CITY OF TEMPE
WATER UTILITIES DEPARTMENT

Mailing Address: P.O. Box 5002
Delivery Address: 255 East Marigold Lane
Tempe, Arizona 85280

Date: April 27, 2007

To: Regional Director - U.S. Bureau of Reclamation - Lower Colorado Regi
Fax No.: (702) 293-8156

From: Eric Kaminski, Water Resources Administrator
Tempe Water Utilities Department

Comments: City of Tempe comments on Draft EIS - Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

City of Tempe - Water Utilities Department, Fax (480) 350-8336
If you do not receive all of these pages, please call (480) 350-2631
s://forms/faxovrsheet.doc

L-10
City of Tempe  
255 E. Marigold Lane  
Tempe, AZ 85281  

Water Utilities Department

April 27, 2007

Via Fax (702) 293-8136 and Regular Mail

Regional Director  
US Bureau of Reclamation  
Lower Colorado Region (Attention: BCOO-1000)  
PO Box 61470  
Boulder City, NV 89006-1470


Dear Regional Director:


The City has previously provided comments to the U.S. Bureau of Reclamation during the scoping process for the Notice of Intent to Prepare the Draft EIS (November 30, 2005). The City has also participated in an Arizona stakeholder group process with the Arizona Department of Water Resources, the Central Arizona Project and Colorado River water users in Arizona to work together on development of shortage criteria for Lower Basin shortages that manage and minimize the impacts to Colorado River water users from shortage declarations by the Secretary of the Interior. This process led to recommendations that were adopted within the Seven Basin States Preliminary Proposal Regarding Colorado River Interim Operations (letter to the Secretary of the Interior, dated February 3, 2006).

The City has reviewed the Draft EIS for Colorado River Interim Guidelines for Lower Basin Shortage and Coordinated Operations at Lakes Powell and Mead. The City supports selection of the Basin States Alternative as the preferred alternative in the Final EIS and implementation of the Basin State Alternative through the Final Record of Decision.
Importance of Central Arizona Project Colorado River Water Supplies

The City of Tempe provides water service to a population of over 171,000 people in our water service area, in addition to a large concentration of industries, businesses, and educational institutions in the heart of the greater Phoenix metropolitan area. Colorado River water delivered to Tempe via the Central Arizona Project (CAP) is a significant component of Tempe’s water resources portfolio. Tempe holds CAP contracts for Municipal & Industrial (M & I) priority water, and lesser amounts of Indian lease water and non-Indian agricultural priority water.

Some portions of the Tempe water service area lack rights to use Salt River Project water supplies, such as the adjacent Town of Guadalupe, to which Tempe has provided water service for over 30 years. Colorado River water delivered by the CAP is the single most important water supply to meet the needs of these areas, and Colorado River reservoir operations are fundamental to the CAP supply. The CAP has a junior priority under the Law of the River, and all CAP water users have a significant interest in the management strategies being developed by the U.S. Bureau of Reclamation.

The Basin States Alternative

The Basin States Alternative, developed through extensive negotiations between the seven Colorado River Basin States, is a compromise alternative acceptable to each of these States. The Basin States Alternative is the only alternative that does not require additional statutory authority and is the only alternative that can be implemented immediately after the Secretary of Interior issues the Final Record of Decision. The Basin States Alternative offers the most certainty to Colorado River water users in the Lower Basin, and the unique level of collaboration between the seven Colorado River Basin States should be considered in selecting this as the preferred alternative.

Other Alternatives in the Draft EIS

The “No Action” and “Water Supply” Alternatives do not propose operational changes that will address future reservoir shortage conditions due to prolonged drought conditions, and do not provide for coordinated operation of Lakes Powell and Mead.

The “Conservation Before Shortage” Alternative includes an intentionally created surplus through forbearance, but no funding mechanism for this intentionally created surplus exists. The “Conservation Before Shortage” Alternative also contains elements that would require additional statutory authority and necessitate amendment of the 1944 Treaty with Mexico.

The “Reservoir Storage Alternative” contains provisions for intentionally created surplus that protects water storage for power generation and recreation to the detriment of downstream water users. These provisions are contrary to the Law of the River which dictates that operation of the system for water supply purposes has a higher priority than operation of the system for hydropower generation purposes. This alternative also
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contains detailed shortage criteria that significantly increase the water shortages for the Lower Basin compared to the Basin States Alternative (maximum shortage volume of 1,200,000 AF/year to the Lower Basin under the Reservoir Storage Alternative compared to a maximum shortage volume of 600,000 AF/year under the Basin States Alternative).

The shortage criteria in the Reservoir Storage Alternative place nearly all the burden of future shortages on the Lower Basin water users in favor of maximizing hydropower generation capacity, contrary to the Law of the River. The Basin States Alternative is far more balanced in its provisions to further consult with the Secretary of the Interior for any potential reservoir operations requiring Lower Basin shortages greater than 600,000 AF/year.

Summary

The Basin States Alternative provides Lower Basin Colorado River water users with the greatest degree of certainty of any of the alternatives. The Basin States Alternative is the result of a unique collaborative effort on the part of all seven Colorado River Basin States. The City of Tempe supports selection of the Basin States Alternative as the preferred alternative in the Final EIS and implementation of the Basin State Alternative through the Final Record of Decision.

Thank you for the opportunity to comment on the Draft EIS for Colorado River Interim Guidelines for Lower Basin Shortage and Coordinated Operations for Lakes Powell and Mead.

Sincerely,

Eric J. Kaminiski
Water Resources Administrator
Tempe Water Utilities Department

cc: Herb Guenther, Director, Arizona Department of Water Resources
Reponses to Comment Letter L-10

L-10-1 and L-10-2
Your comments are noted. No change to the Final EIS was necessary.

L-10-3 and L-10-4
Your comments are noted. Also see response to Comment No. G-1-4.

L-10-5 and L-10-6
Your comments are noted. No change to the Final EIS was necessary.

L-10-7 and L-10-8
Your comments are noted. No change to the Final EIS was necessary.

L-10-9 through L-10-13
Your comments are noted. No change to the Final EIS was necessary.

L-9-14
Your comment is noted. No change to the Final EIS was necessary.
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Regional Director  
Lower Colorado Region, Bureau of Reclamation  
Attention: BCOO-1000  
P.O. Box 61470  
Boulder City, NV 89006-1470


Dear Regional Director:

Lake Havasu City, Arizona, which holds a 4th priority mainstream Colorado River Water contract with the Bureau of Reclamation (Contract No. 3-07-30-W0039), submits the following comments to the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Draft Environmental Impact Statement (DEIS - February 2007).

Lake Havasu City favors the Basin States Alternative as the preferred alternative as this alternative addresses the scope of the changes to reservoir operations. The City, although not adverse to the Conservation Before Shortages Alternative (and would probably benefit more in the short term), believes that the mechanism of voluntary shortages is not sufficiently clear in the DEIS and could lead to operational problems. The other three alternatives would not be beneficial to the City in the long run. Although the Water Supply Alternative would delay shortages for quite awhile and give the City more time to prepare for reductions in water delivery, the shortages that would result from this alternative could greatly impact the city. Several critical issues are not sufficiently addressed in any of the DEIS alternatives including:

- Lake Havasu City along with other 4th priority mainstream users in Arizona have been largely ignored in the DEIS process, even though they will proportionally carry the brunt of the shortages. There will definitely be socioeconomic impacts along the river and on the city, particularly in generating new sources for water acquisition, such as the expected escalation in costs to recovery and replacement of firmed water taken from the Arizona

2330 McCulloch Boulevard N.  Lake Havasu City, Arizona 86403-5950  (928) 855-2116  TDD (928) 855-3945  
www.lhcaz.gov
Local Agency Comments

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Lower Colorado Region, Bureau of Reclamation
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Water Banking Authority, and costs associated with acquiring other water sources such as falling deals with agricultural interests.

Due to significant restrictions on water use during shortage years, the city’s economy and population growth are expected to noticeably slow. Although the water level of Lake Havasu will probably remain unaffected during shortages, tourism may suffer, especially businesses associated with accommodations and restaurants, when water consumption restrictions are in place (a consideration not addressed in sections 3.12 or 4.12.5 in Volume I of the DEIS).

• Furthermore, Stage I and Stage II shortage-sharing modeling assumptions (discussed in Section 4.2.7.1 on pages 4-9 through 4-11), although run by the letter of the law, may not be practical in the sense that Stage II shortages are implemented only when supplies to Arizona 4th priority users have been totally cut off. In essence, the consequences of such an eventuality that would lead to the displacement of tens of thousands of people from Lake Havasu City, Bullhead City, and various smaller communities have not been considered. Laughlin, Nevada would also suffer as that community relies on citizens and businesses of Bullhead City to operate normally. None of the Arizona communities have enough firm water backed to cover multi-year shortages of that magnitude. The socioeconomic impacts would not only affect the region, but also at the state and federal level, not unlike the evacuation from New Orleans. As the probabilities are very low that Stage II shortage-sharing would be instituted within the 19 year interim period, that adjudication would “muddy the waters” of such an action, and since this operation measure has not been adequately addressed in the DEIS, it should be deleted as part of the operational policy of the interim period until a closer examination of the overall effect is implemented.

• Who can participate in the Intentionally Created Surplus (ICS) mechanism is stated as unknown on page 4-12 (section 4.2.8) in the DEIS. Table 4.2-3 on page 4-13 shows that the ICS predominantly helps Nevada (to mitigate their conservation projects), but Arizona may take advantage during normal years. In Arizona, the Central Arizona Project’s (CAP) contract with the Bureau of Reclamation (BOR) includes a clause stating that this agency may take any unused water allotted to other Arizona contracts. What is the legality of a Record of Decision resulting from this EIS that includes a statement indicating all Arizona water providers with BOR contracts may participate without the threat of the CAP’s assertion that they could use that water? The first M&I contracts to be affected by the shortages are from the on-river 4th priority users and this group (although admittedly small) would benefit the most if they could participate since there are limited options to obtain water from other sources. Our concern is that in Arizona, only the CAP would benefit from conserved storage the way the law is currently devised. Computer models from the Arizona Department of Water Resources (ADWR) indicate
that the CAP M&I users will not be directly impacted from the 400K – 600K reductions because of the way the CAP is structured. Much or all of the shortage borne on the CAP can be absorbed from their storage programs and agricultural entities.

