

Comments Submitted By Individuals

This section contains comment letters submitted by the following individuals:

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From: 3sonora73 [3sonora73@cox.net]

Sent: Friday, March 02, 2007 1:40 PM

To: strategies@lc.usbr.gov

Subject: Comment on Colorado River drought plan

Dear Sir or Madam,

I have not had time to read the plan but I did want to comment on it.

I live in the Phoenix area. The future water shortage situation has been talked about for years here but nothing has been done about it. Arizona and Nevada are two of the biggest growth areas in the nation. Arizona has the added burden of illegal aliens pouring in along with the people from other parts of the U.S.. This crazy growth has to stop or at least slow down. We are going to have enough problems sharing the water with the existing population.

I realize this is a state issue, not a federal issue, but nobody from the governor on down wants to talk about it I guess because growth means money to the various state and local governments and their buddies. The builders are just going nuts out here and absolutely nobody wants to

slow them down. The Phoenix area could someday be the biggest ghost town in the world.

The repercussions would be devastating. Is there any way to talk some sense into these representatives from Arizona to start looking into growth control?

1

Thanks for letting me rant,
Totally Frustrated Mike

I-1

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Reponses to Comment Letter I-1

I-1-1

Your comment is noted. No change to the Final EIS was necessary. As noted in Section 3.4 and Section 4.4, water supply planning and water supply management occurs at the federal, state, regional and local levels. Most states, regional agencies, local agencies, and communities have already or are in the process of preparing water resources management plans and or drought management plans that address varying water demand and water supply management issues.

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From: Brianne Emery [brianne.emery@gmail.com]
Sent: Wednesday, March 07, 2007 7:53 PM
To: strategies@lc.usbr.gov
Subject: CO River Interim Guidelines DEIS
Mr. Fulp,

I am writing to express my support of the "Conservation Before Shortage" Alternative for the draft EIS of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.

1

I feel that this alternative would meet the purpose and need of the project without limiting the recreational opportunities of these lakes and without being economically detrimental. While I understand new legislation would have to be passed to provide funding to implement this project, I feel that the Basin States would be willing to support such an action.

2

3

I do however, feel that such an action should be considered for the long term viability of operations and not merely used as "interim guidelines". With the increasing growth in Basin states, it is important that the Bureau of Reclamation plan for not only the near future but for the long term productivity of the Colorado River.

4

5

Thank you,
Brianne Emery

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Reponses to Comment Letter I-2

I-2-1

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

I-2-2 and I-2-3

Your comment is noted. See also response to Comment No. G-1-4.

I-2-4 and I-2-5

Reclamation does not concur with this comment. The interim nature of the guidelines is intended to provide an opportunity to evaluate how the guidelines work. In addition, opportunities for review of the effectiveness of the guidelines are anticipated to be available both throughout the proposed interim period and at intervals during the interim period. Such reviews would provide a basis for possible further federal actions and decisions at the end of the interim period. Reclamation anticipates that a review of the guidelines will be conducted at a time prior to the end of the interim that would allow the Department, and the public, to assess the effectiveness of the guidelines and to determine the most appropriate course of action for the post-interim period.

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From: sherry celine [sceline53@yahoo.com]
Sent: Wednesday, March 07, 2007 12:44 PM
To: strategies@lc.usbr.gov
Subject: drought input

Re Colorado Drought Plan: My proposal is to limit building permits, protect the water we have by implementing substantial fines for polluters, start a conservation plan similar to Tucson & Flagstaff . Thanks for the opportunity to input, Sherry Celine

1,2,3

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Go to the [Yahoo! Mail Q&A](#) for [great tips from Yahoo! Answers](#) users.

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Reponses to Comment Letter I-3

I-3-1

See response to Comment No. I-1-1.


I-3-2

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

I-3-3

Your comment is noted. See also response to Comment No. I-1-1.

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MARCH 01, 2007

DEAR SIR/MADAM

MANDATORY DESERT
 LANDSCAPE ON ALL NEW
 HOMES & OFFICE BUILDINGS.
 OR OTHER NOT REQUIRING
 WATER USE, IN PHOENIX.


I UNDERSTAND
 THAT "TUCSON" HAS THIS
 IN PLACE

THANK YOU,
 Raymond

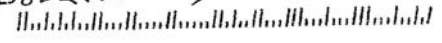
Raymond Trancyger
 4430 E Le Marche Ave
 Phoenix AZ 85032-4278

1

Raymond Trancyger PHOENIX AZ 850
 4430 E Le Marche Ave.
 Phoenix, AZ 85032 02 MAR 07 PM 3 T



REGIONAL DIRECTOR
 LOWER COLORADO REGION
 BUREAU OF RECLAMATION
 ATTN: BC00-1000
 P.O. Box 61470
 BOULDER CITY, NV 89006-1470



89006+1470

I-4

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Reponses to Comment Letter I-4

I-4-1

See response to Comment No. I-1-1.

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From: Jerry & Annette Prioste [japrioste@cox.net]

Sent: Tuesday, March 13, 2007 11:39 AM

To: strategies@lc.usbr.gov

Subject: Colorado River drought plan

The Scottsdale, Arizona, City Government continues its profligate disregard for water resources by ignoring poorly designed, inappropriate, and mismanaged landscaping, which allows water to pour into our streets. I can only imagine the amount of water that has been wasted over the years and how so many other countries and people could be maintained with just our irresponsibly wasted water. 1

I fear for our lowered, beautiful, Colorado River systems.

Thank you for your environmental effort.

Annette Prioste
Scottsdale, Arizona 85254
japrioste@cox.net

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Reponses to Comment Letter I-5

I-5-1

See response to Comment No. I-1-1.

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From: Mikki & Dorothy Niemi [niemicat@hotmail.com]
Sent: Friday, March 16, 2007 7:43 AM
To: rwalsh@lc.usbr.gov
Subject: Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Oper
 CITIZEN INPUT on Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

In Stage I:

It appears that the math used to arrive at the shortage assignments differs from case to case, no doubt the result of the 60s agreement that optimistically took responsibility for all shortages on the river unto Arizona.

1

I now ask what the incentive for all those water users in California to conserve might be? I believe this antiquated agreement that penalizes Arizona water users unduly while cutting no allocations for others leads to profligate development and wastage of water.

2

As a native Arizonan, I deplore this unfair distribution of water shortage ‘allocations’. This ill-conceived agreement should be renegotiated.

Another problem is the cutting off of agriculture in favor of bedroom communities and ever continuing development is strategically foolish. Agriculture recharges the water table, provides human food and fodder for livestock and is a viable business in Arizona. I know the assumption is that food can be shipped in with less cost than the value of the water used in agriculture, but making sure that the population of Arizona is totally dependent on supplies brought in using fossil fuels is poor future planning. Fossil fuel is not going to ever be cheaper and this policy insures that the people of Arizona will be paying inflated food prices on all foodstuffs. I have a problem with this kind of shortsighted planning. Of course, the developers promote this destructive plan since they can then sop up the last of the Arizona allocation in more homes. As of now, Tucson has over 9,000 housing units for sale at inflated prices.

3

I do believe that prohibiting further water hookups, cutting water to golf courses and other water saving measures should be required of all communities using Colorado River water before this shortage allocation plan be implemented.

