long-Range Operation of the Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968* (LROC). The guidelines would remain in effect for determinations made through calendar year 2015 regarding the availability of surplus water through calendar year 2016, may be subject to five-year reviews conducted concurrently with LROC reviews, and would be applied each year as part of the Annual Operation Plan (AOP) process.

III. Background

The Secretary of the Interior manages the lower Colorado River system in accordance with federal law, including the 1964 Decree of the U.S. Supreme Court in Arizona v. California (Decree), the Colorado River Basin Project Act of 1968 (CRBPA), and the Criteria for Coordinated Long-Range Operation of the Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968 (LROC). Within this legal framework, the Secretary makes annual determinations regarding the availability of surplus water from Lake Mead by considering various factors, including the amount of water in system storage and predictions for natural runoff. The 1964 Decree provides that if there exists sufficient water available in a single year for release (primarily from Lake Mead) to satisfy annual consumptive use in the states of Arizona, California, and Nevada in excess of 7.5 million acre-feet (maf), such excess consumptive use in Arizona, California and Nevada is "surplus." The Secretary is authorized to determine the conditions upon which such water may be made available. The CRBPA directed the Secretary to adopt criteria for coordinated long-range operation of reservoirs on the Colorado River in order to comply with and carry out the provisions of the Colorado River Compact of 1922 (Compact), the Colorado River Storage Project Act of 1956 (CRSPA), the Boulder Canyon Project Act of 1928 (BCPA) and the United States-Mexico Water Treaty of 1944 (Treaty). The Secretary sponsors a formal review of the LROC every five years.

The LROC provide that the Secretary will determine the extent to which the reasonable consumptive use requirements of mainstream users in Arizona, California and Nevada (the Lower Division states) can be met. The LROC define a normal year as a year in which annual pumping and release from Lake Mead will be sufficient to satisfy 7.5 maf of consumptive use in accordance with the Decree. A surplus year is defined as a year in which water in quantities greater than normal (i.e., greater than 7.5 maf) is available for pumping or release from Lake Mead pursuant to Article II(B)(2) of the Decree after consideration of relevant factors, including the factors listed in the LROC. Surplus water is available to agencies which have contracted with the Secretary for delivery of surplus water, for use when their water demand exceeds their basic entitlement, and when the excess demand cannot be met within the basic apportionment of their state. Water apportioned to, but unused by one or more Lower Division states can be used to satisfy beneficial consumptive use requests of mainstream users in other Lower Division states as provided in Article II(B)(6) of the Decree.

Pursuant to the CRBPA, the LROC are utilized by the Secretary, on an annual basis, to make determinations with respect to the projected plan of operations of the storage reservoirs in the Colorado River Basin. The AOP is prepared by Reclamation, acting on behalf of the Secretary, in consultation with representatives of the Colorado River Basin states (Basin States) and other parties, as required by federal law. The interim surplus guidelines would serve to implement the provisions of Article III(3)(b) of the LROC on an annual basis in the determinations made by the Secretary as part of the AOP process for a period of fifteen years.

To date, the Secretary has applied factors, including but not limited to those found in Article III(3)(b)(i-iv) of the LROC, in annual determinations of the availability of surplus quantities of water for pumping or release from Lake Mead. As a result of actual operating experience and through preparation of AOPs, particularly during recent years when there has been increasing demand for surplus water, the Secretary has determined that there is a need for more specific surplus guidelines, consistent with the Decree and applicable federal law, to assist in the Secretary's annual decision making during an interim period.

For many years, California has been diverting more than its normal 4.4 maf apportionment. Prior to 1996, California utilized unused apportionments of other Lower Division states that were made available by the Secretary. Since 1996, California has also utilized surplus water made available by Secretarial determination. California is in the process of developing the means to reduce its annual use of Colorado River water to 4.4 maf. Both Arizona and Nevada are approaching full use of their Colorado River apportionments.

Additionally, through adoption of specific interim surplus guidelines, the Secretary will be able to afford mainstream users of Colorado River water, particularly those in California who currently utilize surplus flows, a greater degree of predictability with respect to the likely existence, or lack thereof, of surplus conditions on the river in a given year. Adoption of the interim surplus guidelines is intended to recognize California's plan to reduce reliance on surplus deliveries, to assist California in moving toward its allocated share of Colorado River water, and to avoid

hindering such efforts. Implementation of interim surplus guidelines would take into account progress, or lack thereof, in California's efforts to achieve these objectives. The surplus guidelines would be used to identify the specific amount of surplus water which may be made available in a given year, based upon factors such as the elevation of Lake Mead, during a period within which demand for surplus Colorado River water will be reduced. The increased level of predictability with respect to the prospective existence and quantity of surplus water would assist in planning and operations by all entities that receive surplus Colorado River water pursuant to contracts with the Secretary.

IV. Alternatives Considered

The FEIS analyzed five action alternatives for interim surplus guidelines as well as a No Action Alternative/Baseline Condition that was developed for comparison of potential effects of the action alternatives. A common element of all alternatives is that in years in which the *Field Working Agreement between the Bureau of Reclamation and the Army Corps of Engineers for Flood Control Operation of Hoover Dam and Lake Mead* (Field Working Agreement) requires releases greater than the downstream beneficial consumptive use demands, the Secretary shall determine that a "flood control surplus" will be declared in that year. In such years, releases will be made to satisfy all beneficial uses within the United States and up to an additional 200,000 acre feet (af) will be made available to Mexico under the Treaty. The No Action Alternative/Baseline Condition and the five action alternatives are described below.

1. <u>No Action Alternative/Baseline Condition:</u> Under the No Action Alternative, determinations of surplus would continue to be made on an annual basis, in the AOP process, pursuant to the LROC and the Decree. The No Action Alternative represents the future AOP process without specific interim surplus guidelines. Surplus determinations consider such factors as end-of-year system storage, potential runoff conditions, projected water demands of the Basin States and the Secretary's discretion in addressing year-to-year issues. The No Action Alternative is identified as the "environmentally preferable alternative" as it affords the Secretary the greatest degree of annual flexibility in managing the mainstream waters and resources of the lower Colorado River pursuant to applicable federal law. However, the year-to-year variation in the conditions considered by the Secretary in making surplus water determinations makes projections of surplus water availability highly uncertain, and may hinder efforts by California to reduce its over-reliance on Colorado River water supplies.