- In Appendix D, Table D-1f on page D-6, the depletion schedule for Lake Havasu City used in the hydrologic modeling does not look correct. These numbers appear to be diversion volumes that ADWR provided to the BOR for Lake Havasu City, but they are not consumptive use values using calculated annual return flows. Although page 4-4 in section 4.2.3 of the DEIS states that the depletions include return flow credits where applicable, the numbers in Table D-1f do not reflect the 38% unmeasured return flow rate as calculated by the BOR for Lake Havasu City. The 12,322 ac-ft value for 2008 listed on Table D-1f is too low for a diversion number, particularly since the City’s requested allocation for 2008 will likely be a bit higher than the 2007 allocation request of 16,079 ac-ft. The table also lists a use of 20,378 ac-ft by 2060, yet city projections based on population estimates from the Arizona Department of Economic Security and using a per capita rate of 250 gpcd, Lake Havasu City will reach its diversion entitlement of 25,180 ac-ft (15,611 ac-ft consumptive use) by 2040 under normal Colorado River supply years.

  Bullhead City representatives say that their depletion schedule is also not reflective of their current situation. If these discrepancies are more widespread, than a possible underestimation of the probabilities, timing, frequency, and affects of shortages to the Arizona 4th priority users may result. The hydrologic model output sensitivity to this parameter is expressed on page 4-6 of Section 4.2.6 in the DEIS.

- ADWR has approximately 10,000 ac-ft of unallocated 4th priority water (according to ADWR or a “few thousand acre-feet” according to page 1-15 in the DEIS), which could possibly be made available to those affected by the shortage scenarios, yet this is not covered in the DEIS. It would seem that the unassigned allocation would be part of the Arizona shortage prior to contracted water.

- Lastly, the Supreme Court’s Consolidation Decree of 2006 is mentioned several times (first mentioned on page 1-1 and in Table 1,7-1 although somewhat out of place)) in the DEIS, but no reference to the specifics of the decree are given, only quick references as if everyone already knows the implications of the legal action. The decree is also not easily accessible on the internet as I had to ask a BOR employee to find it for me. It should be spelled out more in the DEIS.

L-11
Lake Havasu City appreciates the opportunity to express its concerns covering this very important document. If you have any questions, please contact me at (928) 453-6660 x4319 or at wilsond@hceaz.gov.

Sincerely,

[Signature]

Doyle Wilson
Water Resources Coordinator

DW:sw

c: Richard Kaffenberger, City Manager
    Kevin Murphy, Public Works Director
    Robert P. Leuck, P.E. Deputy Public Works Director
    Kelly Garry, Assistant City Attorney
Reponses to Comment Letter L-11

L-11-1 through L-11-4
Your comments are noted. No change to the Final EIS was necessary.

L-11-5 through L-11-7

L-11-8 through L-11-10
Your comments are noted. See responses to Comment Nos. L-1-11 and G-1-25.

L-11-11
Your comment is noted.

L-11-12 through L-11-14
See response to Comment No. L-3-7.

L-11-15 through L-11-17
See response to Comment No. L-1-15.

L-11-18
Your comment is noted.

L-11-19
Your comment is noted. Section 1.7.2.1 of the Final EIS notes that Consolidated Decree is one of the many operating criteria, regulations, administrative decisions, etc. that make up the body of documents that are commonly referred to as the Law of the River. Where appropriate, the specific or relevant element of the document is referenced in the EIS. The reader can view summaries and copies of many of these documents at the following website address: http://www.usbr.gov/lc/region/pao/lawofrvr.html
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Environmental Resources Department

Fax Cover Sheet

DATE: Monday, April 30, 2007
TO: Regional Director
    U.S. Bureau of Reclamation, Lower Colorado Region
FAX #: (702) 293-8156
FROM: Stephen Rot, Environmental Program Manager
SUBJECT: City of Glendale, Arizona Comments regarding the Draft Environmental Impact Statement for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead
PAGES: 3 (including cover)
April 30, 2007

Regional Director
Attn: BCOO-1000
Lower Colorado Region
US Bureau of Reclamation
PO Box 61470
Boulder City, NV 89006

Via Fax (702) 293-8156 and Regular Mail

Re: Draft Environmental Impact Statement for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

Dear Regional Director:

The City of Glendale (City) appreciates the opportunity to provide the following comments on the Draft Environmental Impact Statement for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (DEIS). As a member of the Arizona Municipal Water Users Association (AMWUA), the City endorses and supports the comments submitted by AMWUA regarding the DEIS. Additionally, the City supports the comments submitted by the Arizona Department of Water Resources on behalf of the State of Arizona.

The City of Glendale provides water service to over 244,000 people, and relies significantly upon Colorado River water supplies, delivered via the Central Arizona Project (CAP) to meet its water demand. The City’s CAP water supplies include subcontracts for Municipal and Industrial priority water, leases for Indian priority water, and some non-Indian agricultural priority CAP water. Together these Colorado River supplies provide over 36% of the City’s annual water demand. Because of its reliance upon CAP water supplies of differing priority, the City must effectively consider its exposure during a declared Colorado River shortage. As such, and in light of the fact that the CAP is the largest junior priority user under the Law of the River, the City is very interested in the outcome of the shortage criteria and coordinated reservoir operations process.

The junior priority of the CAP results in an increased risk to Arizona water users when a shortage declaration is made. It is imperative that the selection and implementation of a preferred alternative fully consider and minimize those risks. The selection and implementation strategies of a preferred alternative should also consider existing statutory authority and the Law of the River. The Basin States Alternative represents a unique collaboration effort on the part of each of the seven Colorado River Basin States, and is the only alternative that meets these criteria. Therefore, the City supports the selection of the Basin States Alternative as the preferred alternative in the final...
environmental impact statement, and implementation of the Basin States Alternative through the record of decision.

Additionally, the City of Glendale is concerned that the DEIS does not fully consider the economic impacts of a Lower Basin shortage on municipal water providers in Central Arizona. The DEIS incorrectly presumes that there will be no economic impacts on CAP water users, and effectively penalizes those users for their advanced planning efforts and activities. The City of Glendale has expended significant sums of money in developing a diverse water resources portfolio; implementing and maintaining a strong water conservation program; designing and constructing integrated infrastructure systems to efficiently utilize those diverse supplies; underground storage and recovery systems; and reuse of reclaimed water. In spite of the City’s advance planning efforts, and the City’s integrated drought management plan, there will be additional economic impacts associated with Colorado River supply shortages. Complete analysis of these impacts should be incorporated into the final environmental impact statement.

Economic considerations in the DEIS are further exaggerated by the fact that the DEIS only analyzes impacts relating to shortages in a single year. Cumulative shortage impact analyses should be incorporated into the final environmental impact statement.

Again, the City of Glendale appreciates the opportunity to provide comments on the DEIS.

Sincerely,

[Signature]

Stephen Rat
Environmental Program Manager-Water Resources

Cc: Herb Guenther, Director, Arizona Department of Water Resources
Reponses to Comment Letter L-12

L-12-1
Your comment is noted. No change to the Final EIS was necessary.

L-12-2 and L-12-3
See response to Comment No. G-1-25.

L-12-4
See response to Comment No. L-1-11.
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April 30, 2007

Via Facsimile 702-293-8158, 2 Pages

Regional Director  
Lower Colorado Region  
US Bureau of Reclamation  
Attn: BCOO-1000  
PO Box 61470  
Boulder City, NV 89006

RE: Comments Regarding the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Draft Environmental Impact Statement (DEIS)

Dear Regional Director:

The Town of Gilbert, Arizona appreciates the opportunity to comment on the DEIS, and hereby submits its comments. Gilbert understands that the Arizona Department of Water Resources and the Arizona Municipal Water Users Association (AMWUA), of which Gilbert is a member, will also be providing comments on this issue and Gilbert supports those comments.

Gilbert has been the fastest growing city of over 100,000 people for the last several years, with a current population reaching 200,000, who rely on Gilbert to provide safe, reliable drinking water supplies. The Colorado River and Central Arizona Project (CAP) water supplies are key components of the Town’s long-term water resources. Twenty-five percent of Gilbert’s water supply is comprised of various types of Colorado River and Central Arizona Project water.

Gilbert has expended significant monies to manage our water resources, including development of redundant groundwater supplies, the policy of utilizing 100% of our reclaimed water through reuse and recharge, and the adoption of a Water Shortage Management Plan. The preferred alternative that is selected for implementation by the Bureau is of critical interest to the Town of Gilbert.

Town of Gilbert  |  Public Works  
523 North Lindsay Road, Gilbert, AZ 85234  |  Phone: 480-503-6400  
Fax: 480-503-6401  |  www.gilbertaz.us
Gilbert Supports the Basin States Alternative as the Preferred Alternative

Gilbert supports selection of the Basin States Alternative as the preferred alternative in the final environmental impact statement, which will provide Gilbert with the certainty of the continuation of its CAP and Colorado River supplies. Gilbert also supports implementation of the Basin States Alternative through the final Record of Decision (ROD). This alternative is a compromise acceptable to each of the seven Colorado River Basin States. In selecting the preferred alternative and finalizing the ROD, the Secretary of the Interior should recognize the value of this unique compromise.

Furthermore, the Basin States Alternative does not require any additional statutory authorization and is the only alternative that can be implemented immediately after the Secretary issues the final ROD. Implementation of the other alternatives, particularly the Conservation Before Shortage and the Reservoir Storage Alternatives, would require substantive changes to the Law of the River.

Gilbert urges the Secretary to choose the Basin States Alternative as the preferred alternative in the Final EIS. We also urge the Secretary to adopt a ROD that includes the guidelines and criteria necessary to implement the Basin States Alternative in a manner consistent with the carefully negotiated compromise agreements developed among the seven basin states.