4

The economic problems generated by a cessation of raw development are real and can be predicted in terms of construction related unemployment. All of the communities using Colorado River water must aim for sustainability in water resources, which will force a lifestyle change among the water users.

5

I know that the present allocations were assigned during flood times on the Colorado, as corroborated by data from 1500-2000 AD. The ‘new’ average river flow will not sustain the current populations at their level of water use.

6


I-6

I suggest that mandatory conservation and cessation of new water hookups be required of all communities using Colorado River water. A refusal to conserve water and a refusal to deny new water hookups should result in immediate cuts of Colorado River water deliveries. All communities should share in the results of drought conditions.

7

Opinions and Facts!

<http://tucsonpoly.blogspot.com>

 D.P. Niemi

I-6

Reponses to Comment Letter I-6

I-6-1

This comment fails to accurately reflect the information published by Reclamation in the Draft EIS. As noted in Chapter 2, the different alternatives considered alternative criteria for determining when and by how much water deliveries to the Lower Division states may be reduced during drought and low reservoir conditions. The purpose for considering the different criteria was to evaluate, among other things, the trade-offs between water deliveries and retaining water in storage for future use.

I-6-2

See responses to Comment Nos. L-17-17 through L-17-19.

I-6-3

Your comment is noted. No change to the Final EIS was necessary. Please note that the shortages within individual states are assumed to be distributed in the order of priorities within in each respective state and distributed proportionally between the water users with the same priority right. The modeling assumption that distributes water delivery reductions among the equal priorities within individual states does not necessarily distinguish between water user type.

I-6-4 and I-6-5

See response to Comment No. I-1-1.

I-6-6

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-6-7

See response to Comment No. I-1-1.

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From: Brenda Samide [hi_from_brenda@hotmail.com]
 Sent: Friday, April 06, 2007 12:05 PM
 To: strategies@lc.usbr.gov
 Subject: Comments for Operations at Lake Powell & Lake Mead under Low Reservoir Conditions

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

1

After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

3

4

5

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment must be removed to ensure public safety. Removing sediment from Lake Mead downstream, rather than Lake Powell upstream is the most technically feasible, least costly and environmentally advantageous approach.

6

The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

Brenda Samide
 160-55 99th Street
 Howard Beach, NY 11414

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Reponses to Comment Letter I-7

I-7-1

See response to Comment No. G-8-33.

I-7-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-7-3 through I-7-5

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

I-7-6

See response to Comment No. G-6-31.

I-7-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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From: David Whipkey [chorse36@msn.com]
 Sent: Thursday, April 05, 2007 8:59 AM
 To: strategies@lc.usbr.gov
 Subject: Comments for Operations at Lake Powell & Lake Mead under Low Reservoir Conditions

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

1

After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

3

4

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Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment must be removed to ensure public safety. Removing sediment from Lake Mead downstream, rather than Lake Powell upstream is the most technically feasible, least costly and environmentally advantageous approach.

6

The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

David Whipkey
 132 Rebecca Dr.
 Winchester, VA 22602

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Reponses to Comment Letter I-8

I-8-1

See response to Comment No. G-8-33.

I-8-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-8-3 through I-8-5

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

I-8-6

See response to Comment No. G-6-31.

I-8-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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From: Suzanne Kruger [soozikruger@webtv.net]
 Sent: Friday, April 06, 2007 1:15 PM
 To: strategies@lc.usbr.gov
 Subject: Comments for Operations at Lake Powell & Lake Mead under Low Reservoir Conditions

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

1

After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

3

4

5

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6

The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

Suzanne Kruger
 rt.2, box 1008
 Harpers Ferry, WV 25425

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Reponses to Comment Letter I-9

I-9-1

See response to Comment No. G-8-33.

I-9-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-9-3 through I-9-5

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

I-9-6

See response to Comment No. G-6-31.

I-9-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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From: BONNIE HAYMON [rfc333@msn.com]
 Sent: Sunday, April 08, 2007 6:32 AM
 To: strategies@lc.usbr.gov
 Subject: Comments for Operations at Lake Powell & Lake Mead under Low Reservoir Conditions

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

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After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

3

4

5

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6

The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

BONNIE HAYMON
 71 PERRY ST
 BROCKPORT, NY 14420

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Reponses to Comment Letter I-10

I-10-1

See response to Comment No. G-8-33.

I-10-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-10-3 through I-10-5

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

I-10-6

See response to Comment No. G-6-31.

I-10-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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From: Earl Zarbin at ☎ 602-437-2665
 To: Regional Director, USBofR at ☎ 17022938156

04-05-17 08:46 am
 ☐ 002 of 002

BCCO-1000 - page 2 of 2
 ENV-6.00

Powers of the Authority should include:

- 1) Use of eminent domain to reallocate water from farmers or others, both on and off Indian reservations, for urban purposes. There should be one-time compensation to anyone giving up water. (Reservation Indians are citizens of the U.S. and should be treated as all other citizens, i.e., the special privileges awarded reservation Indians by the U.S. Congress at the expense of other citizens should end.)
- 2) Own and operate the river dams.
- 3) Construct additional dams and diversion works.
- 4) Augment the river supply.

Other considerations:

The Authority should urge the U.S. Congress to:

- 1) Repeal the U.S. Supreme Court's "practicably irrigable acreage" (PIA) ruling as the measure of water for Indian reservations (PIA ignores reality, from climate to location, and awards excessive quantities of water to some tribes. See footnote for two such tribes in Arizona).²
- 2) Repeal language in Section 5, Boulder Canyon Project Act, which the U.S. Supreme Court purposefully misinterpreted to give the U.S. secretary of the Interior power to distribute water to Arizona, California and Nevada, and to users within these states.
- 3) Repeal all laws based upon PIA.
- 4) Repeal all laws that conflict with powers given the Colorado River Basin Authority.
- 5) End the reservation system for Indians and assure "the equal protection of the laws" for all citizens as provided in the 14th Amendment to the U.S. Constitution.

Correction: "The Gila River Reservation," according to Chapter 3, 3-88, lines 38-39, Draft EIS, "Reclamation, Managing Water in the West," "was established by executive order in 1859..." (emphasis supplied). Not so. The reservation was created February 28, 1859, by an act of the U.S. Congress.

3

² With implementation of the Arizona Water Settlements Act of 2004, two Arizona Indian reservations, with less than one-half of 1% of Arizona's 5,130,632 people in 2000, are supposed to have yearly almost 1 million acre-feet of Arizona's Colorado River water entitlement. These two are the Gila River Indian Community (GRIC), 328,800 acre-feet (including 17,000 acre-feet from ASARCO, Inc., that remains unsettled), and the Colorado River Indian Tribes, 662,402 acre-feet. With fewer than 19,000 residents, these two reservations will have 991,202 acre-feet (including the 17,000 acre-feet). Add in the Gila River tribe's other water, and the two reservations yearly will have 1,315,902 acre-feet. Not morally, ethically, or historically are these tribes entitled to that much water. These tribes no doubt will be founding members of the Organization of Water Exporting Tribes (OWET).

I-11

From: Earl Zarbin at 602-437-2665
To: Regional Director, USBofR at 17022938156

04-05-17 08:46 am
001 of 002

April 05, 2007

page 1 of 2

To: Regional Director, Lower Colorado Region, Bureau of Reclamation, Attention: BCOO-1000, Box 61470, Boulder City, Nevada 89006-1470
From: Earl Zarbin, 3803 E. St. Catherine Ave., Phoenix, AZ 85042-5013 - (no home Internet or fax reception)
Re: BCOO-1000 - Response to Draft EIS - Colorado River Interim ENV-6.00 Guidelines for Lower Basin Shortages, etc.

