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2005

### **Copies of Unique Comment Letters**

**Mark Belles** 

**Bureau of Reclamation** 

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# Appendix W

## **Copies of Unique Comment Letters**

## W.4 Individual Comment Letters (I)

Mark Belles 9318 Willard Street Rowlett, Texas 75088

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

16 June 2005

Dear Regional Director,

Regarding the "Notice to solicit comments and hold public meetings on the development of management strategies for Lake Powell and Lake Mead, including Lower Basin shortage guidelines, under low reservoir conditions.", please place my name on the mailing list for public notices related to this activity and for opportunities for public comment.

I will be unable to attend the public meetings to be held at Henderson, NV and Salt Lake City, UT, but I have a very strong interest in the outcome of the proposed process.

First of all, I commend the Secretary of the Interior and the Bureau of Reclamation in the strongest terms for facing the Lower Basin storage issues head-on and recommend the following objectives as guiding principals for the plans that will develop from this process.

- 1. The first and foremost management objective should be our international treaty obligations.
- The second (and nearly as important at the first) management objective should be to maximize the beneficial use of the available water for domestic municipal and agricultural purposes in the United States.
- 3. The third priority should be compliance with other Federal Laws such as the Endangered 3 Species Act.
- 4. The next priority should be consideration for the generation of electrical power.
- 5. Finally, accommodation of the recreational industry (boating, etc...) should be considered. 5

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I.001

Considering the objectives noted above, I believe the most effective storage management plan would be to maximize storage at Lake Mead at the expense of Lake Powell for the following reasons,

- 1. There will be less net seepage loss if the water is concentrated at Lake Mead.
- 2. Power generation will be more efficient if the generators are running with water at maximum head at one location rather than being located at two locations at respectively lower heads. Again, water must be held at Lake Mead to supply Las Vegas, so concentrating the water at Lake Mead is the most logical choice for electrical power generation.
- 3. Boating may be possible at one Lake, but most likely not both. Again, concentration of water at Lake Mead is meets this need best.

I hope the Bureau will undertake this task with a willingness to think completely out-of-the-box and settle on a storage plan that most fits the needs of society today.

Thank you for the opportunity to comment, I look forward to further information on this project.

MLnv, Sille

Page 2 of 2

I.001

From:	Tiffany Mapel <tiffmapel@yahoo.com></tiffmapel@yahoo.com>
То:	<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov></strategies@uc.usbr.gov></strategies@lc.usbr.gov>
Date:	6/16/05 2:05PM
Subject:	Lake Powell management

Hello, and thank you for your time,

My name is Tiffany Mapel, and I reside in Durango, Colorado. Lake Powell is my favorite place on the planet, and I have been going there since 1986. It has never been the same lake twice, because of fluctuating lake levels--Lake Powell is doing exactly what it was designed to do. However, with our sixth year of drought, Lake Powell needs to be managed in accordance with yearly precipitation. Today we have the technology to forecast runoff, snowpack, and moisture content which feeds the Colorado River System. They did not have that knowledge back in 1922.

I realize that the Colorado River Compact of 1922 is virtually set in stone, and not open for negotiations. However, it only seems logical that during drought years, the flow should be slowed from Glen Canyon Dam. Instead, the upper basin's allocation of 8.23 million acre feet per year has been generously slipping beyond the dam, even though there is currently plenty of water in the lower basin states due to high precipitation this winter.

When Secretary of the Interior Gale Norton decided that water releases would continue from Lake Powell as scheduled, I did not agree with her decision. Arizona and California cried foul, believing they would miss out on their water. What was the difference in giving them their water now or later? It all flows downstream, and they'll get it anyway. Once it's out of the dam, you can't put it back. Arizona has been doing great in the area of water conservation. Last year, their usage was at levels comparable to 1969, when Phoenix was a lot smaller than it is today. Can the same be said for California? From what I hear, the motto in California is, "Drought? What drought?" There are no conservation measures in place for Californians to conserve water. Are they complacent, knowing they have senior rights on the Colorado River Compact? Maybe California needs to feel the effects of the drought before they can come up with a plan for change. At the rate the Western U.S. is

growing, we all need to conserve water if the projected millions of people are to move here.

During drought years, we should be conserving water, not letting the water out of Lake Powell. In fact, we need more storage reservoirs. With the past few dry years, Lake Powell's level has plummeted because more water is going out of the dam than is coming into the lake. Isn't there a provision in the 1922 Compact that states both Lakes Mead and Powell should be managed with sustainable, and nearly equal levels? Why then is Lake Mead 85% full, while Lake Powell is only 45% full? Lake Powell is currently 100 feet low. The recent runoff was able to replenish the lake, raising it from the lowest it got in April, 144 feet down. We need to learn from the past 6 years of drought, and come up with better management for Lake Powell. It shouldn't be allowed to get that low again.

The releases from Glen Canyon Dam need to be slowed significantly to bring Powell's level back up to a sustainable level. For a National Recreation Area that draws millions of visitors and over \$400 million in revenue, Lake Powell is worth saving. For them, and for the water and power needs of the west. SLOW THE FLOW.

Tiffany S. Mapel Durango, CO www.LakePowell.org

POWELL TO THE PEOPLE!!

Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com

CC: <tiffmapel@yahoo.com>

From:"Steve" <wow2@rof.net>To:<strategies@uc.usbr.gov>Date:Thu, Jun 16, 2005 12:56 PMSubject:Please add this and me to your scoping process...the 7.5 maf annual maximum forLake Powell releases

Dear Regional Directors, Bureau of Reclamation, Lower and Upper Colorado Region,

8.23 maf is not a good number; the maximum should be under 7.5 maf for annual releases from Lake Powell... Steve Parmelee, PO Box 6922, Snowmass Village, Colorado, 81615

Released On: June 15, 2005 Reclamation Seeks Public Comment on Development of Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions

The Bureau of Reclamation today filed a Federal Register Notice requesting public comment on the development of management strategies for Lakes Powell and Mead, on the Colorado River, under low reservoir conditions. Among the management strategies anticipated are shortage guidelines for the Lower Colorado River Basin.

The strategies will likely identify those circumstances under which the Department of the Interior would reduce annual Colorado River water deliveries and the manner in which annual operations of the Colorado River reservoirs would be modified under low reservoir conditions.

The Department expects the strategies to provide guidance to the Secretary's Annual Operating Plan decisions, and provide more predictability to water users throughout the Basin, particularly the Lower Basin states of Arizona, California, and Nevada.

The Annual Operating Plan - developed in consultation with the Basin States, water and power users, Tribes, environmental and recreational groups and other interested parties - guides operation of the Colorado River. Among other elements, it specifies whether the amount of Colorado River water available to be released from Lake Mead to Lower Basin users in a given year will be "normal" (7.5 million acre-feet), "surplus" (more than 7.5 million acre-feet).

Comments can be mailed, faxed, or e-mailed to:

Regional Director, Bureau of Reclamation, Lower Colorado Region, Attention: BCOO-1000, P.O. Box 61470, Boulder City, Nevada 89006-1470, (702) 293-8156, strategies@lc.usbr.gov; and/or Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State Street, Salt Lake City, Utah 84318-1147, (801) 524-3858, strategies@uc.usbr.gov.

The full Federal Register Notice is available on Reclamation's Web site, at

http://www.usbr.gov/lc/region/g4000/docs/strategies.pdf

From:"Sandra Reuther" <SandraReuther@cox.net>To:<strategies@lc.usbr.gov>Date:6/16/05 8:45AMSubject:water in the Colorado Basin

I believe one way water is wasted is open waterways to take water to CA farmers. Seems like farming in the desert and having uncovered water ditches and pipelines are impractical. Charge farmers more and use the surcharge to help fund changes.

Sandra Reuther Boulder City, NV

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From:"Sandra Reuther" <SandraReuther@cox.net>To:<strategies@lc.usbr.gov>Date:6/17/05 8:29AMSubject:Fw: how to operate lake Mead strategies@lc.usbr.gov

----- Original Message -----From: Jim Hobon To: Sandra Reuther Sent: Thursday, June 16, 2005 5:36 PM Subject: Re: how to operate lake Mead strategies@lc.usbr.gov

Keep all kinds of fuel operated water craft off the lakes, The lower water table is not going to be sufficient to dilute the hazard from the fuel and fumes.

I know this will upset a lot of people, but if you ever noticed most of the boats that are their are from Calif., and they don't get their water from Lake Mead like we do. While they do get it from the Colorado River it is before it comes to lake mead.

-----Original Message------

From: Sandra Reuther Date: 06/16/05 08:30:08 To: forum Subject: how to operate lake Mead strategies@lc.usbr.gov

Thursday, June 16, 2005 Copyright © Las Vegas Review-Journal Input sought on Colorado River

Federal officials want public comments on how to operate lakes Mead, Powell

By HENRY BREAN REVIEW-JOURNAL

Federal officials want your input as they prepare for discussions that could reshape how more than 25 million people in seven Western states share the Colorado River.

At issue is how best to operate the river's two key reservoirs, Lake Mead and Lake Powell, as water levels drop from drought and increased demand by water users.

A notice published Wednesday in the Federal Register notes that future "low reservoir conditions may not be limited to drought periods as additional development of Colorado River water occurs."

Demand for water along the river has continued to increase even in the face of what the notice calls "the worst five-year drought in recorded history," one that has left Lake Powell at 46 percent of capacity and Lake Mead at 60 percent of capacity.

The Federal Register notice announces a pair of public meetings the U.S. Bureau of Reclamation will hold next month to gather input on future management strategies for the river.

The first meeting will be July 26 at the Henderson Convention Center. The second will be July 28 in Salt Lake City. Both meetings are from 10 a.m. to noon.

<snip>

About 90 percent of the Las Vegas Valley's drinking water comes from the river by way of Lake Mead.

Nevada has mostly insulated itself from a shortage on the river through its water banking agreement with Arizona. But Brothers said Southern Nevada's water supply could be threatened should the drought force deep cuts by the basin states.

New ways of managing the river also could result in more dramatic changes in the water level at Lake Mead, Brothers said.

The Bureau of Reclamation will accept written comments through Aug. 31.

In the lower basin, comments can be submitted by mail to: Regional Director, Bureau of Reclamation, Lower Colorado Region, Attention: BCOO-1000, P.O. Box 61470, Boulder City NV 89006-1470; by fax to 293-8156; or by e-mail to strategies@lc.usbr.gov

In the upper basin, they can be mailed to: Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State St., Salt Lake City UT 84318-1147; faxed to 801-524-3858; or sent by e-mail to strategies@uc.usbr.gov

Story at http://www.reviewjournal.com/lvrj\_home/2005/Jun-16-Thu-2005/news/26727775.html

From:	"Kelly, Roy A." <roy.a.kelly.ii@hp.com></roy.a.kelly.ii@hp.com>
To:	<strategies@uc.usbr.gov></strategies@uc.usbr.gov>
Date:	Sat, Jun 18, 2005 9:26 AM
Subject:	public comments on managing the Colorado water system

As a life-long resident of Colorado, the offspring of farmers, ranchers, and miners who helped build some of the water diversions in this state and use them, who owned the second-oldest right on the Arkansas River, I have learned more about water rights that I ever really wanted to learn at a tender age. My grandfather told my father when he was a child that more people had been killed over water in this state than over gold. Before he passed on, Granddad had predicted this situation.