We appreciate the opportunity to comment on the DEIS.

Sincerely,

Lonnie Frost
Public Works Director

cc: Herb Guenther, Director, Arizona Department of Water Resources

L-13
Reponses to Comment Letter L-13

L-13-1 through L-13-3
Your comment is noted. No change to the Final EIS was necessary.

L-13-4 through L-13-5
See response to Comment No. G-1-4.

L-13-6
Your comment is noted. No change to the Final EIS was necessary.
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April 30, 2007

Regional Director
Lower Colorado Region
Bureau of Reclamation, Attention BCOO-1000
P.O. Box 61470
Boulder City, NV 89006-1470


Dear Regional Director,


Mesa is the third-largest city in Arizona. Mesa receives electricity from the Colorado River system that it in turn delivers to approximately 15,000 power customers and receives water from the system that it delivers to over 450,000 water customers. Mesa currently makes beneficial use of nearly 55,000 acre-feet of water per year from the Central Arizona Project ("CAP"), and ultimately expects to use at least 80,000 acre-feet per year of CAP water, including water that is of Municipal & Industrial, Indian, and Non-Indian Agricultural priority. Because of this, and because the CAP is the junior diverter in the lower basin, the strategies for shortage criteria and coordinated operations for Lake Powell and Lake Mead currently being developed are of critical importance to our citizens. The prospect of shortage on the Colorado River system already impacts our citizens because Mesa expends enormous resources to mitigate the impacts of future shortages. When actual shortage comes, the impacts will be even greater and the costs will be even higher.

L-14
640 North Mesa Drive
P.O. Box 1466
Mesa, Arizona 85211-1466
480.644.3306 Tel
480.644.2426 Fax
For Mesa’s proactive planning to be meaningful and productive, there must be some reasonable degree of certainty regarding the manner in which shortages will be determined and managed. Of those analyzed, the Basin States’ alternative provides Mesa with the greatest degree of certainty.

Some of the alternatives listed seem to penalize Mesa by assuming that Mesa can bear a greater burden of Colorado River shortage precisely because it has taken a proactive approach towards mitigation of shortages through efforts to diversify its water resources portfolio. The Secretary should please remember that all resources used to protect against shortages are a cost to citizens every bit as burdensome as resources expended after shortage has been declared. Moreover these costs are cumulative over very long periods of time.

Mesa has maintained active interest and involvement in the federal government’s efforts to finalize criteria for the declaration and management of shortage on the Colorado River. Mesa provided previous comments to the U.S. Bureau of Reclamation during the scoping process and participated in the Arizona stakeholder group to work collaboratively on development of shortage criteria that both manage and minimize the impacts of shortage.

The Basin States’ alternative is the result of a coordinated effort between all seven Colorado River Basin States. Mesa urges the Secretary to adopt the Basin States’ Proposal as the preferred alternative in the final environmental impact statement and to implement the Basin States’ alternative through the final Record of Decision.

Sincerely

Kathryn Sorensen
Water Resources Coordinator

c: Herb Guenther, Director, Arizona Department of Water Resources
Reponses to Comment Letter L-14

L-14-1 through L-14-3
Your comments are noted. No change to the Final EIS was necessary.

L-14-4 and L-14-5
See responses to Comment No. G-1-25 and L-1-11.

L-14-6
Your comment is noted. No change to the Final EIS was necessary.

L-14-7 and L-14-8
Your comments are noted. No change to the Final EIS was necessary.
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April 30, 2007

Regional Director, Lower Colorado River Region
Bureau of Reclamation
Attention: BC00-1000, P.O. Box 61470
Boulder City, NV 89006-1470

Re: Comments on Draft Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

Dear Regional Director:

This letter provides comments on the Draft Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (72 Fed. Reg. 9,026) (Feb. 28, 2007) (DEIS). The San Diego County Water Authority recommends selection of the Basin States’ Alternative described in the DEIS as the preferred alternative in the Final Environmental Impact Statement and as the selected action in the Record of Decision.

The Water Authority is highly dependent upon Colorado River water supplies, with the river historically providing most of the region’s total water supply. The importance of Colorado River to the Water Authority further increased with the execution of the Quantification Settlement Agreement in 2003, which included the Water Authority’s water transfer with the Imperial Irrigation District and the lining of the All American and Coachella canals. These projects will supply about 30 percent of the Water Authority’s total water supply by 2020.

The Basin States Alternative resolves a number of outstanding problems of river management, described in the DEIR, by using a consensus-based set of operating guidelines and agreements among the seven Colorado River Basin states. The agreements are necessary to ensure that plans for storing and delivering drought-year supplies can be implemented, and for resolving differences among the states regarding the allocation of supplies in a shortage year. As a result, the implementation of the sought-after guidelines can be accomplished in a relatively expeditious manner. This is important in light of the severe ongoing drought being experienced throughout the Colorado River Basin.

A public agency providing a safe and reliable water supply to the San Diego region
Regional Director, Bureau of Reclamation

Page 2

April 30, 2007

The Water Authority participated in the formulation of draft agreements that would provide for the creation and release of Intentionally Created Surplus (ICS). We urge Reclamation to include this program as part of its preferred alternative. The Water Authority is the recipient of mainstream water from our water transfer agreement with the Imperial Irrigation District and from the All American and Coachella canal lining projects. Transfer water under our agreement with IID is created by extraordinary conservation and by fallowing. Delivery of conserved mainstream water to the Water Authority is accomplished under contract with the Secretary of the Interior pursuant to the Colorado River Water Delivery Agreement of October 10, 2003.

As the holder of a contract with the Secretary for delivery of mainstream water, and as the holder of conserved water that is eligible for designation as Intentionally Created Surplus, the Water Authority qualifies, under the Guidelines proposed by the seven Colorado River Basin states, to participate in the ICS program. However, we understand there may be interpretations of the Draft EIS that would question the Water Authority’s ability to participate in the ICS Program. It is critical that the Final EIS and Record of Decision provide certainty that the Water Authority is fully eligible to participate in the Program. We look forward to working with Reclamation to determine the structure under which the Water Authority will participate in the ICS Program.

The Basin States’ Alternative meets the Secretary of Interior’s goals for addressing limited water availability during times of low reservoir conditions and substantially improves the predictability of water supplies. The Water Authority urges you to select the Basin States’ Alternative as the preferred alternative in the Final Environmental Impact Statement and the selected action in the Record of Decision.

Sincerely,

Maureen A. Stapleton
General Manager
Reponses to Comment Letter L-15

L-15-1
Your comment is noted. No change to the Final EIS was necessary.

L-15-2 through L-15-4
Your comments are noted. No change to the Final EIS was necessary.

L-15-5
See response to Comment No. L-3-7.

L-15-6
Your comment is noted.

L-15-7 and L-15-8
See response to Comment No. L-3-7.

L-15-9
Your comment is noted. No change to the Final EIS was necessary.
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April 30, 2007

Bureau of Reclamation
Attention: BCOO-1000
P.O. Box 61470
Boulder City, NV 89006-1470

VIA EMAIL: strategies@lcs.usbr.gov

The Arizona Power Authority ("Authority") is a body, corporate and politic, of the State of Arizona established by Arizona Revised Statutes (A.R.S. 30-101 et seq.) on May 27, 1944, for the purpose, among others, of receiving the State of Arizona's share of hydroelectric power generated at Hoover Dam and Powerplant. The Authority appreciates this opportunity to provide comments on the Bureau of Reclamation's (Reclamation) draft environmental impact statement on the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (DEIS) (72FedReg. 9026-9028, February 28, 2007). In the event there is an extension of the comment period, or amendments to the DEIS, the Authority may supplement these comments at an appropriate later date.

Hoover power is the Authority's only source of power, therefore, it has vital interest in the disposition of the waters of the Colorado River, especially the flow of the river south of Lee's Ferry into the Lower Colorado River Basin. The Boulder Canyon Project Act of 1928 (43 U.S.C. 617 et seq.) and all related laws amendatory or supplemental thereto, provide very specific instructions from the United States Congress to the Secretary of the Interior and onto the Bureau of Reclamation with respect to the operation of Hoover Dam, the management of the Colorado River into Lake Mead and the disposition of the Colorado River through and below Hoover Dam and its powerplant and the hydroelectric power produced therefrom.

The proposal for Reclamation or the Secretary of the Interior to assess an additional "surcharge" to the cost of hydroelectric power produced at Glen Canyon Dam and Hoover Dam powerplants is beyond the authority of either the Secretary or the Commissioner of Reclamation. The assessment of the Lower Colorado River Basin Development Fund (LCRBDF) charge was
specifically authorized by the Congress in the passage of the 1984 Hoover Power Plant Act.

Furthermore, the Secretary of Energy does not even have the authority to assess such a surcharge proposed in the DEIS as this falls outside DOE’s legislative authority to set power rates for “cost of service” for generation and transmission of federal hydropower.
The proposed surcharge is not associated with the “cost of service” of generating federal hydropower at the aforementioned dams and powerplants anymore than the LCRBDF charge is associated with the “cost of service” of Hoover, Davis or Parker Dams and their respective powerplants. Hence, the need for specific authorization in the 1984 Act.

The Authority supports the consensus process being undertaken by the Basin States in the development of the Basin States (BS) alternative. Further, the Authority also supports the comments and filed by the Colorado River Energy Distributors Association (CREDA) as filed on April 25, 2007 via EMAIL.

Thank you for the opportunity to comment on this DEIS.

Sincerely,

/s/ Joseph W. Mulholland

Joseph W. Mulholland
Executive Director
Arizona Power Authority
1810 West Adams Street
Phoenix, AZ 85007-697
(602) 542-4263

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Reponses to Comment Letter L-16

L-16-1 through L-16-4
See response to Comment No. G-1-7.

L-16-5
Your comment is noted. No change to the Final EIS was necessary.