Best alternative: Given Arizona's growing population, the U.S. secretary of the Interior should adopt as a guideline for Lower (Colorado River) Basin Shortages the alternative calculated to do the least harm to the sufficiency of the Central Arizona Project water supply.

1

Preferred action: Because it is preposterous and illogical to lock into perpetuity a system of water distribution that ignores population shifts and other Colorado River Basin changes, and,

Because the present system unjustly enriches or enables some people at the expense of others, and,

Because there exists a need to restore reason, common sense, and sanity to management of the Colorado River,

The areas of the seven Basin States and the Republic of Mexico within the Colorado River Basin should seek to create a new entity administratively independent of their federal and state governments and other special interests. To accomplish this, the seven Basin States:

2

Should create, using Section 19 of the Boulder Canyon Project Act, a Colorado River Basin Authority or other entity independent of the U.S. secretary of the Interior, and invite Mexican water users to cooperate.¹

(Should the Basin States meet to create a Colorado River Basin Authority, Section 19 permits the U.S. president to name a representative to "participate" and to "report to Congress of the proceedings and of any compact or agreements entered into." The States and the Congress have to approve any agreement, but the Interior secretary has no role unless named by the president. The Interior secretary should not be named.)

¹ Ideally, as noted by John Wesley Powell, river basins should be operated as a unit. For the Colorado River Basin, options include: 1) The U.S. should acquire the portion of Mexico receiving Colorado River water; 2) Mexico should acquire areas of the seven states within the basin; 3) the Colorado River Basin, including the area in the U.S. and Mexico, should create an independent Colorado River Basin Republic. None of these are likely to occur, which means the present messy management of the river will continue unless the seven Basin States unite and act to change the system.

Reponses to Comment Letter I-11

I-11-1

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

I-11-2

Your comment is noted. No change to the Final EIS was necessary. The creation of a new entity that is administratively independent of federal/state governments and special interests groups to manage river and water and reallocate water is outside the scope of the subject EIS.

I-11-3

Information presented in the Draft EIS has been modified in the Final EIS (see Section 3.10.2.2) pursuant to this specific comment, as well as other public comments. Section 3.10.2.2 of the Final EIS has been revised to reflect this comment. This revision does not significantly change the impact analysis or results presented in the Draft EIS.

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From: Richard Spotts [spotts@infowest.com]
Sent: Monday, April 30, 2007 6:43 PM
To: strategies@lc.usbr.gov
Subject: My comments on Colorado River DEIS

April 30, 2007

Dear Bureau of Reclamation officials:

Please accept this letter with my comments on the Colorado River water allocations DEIS.

I strongly support and urge you to adopt and implement the "Conservation Before Shortage Alternative". I believe that this alternative best reflects the changes that are needed to address exponential human growth combined with declining water supplies. Communities in the arid Southwest must learn to be much more aggressive and effective in achieving water conservation and reclamation. Groundwater recharge is also preferable to reservoir storage because of the latter's excessive evaporation losses. Water pricing must reflect true market demands and delivery costs, without any subsidies. Greater use of tiered water pricing can reward conservation and punish wasteful practices.

With global warming and the prospects for more severe droughts, the continuation of status quo management of the Colorado River would be irresponsible and dangerous. Strong reforms are needed now, in anticipation of the more serious shortages to come. We need only to look at Australia this year to see what the future may hold for us.

Please have the foresight and courage to implement these necessary reforms in the public interest.

Thank you very much for your consideration.

Sincerely,

Richard Spotts
1125 W. Emerald Drive
St. George UT 84770-6026
spotts@infowest.com

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Reponses to Comment Letter I-12

I-12-1

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

I-12-2

See response to Comment No. I-1-1.

I-12-3

See response to Comment No. G-8-33.

I-12-4

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

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>>> Julia Burwell <jules0342@msn.com> 04/17/07 12:39AM >>>

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

1

After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

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Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment must be removed to ensure public safety. Removing sediment from Lake Mead downstream, rather than Lake Powell upstream is the most technically feasible, least costly and environmentally advantageous approach.

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The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

Julia Burwell
31 Crescent Key
Bellevue, WA 98006

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Reponses to Comment Letter I-13

I-13-1

See response to Comment No. G-8-33.

I-13-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-13-3 through I-13-5

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

I-13-6

See response to Comment No. G-6-31.

I-13-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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Recommended Alternative

1. The primary purpose of the Colorado River Storage Project is to deliver water to the holders of water rights. The Water Supply alternative is the only alternative that focuses on this purpose. To protect the SNWA the alternative should be amended to protect the 1,000 feet MSL level consistent with the proposed SNWA Lake Mead Intake No. 3 Project noted on page 5-8. With this change the Water Supply Alternative best meets the primary purpose of the system.

Thank you for the opportunity to participate in this process,



Reponses to Comment Letter I-14

I-14-1

The information requested is provided in the Draft EIS. As noted in Section 4.3.2 of the Draft EIS, these traces represent the results of three of the 100 model runs. These distinct traces were provided only to illustrate what was actually simulated under the various traces and respective hydrologic sequences and to highlight that the 90th, 50th, and 10th percentile lines do not represent actual traces, but rather the ranking of each year's data from the 100 traces for the conditions modeled. The traces also illustrate the variability among the different traces and that the reservoir levels could temporarily decline below the 10th percentile line.

I-14-2

See response to Comment No. G-8-32.

I-14-3

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

I-14-4 and I-14-5

Your support for the Water Supply Alternative is noted. No change to the Final EIS was necessary. As noted in Chapter 2, the No Action Alternative and the Conservation Before Shortage Alternative were the only two alternatives that considered absolute protection of Lake Mead water surface elevation 1,000 feet msl. The other action alternatives assumed that SNWA deliveries would be zero at Lake Water surface elevation below 1,000 feet msl. As noted in the response to Comment No. I-14-3, the other action alternatives were formulated to permit an evaluation of a wide range of operating conditions and to permit an evaluation of the trade-offs between water deliveries and retaining water in storage for future use. These other action alternatives, amongst other things, facilitated an evaluation with regard to how often and by how much SNWA may receive water deliveries below their annual entitlement due to Lake Mead water levels dropping below elevation 1,000 feet msl.

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April 15, 2007

TO: Regional Director, Lower Colorado Region,
 Bureau of Reclamation, Attention: BCOO-1000,
 P.O. Box 61470, Boulder City, Nevada 89006-1470;
 FAX (702) 293-8156; e-mail strategies@lc.usbr.gov

FROM : Orion Inskip, Class of 2008
 Seattle University, School of Law, Sullivan Hall
 901 12th Avenue, P.O. Box 222000
 Seattle, WA 98122-1090
inskipo@seattleu.edu

RE:

DRAFT EIS: Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

This comment is regarding the Draft Environmental Impact Statement (DEIS) prepared by the Bureau of Reclamation (Reclamation) for the Secretary of the United States Department of the Interior (Secretary) in support of a proposal to adopt specific interim guidelines for the Colorado River Lower Basin (Lower Basin) shortages and coordinated operations for Lake Powell and Lake Mead, particularly under drought and low reservoir conditions. The bulk of these comments are related to how the Interim Shortage Guidelines (ISG) will affect the Navajo Nation.