The approach used in the FEIS for analyzing the hydrologic aspects of the interim surplus guidelines alternatives was to use a computer model that simulates specific operating parameters and constraints. In order to follow CEQ guidelines calling for a No Action alternative for use as a "base line" against which to compare project alternatives, Reclamation selected a specific operating strategy for use as a baseline condition, which could be described mathematically in the model.

The baseline is based on a 70R spill avoidance strategy (70R strategy). The 70R baseline strategy involves assuming a 70-percentile inflow into the system subtracting out the consumptive uses and system losses and checking the results to see if all of the water could be stored or if flood control releases from Lake Mead would be required. If flood control releases from Lake Mead would be required, additional water is made available to the Lower Basin states beyond 7.5 maf. The notation 70R refers to the specific inflow where 70 percent of the historical natural runoff is less than this value (17.4 maf) for the Colorado River basin at Lee Ferry. In practice, the 70R surplus determination trigger elevation would be made during the fall of the preceding year using projected available system space. The 70R strategy trigger line gradually rises from approximately 1199 feet above mean sea level (msl) in 2002 to 1205 feet msl in 2050 as a result of increasing water use in the Upper Basin. Under baseline conditions, when a surplus condition is determined to occur, surplus water would be made available to fill all water orders by holders of surplus water contracts in the Lower Division states.

Reclamation has utilized a 70R strategy for both planning purposes and studies of surplus determinations in past years. When Reclamation reviewed previous surplus determinations as part of the Draft Environmental Impact Statement (DEIS) effort, the data indicated that the 1997 surplus determination did not precisely fit the 70R strategy. As a result, Reclamation selected the 75R strategy as representative of recent operational decisions for use as the baseline condition in the DEIS. However, based on further review and analysis, public comment, and discussion with representatives of the Basin States during the DEIS review period, Reclamation selected the 70R strategy for the baseline condition in the FEIS. While the 70R strategy is used to represent baseline conditions, it does not represent a decision by Reclamation to utilize the 70R strategy for determination of future surplus conditions in the absence of interim surplus guidelines. It should be noted that the 70R strategy and 75R strategy produced very similar modeling results for the purpose of determining impacts associated with the action alternatives analyzed in this FEIS. The primary effect of simulating operation with the 70R strategy would be that surplus conditions would only be determined when Lake Mead is nearly full.

2. <u>Basin States Alternative (Preferred Alternative)</u>: The Basin States Alternatives is similar to, and based upon, information submitted to the Secretary by representatives of the Governors of the states of Colorado, Wyoming, Utah, New Mexico, Arizona, Nevada and California. After receipt of this information (during the public comment period), Reclamation shared the submission with the public (through the *Federal Register* and Reclamation's surplus guidelines web sites) for consideration and comment. Reclamation then analyzed the states' submission and crafted this additional alternative for inclusion in the FEIS. Some of the information submitted for the Department's review was outside of the scope of the proposed action for adoption of interim surplus guidelines and was therefore not included as part of the Basin States Alternative (e.g., adoption of shortage criteria and adoption of surplus criteria beyond the 15-year period) as presented in the FEIS.

The Basin States Alternative specifies ranges of Lake Mead water surface elevations to be used through 2015 for determining the availability of surplus water through 2016. The elevation

ranges are coupled with specific uses of surplus water in such a way that, if Lake Mead's surface elevation were to decline, the amount of surplus water would be reduced. The surplus determination elevations under the preferred alternative consist of three tiered Lake Mead water surface elevations, each of which is associated with certain designations on the purposes for which surplus water could be used. When a flood control surplus is determined, surplus water would be made available for all established uses by contractors for surplus water in the Lower Division States. When Lake Mead water levels are below the lowest surplus trigger elevation, surplus water would not be made available.

3. <u>Flood Control Alternative</u>: Under the Flood Control Alternative, a surplus condition is determined to exist when flood control releases from Lake Mead are occurring or projected to occur in the subsequent year. The method of determining need for flood control releases is based on flood control regulations published by the Los Angeles District of the Corps of Engineers (Corps) and the Field Working Agreement between the Corps and Reclamation. Under the flood control strategy, a surplus is determined when the Corps flood control regulations require releases from Lake Mead in excess of downstream demand. If flood control releases or space building releases are required, surplus conditions are determined to be in effect. The average Lake Mead water surface elevation that would trigger flood control releases is approximately 1211 feet msl. In practice, flood control releases are not based on the average trigger elevation, but would be determined each month by following the Corps regulations. When a flood control surplus is determined, surplus water would be made available for all established uses by contractors for surplus water in the Lower Division States.

4. <u>Six States Alternative</u>: The Six States Alternative specifies ranges of Lake Mead water surface elevations to be used through 2015 for determining the availability of surplus water through 2016. The elevation ranges are coupled with specific uses of surplus water in such a way that, if Lake Mead's surface elevation were to decline, the amount of surplus water would be reduced. The surplus determination elevations under the Six States Alternative consist of three tiered Lake Mead water surface elevations, each of which is associated with certain designations on the purposes for which surplus water could be used. When flood control releases are made, any and all beneficial uses would be met, including unlimited off-stream storage. When Lake Mead water levels are below the lowest surplus trigger elevation, surplus water would not be made available.

5. <u>California Alternative</u>: The California Alternative specifies Lake Mead water surface elevations to be used for the interim period through 2015 for determining the availability of surplus water through 2016. The elevation ranges are coupled with specific uses of surplus water in such a way that, if Lake Mead's surface elevation declines, the amount of surplus water would be reduced. The Lake Mead elevations at which surplus conditions would be determined under the California Alternative are expressed as three tiered, upward sloping trigger lines that rise gradually year by year to 2016, in recognition of the gradually increasing water demand of the Upper Division states from the present to 2016. Each tier would be coupled with limitations on the amount of surplus water available at that tier. Each tier under the California Alternative

would be subject to adjustment during the interim period based on changes in Upper Basin demand projections. When flood control releases are made, any and all beneficial uses would be met, including unlimited off-stream storage. When Lake Mead water levels are below the lowest surplus trigger elevation, surplus water would not be made available

6. <u>Shortage Protection Alternative</u>: The Shortage Protection Alternative is based on maintaining an amount of water in Lake Mead necessary to provide a normal annual supply of 7.5 maf for the Lower Division, 1.5 maf for Mexico and storage necessary to provide an 80 percent probability of avoiding future shortages. The surplus triggers under this alternative range from an approximate Lake Mead initial elevation of 1126 feet msl to an elevation of 1155 feet msl at the end of the interim period. At Lake Mead elevations above the surplus trigger, surplus conditions would be determined to be in effect and surplus water would be available for use in the Lower Division states. Below the surplus trigger elevation, surplus water would not be made available.