L-16-6
Your comment is noted. No change to the Final EIS was necessary.
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April 30, 2007

Via U.S. Mail and Facsimile at 702-293-8156

Regional Director
Lower Colorado Region
Bureau of Reclamation
Attention: BCOO-1000
P.O. Box 61470
Boulder City, Nevada 89005-1470

Dear Regional Director:

The Central Arizona Water Conservation District (CAWCD) submits the following comments on the Bureau of Reclamation’s February 2007 Draft Environmental Impact Statement on Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (DEIS). CAWCD also endorses the comments on the DEIS submitted by the Arizona Department of Water Resources and the seven Basin States.

Support for Basin States Alternative

CAWCD supports adoption of the Basin States alternative as the preferred alternative. The Basin States alternative is the only alternative that can be implemented under the existing Law of the River with the cooperation of the seven Basin States.

Under the Basin States Proposal, Arizona has agreed to take shortages during the interim period when Lake Mead reaches certain trigger elevations, even though water is still available in storage at those elevations to satisfy Arizona’s full entitlement. The significance of that concession by Arizona to accommodate a seven Basin States agreement cannot be overstated. To prepare for those shortages, Arizona has already spent more than $100 million to store water and will spend hundreds of millions more for additional storage and future recovery.

No Action Alternative is Improper Both as a Baseline and for Future Operations

Each of the alternatives modeled in the DEIS assumes that Reclamation will return to the rules of the No Action alternative after 2026. But the rules of the No Action alternative are flawed and inconsistent with the Law of the River.

The No Action alternative employs an 80P1050 strategy, which would prevent Lake Mead from declining below elevation 1050 with an 80 percent probability. This operating strategy would

L-17
require Reclamation to declare shortages in the lower basin—more specifically, shortages to Arizona and Nevada—even when there was more than enough water in storage in Lake Mead to satisfy all lower basin entitlements. As shown in Figure 2.2-1 of the DEIS, the 80P1050 rule would dictate a shortage declaration in 2060 when Lake Mead was above 1150’ msl and holding more than 16.5 million acre-feet in storage. There is no legal or rational basis for such action.

The operating rules of the No Action alternative also provide absolute protection for Southern Nevada Water Authority’s lower intake at elevation 1000 in Lake Mead. The DEIS ignores the fact that SNWA will have lowered its intake to below elevation 895 by around 2012, making absolute protection of elevation 1000 both unnecessary and improper.

The No Action alternative also uses the Interim 602(a) Storage Guideline adopted by the Secretary in 2004 for use through 2016. As explained more fully in Arizona’s November 28, 2005 scoping comments (copy attached to Arizona’s comments on the DEIS), the current guideline does not properly implement the requirements of section 602(a) of the Colorado River Basin Project Act of 1968.

Forbearance Required for Delivery of Conserved Water

Both the Conservation Before Shortage (CBS) alternative and the Reservoir Storage alternative include provisions for the storage and delivery of conserved water, similar to that proposed under the Basin States alternative. But when the delivery of conserved water would result in a total consumptive use in excess of 7.5 million acre-feet in the three lower basin states, the excess must be apportioned among the lower basin states in accordance with Article II(B)(2) of the Consolidated Decree in Arizona v. California. The only way in which the Secretary can deviate from the requirement of the Consolidated Decree is if the States agree to forbear the delivery of such excess water. The Basin States Proposal includes a draft forbearance agreement for that purpose. But the States have not agreed to forbear for purposes of the CBS or Reservoir Storage alternatives. Therefore, the provisions for storage and delivery of conserved water under those two alternatives cannot be implemented.

Water Supply Alternative

We note that adoption of the Water Supply alternative would result in no anticipated shortages to Arizona during the interim period. Accordingly, that alternative would appear to best satisfy Reclamation’s contractual obligation to Central Arizona Project subcontractors. Each of the more than 60 subcontracts for delivery of CAP water for municipal and industrial and agricultural uses that Reclamation has entered into provides that, in determining the amount of Colorado River water available for delivery through the CAP each year, Reclamation “shall use [its] best efforts to maximize the availability and delivery of Arizona’s full entitlement of Colorado River water over the term of this subcontract.” Those subcontract commitments limit whatever discretion the Secretary might otherwise have in allocating shortages in the Lower Basin.
Regional Director, Lower Colorado Region  
Bureau of Reclamation  
April 30, 2007  
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While the shortage guidelines of the Water Supply alternative are appealing to CAP water users, we recognize that this alternative does not have the support of the Basin States. Accordingly, CAWCD supports the Basin States Proposal, which reflects the many compromises that have been made by the seven states.

DEIS Mischaracterizes CAWCD’s Water Delivery Contract

Table E-1 of the DEIS indicates that CAWCD is only entitled to the delivery of 1.49 million acre-feet of Arizona 4th priority water, and that the remainder of the CAP supply holds a “Bank” priority that is below Arizona 5th priority. That is incorrect.

CAWCD’s master repayment and water delivery contract allows it to take all that remains of Arizona’s 2.8 million acre-foot entitlement after Arizona’s 1st through 3rd priority uses have been satisfied, sharing up to 164,652 acre-feet of that supply with other Arizona 4th priority water users. In general, the Arizona Water Banking Authority (AWBA) may not store Colorado River water that would otherwise have been used in Arizona by a Colorado River contractor. A.R.S. §45-2427(B). Because of that state statute, certain Arizona 5th priority water users have been allowed to take delivery of Colorado River water ahead of the AWBA. That does not give those users priority over CAWCD, and CAWCD may deliver its entire contract entitlement as Arizona 4th priority water.

This mischaracterization of CAWCD’s priority distorts the results of the DEIS shortage allocation model. The model allocates the first increment of Arizona shortage solely to the CAP supply in excess of 1.49 million acre-feet, then apportions the remaining 4th priority water among all 4th priority water users, including CAP. The net effect is to overstate the total shortage to the CAP supply.

DEIS Improperly Allocates Shortages

In the Arizona-Nevada Shortage Sharing Agreement included as part of the Basin States Proposal, Arizona and Nevada have agreed to share specified shortages to the Lower Basin States. The DEIS should reflect the terms of that agreement in describing and modeling the Basin States alternative.

For any alternative other than the Basin States alternative, the Secretary would have to develop his own guidelines to address the issue of California’s priority and the method of allocating shortages in accordance with the law of the River. The shortage guidelines assumed in the DEIS do not comport with the law.

Article II(B)(3) of the Consolidated Decree in Arizona v. California requires that, in time of shortage, present perfected rights (PPRs) are to be satisfied first, in order of priority and without regard to state lines, and then the remaining available supply is to be apportioned after consultation with major Colorado River contractors and the Lower Basin States. Section 301(b) of the Colorado River Basin Project Act, 43 U.S.C. §1521(b), directs that pre-1968 contractors and federal reservations in all three Lower Basin States are to be satisfied after PPRs, with the remaining supply apportioned among CAP and other post-1968 uses. Thus, the Secretary is
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Bureau of Reclamation 
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required by the Law of the River to use a “bottom up” approach when allocating shortages within the Lower Basin, satisfying first PPRs, next pre-1968 uses, and finally CAP and other post-1968 uses.

Rather than follow the “bottom up” allocation method prescribed by law, the DEIS assumed a “top down” methodology under which the first step was to reduce consumptive uses in Arizona and Nevada. The effect of that approach is to overstate shortages to Arizona and CAP.

The DEIS also assumes that all consumptive uses in California are entitled to priority over Arizona’s fourth priority users, including the CAP. But the priority granted to California in 43 U.S.C. §1531(b) applies only to water users in that state served under delivery contracts entered into before September 30, 1968, and by diversion works already constructed as of that date.

Conclusion

The Basin States alternative offers distinct advantages over every other alternative. First, it sets forth shortage guidelines that can be implemented by agreement among the Lower Basin States, thereby avoiding potential disputes over the meaning and application of the Consolidated Decree and the Colorado River Basin Project Act. Second, it describes a program for the coordinated operation of Lake Powell and Lake Mead that all seven Basin States have agreed to accept for the interim period, postponing potential litigation over the Colorado River Compact and Long Range Operating Criteria. Finally, it provides for the storage of conserved water in the Lower Basin and the forbearance necessary to allow delivery of that stored water to the storing entity. For these reasons, CAWCD urges the Secretary to adopt the Basin States alternative.

Sincerely,

David S. “Sid” Wilson, Jr. 
General Manager

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901.06
C: Herb Geusther, Arizona Department of Water Resources
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Reponses to Comment Letter L-17

L-17-1
Your comment is noted. No change to the Final EIS was necessary.

L-17-2 through L-17-6
Your comments are noted. No change to the Final EIS was necessary.

L-17-7 and L-17-8
Your comment is noted. As noted in Section 2.2 of the EIS, the modeling assumptions used for the No Action Alternative are consistent with assumptions used in previous environmental compliance documents for the ISG, the Colorado River Water Delivery Agreement, and the LCR MSCP. The assumptions used in the No Action Alternative are not intended to limit or predetermine the action decision in any future AOP determination.

L-17-9

L-17-10
Your response is noted. No change to the Final EIS was necessary.

L-17-11 and L-17-12
See response to Comment No. L-3-7.

L-17-13
Your comment is noted. No change to the Final EIS was necessary.

L-17-14 through L-17-15
Reclamation concurs with these comments. Appendices E and G of the Final EIS have been updated to reflect that the Arizona Water Bank in the CAP is co-equal to fourth priority.

L-17-16
See response to Comment No. G-1-4.
L-17-17 through L-17-19

In accordance with the Consolidated Decree, the CRBPA, and other key provisions of the Law of the River, the Secretary has the authority to declare and allocate shortages to the Lower Division states. Although some guidance exists with regard to how shortages would be allocated, e.g., PPR deliveries must be met without regard to state lines; there are no specific guidelines in place to further inform the Secretary’s decision with respect to how shortages might be shared by the water users in the Lower Division states. Modeling assumptions with respect to the distribution of shortages to the Lower Division states and Mexico were necessary in order to analyze potential impacts to hydrologic and other environmental resources.