This was a topic around the table as I grew up. We turned and twisted the topic to learn all the implications on each party. The cities need to ensure their end users have the water they need; the wildlife needs the natural flows, or the closest to it we can provide; the farmers and ranchers need the water to grow their crops; the streams also need water for recreation, fishing, rafting, kayaking, and boating; towns and cities downstream need clean water for their use. It is easy to see that there are more demands than can be answered, and any solution will require compromise from every party.

Thirty years of discussions did come up with one possible solution, but we finally decided what would be the best compromise would never be implemented because it is too simple. It is this simple... build a second pipeline that returns treated water back into the stream 100 feet upstream from the diversion point. This satisfies all users; the cities can take all the water they need, the streams have their natural flows, and downstream users have clean water for their own use.

Roy A. Kelly II

From:Diron Baker <dhb613@yahoo.com>To:<strategies@lc.usbr.gov>Date:6/21/05 11:44AMSubject:Glen Canyon

Dear Regional Director Robert Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels..

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

**Diron Baker** 

13135 W. 2nd. Pl. apt. 3527

Lakewood, Co. 80228

303-914-1997

dhb613@yahoo.com

-----

Yahoo! Sports Rekindle the Rivalries. Sign up for Fantasy Football

Date: Varies, see Commenter List (see note below)

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

Dear Director Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. I visited GCNRA in May 2004 and discovered newly reemerging canyons that were in the process of renewal with regrowth of vegetation and flushing out the silt. What a spectacular sight it was! I am returning this coming September to continue the rediscovery. Unfortunately these cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels.

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

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Sincerely,

This Form Letter A was received from approximately 15 individuals (Commenters). All the letters were identical. For efficiency purposes, the commenter contact information has been entered into a database and each different comment noted/identified on this letter are noted to have been received 931 times within the Comment database.

From:	"mark pepper" <sparks11757@hotmail.com></sparks11757@hotmail.com>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	6/21/05 4:24PM

Dear Mr. Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are found only in Glen Canyon are now threatened by fluctuating reservoir levels. This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. I urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

Mark L. Pepper

2427 Franklin Ave.

Secane, PA 19018

610-541-0859

mlp93083@verizon.net<mailto:mlp93083@verizon.net>

From:"D. Riddle" <aqua4fun@hotmail.com>To:<strategies@lc.usbr.gov>Date:6/21/05 3:46PMSubject:Fill Lake Mead First

I think it was a mistake to build Glen Canyon Dam in the first place, but now that the combined downstream water usage and the drought make possible all surplus water to be stored in Lake Mead, you should not be re-filling Lake Powell and burying once more the cultural, biological, and scenic resources found only in Glen Canyon.

I am not only concerned with the cultural and scenic aspects of Glen Canyon. From a practical water conservation perspective, there would be less loss by evaporation if all the water were stored in one reservior...Lake Mead. Sincerely,

Donna Riddle 1238 Crest Dr. Eugene, OR 97405

From:<SuperMolar@aol.com>To:<strategies@lc.usbr.gov>Date:6/21/05 2:10PMSubject:Glen canyon

Dear Mr. Johnson; i have learned that with the declining level of lake powell there has become an option to fill lake meade and allow glen canyon to return to its pre lake powell beauty. Filling lake meade would be a better choice as a water use policy. Please consider not refilling lake powell, that is a losing proposition. Thank you-Robert Rosenfield

From:"Robert Rutkowski" <rutkowski@terraworld.net>To:<gale\_norton@ios.doi.gov>, <exsec@ios.doi.gov>, <strategies@lc.usbr.gov>,<strategies@uc.usbr.gov>Date:6/21/05 5:05PMSubject:A sustainable water supply for the west

Gale Norton Executive Secretary Department of the Interior 1849 C Street, N.W. Washington DC 20240 gale\_norton@ios.doi.gov exsec@ios.doi.gov

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

Rick Gold Regional Director Bureau of Reclamation Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 (801) 524-3858 strategies@uc.usbr.gov

Dear Secretary Norton and Regional Directors:

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels.

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

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Thank you for the opportunity to bring these remarks to your attention.

Mindful of the enormous responsibilities which stand before you, I am,

Yours sincerely, Robert E. Rutkowski

cc: Nancy Pelosi President George W. Bush

2527 Faxon Court Topeka, Kansas 66605-2086 P/F: 1 785 379-9671 r\_e\_rutkowski@myrealbox.com

**CC:** "Nancy Pelosi" <sf.nancy@mail.house.gov>, "George W. Bush" <president@whitehouse.gov>

From:Steve Skinner <steve@aspendailynews.com>To:<strategies@lc.usbr.gov>Date:6/21/05 11:49AMSubject:Lake Powel/Lake Mead

Dear Robert Johnson-

I'm hoping that you will take this opportunity to help preserve and protect the Colorado River by filling Lake Mead and NOT "Lake" Powell. I have spent a lot of time on the Colorado River between Glenwood Springs, Colorado and the Glen Canyon Dam - I've seen first hand the destruction of the ecosystem through the Grand Canyon and been very excited by the drought as it reveals the revered and historical Glen Canyon.