V. Basis For Decision

Reclamation selected the Basin States Alternative as its preferred alternative based on Reclamation's determination that it best meets all aspects of the purpose and need for the action, including the need: to remain in place for the entire period of the interim guidelines; to garner support among the Basin States that will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that balances all existing needs for these precious water supplies; and, to assist in the Secretary's efforts to insure that California water users reduce their over reliance on surplus Colorado River water. Reclamation notes the important role of the Basin States in the statutory framework for administration of Colorado River Basin entitlements and the significance that a seven-state consensus represents on this issue. With respect to the information within the scope of the proposed action, Reclamation found the Basin States Alternative to be a reasonable alternative and fully analyzed the environmental effects of this alternative in the FEIS. The identified environmental effects of the Basin States Alternative are well within the range of anticipated effects of the alternatives presented in the DEIS and do not affect the environment in a manner not already considered in the DEIS. Thus, based on all available information, this alternative is the most reasonable and feasible alternative.

VI. Public Response To Final Environmental Statement

Following the Federal Register Notice of Availability for the FEIS on December 15, 2000, and as of Friday at 7:00 PM (EST), on January 12, 2001, Reclamation had received one letter supporting the preferred alternative in the FEIS, one letter from the Ten Tribes Partnership, one letter from a Non-governmental Organization and four letters and approximately 7,517 email comments entitled "Stop Damage to the Colorado River Delta" commenting on the FEIS. The email form letter appears to be based upon information made available by Environmental Defense as posted

on its Environmental Defense Action Network Internet web site. The live action alert allows citizens to automatically email a form/sample letter to a designated addressee (in this case the Bureau of Reclamation's project leader). Of the total of approximately 7,517 email form letters, approximately 400 have been edited in some manner from the template letter provided and the remainder (approx. 7,100) are identical to the form letter. Of the edited email form letters none make substantive comments on the FEIS beyond that contained in the email form letter template.

With respect to the comments received on the FEIS, and pursuant to Reclamations's NEPA guidance, "Only in special circumstances should any specific comments be responded to in the ROD. If the comments raise significant issues that have not been addressed, the need to supplement the FEIS should be determined." Reclamation does not believe that the comments received on the FEIS raise any significant issues that would require supplementing the FEIS. Reclamation provides the following additional information.

A summary of issues raised by the comment letters are as follows:

Comment/Issue 1: Objection to the preferred alternative in the FEIS because these criteria will deprive the Colorado River delta of life-sustaining water, destroy important native riparian habitats, and push numerous endangered species perilously close to extinction.

Response: The rational for identification of the preferred alternative is addressed in Chapter 2.3.2 and analyzed in the Chapter 3, Affected Environment and Environmental Consequences. Transboundary Impacts are addressed in Chapter 3.16 of the FEIS. In addition, the status of consultation on special status species for the preferred alternative in the FEIS is addressed in Section VIII of the ROD.

Comment/Issue 2. Urges Reclamation to insure that impacts to the Colorado River delta are mitigated by dedicating sufficient water to meet the needs of its riparian ecosystems, specifically the needs of cottonwoods and willows throughout their lifecycle.

Response: Dedicating Colorado River Water for the Colorado River delta is addressed in Chapter 1.1.4 and Chapter 2.2.3 of the FEIS. Transboundary Impacts are addressed in Chapter 3.16 of the FEIS. See also Section X. Part 7, Transboundary Impacts, and Section VIII of the ROD that discusses the status of consultation on special status species for the preferred alternative.

Comment/Issue 3: Urges Reclamation to issue a supplemental EIS including the Pacific Institute proposal as a reasonable alternative and its analysis.

Response: Consideration of the Pacific Institute's proposal in the FEIS is addressed in Chapter 2.2.3 and further responded to in Volume III, Comment and Responses, Part B, page B-22, Response 11-2 and page B-24, Response 11-6, page B-38, comment 12-6 and 12-7. These responses address the reasons that the Pacific Institute proposal was not analyzed as an independent alternative in the FEIS. Accordingly, Reclamation has

determined that is not necessary to supplement the FEIS.

Comment/Issue 4: Disagreement on the acceptance of the Basin States proposal as an alternative and its identification as the preferred alternative.

Response: The Basin States Alternative and its identification as the preferred alternative is addressed in Chapter 2.3.2 of the FEIS. The working draft of the Basin States Proposal was published in the Federal Register during the DEIS public comment process. The Federal Register notice on the draft Basin States Proposal is included in the FEIS in Chapter 5.9.

Comment/Issue 5: The Ten Tribes Partnership, by letter dated January 8, 2001, expressed concerns regarding the impact of the Interim Surplus Guidelines on the Tribes' reserved water rights. The Tribes noted their disagreement with Reclamation's analysis and the position taken by the Department of the Interior with regard to its trust responsibility on Tribal water rights in the FEIS. Additionally, the Ten Tribes Partnership requested Reclamation to assist them in on-reservation development of their water resources.

Response: As an initial matter, Reclamation fully identified and analyzed Tribal water rights in the FEIS in Chapter 3.14, their Depletion Schedule in Attachment Q, and fully responded to Tribal comments on the DEIS in Volume III, pages B-164 through 219 of the FEIS.

Additionally, as part of its analysis of the proposed federal action in the EIS, Reclamation identified a significant quantity of confirmed but unused water rights belonging to several Indian tribes in the Colorado River basin. These undeveloped rights are a factor in the available water supply which is being managed as surplus.

The Department, as trustee, believes that these surplus guidelines will benefit the tribes by helping to ensure that California does not develop a permanent reliance on unused water rights. By the same token, the Department believes it important for the tribes to develop and utilize their water rights. Accordingly, the Department directs the Bureau of Reclamation to provide appropriate assistance (including technical and financial assistance) to each of the relevant tribes to establish a water use plan for on-reservation development.

VII. Alteration of Project Plan In Response To Public Comment

Public comments on the FEIS did not result in changes to the proposed action nor selection of the Preferred Alternative.