L-17-20 through L-17-22

Your comments are noted. No change to the Final EIS was necessary.
April 30, 2007

Honorable Dirk Kempthorne
Secretary of the United States Department of the Interior
1849 C. Street, NW
Washington, D.C. 20240

Re: City of Tucson, Arizona Water Department Comments Regarding the Draft Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

Dear Mr. Secretary:

The City of Tucson, Arizona Water Department (Tucson Water) submits the following comments to the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Draft Environmental Impact Statement (February 2007).

Tucson is located in the northern semi-arid reaches of the Sonoran Desert. Tucson Water, a municipally-owned and operated utility, is the largest water provider in southeastern Arizona, serving about 700,000 customers over a 300 square-mile service area. In addition, Tucson Water has the largest municipal and industrial (M&I) allocation of Colorado River water in the state of Arizona, with delivery via the Central Arizona Project (CAP). Tucson Water is the only water provider in southern Arizona currently delivering Colorado River water to its customers, with almost half of annual customer demand met through use of this renewable resource. The Utility has both construction projects and financial mechanisms in place to rapidly increase the percentage of Colorado River water used to meet demand over the next several years.

The City of Tucson is keenly interested in the selection of a preferred alternative for the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead. Of the 7.5 million acre-feet of Colorado River allocation available to the lower basin states of California, Arizona, and Nevada, Arizona’s 1.5 million acre-foot CAP water supply has the most junior priority. Tucson’s location at the very end of the 336-mile CAP canal introduces an additional level of vulnerability when discussing potential Colorado River shortages, especially since Tucson has no other access to renewable drinking water supplies.
The Proposed Alternatives
There have historically been significant differences among the seven Colorado River Basin states concerning important elements of the Law of the River. Hydrological conditions on the River require that the Secretary, in consultation with the Basin states, adopt shortage guidelines. The process for adoption of such guidelines could have resulted in each of the Basin states asserting its legal positions - with extended litigation and years of uncertainty for Colorado River water users. The seven states chose, instead, to seek agreement on shortage guidelines and guidelines for the management of Lakes Mead and Powell for an interim period of nineteen years and to reserve their legal positions for later resolution if necessary.

The Basin States Alternative
Reclamation should Adopt the Basin States Alternative as the Preferred Alternative. The Basin States Alternative provides the greatest degree of certainty for Tucson Water because it is the compromise alternative developed by the Governor’s Representatives of the seven Colorado River Basin States and can be implemented upon approval of the Record of Decision (“ROD”) without the need for additional action.

The Basin States Alternative is the only alternative that meets all the criteria discussed in Section 1.1 of the Draft EIS that states, “[T]he Secretary intends to consider, adopt and implement the proposed federal action consistent with applicable federal law and judicial decisions, and, further, in a manner that will not require any additional statutory authorization.” (DEIS at p. 1-1). This alternative also best meets the goals of the proposed action discussed in the February 28, 2007 Federal Register Notice, i.e., “[T]his action is proposed in order to provide a greater degree of certainty to U. S. Colorado River water users and managers of the Colorado River Basin by providing detailed and objective guidelines for the operations of Lake Powell and Lake Mead, thereby allowing water managers and water users in the Lower Basin to know when, and by how much, water deliveries will be reduced in drought or other low reservoir conditions.” (72 Fed. Reg. 9027 dated February 28, 2007.)

In addition, the certainty provided by the Basin States Alternative goes well beyond the actual criteria and numbers. The Agreement reached by the Basin States, as reflected in the Basin States Alternative, creates an increased level of confidence that legal issues over the interpretation and implementation of the Colorado River Compact, the Mexican Treaty, accounting under the Arizona v. California Decree, and equalization of Lake Mead and Lake Powell will not result in costly and divisive litigation with an uncertain outcome for water users. The value of collaboration by the Basin States cannot be overstated.

Further, the Basin States Alternative provides flexibility within the system and a mechanism for maximizing the efficiency of the system by allowing for the intentional creation of surplus (“ICS”) in Lake Mead by a Lower Colorado River mainstem contractor and release of that surplus for use within the state that created it, with the forbearance of the other Lower Division States. The State of Arizona recently enacted legislation that allows the State to forbear ICS water if the Secretary “adopts substantially the same concepts as contained in the proposal of the seven basin states for shortage
guidelines and conjunctive management of lakes Mead and Powell,” clearing the way, at least from Arizona’s perspective, for ICS to be implemented if that alternative is memorialized in the ROD.

Certainty for water users and the ability of the Basin States Alternative to be immediately implemented is also enhanced by the fact that the Lower Colorado River Multi-Species Conservation Plan (“MSCP”) provides compliance with the Endangered Species Act (“ESA”) for this alternative because the MSCP analyzed reductions of flow that exceed the reductions proposed in the Basin States Alternative. Additional ESA consultation that may be required under other alternatives raises uncertainties regarding the implementation schedule for those alternatives.

The Basin States Alternative is the only alternative that allows for the extension and modification of the existing Interim Surplus Guidelines (“ISG”) without the need for further action. The package submitted to the Secretary by the Seven Basin States on February 3, 2006 includes provisions to amend the ISG by agreement of all the States and the Basin States Alternative adopts those amendments.

The No Action and Water Supply Alternatives
The No Action and Water Supply Alternatives analyze a broad range of environmental impacts but do not meet the goals of the proposed action. Both alternatives fail to provide certainty for the timing and extent of shortages in the Lower Basin and fail to propose viable criteria for the coordinated management of Lake Powell and Lake Mead. These two alternatives do not allow for the creation or use of ICS thus limiting flexibility in the operation of the system and creating greater risk and uncertainty regarding shortages for water users in the Lower Basin.

The Water Supply Alternative reflects the traditional strategy for managing reservoir systems in the West, wherein shortages are declared only when water is physically unavailable for delivery. The DEIS also projects no likely shortages to Arizona during the interim period under this alternative. However, there would be less water retained in storage in Lake Powell under this alternative and it lacks consensus Basin States’ support.

The analyses of the No Action and Water Supply alternatives are important because they expand the range of analyzed impacts. However, neither alternative includes negotiated criteria for the coordinated operation of Lake Powell and Lake Mead or specific guidelines for the implementation of future water supply reductions in the Lower Colorado River Basin under defined shortage conditions.

The Reservoir Storage Alternative
The Reservoir Storage Alternative (“RSA”) proposes levels of shortages starting at 600,000 AF and increasing to 1,200,000 AF and the magnitude of the average shortage volumes during the interim period are the highest under this alternative. (DEIS at p. ES-10). The RSA does not meet the goal stated in the Federal Register Notice, i.e., “to (1) improve Reclamation’s management of the Colorado River by considering the trade-offs between the frequency and magnitude of reductions of water deliveries…” (72 Fed. Reg.
9027 dated February 28, 2007. emphasis added). Furthermore, this alternative would require changes to the Law of the River prior to its implementation.

The Reservoir Storage Alternative serves a valuable purpose by allowing analysis of a broad range of impacts in the EIS, but it contains provisions that impound water for power generation and recreation to the detriment of downstream agricultural and domestic uses. This is prohibited by Article IV (b) of the Colorado River Compact (Compact) which clearly states that “Subject to the provisions of this compact, water of the Colorado River System may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.”

The Conservation Before Shortage Alternative
The Conservation Before Shortage Alternative (“CBS”) also falls short of meeting the certainty provisions of the proposed action. With the CBS alternative, “shortages are implemented in any given year to keep Lake Mead above SNWA’s lower intake at elevation 1000’ (absolute protect of elevation 1,000).” Water users in the Lower Basin will be left to the whims of the Annual Operating Plan for determining when and how much of a shortage will be declared under this alternative. This greatly reduces certainty for water users like Tucson Water.

This alternative essentially would allow 4.2 million AF of ICS in Lake Mead compared to a maximum ICS of 2.1 million AF under the Basin States Alternative. Creating ICS of this magnitude could create too much risk for losing expensive ICS water to spills in wet years and earmark too much Lake Mead water for a particular water use, rather than for the system.

Two additional drawbacks of the CBS alternative are: (1) no funding mechanism for creation of ICS currently exists; and (2) including ICS by the Republic of Mexico could necessitate amending the 1944 Treaty to allow for the creation and delivery of ICS water to Mexico. Reclamation recognizes the limitations of the CBS alternative by stating, “[I]t is not known at this time. Reclamation currently does not have authority to implement all facets of this proposal and additional legislation would be necessary to gain such authority.” (Draft EIS at p. 2).

Summary
In comparison of the proposed alternatives, it is evident that the Basin States Proposal is superior to any of the other alternatives because it provides the greatest degree of certainty to water users, avoids potential litigation, creates shortage criteria that are reasonable in magnitude and are readily predictable based upon elevations at Lake Mead, and presents a package that can be implemented without the need for further legislation or ESA compliance. Furthermore, the Basin States Alternative best meets all the aspects of the purpose and need for the action and has the support of the Basin States, which will enhance the Secretary’s ability to manage the Colorado River system in a collaborative manner.
Tucson Water urges the Secretary to adopt the Basin States Proposal as the preferred alternative in the Final EIS.

**Conjunctive Operation of Lake Mead and Lake Powell**

The Basin States Alternative creates the ability to more effectively balance the contents of Lake Mead and Lake Powell in a way that better controls large fluctuations in reservoir elevations during extended periods of low inflow into the system. That alternative also removes potential issues over the methodology for equalizing the contents of Lake Mead and Lake Powell under other proposed alternatives.

Currently, equalization is largely governed by the Interim 602(a) Storage Guideline for Management of the Colorado River, which contains a 14.85 million acre-feet storage requirement. That guideline artificially limits equalization and has a detrimental effect on storage in Lake Mead and thus on Tucson Water. While the current guideline was also part of a package agreed to by the Seven Basin States as part of the ISG process, it essentially provides for greater protection for power production at Lake Powell than is otherwise authorized under the Law of the River. The Basin States Alternative replaces this equalization requirement in favor of a strategy that is not as onerous for Tucson Water.

If the Basin States Alternative is adopted and implemented in the guidelines set out in the ROD, at the end of the interim period in 2026 or if the guidelines are changed, whichever comes first, Reclamation must consult on the guidelines to assure that they are consistent with the legal priorities established by the Law of the River. For these reasons and because the coordinated operations of Lake Powell and Lake Mead are essential components to shortage criteria, the Secretary should adopt the Basin States Alternative.