SUMMARY of COMMENTS

In general the DEIS fails

- (1) to include the Upper Basin usage or Management into the any of the plans; the Final Environmental Impact Statement should be a programmatic EIS that includes the shortage plan for the entire basin so that the shortage can be equally shared across all stakeholders; 1
- (2) to address the issue of Federal Indian Reserve Water Rights particularly the lack of adequate culinary water available to members of the Navajo Nation; 2
- (3) to address the storage capabilities of CAP, the MWD Aquaduct, and the alternatives of using aquifers for storage to reduce the evaporative loss in the reservoirs; and 3
- (4) to include contingencies to react to actual global warming projections. 4

I-15
 1

Background of the Navajo Nation

The Navajo Nation includes the largest geographic area of any reservation in the United States.¹ The reservation is approximately 27,000 square miles.² As of the year 2000 census there are currently 298,215 members of the Navajo Nation, of which an estimated 173,987 currently live within the Navajo Nation reservation.³ The majority of the Navajo Nation is geographically located in the Lower Basin state of Arizona. However, there are portions of the Navajo Nation in New Mexico and Utah. As of the 2000 census 63,500 members of the Navajo Nation were without domestic culinary water in their homes and had to haul water from community wells.⁴ Additionally, the Navajo Nation will likely continue a transition from livestock herding to an agricultural based economy. In order to meet the future demands of the Navajo Nation a substantial quantity of water will be required.

The Supreme Court recently decreed in the Consolidated Decree that the Colorado River Indian Reservation, located in Arizona and California, had a prior perfected right to 662,402 acre feet (af) of Lower Basin.⁵ This allocation is based on water that can be diverted and put to a consumptive use on the reservation.⁶ However, the Decree does not actually restrict the use to which that water can be applied, so long as it is a beneficial use under the meaning in the decree.⁷ Additionally, under the Consolidated Decree allocations to the tribes are charged to the state within which the consumptive use is made.⁸ Although, there are members of the Navajo Nation homesteading on the Colorado River Indian Reservation, the bulk of the Nation's

¹ <http://www.census.gov/population/www/cen2000/phc-t18.html> [last checked 15 April 2007]

² *Id.*

³ *Id.*

⁴ <http://www.freewmexican.com/news/57909.html> [last checked 15 April 2007]

⁵ *AZ v. CA*, 547 U.S. 150, 126 S.Ct. 1543 (2006)

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

members remain within the Navajo Nation reservation. Unfortunately, the Consolidated Decree does not identify an apportionment from the Lower Basin's apportionment to the Navajo Nation.

Approximately one third of the Navajo Nation reservation is in the state of New Mexico. The fact that the Navajo Nation is split between states and between the Upper and Lower Basins has severely complicated any claims by the Navajo Nation for water. Although Congress granted the Navajo Nation 508,000 af of Upper Basin water in the Navajo Indian irrigation project, the Navajo Nation has never realized that amount.⁹ Instead, after decades of litigation and controversy, the Navajo Nation has agreed to settle with the State of New Mexico for 56% of New Mexico's entire allocation and with priority dates starting in 1868.¹⁰ However, that settlement is still pending congressional approval. Furthermore, only one third of the Navajo Nation will be serviced from the water in the settlement if it is approved.

The balance of the Navajo Nation is in Arizona, 18,119.2 square miles, and Utah. The Navajo Nation has the right to demand sufficient water to put the all of the irrigable land on the reservation to a beneficial use. Unfortunately, the amount of irrigable land is still heavily contested. There are 11,601,856 acres of Navajo Nation Land within Arizona, under the precedent in the Consolidated Decree the Navajo Nation could claim an average of 6 af per irrigable acre on the reservation.¹¹ Under the Law of the River the water would be charged against Arizona's allocation. Furthermore, the Consolidated Decree has determined that anywhere between thirty and seventy percent of a tribe's reservation may be irrigable.¹² However, Public Law (87-483) designated 110,630 acres of the Navajo Nation reservation

⁹ Navajo Indian Irrigation Project, Public Law 87-483, (1962).

¹⁰ *New Mexico v. U.S.*, CIV. 75-418. See THE SAN JUAN RIVER BASIN IN NEW MEXICO NAVAJO NATION WATER RIGHTS SETTLEMENT, April 19, 2005.

¹¹ *AZ v. CA*, 547 U.S. 150, 126 S.Ct. 1543

¹² *Id.*

located in New Mexico as irrigable, or roughly, two percent, a more realistic number when looking at the Navajo Nation.¹³ Therefore, if the Navajo Nation can prove that 232,037 of the total reservation in Arizona is irrigable then the Navajo Nation could claim as much as 1.4 maf, or approximately one half of Arizona's total apportionment under the BCPA.¹⁴

COMMENTS

FACT SHEET

1. The Fact Sheet states that four action alternatives and a no-action alternative are included in the DEIS. Additionally, the Fact Sheet states that two of the four action alternatives were developed based on comments from parties outside the Bureau of Reclamations. Please identify the cooperating agencies, stakeholders, and other interested parties that are mentioned as providing input for the two action alternatives. Other stakeholders and interested parties would be more likely to provide meaningful input into the DEIS if it was clear who had already participated in the drafting process.

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2. The Fact Sheet also states that the purposes of the proposed federal actions are to: (1) improve Reclamation's management of the Colorado River by considering the tradeoffs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, water supply, power production, recreation, and other environmental resources; 2) provide mainstream U.S. users of Colorado River water, particularly those in the Lower Division states, a greater degree of predictability with respect to the amount of annual water deliveries in future years, particularly under drought and low reservoir conditions; and, 3) provide additional mechanisms for the storage and delivery of water supplies in Lake Mead. With the increase in demand on water use projected in the Upper Basin

¹³ Navajo Indian Irrigation Project, Public Law 87-483, (1962).

¹⁴ Boulder Canyon Project Act of 1928

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states and pending determinations of Tribal reserve water rights, the purpose should include identification and resolution of those issues to avoid future conflicts during times of drought.

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CHAPTER 1: PURPOSE AND NEED

1. Section 1.3 Purpose of and Need for Action. The DEIS statements for the need for action fail to mention anything about the known effects of climate change on the future supply of water for the Colorado River Basin. The harms associated with global climate change were recently recognized in by the Supreme Court in *Massachusetts v. EPA*.¹⁵ Among the known harms that will directly affect any shortage plan in the Colorado River Basins is a significant reduction in winter snowpack in the Rocky Mountains.¹⁶

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2. Additionally, Section 1.3 fails to account for the recent 9th Circuit decision that vacated an injunction against lining the All American Canal to reduce seepage into Mexico.¹⁷ Under the *Mexicali* decision the seepage water that currently enters Mexico from the canal will be reclaimed for use in the Imperial Valley Irrigation District. This will further reduce the amount of water that enters Mexico to meet treaty obligations.¹⁸ Although it was assumed that this seepage water was not part of the treaty allocation it has become relied upon by Mexico and will have to be replaced from another source in the Lower Basin. Additionally, where the seepage has replaced the in-stream flows into Mexico it may have the original priority date set by the treaty of 1944.¹⁹

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3. Section 1.5.1 Affected Region and Interests: limits the scope of the DEIS to the Lower Basin. It is well documented that there is a hydrological nexus between the Upper and Lower

¹⁵ *Massachusetts v. EPA*. 2007 WL957332 (U.S.)