VIII. Status Of Consultation On Special Status Species Under Section 7(a)(2) Of The Endangered Species Act

On January 11, 2001, Reclamation received a memorandum from the U.S. Fish and Wildlife Service (Service) pursuant to the Endangered Species Act (Act) of 1973, as amended, responding to Reclamation's November 29, 2000 memorandum regarding the adoption of proposed Interim Surplus Criteria for the lower Colorado River and its possible effects to endangered species and their critical habitat in the river corridor below Glen Canyon Dam to Separation Rapid from Glen Canyon Dam operations. Reclamation's November 29, 2000 memorandum concluded that the proposed project may affect, but is not likely to adversely affect, listed species in the Colorado River corridor or their critical habitat from Glen Canyon Dam to the headwaters of Lake Mead. The species of consideration include the endangered humpback chub (Gila cypha) with critical habitat, endangered razorback sucker (Xyrachen texanus) with critical habitat, endangered southwestern willow flycatcher (Empidonax extimus trailli) without critical habitat, and threatened (proposed delisted) bald eagle (Haliaeetus leucocephalus) without critical habitat. The Service concurred with Reclamation's determination that a 2 percent change in the frequency of occurrence of experimental flows as a result of Interim Surplus Criteria "may affect, but is not likely to adversely affect the above mentioned listed species or their critical habitat." The Service also concurred with Reclamation's determination that a change in the frequency of Beach Habitat Building Flows (BHBF) through the Grand Canyon from 1 in 5 years, to the current estimate of 1 in every 6 years with the adoption of Interim Surplus Criteria "may affect, but is not likely to adversely affect listed species or adversely modify their critical habitat" given that BHBF's are not required to remove jeopardy to native fish, nor required to minimize incidental take, and have not proven critical to the survival or recovery of native fishes. No further section 7 consultation is required for the adoption of Interim Surplus Criteria in the Grand Canyon at this time.

On January 12, 2001 Reclamation received a Biological Opinion (BO) from the Service for Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary, Arizona, California, and Nevada. This BO is based on information provided in the August 31, 2000 biological assessment, the DEIS for Interim Surplus Criteria, and final conservation measures provided by Reclamation on January 9, 2001. The species under consideration include the razorback sucker, bonytail chub (Gila elegans), desert pupfish (Cyprinodon macularius), Yuma clapper rail (Rallus longirostris yumanensis), brown pelican (Pelecanus occidentalis), southwestern willow flycatcher, the threatened desert torto ise (Gopherus agassizii) and bald eagle; and designated critical habitat for the razorback sucker and bonytail chub. The service previously concurred with Reclamation's determination of "is not likely to adversely affect" for the bald eagle. Reclamation has also made findings of "no effect" for the desert pupfish, brown pelican, and desert tortoise and critical habitat for the bonytail chub. After reviewing the current status of the bonytail chub, razorback sucker, Yuma clapper rail and southwestern willow flycatcher, the environmental baseline for the action area, the effects of Interim Surplus Criteria, including conservation measures, and cumulative effects, it is the Service's biological opinion that the proposed action of Interim Surplus Criteria is not likely to jeopardize the continued existence

of the bonytail chub, razorback sucker, Yuma clapper rail, and southwestern willow flycatcher or result in the destruction or adverse modification of critical habitat for the razorback sucker in the Lower Colorado River. Reclamation has provided conservation measures that would be part of the proposed action once selected. These measures are designed to reduce the significance of the effects of the action on listed species and critical habitat. These conservation measures are identified in this ROD in Section X.- Environmental Impacts and Implementation of Environmental Commitments, Part 4 - <u>Special Status Species</u>.

Reclamation consulted with the Service and the National Marine Fisheries Service (NMFS) through a supplemental biological assessment (SBA) on Transboundary effects in Mexico from the proposed action for Interim Surplus Criteria by memoranda dated January 9, 2001. These consultations do not reflect any conclusion on Reclamation's part that consultation is required, as a matter of law or regulation, on any possible impact the adoption of interim surplus criteria may have on U.S. listed species in Mexico. Rather, consultation on these effects have proceeded with the expressed understanding that it may exceed what is required under applicable Federal law and regulations and does not establish a legal or policy precedent.

The Service responded to Reclamation's memorandum on Transboundary effects on January 11, 2001. The Service noted that Reclamation requested Service concurrence with a finding of "may affect, not likely to adversely affect" for the endangered southwestern willow flycatcher and toto aba (*Totoaba macdonaldi*). Reclamation also made findings of "no effect" to the endangered desert pupfish, Yuma clapper rail, and the vaquita (*Phocaena sinus*). The Service stated that it does not have jurisdiction in section 7 consultations for marine species such as the vaquita and totoaba, therefore they are not discussed in their memorandum. The Yuma clapper rail is not listed under the Endangered Species of 1973 (as amended) outside of the United States. Therefore, Yuma clapper rails in Mexico are not protected or considered in the section 7 consultation and are not discussed further in their memorandum. The Service concurred with Reclamation's finding of "no effect" for the desert pupfish. The Service finds that the effects of the Interim Surplus Criteria as described in the SBA are insignificant and concurs with Reclamation's finding of "may affect, not likely to adversely affect" for the southwestern willow flycatcher.

The NMFS responded to Reclamations's memorandum on Transboundary effects on January 12, 2001. Reclamation concluded that the proposed action for the Interim Surplus Criteria will "not affect" the Yuma clapper rail, desert pupfish, and the vaquita. Reclamation also concluded that the proposed interim surplus criteria "may affect, but is not likely to adversely affect" the southwestern willow flycatcher and totoaba and requested concurrence with this finding for the endangered totoaba. In their response the NMFS concurred with Reclamation's determination that the implementation of the preferred alternative will not likely adversely affect the totoaba. This finding concludes informal consultation pursuant to section 7 of the Endangered Species Act and its implementing regulations.

IX Status of Consultation On Cultural Resources Under Section 106 Of The National Historic Preservation Act

Reclamation is the agency designated to act on behalf of the Secretary with respect to the adoption of specific interim surplus guidelines identified in the Preferred Alternative (Basin States Alternative) analyzed in the FEIS. Reclamation is the lead Federal agency for the purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. Reclamation determined in the FEIS, that while development and implementation of Interim Surplus Guidelines should be considered an undertaking for the purposes of Section 106, it is not of a type that was likely to affect historic properties. Following publication and distribution of the DEIS, Reclamation received a memorandum from the Nevada State Historic Preservation Officer (NSHPO) through the public review and comment process. The memorandum stated that the NSHPO disagreed with Reclamation's finding that development and implementation of Interim Surplus Guidelines constituted an undertaking with no potential to effect historic properties, and requested the matter be forwarded to the Advisory Council on Historic Preservation (Council) for review. In accordance with the NSHPO's request, and pursuant to 36 CFR 800.5(c)3, Reclamation has prepared a memorandum on this matter and has forwarded it to the Council for review. Reclamation is proposing that further consultation occur within the framework provided by Section 110 of the NHPA. Reclamation believes questions and concerns regarding what sorts of impacts might be occurring to, or may occur at some future date to historic properties as a result of on-going operation of the Colorado River system, are better viewed as long term management issues, which should be addressed through consultation under Section 110 or the NHPA, rather than through Section 106 compliance for a specific activity that represents only a small part of a much larger, on-going program.