Please lower "Lake" Powell.

Thanks very much, Steve Skinner 1398 Rock Court Carbondale, CO 81611 970 963-2126

PS - Did you know that you share a name with a blues legend?

From:john spezia <jspezia@yahoo.com>To:<strategies@lc.usbr.gov>Date:6/21/05 5:56PMSubject:Lake Powell

Robert,

Don't fill up Lake Powell with more water.

Fill up Lake Mead instead.

Its time to use the water more sustainably and wiser by filling up Lake Mead with this year's meager runoff.

John Spezia

Discover Yahoo! Use Yahoo! to plan a weekend, have fun online and more. Check it out! http://discover.yahoo.com/

From:"jesse call" <matkat148@hotmail.com>To:<strategies@lc.usbr.gov>Date:6/22/05 9:17AMSubject:Bower Flats

Hello Robert,

I'm a student and mother from Idaho. All my life my family, friends, and I have been fortunate enough to enjoy many of nature's beauty and wonders.

I make a conscious effort to bring about my daughter's awareness of the natural resources we have and how to conserve and enjoy them.

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels..

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

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All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for my daughter and our future generations.

Sincerely,

Jesse Naomi Call

264 N. 300 W.

Blackfoot, ID--83221

matkat148@hotmail.com<mailto:matkat148@hotmail.com>

208 785 4036

calljess@isu.edu<mailto:calljess@isu.edu>

Your future depends on many things, but mostly on you. -Frank Tyger-

If you hear a voice within you say 'you cannot paint,' then by all means paint, and that voice will be silenced.

-Vincent Van Gogh-

From:"Marcia Harvey" <mharvey@tcsn.net>To:<strategies@lc.usbr.gov>Date:6/22/05 10:24PM

Dear Mr. Johnson, Please help to restore Glen Canyon by filling Lake Mead first. Thank you,

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Marcia Harvey 5370 Morningstar Place Paso Robles, Ca. 93446 From:"Jean Hegland" <jhegland@sonic.net>To:<strategies@lc.usbr.gov>Date:6/22/05 9:19AMSubject:protect Glen Canyon

Please protect Glen Canyon by filling Lake Meade first. Sincerely, Jean Hegland 5450 Mill Cr Rd. Healdsburg, CA 95448

From:	Charles W Howe <howec@colorado.edu></howec@colorado.edu>
То:	<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov></strategies@uc.usbr.gov></strategies@lc.usbr.gov>
Date:	6/22/05 12:03PM
Subject:	Colorado River Drought Plan: the use of interstate waterleases.

Ladies & Gentlemen: there have been several proposals for interstate water leasing that, under current conditions throughout the Basin, warrant further consideration. Water leasing would always be under "willing seller-willing buyer" conditions, subject to state oversight. Especially during drought, an organized water market can redirect water to the highest-valued uses, subject to state protections of other water users.

The proposals that should be considered are (1) Colorado River Board of California's 1991 proposal for water leasing ("Conceptual Approach for Reaching Basin States Agreement...and Implementation of an Interstate Water Bank", prepared by California for the Colorado River Basin States meeting in Denver, August 28th, 1001) and (2) Governor Roy Romer's proposal to contract with Lower Basin States for the 40 year non-development of part of Colorado's allotted water under the Compact (Denver Post news article, Oct. 24th, 1991).

The problem with fixed rules that may emerge interstate negotiations or from the Secretary of Interior's imposed rules is that they will not fit all future climatic, demographic and economic conditions. Interstate water markets remain responsive to emerging conditions and need to involve only water at the "tradable margin" (a small percentage of total available water) to produce substantial gains for the participating states.

Further information can be provided if these ideas are of interest.

Charles W. Howe

Professor of Economics (Emeritus) Professional Staff, Institute of Behavioral Science, University of Colorado-Boulder.

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From:Jean Jackman <jljackma@dcn.davis.ca.us>To:<strategies@lc.usbr.gov>Date:6/22/05 2:18PMSubject:Glen Canyon

Dear Mr. Johnson,

In the 60's, I was a student at the University of Minnesota when I saw a movie about the Glen Canyon. It was breathtaking. i said to my husband, we have to go there. Near the end of the movie, the narration said this is how it looks now. It showed the flooded canyon.

i was so horrified, I began to be an environmental activist. Now in retirement from teaching, I advocate and write a nature column

Please restore Glen Canyon. I hope to visit it before I die and see us passing that correction, that legacy, to our grandchildren.

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1.025

Please save Glen Canyon, Jean Jackman 306 Del Oro Ave. Davis, CA 95616 From:"alayne meeks" <alayne@meekshoney.com>To:<strategies@lc.usbr.gov>Date:6/22/05 6:53PMSubject:Glen Canyon

We have the chance to save what was once lost to us. Please take this chance to right an injustice to nature, and to those who love it, and save Glen Canyon from being flooded again. Thank you, Alayne Meeks

From:ray walker <waterrdw@yahoo.com>To:<strategies@lc.usbr.gov>Date:6/22/05 5:51AMSubject:Comments on New Drought Plan for Water-sharing Agreement Requested By<br/>Department of Interior

June 22, 2005

TO: United States Bureau of Reclamation

Robert W. Johnson, Regional Director, Bureau of Reclamation,Lower Colorado River c/o rwalsh@lc.usbr.gov External Affairs Officer strategies@lc.usbr.gov & strategies@uc.usbr.gov John Keys, Commissioner, Bureau of Reclamation c/o mcollier@usbr.gov Executive Assistant to John Keys

FROM: Ray Walker, Colorado River Water Rights Analyst

SUBJECT: Response to Bureau of Reclamation's REQUEST TO COMMENT Re: Colorado River Drought Plan for Department of the Interior

On June 16, 2005, Jerd Smith of the Rocky Mountain News reported that Bureau of Reclamation Officials will take written comments for review, analysis, and consideration for inclusion into the new drought plan .