¹⁶ *Id.* at 12-17

¹⁷ *Consejo de Desarrollo Economico de Mexicali, A.C. v. U.S.* 2007 WL1054271 (9th Cir(Nev.)).

¹⁸ *Id.*

¹⁹ See Treaty Between the United States of America & Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande ["1944 Treaty"], 59 Stat. 1219, T.S. No. 994, Section III, Art. 10 (Nov. 8, 1945).

I-15

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Basin States.²⁰ If the interim guidelines for Lower Basin shortage operations are based on the assumption that a minimum of 8.23 maf of water will be available for release annually from Glen Canyon Dam then the affected region includes all of the Upper Basin states. Under current and future projected precipitation the total per annum flow through the basin is, and will continue to be, less than 15 maf.²¹

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CHAPTER 2: DESCRIPTION OF ALTERNATIVES

1. Section 2.1 Development of Alternatives: Although there is discussion of encouraging conservation under one of the four action alternatives, there is no inter-basin strategy to reduce demand for water resources through an increased emphasis on conservation. With a growing demand and diminishing supply the Conservation Before Shortage Alternative is the only alternative that realistically attempts to address the larger problem. However, without an inter-basin coordinated management alternative any savings realized in the Lower Basin will be lost to the ever decreasing supply available from the Upper Basin. Furthermore, all published alternatives require an unrealistic minimum annual inter-basin transfer of 8.23 maf through Lee’s Ferry and follow the same Shortage priority

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2. Section 2.2.1 Shortage Guidelines: The DEIS discusses the Secretary’s current options under the Law of the River as placing California’s claims ahead of Arizona. In effect, under this interpretation, California would not incur a shortage until all Arizona post 1968 contracts were reduced completely, including the Central Arizona Project. However, there is no discussion of allocation to the tribes and specifically the Navajo Nation during a shortage. The Navajo Nation

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²⁰ See generally, Pontius, Dale, Colorado River Basin Study: Report to the Western Water Policy Review Advisory Commission, <http://hdl.handle.net/1928/2782> (1997)

²¹ See Niklas S. Christensen, *The Effects of Climate Change on the Hydrology and Water Resources of the Colorado River Basin*, Climatic Change 62: 337-363 (Kluwer Academic Publishing, Netherlands, 2004).

has a water right as of September 9, 1850.²² Under the *Winters' Doctrine* the Supreme Court recognized the water rights of the tribes as the time that the reservation was created under the treaty.²³ Additionally, the Supreme Court quantified the right as an amount sufficient to make use of the reserved land in the manner for which they are reserved.²⁴ However, the actual acre feet reserved to the Navajo Nation has yet to be determined. Any interim or long term shortage strategy must include an accurate accounting of the water available to the Upper and Lower Basin states after the prior perfected rights are quantified and apportioned. Finally, in 1922 the Colorado River Compact solidified that the Indian reserve water rights were not to be affected by the Compact or later statutes or decisions.²⁵

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CHAPTER 3: AFFECTED ENVIRONMENT

1. Section 3.4.1 Apportionments to Upper Basin States: explains the apportionment to the Upper Basin states by percentage. Appendix C includes a depletion schedule projected through 2060 based on current and projected uses. Section 3.2.1.1 identifies that the Navajo Nation is riparian to a portion of Reach 1 defined as Gypsum Canyon to Glen Canyon Dam. Section 3.3.2 Lake Powell and Glen Canyon Dam: states that the Navajo Generating Station takes water directly from the Lake Powell for use as cooling water. The depletion schedule in Appendix C limits use within Arizona to 50 kaf. The amount currently used by the Navajo Generating Station is 34,100 af. The balance of the 50 kaf is already allocated to beneficial uses within the portion of the Navajo Nation in the Upper Basin. The Navajo Nation has agreed not to make demands additional demands against Arizona’s Upper Basin apportionment greater than 50 kaf

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²² 9 Stat. 974.
²³ *Winters v. United States*, 207 U.S. 564 (1908)
²⁴ *Arizona v. California*, 373 U.S. 546, 600 (1963).
²⁵ See article 4(a), Colorado River Compact (St. Cal. 1929, p. 4).

before 2018.²⁶ However, this amount does not account for the total prior perfected right of the Navajo Nation in the Upper or Lower Basin.

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CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

1. Section 4.15 Environmental Justice: explains the methodology and consequences of the ISG on the 9 identified Environmental Justice counties within the Lower Basin states. Because the alternatives all follow the same priority for reductions in deliveries to the respective water users there is no significant difference to the environmental justice communities under any alternative. However, Executive Order 12898 directs agencies to identify and address, as appropriate, disproportionately high and adverse human health and environmental impacts of their programs, policies, and activities on minority and low-income populations.²⁷ The tribes have historically been left out of the discussions regarding allocations of water throughout the basin. Any plan that does not take into account the Indian reserve water rights, and specifically the reserve water rights of the Navajo Nation, will ultimately have a disproportionately high and adverse impact on the low-income populations on the reservations. By failing to identify and secure the water rights of the Navajo Nation now the agency is effectively maintaining the status-quo by allowing junior water-rights holders to continue to appropriate water ahead of their priority date. Additionally, the longer the agency waits to rule on the quantity due to the Navajo Nation the more severe the impact and the greater the estoppel argument against the prior perfected rights of the Navajo Nation. Without a final decision the junior appropriators are far more likely to continue to litigate the matter as long as they can and are allowed to use the water during litigation. The ISG should take into account the amount of water that the Navajo Nation can put to a beneficial use on the existing reservations.

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²⁶ See Navajo Nation Council Resolution CD-108-68.

²⁷ Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629 (1994) .

CONCLUSION

None of the proposed alternatives have significant differences to environmental impacts or on environmental justice issues. There are no alternatives relating to the actual significant government action that is affecting the human environment, specifically the Interim Shortage Guidelines and the priority of imposing shortages is the substantially the same in each alternative. Essentially, all of the current alternatives follow the same shortage sharing modeling assumptions. The ISG then imposes shortages in the same priority without any regard for the actual quantity of available water after consideration of the Federal Reserve Indian Water rights of the Navajo Nation. Finally, the Scope of the Environmental Impact Statement needs to be reevaluated to adequately address the effects of the ISG on minority and low-income populations that stand to be affected by the Federal Action in accordance with EO 12898.

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Respectfully yours,

Orion Inskip
Seattle University – School of Law
Class of 2008

I-15
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Reponses to Comment Letter I-15

I-15-1

As noted in Section 3.2 reservoirs located upstream of Lake Powell and operate independently of Lake Powell would not be affected by changes in the operations of Lake Powell and Lake Mead or consequently the proposed federal action.

I-15-2

Your comment is noted. To the extent that additional Tribal water rights are developed, established or quantified during the interim period of the proposed federal action, the United States will manage Colorado River facilities to deliver water consistent with such additional water rights, if any, pursuant to federal law. Thus, modifications to system operation, in accordance with pertinent legal requirements, will be considered as Tribal water rights and will be exercised in accordance with applicable law.

I-15-3

See response to Comment No. G-8-33.