X. Environmental Impacts and Implementation of Environmental Commitments

Potential Impacts are associated with changes in the difference between probabilities of occurrence for specific resource issues under study when comparing the No Action Alternative/Baseline Condition to that of the Preferred Alternative. Potential impacts on 13 resource issues from the Preferred Alternative were analyzed by Reclamation in the FEIS. These included; Water Supply, Water Quality, River Flow Issues, Aquatic Resources, Special Status Species, Recreation, Energy Resources, Air Quality, Visual Resources, Cultural Resources, Indian Trust Assets, Environmental Justice, and Transboundary Impacts. Reclamation determined these resource issues will not be adversely affected by the adoption of the Preferred Alternative and thus will not require specific mitigation measures to reduce or eliminate non-significant effects because the small changes in the probabilities of occurrence of flows which would effect these resource issues are within Reclamation's current operational regime and authorities under applicable federal law. In recognition of potential effects that could occur with implementation of the Preferred Alternative, Reclamation has developed a number of environmental commitments that will be undertaken. Some environmental commitments are the result of compliance with specific consultation requirements.

Environmental commitments that will be implemented by Reclamation are identified below.

1. <u>Water Quality</u>

Reclamation will continue to monitor salinity and Total Dissolved Solids (TDS) in the Colorado River as part of the ongoing Colorado River Basin Salinity Control Program to ensure compliance with the numeric criteria on the river as set forth in the Forum's 1999 Annual Review.

Reclamation will continue to participate in the Lake Mead Water Quality Forum and the Las Vegas Wash Coordination Committee as a principal and funding partner in studies of water quality in the Las Vegas Wash and Lake Mead. Reclamation is an active partner in the restoration of the Las Vegas Wash wetlands.

Reclamation is and will continue to acquire riparian and wetland habitat around Lake Mead and on the Lower Colorado River related to ongoing and projected routine operations.

Reclamation will continue to participate with the Nevada Division of Environmental Protection and Kerr-McGee Chemical Company in the perchlorate remediation program of groundwater discharge points along Las Vegas Wash which will reduce the amount of this contaminant entering the Colorado River.

Reclamation will continue to monitor river operations, reservoir levels and water supply and make this information available to the Colorado River Management Work Group (CRMWG), agencies and the public. This information is also available on Reclamation's website (http://www.k.usbr.gov and http://www.uc.usbr.gov).

2. <u>Riverflow Issues</u>

Reclamation and the other stakeholders in the Glen Canyon Dam Adaptive Management Program (AMP) are currently developing for recommendation to the Secretary an experimental flow program for the operations of Glen Canyon Dam which includes Beach/Habitat-Building-Flows (BHBFs). BHBFs are implemented over the long-term by hydrologic triggering criteria approved by the Secretary, and are one measure implemented subject to and consistent with existing law designed to protect and mitigate adverse impacts to and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established. This experimental flow program will consider both the potential for reduced frequency of BHBFs resulting from the Interim Surplus Guidelines and for experimental flows to be conducted independent of the hydrologic triggering criteria. The design of the experimental flow program will include the number of flows, the duration and the magnitude of experimental flows. The AMP shall forward their recommendation on this matter for the Secretary's consideration.

3. Aquatic Resources

Reclamation will initiate a temperature monitoring program below Hoover Dam with state and other Federal agencies to document temperature changes related to baseline conditions and implementation of interim surplus guidelines and assess their potential effects on listed species and the sport fishery. The existing hydrolab below Hoover Dam will be modified as necessary to provide this temperature data.

4. <u>Special Status Species</u>

Reclamation will implement the following conservation measures for Razorback sucker in Lake Mead and native fish in Lake Mohave:

- 1. Reclamation will continue to provide funding and support for the ongoing Lake Mead Razorback Sucker study. The focus will be on locating populations of razorbacks in Lake Mead from the lower Grand Canyon (Separation Canyon) area downstream to Hoover Dam, documenting use and availability of spawning areas at various water elevations, clarifying substrate requirements, monitoring potential nursery areas, continuing ageing studies and confirming recruitment events that may be tied to physical conditions in the lake. The expanded program will be developed within 9 months of signing the BO and implemented by January 2002. Initial studies will extend for 5 years, followed by a review and determination of the scope of studies for the remaining 10 years of the Interim Surplus Guidelines (ISG). Reclamation will use the bathymetric surveys, to be conducted in fiscal year 2001, to gather data in the areas of the identified spawning habitat, if not already available;
- 2. Reclamation will to the maximum extent practicable provide rising spring (February through April) water surface elevations of 5-10 feet on Lake Mead, to the extent hydrologic conditions allow. Hydrologic studies indicate that such conditions could occur once in 6 years, although no guarantee of frequency can be made. This operation plan will be pursued through BHBFs and/or equalization and achieved through the Adaptive Management Program and Annual Operating Plan processes, as needed for spawning razorback suckers;
- 3. Reclamation will continue existing operations in Lake Mohave that benefit native fish during the 15-year effective period of these Guidelines and will explore additional ways to provide benefits to native fish; and,
- 4. Reclamation will monitor water levels of Lake Mead from February through April of each year during the 15 years these Guidelines are in place. Should water levels reach 1160 feet because of the implementation of these Guidelines, Reclamation will implement a program to collect and rear larval razorbacks in Lake Mead the

spawning season following this determination. If larvae cannot be captured from Lake Mead, wild larvae will be collected from Lake Mohave.

The implementation of these Guidelines is not likely to produce a condition resulting in a minimum February through April Lake Mead elevation at or below 1130 feet for more than 2 consecutive years during which surplus is being declared. Therefore, this condition has not been evaluated as an effect of the proposed action.

5. <u>Recreation</u>

Reclamation is initiating a bat hymetric survey of Lake Mead in fiscal year 2001 and will coordinate with the Lake Mead National Recreation Area to identify critical recreation facility elevations and navigational hazards that would be present under various reservoir surface elevations.