It was reported by Mr. Smith that, last week, at a University of Colorado conference on the Colorado River, several western water officials said,

"the only way to break the deadlock is to find new water supplies,..."

Please consider this as a formal response to comment on the new drought plan for a water-sharing agreement requested by US Secretary of the Interior, Gale Norton.

I have 35 years of experience as Colorado Water Rights analyst. My brother has 35 years of experience in construction and water delivery systems.

My brother and I have discovered & analyzed a vast new water supply source for the Colorado River.

It is our opinion that another 750,000 acre feet (AF) of water per year available for beneficial use and storage in Lake Mead should be considered for inclusion into the new drought plan for the Colorado River and / or, be developed by the hundreds of entities affected by water shortages on the Colorado River.

The following is a brief description of the various aspects of the new SOURCE.

1) Yield; The SOURCE can be expected to yield, on average, 750,000 acre feet (AF) of fresh water per year.

2) Unappropriated; The SOURCE is unappropriated and available for appropriation. Appropriation of the Source will not damage any prior vested water rights of anyone, anywhere.

3) Water Quality; The SOURCE is fresh water and can be treated in the normal reasonable fashion to become potable water.

4) Non-tributary to the Colorado River; The SOURCE is non-tributary to the Colorado River and its tributaries.

Based on the administration of other Compacts in the Western U.S., non-tributary water entering the Colorado River will not be subject to the allocation described in the Colorado River Compact provided said non-tributary water is adequately measured into and out of the Colorado River to the satisfaction of the Department of the Interior and the compact signatory states.

5) Environmentally acceptable; Development of the SOURCE can be expected to be acceptable to the environmental community.

6) Economically feasible: The SOURCE is economically feasible to develop considering the range of the problems that can be solved and compared to existing projects of similar scope.

7) Job creation; Development of the SOURCE will create a substantial number of new jobs in several western states.

8) Electrical power ; Electrical power generation can be increased in Lake Mead by storing water from the SOURCE.

9) Water deliveries; The SOURCE is deliverable to all of the signatory states of the Colorado River Compact, either directly or by exchange.

10) Additional source of supply for Southern California; The SOURCE could be developed in such a manner that it can be considered viable as an additional source of water for Southern California in the event that the present delivery system to California from the Colorado River failed due to an earthquake or a terrorist attack.

We know you have a simple request: What exactly is the Source?

We want to immediately disclose the Source so that analysis, investigation and development of the source can proceed as quickly as possible. We welcome all input from the Department of the Interior, its agencies & its attorneys and all other entities interested in more water.

Our request is also simple:

We wish to enter into a contract with all entities, including the Bureau of Reclamation, who would be interested in receiving more water from the Colorado River either directly or by exchange. If upon disclosure, the contracting entities are completely satisfied that the source is as represented and meets with their expectations, they agree to compensate us pursuant to a written equitable agreement. If the entities to the agreement are not 100% satisfied, they owe us nothing, but they agree not to pursue development of the source.

We have previously proposed to disclose the source to the Bureau of Reclamation and others. We are continually told that with all of the legal expertise available, no entity can formulate a way to comply with our simple request, so that we can comply with theirs.

Considering the millions of people with water needs for municipal, domestic, agricultural, recreational & power purposes and scores of endangered species,....Is it not possible for one/all entities affected to be instrumental in solving this rather simple impasse ?

The Bureau of Reclamation and all other entities who are interested/concerned/committed to more water in/from the Colorado River, need to answer the following questions:

A) Is your entity genuinely interested in more water in/from the Colorado River?

B) If your entity is interested in more water, how many acre feet per year does your entity want to own

and/or control ?

C) What beneficial uses does your entity want to make of additional water from/in the Colorado River ?

D) Does your entity have in place a procedure to fund its share of the development of the source, including the disclosure ?

E) What is an acre foot of water each year worth to your entity?

F) Does your entity have a legal staff that can formulate an agreement which will allow it to enter into an agreement for disclosure of the source ?

G) Does your agency have any legal prohibition against entering into an agreement in which it must be 100 % satisfied before distributing any consideration for an agreed upon disclosure of the source ?

H) How will your entity benefit from the storage of an additional 750,000 AF or more each year in Lake Mead ? What is the value of that additional storage to your entity ?

We respectfully request that the Bureau of Reclamation provide us with the name of any entity and their address including Email, to which you forward our comments.

Because of the enormous importance this source may have to California, we respectfully request that you provide us information so that we can directly contact by Email, Governor Arnold Schwarzenegger, Department of Interior Secretary Gail Norton, Senator Pete V. Domenici, Chairman Energy & Natural Resources Committee, and U.S. Representative George Radanovich, Chairman House Sub-Committee Water & Power.

Please have our comments read into the record at any and all upcoming meetings pursuant to a drought plan for the Colorado River.

Please feel free to provide a copy of our comments to all entities that you feel may have a need for more water from/in the Colorado River either directly or by exchange.