I-15-4

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-15-5

The information requested is provided in the Draft and Final EIS. Please refer to Section 1.4 for a listing of the cooperating agencies and Chapter 2 for details on the involvement of other stakeholders in the development of the alternatives.

I-15-6

See response to Comment No. IT-15-2.

I-15-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-15-8

The All-American Canal Lining Project is not a part of this proposed federal action but is considered an interrelated project. A description of this project has been added to Chapter 5 (Other Considerations and Cumulative Impacts) in the Final EIS.

I-15-9

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability. See also response to Comment No. G-5-44.

I-15-10 through I-15-12

As noted in Section 3.2 reservoirs located upstream of Lake Powell and operate independently of Lake Powell would not be affected by changes in the operations of Lake Powell and Lake Mead or consequently the proposed Federal Action. Your comment is also addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-15-13 through I-15-15

See response to Comment No. I-15-2.

I-15-16

Your comment is noted. See response to Comment No. I-15-2.

I-15-17 through I-15-20

Reclamation recognized federal reserved water rights of tribes on pages 3-81 to 3-89 and on 4-213 of the Draft EIS. Given that no effect is anticipated to Indian water rights, there would be no resulting environmental justice impacts. See also response to Comment No. I-15-2.

I-15-21

The information requested is provided in the Draft EIS. Please refer Section 4.14, Section 4.15, and Appendix H in the Draft and Final EIS for information on the potential impacts on minority and low-income populations which includes Indian tribes.

>>> Lana Jones <lana.jones@arizona.edu> 04/23/07 03:07PM >>>
Dear Bureau of Reclamation:

I'm writing to comment on the Draft EIS Interim Guidelines for Lower Basin Shortages.

In Chapter 4, page 4-265, lines 35-37 the range for reduced consumptive use of 4.2 to 6.9 af per acre is attributed to Colby et. al. 2006 but there is no entry for Colby in the References Cited, 1

page Ref-4.

In Colby B., K. Pittenger and L. Jones. "Voluntary Irrigation Forbearance to Mitigate Drought Impacts: Economic

Considerations" water application rates range from 3.5 to 5.8 af/acre. These rates comes from "Estimated Quantity of 2

Water Applied and Method of Distribution by Selected Crops Harvested: 2003 and 1998." 2003 Farm and Ranch Irrigation Survey Census of Agriculture, 2002 Census of Agriculture, http://www.nass.usda.gov/census/census02/fris/tables/fris03_28.pdf.

In brief, the range of consumptive use reduction in the dEIS seems high compared to the application rates found in the irrigation survey. 3

Best regards,
Lana Jones
Graduate Research Assistant
Agricultural & Resource Economics
University of Arizona

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Reponses to Comment Letter I-16

I-16-1 and I-16-2

Information presented in the Draft EIS has been modified in the Final EIS pursuant to this specific comment, as well as other public comments. The appropriate citation has been added to the References Cited (bibliography). This revision does not significantly change the impact analysis or results presented in the DEIS.

I-16-3

Your comment is noted. No change to the Final EIS was necessary. The range of consumptive use reductions considered in the Draft EIS are attributed to the references cited. Although these rates may vary by region and more specifically by the local soils type, crops grown, and irrigation methods, amongst other factors; the methodology in the Draft EIS addressed this issue in an appropriate fashion since the information was used consistently between alternatives and appropriately lent itself in the relative comparison of the alternatives.

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4-17-07

Bureau of Reclamation

Re: Comments on Shortage Guideline Matters

1. I request that your use of the term "extraordinary conservation" be changed to **extraordinary measures** which includes:
 - a. **Extraordinary conservation** based on doing something using less water and thereby generating **conserved wet water**.
 - b. **Fallowing and crop rotation** based on "not farming for a period of a year or more" or "not farming for a period which is less than a year" and generating **saved wet water**.

Making this distinction is important for:

- (1) **Conservation** has a positive socioeconomic impact
- (2) **Not farming** has a negative socioeconomic impact

2. I support Reclamation directly managing the ICS program based on:
 - a. The Lower Basin States submitting their ideas
 - b. Reclamation proposing and establishing policies and procedures
 - c. Reclamation managing the ICS program in accordance with its policies and procedures

Because the Seven Basin State and lower Basin State meetings and the Technical Committee meetings are closed to the public, I request that Reclamation will be available to discuss the management of the ICS program further upon request.

Cliff Hurley

Cliff Hurley 1108 W. Evan Hawes Hwy, El Centro, CA 92243 Phone/fax 760.352.6496

I-17

FROM : FAX NO. : Apr. 25 2007 07:56AM P1

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Reponses to Comment Letter I-17

I-17-1

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

I-17-2

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

I-17-3

Your comment is noted. No change to the Final EIS was necessary. See also response to Comment No. L-3-7.

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From: Bird, Mark [mark.bird@ccsn.edu]
Sent: Thursday, April 26, 2007 1:51 PM
To: strategies@lc.usbr.gov
Cc: Bird, Mark
Subject: river DEIS

Hi:

I am responding the DEIS for the Colorado River. I believe options to be considered should include:

1. The Secretary of the Interior reducing water to all river states by 5 percent. | 1
2. Converting farm water to city water. | 2
3. Increasing by a factor of three the amount of money for desalting research and development. | 3
4. U.S. efforts at reducing global warming gases at a national and international level. | 4

These options are further discussed in the following newspaper article relating to the Colorado River. Please include a copy of this article as a part of my reply. Also, can you tell me whether or not you can include the following article? | 5

Thanks,
Mark Bird

Is California headed toward economic collapse?

By Mark Bird
March 9, 2007

California has been using over 100 percent of its allocation of the Colorado River and over 100 percent of its annual renewable groundwater. Nearly 100 percent of the water used in metro San Diego and metro Los Angeles flows from hundreds of miles away.

There is a virtual 100 percent probability global warming is occurring and will intensify. Solutions will be thwarted by a near 100 percent certainty of litigation.

The Colorado River is the most critical water source for Southern California, Arizona and Nevada. In the next 30 years, the population of these two latter states will increase by 100 percent. Wyoming, Colorado, Utah and New Mexico will all also be using more Colorado River water in the next decade.

Lake Mead, on the Colorado River, is the largest reservoir in North America. Relative to its designed storage capacity, Lake Mead is now 15 percent silt, 37 percent water and 48 percent empty. A California economic collapse would commence if Lake Mead loses as little as another 20 percent of its storage capacity.

Additional hydrological factors include the absence of any large lake or river that is entirely within Southern California, the urban heat island effect, the tree-ring record suggesting the 20th century was a wet century, aging water infrastructure and an absence of regulations addressing shortage conditions on the Colorado River.

Additional sociological factors include water speculators buying water rights, bureaucratic inertia, an anti-science disposition relative to present trends, unfriendly relations with other states, and the complexity of approximately a thousand water districts and water-regulating entities in California. These factors are certain to intensify water scarcity in the near future.

But global warming is probably the most significant factor. In about 150 years of measurement, the 10 warmest years have all occurred after 1989. Statistically, one would not expect this pattern in over a million samples of picking 10 random years from a box.

For metro Los Angeles, 86 percent of its water derives from aqueducts supplying water from the Colorado River or the Sierra Nevada mountains in Northern California. Global warming is likely to continue to mean less snow being created, upstream soil absorbing more water, more evaporation from all reservoirs, less water entering the over 2,000 miles of concrete canals in California and more evaporation from these canals. At the same time, due to the warming, all farms will need more water to grow the same quantity of food.