Reclamation will continue to monitor river operations, reservoir levels and water supply and make this information available to the CRMWG, agencies and the public. This operational information will provide the Lake Mead National Recreation Area and the Glen Canyon National Recreation Area with probabilities for future reservoir elevations to aid in management of navigational aids, recreation facilities, other resources and fiscal planning.

Reclamation will continue its consultation and coordination with the Glen Canyon National Recreation Area and the Navajo Nation on the development of Antelope Point as a resort destination.

6. <u>Cultural Resources</u>

Reclamation shall continue to consult and coordinate with the State Historic Preservation Officer, the Advisory Council on Historic Preservation (Council), Glen Canyon National Recreation Area, Lake Mead National Recreation Area, Tribes and interested parties with regard to the potential effects of implementation of the Preferred Alternative as required by Sections 106 and 110 of the National Historic Preservation Act following the Council's recommended approach for consultation for the Protection of Historic Properties found at 36 CFR 800.

7. <u>Transboundary Impacts</u>

A November 14, 2000, meeting of the International Boundary and Water Commission and Technical Advisors from the U.S. Bureau of Reclamation and Mexico's National Water Commission was held. At this meeting, Mexico expressed concern that a reduction of historic flows arriving in Mexico could impact: Mexico's use of those waters for recharge

of ground waters; Mexico's use of those waters for leaching of soils to combat salinity; Mexico's use of those waters to dilute saline flows in the land boundary delivery point; endangered species that depend on use of those waters in Mexico; riparian habitat that depends on those waters in Mexico; and, fisheries in the upper Gulf of California. Though it is the position of the United States through the United States International Boundary and Water Commission that the United States does not mitigate for impacts in a foreign country, the United States is committed to participate with Mexico through the IBWC Technical Work Groups to develop cooperative projects beneficial to both countries concerning the issues expressed by Mexico. Significantly, IBWC Minute No. 306 (which was adopted by the IBWC's United States and Mexico sections on December 12, 2000), outlines a process that may lead to specific delta restoration measures.

XI. Implementing The Decision

1. Allocation of Colorado River Water - Basic Apportionment

Article II(B)(6) of the Decree authorizes the Secretary to release a lower division state's apportioned but unused water for consumptive use in another lower division state, but provides that no rights to the recurrent use of such apportioned water shall accrue to any state by reason of its previous use. The Decree leaves it to the Secretary to determine how any such unused apportionment shall be allocated, and to make such determinations either annually, or for a more extended period, though in neither situation can the Secretary's policy create a right in any state to the future use of such unused apportionment. In the course of establishing Interim Surplus Guidelines for the lower division states, the Secretary has determined that in order to make an accurate assessment of the amount of water available and reasonably needed to meet annual consumptive use in the lower division states, it is desirable to know in advance to which users, and for which uses, any unused apportionment will be made available. The Secretary is therefore including within the Interim Surplus Guidelines a statement of his intended method of distributing unused apportionment that may be available during the Interim period.

2. Forbearance and Reparation Arrangements

It is expected that Lower Division States and individual contractors for Colorado River water will adopt arrangements that will affect utilization of Colorado River water during the effective period of these guidelines. It is expected that water orders from Colorado River contractors will be submitted to reflect these forbearance and reparation arrangements by Lower Division states and individual contractors. The forbearance arrangements are expected to address California's Colorado River water demands while the anticipated reductions in California's Colorado River water to make are implemented. The reparation arrangements are expected to address the circumstance where California contractors would limit their use of Colorado River water to mitigate the impacts of any declared shortage conditions on other Lower Division states. The reparation arrangements are also expected to address the circumstance where the anticipated reductions do not in fact occur and would require California contractors to limit their use of Colorado River water in order to repay the Colorado River system for previously stored water.

It is anticipated that MWD will enter into forbearance and reparation agreements with the State of Arizona and with the Southern Nevada Water Authority, which are necessary to provide for forbearance of water under Article II(B)(6) of the Decree. The Secretary may also, as appropriate, be a party to those portions of the agreements concerning the allocation of forbearance of water under Article II(B)(6) of the Decree. It is anticipated that these agreements will be completed no later than December 31, 2001. In the event that the forbearance and reparation agreements are not completed by December 31, 2002, apportionment for use of surplus water shall be made according to the percentages provided in Article II(B)(2) of the Decree (without prejudice to the Secretary's authority under Article II(B)(6) of the Decree) until such time as the agreements are completed, or until December 31, 2015, whichever is earlier.

The Secretary will deliver Colorado River water to contractors in a manner consistent with these arrangements, provided, however, that any such arrangements are consistent with the BCPA, the Decree and do not infringe on the rights of third parties. Surplus water will only be delivered to entities with contracts for surplus water.

3. Definitions

For purposes of these guidelines, the following definitions apply:

a. "Domestic" use shall have the meaning defined in the Compact.

b. "Off-stream Banking" shall mean the diversion of Colorado River water to underground storage facilities for use in subsequent years from the facility used by a contractor diverting such water.

c. "Direct Delivery Domestic Use" shall mean direct delivery of water to domestic end users or other municipal and industrial water providers within the contractor's area of normal service, including incidental regulation of Colorado River water supplies within the year of operation but not including Off-stream Banking.

d. "Direct Delivery Domestic Use" for The Metropolitan Water District of Southern California (MWD) shall include delivery of water to end users within its area of normal service, incidental regulation of Colorado River water supplies within the year of operation, and Off-stream Banking only with water delivered through the Colorado River Aqueduct.

4. Relationship with Existing Law

These Guidelines are not intended to, and do not:

a. Guarantee or assure any water user a firm supply for any specified period.

b. Change or expand existing authorities under applicable federal law, except as specifically provided herein with respect to determinations of surplus conditions under the Long Range Operating Criteria and administration of surplus water supplies during the effective period of these Guidelines.

c. Address intrastate storage or intrastate distribution of water, except as may be specifically provided by Lower Division States and individual contractors for Colorado River water who may adopt arrangements that will affect utilization of Colorado River water during the effective period of these Guidelines.

d. Change the apportionments made for use within individual States, or in any way impair

or impede the right of the Upper Basin to consumptively use water available to that Basin under the Colorado River Compact.

e. Affect any obligation of any Upper Division State under the Colorado River Compact.

f. Affect any right of any State or of the United States under Sec. 14 of the Colorado River Storage Project Act of 1956 (70 Stat. 105); Sec. 601(c) of the Colorado River Basin Project Act of 1968 (82 Stat. 885); the California Limitation Act (Act of March 4, 1929; Ch. 16, 48th Sess.); or any other provision of applicable federal law.

g. Affect the rights of any holder of present perfected rights or reserved rights, which rights shall be satisfied within the apportionment of the State within which the use is made in accordance with the Decree.