Also, it would be most helpful and courteous if all parties who receive these comments would acknowledge receipt by sending us an Email.

Respectfully submitted,

Ray Walker 249 Coyatee Shores Loudon, TN 37774 865 408-0041 waterrdw@yahoo.com

 Senator Pete V. Domenici, Chairman Energy & Natural Resources Committee FAX 202 224-6163
US Representative George Radanovich, Chairman Sub-Committee Water & Power FAX 202 226-6953 Kyle Weaver FAX 202 225-3402 Tricia Geringer
George M. Caan, Executive Director, Colorado River Commission of Nevada gcaan@crc.nv.gov
Patricia Mulroy, Manager, Southern Nevada Water Authority patricia.mulroy@lvvwd.com & john.entsminger@lvvwd.com Attorney. Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com

CC: <strategies@uc.usbr.gov>

From:"Diane Welles" <dianewelles@hotmail.com>To:<strategies@lc.usbr.gov>Date:6/22/2005 8:14 PMSubject:Glen Canyon

Please restore Glen Canyon by dismantling Resevoir Powell.

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1.030

From:"Corin Wood" <cwood@ranchcreek.com>To:<strategies@lc.usbr.gov>Date:Wed, Jun 22, 2005 9:08 AM

Dear Director Johnson:

The fluctuating water levels in Glen Canyon are threatening some of the incredible features that have recently appeared. It makes no sense to have these cultural, biological and scenic resources continually covered and uncovered by water levels going up and down. It is merely destructive.

All "excess" water can easily be stored in Lake Mead. It does not need to be stored in Lake Powell. Please do the right thing by protecting these priceless sites and the emerging species habitat that the lower levels of water have uncovered. Future generations deserve no less.

Thank you.

~Corin Wood

Corin A. Wood

cwood@ranchcreek.com

From:Kim Johnson <wind\_river\_man2004@yahoo.com>To:<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov>, <gail\_norton@ios.doi.gov>,<exsec@ios.doi.gv>Date:6/23/05 10:33AMSubject:Restore Glen Canyon

Dear Mr. Johnson, Mr. Gold, and Ms. Norton;

Please allow Glen Canyon to be restored to its natural and cultural splendor by allowing a free-flowing Colorado River through Glen Canyon and the Grand Canyon, with any and all surplus water being stored in Lake Meade. Lake Meade can easily hold all of this water while allowing Glen Canyon to revert back 2 to its original glory and rejuvinating the ecology of the Grand Canyon back to its original state.

It only makes sense.

Thank you very much.

Regards, Mr. Kim Johnson 1 Wood Avenue PO Box 1461 Fort Washakie, WY 82514-1461

-----Yahoo! Sports

Rekindle the Rivalries. Sign up for Fantasy Football

From:	Greg Reis <gregorreis@yahoo.com></gregorreis@yahoo.com>
To:	<exsec@ios.doi.gov>, <strategies@lc.usbr.gov></strategies@lc.usbr.gov></exsec@ios.doi.gov>
Date:	6/23/05 7:09AM
Subject:	Fill Mead First

To: Gale Norton, Robert Johnson, Rick Gold

The Colorado River is filling Powell Reservoir right now, and that water could be released instead to Lake Mead. The rising waters are inundating and damaging the spectacular features of the Glen Canyon National Recreation area unnecessarily.

I am planning a September trip to some of the formerly-inundated reaches of the Escalante River, and it is very disappointing that just as some of these riparian resources are given a chance to recover, they are flooded again.

Meanwhile Las Vegas must build a deeper pipe in Lake Mead. This type of water management benefits no one. It damages natural resources and increases costs of water users.

Please use this opportunity to drain the rest of the storage from Powell Reservoir and decommission Glen Canyon Dam. Eliminating Powell from the system will save as much water as the City of Los Angeles uses in a year. Right now you are converting a scarce resource (water) into an abundant resource in the region (electricity). Is it worth evaporating 600,000 AF per year to generate more of an already abundant resource? When you look at the costs to Glen Canyon National Recreation Area and Grand Canyon National Park, and all downstream water users, I think not.

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I implore you to return sanity to water management on the Colorado River, for the benefit of all Americans.

Thank you for your time, Greg Reis P.O. Box 41 Lee Vining, CA 93541

Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com
From:"Barry Wolf" <bwolf213@earthlink.net>To:<gale\_norton@ios.doi.gov>, <exsec@ios.doi.gov>, <strategies@lc.usbr.gov>,<strategies@uc.usbr.gov>Date:6/25/05 1:50PMSubject:Glen Canyon

Secretary Norton and Gentlemen:

Due to the prolonged drought, the water levels at Lake Powell reservoir on the Colorado River have dropped steadily and have revealed spectacular features not seen in decades. These cultural, biological and scenic resources are national treasures and are found only in Glen Canyon. They are now threatened by the fluctuating reservoir levels.

Restored precious treasures such as Cathedral Rock, petroglyphs and Ft. Moqui are going back under water only to be uncovered again later this year. These fluctuations are not only unnecessary but destructive to these priceless cultural, historic and scenic sites.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. I urge the Bureau of Reclamation to protect these national treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for these priceless, sacred and historical sites and emerging endangered species habitats. Please restore and protect Glen Canyon for future generations.