It would be difficult to quantify, but perhaps the 43 non-Colorado River states and about 200 nations in the world are now annually "using," in terms of global warming evaporation, an amount of California water equal to the annual water usage of San Diego.

Over a few years, the contours of a collapse may feature a 50 percent increase in water bills, a 50 percent increase in power bills from electricity from Colorado River dams, and a 50 percent increase in the cost of food grown in Southern California. Such a scenario would send ripples of unemployment, crime and civil

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Is California headed toward economic collapse? | The San Diego Union-Tribune

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unrest throughout the Golden State.

Given these trends, what are four key solutions?

Perhaps the most immediate solution is for the federal government to promptly reduce water deliveries by 5 percent for all seven Colorado River states. This could be in effect until the water level of Lake Mead reaches, say, 75 percent of capacity.

Likewise, California should institute water-based financial rewards and penalties for all farms and cities.

As there are three theoretical techniques that may each reduce desalting costs by 75 percent, the federal government should triple funds for desalting research and development, with a focus on desalting powered by solar, wind, tidal or other sources.

To further prepare for certain lean water years, the federal government should assume a far more energetic leadership role in reducing global warming gases.

Without major water policy shifts, an economic collapse of California could start as early as 2008. Otherwise, as California has eight times as many people as Louisiana in 2004, an economic collapse could be more financially devastating than Hurricane Katrina.

■ Bird, a professor at the Community College of Southern Nevada, is an author of over 30 water-related articles. He can be reached via e-mail at mark_bird@ccsn.edu.

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Reponses to Comment Letter I-18

I-18-1

Your comment is noted. No change to the Final EIS was necessary. The Secretary is vested with the responsibility to manage the mainstream waters of the Lower Basin pursuant to applicable federal law. The responsibility is carried out consistent with a body of documents referred to as the Law of the River. The Law of the River comprises numerous operating criteria, regulations, and administrative decisions included in federal and state statutes, interstate compacts, court decisions and decrees, an international treaty, and contracts with the Secretary. This body of documents also sets forth the quantity and priority of water rights from the Colorado River. The Secretary has the responsibility to observe the priority of water rights and cannot arbitrarily implement delivery reductions that do not comport to the established rights, and the elements of the legal framework for allocation and delivery of Colorado River water, including the Supreme Court Consolidated Decree.

I-18-2

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

I-18-3

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

I-18-4

Your comment is noted. No change to the Final EIS was necessary. Please note that the identification and evaluation of the methods to reduce warming gasses is outside the scope of this EIS.

I-18-5

Your comment is noted.

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From: Tim Barnett [tbarnett-ul@ucsd.edu]
Sent: Friday, April 27, 2007 10:13 AM
To: strategies@lc.usbr.gov
Cc: tbarnett-ul@ucsd.edu
Subject: Objections: Colorado EIS

Importance: High

4/13/2007

TWIMC....

I was

>reviewing the USBR EIS* on operating rules for the Colorado in times of
>water shortage. The results of that EIS are
practically useless and, if implemented, will put the public interest at risk. My reasons 1
for this statement are as follows:

>Essentially, they use a river/reservoir model forced by 50 years chunks
>of actual Colorado River flow. These runs under different river flow
>scenarios are used to estimate the likely range of future levels of
>Lake Mead (say); the probability the Lake will be full or empty. In
>fact, their simulations show a disturbingly large range of
>possibilities from full pool to a level near dead pool. Just how the
>Lake is operated depends on these probabilistic estimates of future
>elevation.

>
> But the analysis done by USBR to date and the one on which the
>EIS is omits one huge factor. Essentially, their analysis to date
>assumes the past climatic variations in rainfall, snow levels,
>evaporation, etc are good estimates of what the future will be 2
>like past river flows are good estimates of future river flows. In
>their case, this is a fatal error that, in my view, negates the basis
>of the EIS.

>Numerous studies over the last 10 years have shown the climate of the
>Colorado drainage will change markedly in the next few decades (it is
>already!). There will be less rain, snow pack will disappear earlier,
>increase temperatures will increase evaporation, etc. In short, the 3
>EIS is defined for the past, not the future. As such it is largely
>unreliable for decision makers.

>
> I believe the model forcing changes could be estimated from
>existing information. They could be added to the existing simulations
>and the whole probability structure of future possibilities be made 4
>available to decision makers: at least then we would be taking a fairly
>realistic look at the future of the Colorado system under the climate
>change scenario. Given that the system is uncomfortably close to
>failure now, we need the best look at what to expect.

I-19

>
> One other item along the same lines:
>while USBR talks about inflow, outflow, etc in the EIS, they never
>factor in increasing population. The 20 million more folks expected to
>rely on Colorado water by 2030 will need something like 3 maf MORE than
>is required today. This is order 20-30% the typical inflow to Lake
>Powell today. And as we have seen, numerous studies all show that
>inflow will decrease in a greenhouse world. So where does that extra
>water come from?

5

Thank you for your consideration. Dr. Tim Barnett, Climate research Div, Scripps Inst
Oceanography, La Jolla, CA

>
>
>
>
>* Draft EIS Feb, 2007. Colorado River Interim Guidelines for lower
>Basin shortages and coordinated operations for Lakes Mead and Powell.
>--

Reponses to Comment Letter I-19

I-19-1

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

I-19-2 through I-19-4

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-19-5

The information requested is provided in the Draft EIS. Please refer to Section 3.4 (Water Deliveries) for details on the water depletion schedules that were used in the modeling of the alternatives. As noted in this section, the Upper Basin depletion schedules have factored the projected increased water demands that are associated with increased use of domestic water supplies to meet the projected population growth in the Upper Division states. In the Lower Basin, all of the Lower Division states are currently using the full amount of their entitlement of Colorado River water and therefore, their respective entitlements limit their use of water from the Colorado River. Managing future population growth within the constraints of available water supply is primarily a local responsibility.

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>>> "Stacey Hamburg" <shambu@myway.com> 04/27/07 11:15AM >>>

Mr. Rick Gold
 Regional Director, Bureau of Reclamation Upper Colorado Region
 Attn: UC-402
 125 South state St
 Salt Lake City, Utah 84138-1147

Dear Mr. Gold,

I applaud the Bureau's acknowledgment of the critical water problems for the people of the southwest in the face of continuing long-term drought as well as the efforts to devise a strategy to deal with the problem.