**The Record of Decision and Implementation of the Preferred Alternative**

Tucson Water supports the Basin States Alternative as the preferred alternative and recommends that it be incorporated into the Record of Decision ("ROD"). Tucson Water believes that the Secretary should work with the Basin States to create specific implementation criteria and guidelines consistent with the adoption of the Basin States Alternative as the preferred alternative. That document will serve as a road map that can then be relied upon to better manage our water supplies and to better prepare for shortages. To effectuate those guidelines and criteria so that the certainty outlined in the proposed action is achieved, Tucson Water urges the Secretary to include a statement in the ROD that “during the effective period of the guidelines the Secretary shall utilize the established process for development of the Annual Operating Plan for the Colorado River System Reservoirs (AOP) and shall use those guidelines to make determinations regarding normal, surplus and shortage conditions for the operation of Lake Mead and for the coordinated management of Lake Mead and Lake Powell.”

**Cumulative Impacts of Shortages in Arizona**

The DEIS has only attempted to analyze the socio-economic impacts for shortages in a single year. Analysis by the State of Arizona indicates a high probability that multi-year
shortages will occur. The socio-economic impacts of multi-year shortages should be analyzed and incorporated into the Final EIS for all of the alternatives.

**Socioeconomic Impacts to Municipal Water Users in Arizona**

The DEIS does not adequately analyze and describe the impacts to municipal water users in Arizona. The DEIS states, “Implementing statewide and local demand-side and supply-side strategies are expected to minimize adverse socioeconomic effects occurring during the maximum M&I shortage.” This statement accurately reflects the strategies Tucson Water has historically used, and continues to use, for determining its long-term need for water supplies including supplies to help offset shortages. Likewise, demand restrictions are also part of the Utility’s plan for dealing with actual shortages. Tucson Water’s goal is to minimize the impacts on its citizens and on its economy. However, neither demand-side strategies nor supply-side strategies and actions come without a substantial price.

Arizona municipal water providers have already expended substantial sums of money in anticipation of shortages on the Colorado River. Municipal water users in Arizona, including Tucson Water, will rely in part on recovery of water stored underground by the Arizona Water Banking Authority to make up for shortfalls due to Colorado River shortages. Through calendar year 2006, the Arizona Water Banking Authority (“Bank”) has stored about 2,243,000 AF of water at a cost of about $101 million. Funding for the Bank comes primarily from a property tax in Maricopa, Pinal and Pima Counties, from a pump tax paid by groundwater users in those counties and from some appropriations by the Arizona Legislature.

The DEIS does not analyze quantitatively, or even qualitatively, the costs associated with shortages. This is a glaring omission in the DEIS. The socioeconomic impacts on municipal water users in Arizona due to Colorado River shortages are significant and should be documented in the Final EIS.

**Conclusion**

Tucson Water reiterates that the Basin States Alternative is the only alternative that meets all the criteria defined in the proposed action for the EIS. Tucson Water urges that the Final EIS adopt the Basin States Alternative as the preferred alternative and that a Record of Decision be signed incorporating the terms of the Basin States Alternative.

Sincerely,

David V. Modeer
Director

DVM:kc

cc: Robert W. Johnson, Commissioner, U. S. Bureau of Reclamation
    Rick Gold, Regional Director, U. S. Bureau of Reclamation, Upper Colorado Regional Office
    Jayne Harkins, Acting Regional Dir., U. S. BOR, Lower Colorado Regional Office
    Larry Walkoviak, Deputy Regional Dir., U.S. BOR, Lower Colorado Regional Office
Reponses to Comment Letter L-18

L-18-1 through L-18-6
Your comments are noted. See also response to Comment No. G-1-4.

L-18-7
Your comment is noted.

L-18-8 and L-18-9
See response to Comment No. L-3-7.

L-18-10 and L-18-11
See response to Comment No. L-2-8.

L-18-12
The Basin States, Conservation Before Shortage, and Water Supply alternatives and the Preferred Alternative all consider the extension of ISG.

L-18-13 through L-18-17
Your comments are noted.

L-18-18 through L-18-21
Your comments are noted. Also see response to Comment No. G-1-4.

L-18-22 and L-18-23
Your comments are noted. No change to the Final EIS was necessary.

L-18-24
See responses to Comment Nos. G-5-93.

L-18-25 through L-18-27
See response to Comment Nos. G-1-7 and F-5-2.

L-18-28 and L-18-29
Your comment is noted. No change to the Final EIS was necessary.
Local Agency Comments

L-18-30 through L-18-34

Your comments are noted. No change to the Final EIS was necessary.

L-18-35

See response to Comment No. L-2-31.

L-18-36

See response to Comment No. L-1-11.

L-18-37 through L-18-39

See response to Comment No. G-1-25.
Technical comments on river operations DEIS from the Imperial Irrigation District

Preliminary comments

1. It is unclear as to whether the DEIS identifies any “significant” environmental effects from the proposed alternatives in accordance with the terminology used in NEPA. It would be helpful for Reclamation to summarize in the final EIS the environmental conclusions in terms of NEPA terminology, including any significant environmental effects and what mitigation requirements might be recommended beyond what will be covered by the MSCP program.

2. In addition to the specific comments set forth below, a general comment is that the overall socioeconomic impact analysis in the DEIS is insufficient. For example, for involuntary shortages it is assumed that the impact, with some resulting land falling, will occur within the CAP service area. However, as shortages become more significant in volume (up to 2.5 maf in the DEIS), and as CAP M&I and Indian uses are reduced to zero, it is likely that substitute water supplies for central Arizona urban areas will have to be obtained from higher priority agricultural sources along the Colorado river within Arizona. But the DEIS does not analyze the socioeconomic or other impacts of the land falling that will likely occur in those locations. Another example is the assumption that in involuntary shortage situations farmers will fallow lands with the least profitable crops (pages 4-463 and 4-465), which is unsupportable given actual experience (for example, with IID’s QSA falling program). The realistic potential impacts from large scale falling, both under involuntary shortages or voluntary shortages, should be thoroughly and realistically presented in the final EIS.

Chapter 1

1. Page 1-7 – at the bottom of table 1.5-1 it is suggested that impacts to water rights are not addressed in this DEIS because Reclamation determined that water rights were not going to be impacted or were otherwise not “potentially significant.” However, as explained below, in section 2.2.1 on pages 2-5 and 2-6 and in section 4.2.7.1 on pages 4-9 and 4-10 it is explained that Reclamation has assumed that in a Stage 2 shortage, reaching down into the 1929 to 1968 pool of rights, California will take 65% of the shortage. This is an incorrect assumption under the law of the river and does not reflect the most important attribute of lower basin water entitlements – and that is priority. If the Stage 2 shortage is imposed in accordance with Reclamation’s assumption there will be a significant impact on water rights within California and that impact should be explained in the DEIS if this assumption is retained. Alternatively, since table 1.5-1 is inaccurate it should be modified in the final EIS to better reflect the governing law.
2. Page 1-15, lines 20-21 – it is stated that the lower basin state apportionments were established in the BCPA. In Arizona v. California the Supreme Court said: “Congress intended the Secretary of the Interior, through his section 5 contracts, both to carry out the allocation of the waters of the main Colorado River among the Lower Basin States and to decide which users within each state would get water,” (373 US at 580). And: “We have agreed with the Master that the Secretary’s contracts with Arizona for 2,800,000 acre-feet of water and with Nevada for 300,000, together with the limitation of California to 4,400,000 acre-feet, effect a valid apportionment of the first 7,500,000 acre-feet of the mainstream water in the Lower Basin.” (373 US at 592) These quotes demonstrate that it was not the BCPA that effectuated an apportionment of the Lower Basin entitlement but it was instead the Secretary’s contracts with Arizona, Nevada, and with users within California, and the California Limitation Act, that resulted in the Lower Basin apportionment.

3. Page 1-22, lines 4-6 – the statement made here infers that California is currently taking actions to reduce its use of water in excess of 4.4 maf. This is an inaccurate statement, and the same mistake is made on page 1-25 and in chapter 3 at page 3-36. Reclamation is aware of the fact that as of January 1, 2003 California’s Colorado River water use has been limited to 4.4 maf/yr, and that has been the situation since 2003. Accordingly, it is inaccurate to suggest that California needs to implement programs to assist “in reducing its projected Colorado River depletion to its normal apportionment of 4.4 maf.” (page 3-36) Under the California Plan and other documents, such as the QSA agreements, California is presently engaged in the process of shifting some water use within its 4.4 maf apportionment from agriculture to M&I for a period of years. Accordingly, it is inaccurate to suggest that there is a need to “facilitate California’s reduction of its use of Colorado River water.” (pages 1-25) There is currently no action underway for California to reduce its use of Colorado River water.

Chapter 2

1. Page 2-4, lines 34-36 – it is stated that determination of deliveries to Mexico in times of shortage “is not a part of the federal action.” (And this statement is repeated elsewhere in the DEIS) However, one aspect of this Secretarial action is to give the Lower Basin users certainty as to what will happen in times of shortage declarations. That certainty cannot be achieved without an understanding of the shortage cutbacks to be imposed on Mexico in times of declared shortages. It is unhelpful to suggest that this determination cannot be made because it involves the decision-making of the State Department. The Department of the Interior should coordinate with the State Department prior to the issuance of the final EIS and the ROD so as to include the State Department’s Mexico shortage determination in the final federal administrative action.

2. Pages 2-5 and 2-6 – this section explains the function of a Stage 2 shortage declaration that would provide for water supply cutbacks into the 1929 to 1968 pool of rights. In this section it is explained that in a Stage 2 shortage California can expect to take 60 to 65% of the Stage 2 shortage cutback. This assumption reflects an inaccurate view of the law of
the river and should be corrected. As Reclamation understands, all of the contracts for the
major water users within California were executed in the early 1930’s. Those contract
dates give the California users priority over users in other states with contracts dated in
the 1940’s, 1950’s, and 1960’s. In other words, the assumption used by Reclamation to
arrive at the 60 to 65% California reduction ignores one of the most important attributes
of a water entitlement, and that is priority. This assumption should be changed in the final
EIS to more accurately reflect the governing law.