Sincerely,

Barry Wolf

From:"Avram Chetron" <avram\_chetron@hotmail.com>To:<strategies@lc.usbr.gov>Date:6/26/05 11:18PMSubject:Lake Powell

Dear Regional Director of the Bureau of Reclamation,

Please do not attempt to raise the water level of Powell Lake Reservoir unless the storage capacility of Lke Meade has been exhausted. Many of the features of invaluable character in Glen Canyon shold not be resubmerged for no reason at all.

Avram Chetron

From:"John Nutting" <jnutting@austin.rr.com><br/><strategies@lc.usbr.gov><br/>6/30/05 10:19PM<br/>Lake PowellRobert JohnsonLake PowellRegional DirectorImage: Strategies@lc.usbr.gov><br/>6/30/05 10:19PM<br/>Lake PowellBureau of ReclamationImage: Strategies@lc.usbr.gov><br/>Image: Strategies@lc.u

Dear Mr. Johnson,

I wish to espress my opinion regarding the management of Lake Powell and Lake Mead.

When I found out the level of Lake Powell had fallen low enough to expose beautiful side canyons and ancient rock art that had been hidden for over 35 years, I was delighted. Now that the lake is filling back up, I am disappointed.

It seems to me that there are many good reasons to fill up Lake Mead, which is also at a low level, and allow Lake Powell to remain at its low level. In particular, it would reduce the surface area exposed to evaporation, and would therefore conserve precious water resources. Equally importantly, it would avoid causing Lake Powell's level to fluctuate up and down over the rock art, which does more damage than either full exposure or full submersion.

I hope you will take whatever steps are necessary to protect the treasures in the Glen Canyon NRA as well as to conserve water.

John Nutting

10612 Scotland Well Drive

Austin, TX 78750

Stephen R. Cole 5 Deerwood Aliso Viejo, CA 92656

July 1, 2005

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



Re: Development of Management Strategies for Lake Powell and Lake Mead

Dear Director Johnson,

I am writing to comment on the development of management strategies for Lake Powell and Lake Mead under low reservoir conditions. Please do not allow Lake Powell reservoir to refill and flood Glen Canyon again.

I have spent a great deal of time in Glen Canyon NRA since 1991. Over the past five years I have made 30-40 visits there, and I have personally witnessed the effects of the steadily dropping water levels at Lake Powell reservoir. Formerly impounded side canyons have been drained for the first time in 40 years and there is some incredibly spectacular scenery in there. Below you will find photos from Fiftymile Creek and Twilight Canyon. Both of these photos were taken at a point that is BELOW the normal high water mark of Lake Powell (3700'). In other words, these are scenes that have not been seen in 40 years. Incredible!





1.042

Stephen R. Cole 5 Deerwood Aliso Viejo, CA 92656

At the end of March this year, I went into Cathedral in the Desert via an overland route from Hole-in-the-Rock Road and rappelled to the floor of the Cathedral. (See photos below.) It was a very emotional experience. This magnificent alcove in the Navajo sandstone was made famous by photographs by Eliot Porter and others, long before Lake Powell reservoir existed. Please don't let this place be re-flooded...to me that would be like purposely flooding a church.





I urge you to manage the reservoirs at Lake Mead and Lake Powell such that the level of Lake Powell reservoir is at a minimum. Please fill Lake Mead reservoir to its maximum safe level before allowing Powell reservoir to rise. This will help protect the real Glen Canyon and its myriad side-canyon wonderlands.

Thank you for considering my comments.

Sincerely,

.R. Cole 57 0

Stephen R. Cole 5 Deerwood Aliso Viejo, CA 92656

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1.042

<puttin47@comcast.net></puttin47@comcast.net>
<strategies@uc.usbr.gov></strategies@uc.usbr.gov>
7/8/05 4:50PM

TO: DEPARTMENT OF THE INTERIOR Bereau of Reclamation

I would like to thank the Department for the opportunity to use this forum in submitting concearns and ideas regarding the Colorado River Reservoir Operations. For many decades the water management strategies have served both public and private needs in helping the west develop and prosper. It is because of the great vision and the ability to forecast demands that you have this success. I continue to admire the infrastructure to supply so many, with what seems so little at times. Our predesessors - architects and builders of our system of dams and hydroelectric facilities had this same vision, mostly of necessity and percieved need at the time. It seems to be without mention that our lives would be very different if the system had not been built.

It is my opinion that we augment the existing flows into the Upper Colorado River by building new water strorage facilities. The continued growth in the region and present demands on the system indicate this. Future generations would prosper instead of subside. New additions to the system could not only supply needed water and electricity that we immediately can't fully deliver, but would suffice long into the future. These new storage facilities could then supply continued growth in the west, as well as export electricity and possibly water to other areas in need.

Again, thank you for your consideration of both public and private viewpoints on this critical issue. I have great faith in the Department of the Interior and the United States to successfully implement solutions with foresight and dilegence.

Sincerely,

Andrew J. Mueller 1703 Center Ave. Martinez, Calif. 94553

CC: <Strategies@lc.usbr.gov>

7/10/05 Dan Kozarsky 366 Sierra Vista Ave., #12 Mountain View, CA 94043

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Robert Johnson Regional Director, Bureau of Reclamation, Lower Colorado Region Boulder City, NV

Dear Director Johnson,

I am writing to urge you to allow water levels in Lake Powell to continue to lower, and to fill Lake Mead first.