5. Interim Surplus Guidelines

These Guidelines, which shall implement and be used for determinations made pursuant to Article III(3)(b) of the *Criteria for Coordinated Long-Range Operation of the Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968* (LROC) during the period identified in Section 4(A) are hereby adopted:

Section 1. Allocation of Unused Basic Apportionment Water under Article II(B)(6)

A. Introduction

Article II(B)(6) of the Decree allows the Secretary to allocate water that is apportioned to one Lower Division State, but is for any reason unused in that State, to another Lower Division State. This determination is made for one year only and no rights to recurrent use of the water accrue to the state that receives the allocated water. Historically, this provision of the Decree has been used to allocate Arizona's and Nevada's apportioned but unused water to California.

Water use projections made for the analysis of these interim Guidelines indicate that neither California nor Nevada is likely to have significant volumes of apportioned but unused water during the effective period of these Guidelines. Depending upon the requirements of the Arizona Water Banking Authority (AWBA) for intrastate and interstate Off-Stream Banking, Arizona may have significant amounts of apportioned but unused water.

B. Application to Unused Basic Apportionment

Before making a determination of a surplus condition under these Guidelines, the Secretary will determine the quantity of apportioned but unused water from the basic apportionments under Article II(B)(6), and will allocate such water in the following order of priority:

- 1. Meet the Direct Delivery Domestic Use requirements of MWD and Southern Nevada Water Authority (SNWA), allocated as agreed by said agencies;
- 2. Meet the needs for Off-stream Banking activities in California by MWD and in Nevada by SNWA, allocated as agreed by said agencies; and
- 3. Meet the other needs for water in California in accordance with the California Seven-Party Agreement as supplemented by the Quantification Settlement Agreement.

Section 2. Determination of Lake Mead Operation during the Interim Period

- A. Normal and Shortage Conditions
- 1. Lake Mead at or below elevation 1125 ft.

In years when available Lake Mead storage is projected to be at or below elevation 1125 ft. on January 1, the Secretary shall determine a Normal or Shortage year.

- B. Surplus Conditions
- Partial Domestic Surplus (Lake Mead between elevation 1125 ft. and 1145 ft.)

In years when Lake Mead storage is projected to be between elevation 1125 ft. and elevation 1145 ft. on January 1, the Secretary shall determine a Partial Domestic Surplus. The amount of such Surplus shall equal:

- a. For Direct Delivery Domestic Use by MWD, 1.212 maf reduced by: 1.) the amount of basic apportionment available to MWD and 2.) the amount of its domestic demand which MWD offsets in such year by offstream groundwater withdrawals or other options. The amount offset under 2.) shall not be less than 400,000 af in 2002 and will be reduced by 20,000 af/yr over the Interim Period so as to equal 100,000 af in 2016.
- b. For use by SNWA, one half of the Direct Delivery Domestic Use within the SNWA service area in excess of the State of Nevada's basic apportionment.
- c. For Arizona, one half of the Direct Delivery Domestic Use in excess of the State of Arizona's basic apportionment.
- Full Domestic Surplus (Lake Mead above Elevation 1145 ft. and below 70R Strategy)

In years when Lake Mead content is projected to be above elevation 1145 ft., but less than the amount which would initiate a Surplus under B.3. 70R Strategy or B.4. Flood Control Surplus hereof on January 1, the Secretary shall determine a Full Domestic Surplus. The amount of such Surplus shall equal:

- a. For Direct Delivery Domestic Use by MWD, 1.250 maf reduced by the amount of basic apportionment available to MWD.
- b. For use by SNWA, the Direct Delivery Domestic Use within the SNWA service area in excess of the State of Nevada's basic apportionment.
- c. For use in Arizona, the Direct Delivery Domestic Use in excess of Arizona's basic apportionment.
- 3. Quantified Surplus (70R Strategy)

In years when the Secretary determines that water should be released for beneficial consumptive use to reduce the risk of potential reservoir spills based on the 70R Strategy the Secretary shall determine and allocate a Quantified Surplus sequentially as follows:

- a. Establish the volume of the Quantified Surplus.
- b. Allocate and distribute the Quantified Surplus 50% to California, 46% to Arizona and 4% to Nevada, subject to c. through e. that follow.
- c. Distribute California's share first to meet basic apportionment demands and MWD's Direct Delivery Domestic Use and Off-stream Banking demands, and then to California Priorities 6 and 7 and other surplus contracts. Distribute Nevada's share first to meet basic apportionment demands and then to the remaining Direct Delivery Domestic Use and Off-stream Banking demands. Distribute Arizona's share to surplus demands in Arizona including Off-stream Banking and interstate banking demands. Arizona, California and Nevada agree that Nevada would get first priority for interstate banking in Arizona.
- d. Distribute any unused share of the Quantified Surplus in accordance with Section 1, *Allocation of Unused Basic Apportionment Water Under Article II(B)(6)*.
- e. Determine whether MWD, SNWA and Arizona have received the amount of water they would have received under Section 2.B.2., *Full Domestic Surplus* if a Quantified Surplus had not been declared. If they have not, then determine and meet all demands provided for in Section 2.B.2. *Full Domestic Surplus* (a), (b) and (c).

4. Flood Control Surplus

In years in which the Secretary makes space-building or flood control releases pursuant to the Field Working Agreement, the Secretary shall determine a Flood Control Surplus for the remainder of that year or the subsequent year as specified in Section 7. In such years, releases will be made to satisfy all beneficial uses within the United States, including unlimited off-stream banking. Under current practice, surplus declarations under the Treaty for Mexico are declared when flood control releases are made. Modeling assumptions used in the FEIS are based on this practice. The proposed action is not intended to identify, or change in any manner, conditions when Mexico may schedule up to an additional 0.2 maf. Any issues relating to the implementation of the Treaty, including any potential changes in approach relating to surplus declarations under the Treaty, must be addressed in a bilateral fashion with the Republic of Mexico.