3. Pages 2-11, Section 2.4 – IID is on record in asserting that the conservation before
shortage alternative is without merit and should not be given further consideration in this
NEPA process (See letter to Robert Johnson dated November 30, 2005; and attached
appendix). IID also points out that on page 2-13 on line 27 it says that legislation would
be necessary, but on page 1-1 at the very beginning of the DEIS Reclamation states that it
intends to adopt an alternative that “will not require any additional statutory
authorization.”

Chapter 3

1. Page 3-3, lines 17-24 – this section states that only limited water service areas within
the three states are included in the discussions of potential environmental impacts.
However, in chapters 2 and 4 it is provided that in relation to Stage 2 shortages, for the
1929 to 1968 pool of rights, California is assigned 65% of the shortage cutbacks. If
California is to take that kind of impact it is possible that other water service areas within
California could be impacted beyond the water service area of MWD. Also, in the context
of the conservation before shortage alternative many different water service areas might
be impacted, in terms of air quality, socioeconomic impacts, and other impacts.

2. Page 3-24, lines 12-15 – the statement regarding the average annual flow of the Bill
Williams River in Arizona does not make sense given the flow volumes cited.

3. Page 3-33, lines 6-7 – the allocations of water in the Lower Basin include Present
Perfected Rights. In the 1964 decree from the Supreme Court in Arizona v. California the
Court provided that: “Perfected rights means a water right acquired in accordance with
state law, which right has been exercised by the actual diversion of a specific quantity of
water that has been applied to a defined area of land or to definite municipal or industrial
works.....” Accordingly, any reference to the underpinnings of the entitlements held by
users in the Lower Basin should refer to the state law appropriation process.

4. Page 3-40, line 8 – IID’s entitlement to Colorado River water has been capped at 3.1
maf for a period of years under the QSA agreements. IID’s entitlement is not 3.0 maf/yr.

5. Page 3-40, Table 3.4-5 and lines 20-23 – first, it is inaccurate to say “upon 25,000”
acres for the Yuma Project in California. That entitlement is for “up to 25,000 acres” and
there is a current dispute about the actual number of acres appropriately included in the
Yuma Project on the California side. Second, there should be a footnote to this table
reflecting that there is an agreement between IID and the Coachella Valley Water District
that subordinates the CVWD entitlement to the IID entitlement. This is also a problem in
Table E-2 on page E-5 in Appendix E. Third, the discussion at the bottom of the page,
and continuing on to page 3-41, should be modified to reflect the QSA agreements as
opposed to the California 4.4 Plan. The rights of PPR holders relative to the Seven Party
Agreement priorities, during the period of the QSA, is addressed in the QSA and related
agreements.

6. Page 3-127, lines 9-16 – this paragraph appears to be inaccurate and misleading to the
reader. The topic here is socioeconomics and land uses, but this paragraph suggests that
the impacts are minimal or non-existent. It also suggests that the potential actions would
not have any impact on prime or unique farmlands, which is likely to be inaccurate. First,
this explanation should cover two areas of impact as opposed to one: 1) the consequences
of formal shortage declarations; and 2) the consequences of the conservation before
shortage alternative. In both situations there will be large scale land falling, over a
period of years, with significant socioeconomic consequences. Indeed, those
consequences are discussed in section 4.14 starting on page 4-261. Most importantly, the
conservation before shortage alternative proposes a maximum falling plan of sufficient
size to create 600,000 acre feet of water. This would require a likely falling of about
100,000 acres of land or more – which would result in major consequences, such as air
quality impacts and socioeconomic impacts. The potential realistic impacts of shortage
declarations and alternatives like conservation before shortages should not be minimized
or ignored in the final EIS.

Chapter 4

1. Page 4-10, lines 5-10 and Table 4.2-2 – as noted above in point number 2 under
Chapter 2, this discussion and Table 4.2-2 do not reflect the law of the river and do not
reflect the most important attribute of Western water rights – which is priority.
Accordingly, the assumptions use in this section for the Stage 2 shortages are inaccurate
and should be modified in the final EIS. In order to determine the potential impact of a
Stage 2 shortage Reclamation should use the priority dates of the contracts in the 1929 to
1968 pool of rights.

2. Page 4-11, footnote 1 to Table 4.2-2 – this footnote is not sufficient to cover the full
range of assumptions used for Table 4.2-2. As noted above, Reclamation has utilized
major assumptions regarding the 1929 to 1968 pool of rights that have nothing to do with
the Mexican water treaty.

3. Page 4-125, lines 1-19 – the discussion in this section regarding the operation of Stage
1 shortages and no impact within California is a correct reflection of the law and should
be retained in the final EIS.

4. Page 4-129, lines 34-36 and Table 4.4-16 – the statement in lines 34-36 does not seem
correct in light of other information in the DEIS. For example, on page 4-125, Table 4.4-
16 it is stated that California could face a maximum shortage of 474,468 if the shortage magnitude is 2.5 maf. Also, on page 4-127 it states that Nevada could face a maximum shortage of 84,290 af under the same conditions. Also, Table 4.4-16 seems inconsistent with Table 4.4-17 on page 4-126. On page 4-125 the maximum shortage to California is 474,468 af, and on page 4-126 the maximum shortage to California is 511,784 af.

5. Page 4-149, section 4.6–this section does not reflect one of the most important potential air quality impacts, and that is the massive land fallowing that is likely to occur under both declared shortages and under the conservation before shortage alternative. Although it is clear that certain types of water uses, such as within the CAP agricultural area, may continue to be under agricultural production because of the availability of stored water or pumped groundwater, as the involuntary shortages go deeper it is likely that large areas of land within Arizona will need to be fallowed. On another front, the conservation before shortage alternative suggests a maximum of 600,000 af to be created through land fallowing. This could mean more than 100,000 acres of fallowed land – in both Arizona and California. The potential air quality impacts resulting from that amount of fallowed land cannot be ignored in the final EIS, and it is insufficient to suggest that Reclamation cannot predict which lands in California or Arizona will be fallowed under either proposed program. In light of the volume of land fallowing that may result from both actions, it is imperative for Reclamation to make some reasonable assessment of the likely air quality impacts from such actions.

6. Page 4-161, section 4.8.1.2–this section addresses the MSCP but does not provide enough detail for the reader to understand the nature and scope of the MSCP coverage that will be relevant in relation to the preferred alternative and any impacts within the river corridor. For example, this section does not explain that the MSCP coverage in the corridor area includes both NEPA and ESA compliance. Also, this section does not thoroughly explain the MSCP coverage for both lower basin shortage operations and changes in points of diversion that would cover other actions, such as the ICS mechanism, and potential impacts within the river corridor area.

7. Page 4-233, lines 21-27 – the discussion in this section does not make sense, especially in the second sentence. First, the figure of 122,500 af of water does not make sense. For the reader to understand the impact of the 600,000 af voluntary shortage the reader should be told how much land might have to be fallowed and at what cost. Second, the suggestion of $20 to $100 per acre foot is too low, and this assertion is supported by the comments on the conservation before shortage proposal submitted by IID on November 30, 2005 (including the supplemental economic analysis by Rod Smith).

8. Page 4-270, lines 6-8 – the statement here is that: “No permanent change in land uses would occur under any of the alternatives because shortages would be of a temporary nature and agricultural lands would likely not be permanently removed from production.” This is a very cursory analysis of fallowing and the potential impacts from land fallowing compared to the QSA Transfer Project EIR/EIS and the SSRP PEIR. The DEIS does not mention the potential impacts of repeated temporary fallowing on the productivity of agricultural lands and does not address a parcel’s designation as prime farmland pursuant
to state statutes. It is also not clear whether only short-term falling would result from both the conservation before shortage alternative and the ICS mechanism and in addition who would be responsible for assessing such impacts.

9. Page 4-275, lines 10-18 – this section addresses the conservation before shortage alternative in the context of socioeconomic impacts. It is stated: “This analysis assumes that the voluntary conservation targets ……… would be met, assuming that farmers would participate voluntarily in the program and that losses resulting from voluntary shortages would be offset by payments made to farmers to forgo raising crops.” This statement is confusing and the point to be made is not clear. If the assertion is that the socioeconomic impacts of this alternative can be offset by payments to farmers that assertion is likely to be inaccurate. The socioeconomic impacts of falling enough land to create 400,000, 500,000, or 600,000 af of water under this alternative will be enormous and will manifest in the form of lost labor income, impacts on farm suppliers, and other negative economic impacts on nearby farm communities. Payments made to farmers to create the conserved water, by taking productive land out of production, will have no direct impact on the costs necessary to mitigate third party impacts. Such necessary costs will be in addition to the payments made to farmers to allow the land. This should be corrected in the final EIS by demonstrating the significant socioeconomic impact that will result from the extreme land falling proposed under the conservation before shortage alternative, and the true costs associated with that alternative.

Appendix D

1. Page D-11, Table D-2a – there are several problems with this table. First, the numbers used for IID and CVWD do not match the Water Delivery Agreement. It is unclear why the numbers are inaccurate, but it may be related to the AAC project water conservation schedule. Second, it should be noted that in 2048 IID no longer transfers 50kaf to CVWD. This change has not been reflected in the table.