Of the four alternatives listed in the DEIS, Conservation before Shortage provides the best solution for providing for the water and electricity needs of the southwest cities while also protecting the Colorado's riverine ecosystem. 1

A particularly attractive feature of Conservation Before Shortage that is not included in the Basin States Alternative is that users who give up water in response to a conservation trigger are compensated. The Basin States alternative does not provide such compensation but strictly follows first in time, first in right western water law. This feature of Conservation Before Shortage is attractive for its obvious fairness and is particularly meaningful in that it alters the traditional way of dealing with water shortage in the West. 2

There are significant potential advantages to the use of voluntary, market-based conservation as an alternative to and as a means of mitigating against involuntary shortages. 3

In addition, in the Conservation Before Shortage Alternative, Mexico is allowed to participate in the ICS. That is Mexico can create surplus and bank it in Mead. This feature has many beneficial possibilities for the Delta. Initial indications are that all the potential players, including the powers in Mexico, find the potential attractive. 4

- Based on extensive modeling performed for the Lower Basin states, reductions of 400,000, 500,000 and 600,000 acre-feet at Lake Mead elevations 1075 feet, 1050 feet and 1025 feet, respectively, appear to provide optimal results in preventing larger involuntary shortages that perform better than the 200,000, 400,000, and 600,000 acre-foot reductions proposed in the original CBS proposal. 5

- It is desirable to protect the elevation of Lake Mead at no less than 1000 feet under any condition to protect Southern Nevada Water Authority's lower intake structures, as well as the new minimum power pool if proposed low-pressure turbines are installed at Hoover Dam. 6

I-20

- It is preferable for Lower Basin water users to voluntarily engage in predictable, small-scale reductions in use – and receive compensation for those reductions – rather than face large-scale, involuntary and uncompensated disruptions in water deliveries that could cut into municipal and agricultural water supplies and create unmitigated economic impacts.

7

- There is a large volume of Colorado River water which could be temporarily conserved through voluntary, market-based mechanisms such as part-year fallowing or forbearance agreements, dry year options, or other similar arrangements to reduce Lower Basin consumptive use on an occasional, temporary basis as an alternative to involuntary shortages to low-priority users.

- Users of Colorado River water in Mexico may wish to participate in short-term, voluntary and compensated conservation agreements, to reduce the probability of larger, uncompensated future reductions due to a declaration of shortage under the 1944 Treaty with Mexico.

8

For the reasons listed above, I urge the Bureau to adopt the Conservation before Shortage Alternative as the preferred alternative.

Thank you.

Stacey Hamburg
1550 N Fort Valley #19
Flagstaff, AZ 86001

Reponses to Comment Letter I-20

I-20-1

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

I-20-2

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

I-20-3

Information presented in the Draft EIS has been modified in the Final EIS (see Appendix H) pursuant to this specific comment, as well as other public comments. According we have added an analysis that considers the positive and negative effects of a voluntary conservation program. The results of this analysis are summarized in Appendix H, Section H.6.

I-20-4

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

I-20-5

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

I-20-6

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

I-20-7

See response to Comment No. I-20-3.

I-20-8

See response to Comment No. F-5-2.

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>>> Melanie Florence <smskflor@yahoo.com> 04/27/07 12:42PM >>>
Dear Bureau of Reclamation,

I live in St. George, Utah, a place that will be affected by future water policies on the Colorado River. I have read the four alternatives and feel like the best one is the conservation before shortage initiative.

1

St. George right now uses a lot of water--about 300 gallons per person per day--and is pursuing building a Lake Powell to get even more. Most of the water is used on house lawns and golf courses--even during the summer when the snowbirds have left for cooler temperatures. Sprinklers all over town go off during the hot times of the day, in strong winds, and many areas overwatered. Even the city does not appear to be curbing water conservation in parks, school grounds, etc. Although St. George and Washington County in general has a desert climate, very few homes and businesses are xeriscaped in the front yards.

I feel like the only way to force the city and county to look toward future water shortages and encourage water conservation practices now is by imposing it from the outside somehow. I hope the conservation before shortage alternative will do that.

2

Sincerely,
Melanie Florence

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Reponses to Comment Letter I-21

I-21-1

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

I-21-2

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

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>>> "Crista Worthy" <crisaworthy@hotmail.com> 03/01/07 10:47 AM >>>

Thank you for the opportunity to comment:Due to climate change, which has already begun, it seems inevitable that those who depend on the Colorado River for their water supply will receive less and less in the future. This makes it all the more ridiculous to continue the existence of "Lake" Powell. Although I am one of those who has enjoyed boating on this reservoir, I also know that it wastes an obscene quantity of water each year, through evaporation and seepage--enough to supply the entire state of Nevada! The Glen Canyon Dam, just upstream from the Grand Canyon, not only prevents sediment from entering that National Park, but drastically lowers the water temperature, causing the extinction of a number of fish, and near-extinction of others, contrary to Federal Law.

1
2
3

Lake Powell should be drained, the dam decommissioned, and the West will instantly have enormously more water, which can be taken directly from the river or stored, if necessary, in the Lake Mead reservoir. The small amount of electricity generated at the Glen Canyon Dam can be replaced by building wind and solar generators nearby. The Grand Canyon river ecosystem, unique in all the world, will be saved. The muck and scum of "Lake" Powell that now fills the main channel of the Colorado River through Glen Canyon will clean itself out within a decade or so through natural forces, and Glen Canyon will once again be what it was: the true heart of the Southwest, an oasis with more wildlife than all the thousands of square miles of desert surrounding it put together.

4
5
6

Crista Worthy
16664 Calle Brittany
Pacific Palisades, CA 90272
(310) 454-4329
(310) 560-7324

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Reponses to Comment Letter I-22

I-22-1

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-22-2 and I-22-3

See responses to Comment Nos. G-6-31 and G-8-32.

I-22-4 and I-22-5

See response to Comment No. G-6-18.

I-22-6

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

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From: Rebecca McCartt [ramccartt@hotmail.com]
 Sent: Wednesday, May 09, 2007 7:11 PM
 To: strategies@lc.usbr.gov
 Subject: Comments for Operations at Lake Powell & Lake Mead under Low Reservoir Conditions

Dear Mr. Johnson and Mr. Gold:

Lake Powell and Lake Mead lose 17 percent of the water that flows into them through evaporation. Vacant space in underground aquifers near existing Colorado River water recharge facilities could store more water than these two reservoirs combined. Upwards of 810,000 acre-feet of water annually could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

1

After more than 40 years of operation, it was not until the fall of 2004 that Lake Powell's water storage actually augmented downstream water use. And with the impacts of climate change and rising water consumption, it is unlikely that there will be sufficient surplus water to fill Lake Powell again. Even should surplus water accumulate, Lake Mead alone could provide sufficient storage.

2

Between Lake Powell and Lake Mead lies Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam at Lake Powell has been far more devastating. Since the dam's completion four of eight native fish have gone extinct and the dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

3

4

5

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment must be removed to ensure public safety. Removing sediment from Lake Mead downstream, rather than Lake Powell upstream is the most technically feasible, least costly and environmentally advantageous approach.

6

The Colorado River Compact of 1922, which largely governs the operations of Lake Powell for Lake Mead, cannot meet its intended purpose of equitably sharing Colorado River water between the Upper and Lower Basin states. With River flows expected to decline 18 percent by 2040, this inequity will worsen, furthering the need for Compact amendments while highlighting the benefits of eliminating Lake Powell to fulfill the Compact's primary objective.

7

Rebecca McCartt
 1360 Franklin st NW
 salem, OR 97304

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Reponses to Comment Letter I-23

I-23-1

See response to Comment No. G-8-33.

I-23-2

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

I-23-3 through I-23-5

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

I-23-6

See response to Comment No. G-6-31.

I-23-7

Your comment is addressed in the general response pertaining to climate changes and hydrologic variability in the introduction to Volume IV of the Final EIS. Section 4.2 of the Final EIS has been enhanced and two new appendices (Appendix T and Appendix U) have been added to provide additional information regarding the potential impacts of climate change and hydrologic variability.

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