C. Allocation of Colorado River Water and forbearance and reparation arrangements

Colorado River water will continue to be allocated for use among the Lower Division States in a manner consistent with the provisions of the Decree. It is expected that Lower Division States and individual contractors for Colorado River water will adopt arrangements that will affect utilization of Colorado River water during the effective period of these guidelines. It is expected that water orders from Colorado River contractors will be submitted to reflect forbearance and reparation arrangements by Lower Division states and individual contractors. The Secretary will deliver Colorado River water to contractors in a manner consistent with these arrangements, provided that any such arrangements are consistent with the BCPA, the Decree and do not infringe on the rights of third parties. Surplus water will only be delivered to entities with contracts for surplus water.

D. Shortage

Two different shortage assumptions, including shortage guidelines submitted in the information presented by the Basin States, were modeled and compared in the FEIS. The Department and Reclamation intend to develop shortage guidelines, through the 5-year review of the LROC, when appropriate. These Guidelines are not intended to, and do not, change in any manner from current conditions the assumptions for conditions that may create a determination of shortage or the magnitude of shortage that could be imposed on Lower Basin diversions.

Section 3. Implementation of Guidelines

During the effective period of these Guidelines the Secretary shall utilize the currently established process for development of the Annual Operating Plan for the Colorado River System Reservoirs (AOP) and use these Guidelines to make determinations regarding Normal and Surplus conditions for the operation of Lake Mead and to allocate apportioned but unused water.

The operation of the other Colorado River System reservoirs and determinations associated with development of the AOP shall be in accordance with the Colorado River Basin Project Act of 1968, the Guidelines, and other applicable federal law.

In order to allow for better overall water management during the Interim Period, the Secretary shall undertake a "mid-year review" pursuant to Section I(2) of the LROC, allowing for the revision of the current AOP, as appropriate, based on actual runoff conditions which are greater than projected, or demands which are lower than projected. The Secretary shall revise the determination for the current year only to allow for additional deliveries. Any revision in the AOP may occur only after a re-initiation of the AOP consultation process as required by law.

As part of the AOP process during the effective period of these Guidelines, California shall report to the Secretary on its progress in implementing its California Colorado River Water Use Plan.

These Guidelines implement Article III(3) of the LROC and may be reviewed concurrently with the LROC 5-year review. The Secretary will base annual determinations of surplus conditions on these Guidelines, unless extraordinary circumstances arise. Such circumstances could include operations necessary for safety of dams or other emergency situations, or other unanticipated or unforseen activities arising from actual operating experience.

Section 4. Effective Period & Termination

A. Effective Period

These guidelines will be in effect 30 days from the publication of the Secretary's Record of Decision (ROD) in the Federal Register. These Guidelines will, unless subsequently modified, remain in effect through December 31, 2015 (through preparation of the 2016 AOP).

B. Termination of Guidelines

These Guidelines shall terminate on December 31, 2015 (through preparation of the 2016 AOP). At the conclusion of the effective period of these Guidelines, the modeled operating criteria are assumed to revert to the operating criteria used to model baseline conditions (i.e., modeling assumptions used in the EIS are based upon a 70R strategy for the period commencing January 1, 2016 (for preparation of the 2017 AOP)).

At the conclusion of the effective period of these Guidelines, California shall have implemented sufficient measures to be able to limit total uses of Colorado River water within California to 4.4 maf, unless a surplus is determined under the 70R strategy.

Section 5. California's Colorado River Water Use Plan Implementation Progress

A. Introduction

The purpose of the California Colorado River Water Use Plan is to ensure that California limits its use of Colorado River water to no more than 4.4 maf in normal years at the end of the fifteen year period for these Guidelines, unless a surplus is determined under the 70R strategy. The Secretary will annually review the status of implementation of the California Colorado River Water Use Plan during the development of the AOP.

B. California's Quantification Settlement Agreement

It is expected that the California Colorado River contractors will execute the Quantification Settlement Agreement (and its related documents) among the Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), MWD, and the San Diego County Water Authority by December 31, 2001. In the event that the California contractors and the Secretary have not executed such agreements by December 31, 2002, the interim surplus determinations under Sections 2(B)(1) and 2(B)(2) of these Guidelines will be suspended and will instead be based upon the 70R Strategy, for either the remainder of the period identified in Section 4(A) or until such time as California completes all required actions and complies with reductions in water use reflected in Section 5(C) of these Guidelines, whichever occurs first.

C. California's Colorado River Water Use Reductions

California will need to reduce its need for surplus Colorado River water through the period identified in Section 4(A). The California Agricultural (Palo Verde Irrigation District (PVID), Yuma Project Reservation Division (YPRD), IID, and CVWD) usage plus 14,500 af of Present Perfected Right (PPR) use would need to be at or below the following amounts at the end of the calendar year indicated in years of quantified surplus (for Decree accounting purposes all reductions must be within 25,000 af of the amounts stated):

Benchmark Date (Calendar Year)	Benchmark Quantity (California Agricultural usage
 <i>LLL</i> _ <i>L</i>	& 14,500 AF of PPR Use in maf)
2003	3.74
2006	3.64
2009	3.53
2012	3.47

In the event that California has not reduced its use in amounts equal to the above Benchmark Quantities, the interim surplus determinations under Sections 2(B)(1) and 2(B)(2) of these Guidelines will be suspended and will instead be based upon the 70R Strategy, for up to the remainder of the period identified in Section 4(A). If however, California meets the missed Benchmark Quantity before the next Benchmark Date, the interim surplus determinations under Sections 2(B)(1) and 2(B)(2) shall be reinstated as the basis for the surplus determinations under the AOP for the next following year(s). Upon such reinstatement, California's reductions shall return to the schedule identified above.

Section 6. Authority

These Guidelines are issued pursuant to the authority vested in the Secretary by federal law, including the Boulder Canyon Project Act of 1928 (28 Stat. 1057) (the "BCPA"), and the Decree issued by the U.S. Supreme Court in *Arizona v. California*, 376 U. S. 340 (1964) (the "Decree") and shall be used to implement Article III of the Criteria for the Coordinated Long-Range Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968 (Pub. L. No. 90-537) (the "LROC").

Section 7. Modeling and Data

The August 24-Month Study projections for the January 1 system storage and reservoir water surface elevations, for the following year, will be used to determine the applicability of these Guidelines.

In preparation of the AOP, Reclamation will utilize the 24-Month Study and/or other modeling methodologies appropriate for the determinations and findings necessary in the AOP. Reclamation will utilize the best available data and information, including the National Weather Service forecasting to make these determinations.