Appendix E

1. Page E-5, Table E-2 – there are a number of problems in this table. First, the California priority system is well established and easily understood through reference to the 1931 Seven Party Agreement. Because of the clear priority designations in that agreement, it would be best to use the priority designations in the Seven Party Agreement as opposed to creating a new structure that is then confusing to the reader. For example, in Table E-2 the 5th priority is more properly designated priority 5 (a) to parallel the Seven Party Agreement. Similarly, the 6th priority in Table E-2 should be designated priority 5 (b). Finally, the 7th priority in Table E-2 should be broken down into priority 6 (a) for IID and Coachella, and priority 6(b) for PVID. Second, the number used for the IID right in the 4th priority is not explained via footnote or otherwise. It is not clear to the reader why the IID entitlement in priority 4 in Table E-2 is quantified at 561,159 af. It has been clarified in judicial proceedings that IID’s entitlement is 3.85 maf minus priorities one (PVID) and
two (Yuma Project). Third, the same problem applies to the notations for MWD and SDCWA under IID in the 4th priority. It is not at all clear why the number of 90,000 af is used for MWD and 30,000 af is used for SDCWA. Fourth, to the extent that there is intended to be included in Table E-2 any representation of the IID-SDCWA transfer, the priority date used should be IID’s water delivery contract date of 1932. Fifth, under the listing of PPR’s, under the 1st priority in Table E-2, the reference to the IID PPR is incorrect. IID’s PPR applies only to lands within the IID service area. None of the lands within CVWD are included in the IID PPR. And finally, based on all that is said above, the footnote addressing IID’s water rights (*) is incorrect in many respects and should be modified. IID recommends that the California agencies should present a revised Table E-2 to Reclamation for use in the final EIS.

Appendix M

1. Page M-5, sections M.3.1.1 and M.3.1.2 – Both of these sections state that it has been assumed that credits may be stored and delivered only during normal flow conditions. This is not a helpful assumption. ICS credits should be allowed to be stored and delivered during all conditions – normal, surplus, and shortage. First, it is obvious that stored ICS credits would likely be most useful to the developer of those credits during a shortage condition, so that benefit should be facilitated in the ROD. Second, even though the ICS rules are likely to state that no form of surplus water can be used to develop ICS credits, it should be recognized that during some surplus situations some entities might be allowed to take surplus water and others might not be allowed to take surplus water. For example, in a situation where MWD is taking special surplus water but IID is not, it would make sense to allow IID to develop ICS credits in that surplus condition year so as to obtain the general benefits of ICS development – for both IID and the system as a whole.

2. Page M-8, section M.3.2 – in this section Reclamation discusses the conservation before shortage alternative, but the reader is not given the benefit of an explanation of the differences between water developed for the conservation before shortage purpose and water developed for the purpose of creating ICS credits. Under the conservation before shortage alternative the main purpose is to create storage in Lake Mead, through compensated voluntary following, that would then counteract the impact of an anticipated Lower Basin shortage declaration. The purpose of that water would be to be part of the storage in Lake Mead – so as to push off the shortage threat – as opposed to devoting that water to specific downstream uses (See page 2 of the conservation before shortage proposal in Appendix K – “Federal ICS credits created in excess of the federal cap [of 1.5 maf to be devoted to replacement of bypass flows] would become system water”). In contrast, the development of ICS credits by “others” is for the specific purpose of having water that can then be used for specific environmental or other purposes either within the United States or in Mexico. These concepts should not be confused in attempting to explain how the modeling was carried out to reflect these two different operational mechanisms. Stated differently, these concepts should be explained separately so that the
reader has a complete understanding of the actual function and impacts of these different operational mechanisms.

3. Page M-9, lines 5-6 – the concept of a delta pulse flow is a part of the development of ICS credits by “others” so that water sufficient for a pulse flow every five years can be developed on an annual basis and then used in the fifth year for the benefit of the environment. This section states that such pulse flows would be counted as a part of the treaty delivery to Mexico. This assumption seems to be in error. If it is assumed that the 250,000 af is developed over a period of years, and then is in storage in Lake Mead and is released after the fifth year of the development of that supply, there is no basis to assume that this water would be part of the Mexican treaty delivery in that year of release. In fact, the opposite is likely to be true – the pulse flow would be in addition to the treaty delivery because that 250,000 af would not have been created in the year of the release of the pulse flow and would not have any connection to the treaty delivery for that year. This assumption should be corrected in the final EIS.
Reponses to Comment Letter L-19

L-19-1
Your comment is noted. See also response to Comment No. L-2-8.

L-19-2

L-19-3
As noted in Section 3.4.2, the proposed federal action will not affect the apportionments and water rights of Colorado River water users. However, water deliveries to each Lower Division state and to users within each of the three Lower Division states may potentially be affected. These potential effects are analyzed and discussed in Section 4.4. See also response to Comment No. L-17-18.

L-19-4
Table 1.5-1 provides a list of the resource issues that were determined to be potentially significant and that were addressed in the EIS. The determination of the significance of the potential affected environmental resources and associated issues were identified through scoping and analyses of the environmental resources listed in this table. The determination on the potential impacts to water rights is addressed in the response to Comment No. L-19-3.

L-19-5
Information presented in the Draft EIS has been modified in the Final EIS (see Section 1.7.2.2) pursuant to this specific comment, as well as other public comments. Both the Boulder Canyon Project Act and the Section 5 Contracts establish the apportionments. Accordingly, the referenced line in Section 1.7.2.2 has been modified in the Final EIS to read as follows: “Lower Division state apportionments were established by Congress in the BCPA and by the Secretary's water delivery contracts under the BCPA.”

L-19-6
Reclamation concurs with this comment. The referenced sections have been revised in the Final EIS.

L-19-7
Your comment is noted. Also see response to Comment No. F-5-2.
L-19-8

Your comment is noted. The modeling assumptions regarding the distribution of shortages (Section 2.2.1); particularly with respect to Stage II shortages were common to all alternatives and permitted a relative comparison of the alternatives.

L-19-9

Your comment is noted. No change to the Final EIS was necessary.

L-19-10

Your comment is noted. The Final EIS acknowledges that aspects of the Conservation Before Shortage Alternative could not be implemented without further legislative authority.

L-19-11

The information requested is provided in the Draft and Final EIS. The maximum observed reductions in water deliveries to the Lower Basin that was observed in the modeling of the alternatives was 2.97 maf and occurred in only one of the 100 modeled traces (one percent of the time) under the modeling of the Water Supply Alternative. All the other alternatives had maximum single-year water delivery reductions that were about 2.0 maf. Therefore, under almost all conditions, the California shortage is allocated to the Metropolitan Water District of Southern California.

L-19-12

See response to Comment No. G-5-3.

L-19-13

Reclamation concurs with this comment. The referenced paragraph in Section 3.3.6 that discusses the inflow from the Bill Williams River has been revised and updated to include the most current year records of flows from the Bill Williams River.

L-19-14

The referenced text in Section 3.4.2.1 only discusses the apportionments between the Lower Division states. All other references to priorities within each respective state are provided to inform the reader how water delivery reductions were distributed based on the modeling assumptions used in the analyses. These modeling assumptions are not intended to interpret specific provisions of the Law of the River or the state law appropriation process of any of the Colorado River Basin States.
L-19-15
Section 3.4.6.2 has been revised in the Final EIS to show an approximate 3.1 maf annual diversion by the Imperial Irrigation District.

L-19-16
Reclamation concurs with this comment. The referenced text in Section 3.4.6.2 has been revised to read under the Second Priority line, as follows – “Reclamation’s Yuma Project for beneficial use on up to 25,000 acres.”

L-19-17
Reclamation concurs with this comment. Appropriate modifications have been made to Table E-2 and the attachments to Appendix G.

L-19-18
Reclamation concurs with this comment. A footnote has been added to Table 3.4-5 in the Final EIS to reflect the referenced agreement between the Imperial Irrigation District and Coachella Valley Water District pursuant to the Quantification Settlement Agreement.

L-19-19
Reclamation concurs with this comment. The referenced text in Section 3.4.6.2 has been revised and the references to the California 4.4 Plan have been changed to the Quantification Settlement Agreement.

L-19-20
Chapter 4.14 of the Final EIS includes an expanded discussion on multi-year shortages and Appendix H-6 provides additional information on the impacts of voluntary fallowing. Also see response to Comment No. G-5-16.

L-19-21
See response to Comment No. L-17-18.

L-19-22
See response to Comment No. L-17-18.

L-19-23
Your comment is noted. No change to the Final EIS was required.
L-19-24
The distribution of shortages as discussed in Section 4.4 has been updated in the Final EIS to reflect the updated modeling of the alternatives.

L-19-25
Your comment is noted. No change to the Final EIS was necessary. A detailed analysis of potential air quality impacts associated with voluntary or involuntary land fallowing is not possible as it is unknown which specific lands would be affected. Such an analysis would require information associated with the lands that would be fallowed including specific locations, affected acreage, soils type, and prevailing wind data.

L-19-26
See response to Comment No. L-2-8.

L-19-27
See response to Comment No. G-5-37.

L-19-28
See response to Comment No. G-5-16.

L-19-29 through L-19-32

L-19-33
For the modeling of the alternatives in the Draft and Final EIS, Reclamation used the future depletion schedules provided by the Basin States. The depletion projections for IID and CVWD provided as part of the California depletion schedules are generally consistent with the respective schedules outlined in Exhibit B of the Water Delivery Agreement (WDA) with a few exceptions. These exceptions or adjustments reflect modeling assumptions by Reclamation in the modeling of the alternatives for the EIS. These modeling assumptions enabled Reclamation to assess the potential effects to environmental resources of the proposed federal action.

L-19-34
Reclamation concurs with this comment. Table E-2 in Appendix E has been revised to reflect the provisions of the Seven Party Agreement and the contents of this table have also been coordinated with the quantified entitlements provided in the Quantification Settlement Agreement including references to the water transfers expressed in the Quantification Settlement Agreement.
L-19-35
See response to Comment No. L-3-7.

L-19-36
Chapter 2, Appendix A, and Appendix M describe the elements of the Conservation Before Shortage proposal that were included and modeled in the Conservation Before Shortage Alternative. Table M-5 in the Final EIS provides the storage and delivery of ICS credits assumed under the Conservation Before Shortage Alternative. This table provides a breakdown of the deliveries that were recommended by the proponents of the Conservation Before Shortage proposal which include; Delta Pulse Flows; Other Flows Below NIB, and Additional Environmental Uses. Section M.3.2 in Appendix M provides descriptions of these different flows.

L-19-37
Reclamation concurs with this comment. See response to Comment No. G-5-34.
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