Glen Canyon and the rivers that feed into it are a spectacular national treasure, deserving of national park status. My wife and I spent a week hiking and backpacking this May in the Escalante River area and just love this spectacular but fragile redrock and canyon country. It is without question deserving of national park status. It was encouraging to see that portions of some of the canyons have been reclaimed from their underwater burial. We would love to have an opportunity in the near future to hike to fantastic, sacred places such as the Cathedral in the Desert that are gradually being unearthed (but the water was too high this year). These places are threatened by the fluctuating water levels.

During high runoff years such as this year it makes a lot more sense to store excess water at Lake Mead instead of Lake Powell. Please respect that the Glen Canyon NRA is one of the world's most spectacular and sacred areas, allow it to restore itself! We owe this to ourselves and to our children.

Thank you for your consideration of my comments.

Som Kayer

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Page 1

From:"Sean Hill" <seanmichelle@gobrainstorm.net>To:<strategies@uc.usbr.gov>Date:Thu, Jul 14, 2005 8:32 PMSubject:Lake Powell and Lake Mead

Outflow should not exceed inflow once the critical level is obtained. Stop wasting water by excessive "flushing of the river". If people upstream are in a drought why maintain flows that suggest that there is no drought? If reservoir levels are below 50% then discharges should be restricted. What were the procedures when both reservoirs were first filled? California is way too greedy and will take all of our water if we allow it to happen.

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Sean Hill 505-320-7198 Susan Maida, Ph.D. 131 Pine Ridge Loop Durango, Colorado 81301 970-259-5257

June 21, 2005

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

Dear Mr. Johnson:

The steadily dropping water levels at Lake Powell reservoir on the Colorado River are revealing spectacular features that have not been seen in decades. Unfortunately, fluctuating reservoir levels are now threatening these cultural, biological, and scenic resources that are unique to Glen Canyon.

More specifically, precious features such as Cathedral in the Desert, Register Rock, Fort Moqui and numerous petroglyphs are being re-submerged as spring runoff raises the reservoir level, only to uncovered once again later this year as the lake level declines. This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

An alternative that makes sense is to store all "surplus" Colorado River water in Lake Mead instead of in Glen Canyon. I urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

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Sincerely,

Man Muddin Susan Maida

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Page	1

From:	"Gracia Barr" <gracia@localnet.com></gracia@localnet.com>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/25/05 10:45AM
Subject:	Halt the operation of Glen Canyon Dam

[:call2drain:] ACTION ALERT: Comments needed to halt the ore: The Bureau of Reclamation is accepting public comments on the reoperation of the nation's two largest reservoirs, Lake Powell and Lake Mead.

 1. There is no longer a need for a single-use dam at Glen Canyon
 1

 2. It's time for more efficient storage, with Lake Powell and Lake Mead losing to evaporation upwards of
 2

 17 percent of the water that flows into them
 2

 3. Revive Grand Canyon: 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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 4. Manage the sediment
 4

 5. Revise the Colorado River Compact: The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of aboring Colorado
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5. Revise the Colorado River Compact: The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states.

gracia barr 900 n switzer canyon, 126 flagstaff az 86001 From:<kijohnson1@aol.com>To:<strategies@lc.usbr.gov>Date:7/25/05 3:32PMSubject:Decommission Glen Canyon Dam

To: Regional Director, BLM Fr: Kim Johnson Re: Decommissioning Glen Canyon Dam

Dear Sir,

As a resident of Arizona for 43 years, and now living in Wyoming, I still hold a sincere desire to see Glen Canyon Dam decommissioned and a free-flowing Colorado River restored throughout Glen Canyon.

The "usefullness" of Powell Reservoir is obviously limited, and at this point, meaningless. The damage created by impounding Colorado River water behind Glen Canyon Dam greatly outweighs any "benefits" derived from the reservoir.

By allowing a free-flowing Colorado River, Glen Canyon and the Grand Canyon ecosystems will be allowed to rejuvinate back to their original splendor.

Lake Meade can easily hold the water required for power generation and water reserves for the lower Colorado River states.

Please seriously consider decommissioning Glen Canyon Dam in the near future. It was a bad idea that can be erased for all time.

Thank you.

Regards,

Mr. Kim Johnson PO Box 978 Thayne, WY 83127

<b>D</b> 4	
Page 1	

From:	Shaylih Muehlmann <shaylih@gmail.com></shaylih@gmail.com>
То:	<strategies@uc.usbr.gov></strategies@uc.usbr.gov>
Date:	Mon, Jul 25, 2005 9:09 PM
Subject:	Public Comment on Lake Powell and Lake Mead

Will there only be the two public meetings soliciting comments? I'm an Arizona resident and would very much like to attend a public meeting on the development of these reservoirs. Will there be a meeting in Arizona? Please let me know. Sincerely, Shaylih Muehlmann

From:"Robert Rutkowski" <rutkowski@terraworld.net>To:<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov>Date:7/25/05 11:55AMSubject:Operation of Glen Canyon Dam

Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, Nevada 89006-1470 Fax (702) 293-8156

strategies@lc.usbr.gov

Regional Director Bureau of Reclamation Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 Fax (801) 524-3858

strategies@uc.usbr.gov

Dear Regional Directors:

Please accept these comments on the reoperation of the nation's two largest reservoirs, Lake Powell and Lake Mead. I ask the BLM to examine the viability of permanently ceasing operations at Lake Powell and employing just one reservoir to capture and manage the bulk of Colorado River flows.

I write in calling for The One-Dam Solution: Preliminary report by Living Rivers to the Bureau of Reclamation on proposed reoperation strategies for Glen Canyon and Hoover Dam under low water conditions as outlined in Living Rivers' new report prepared for this reoperation public scoping process. http://www.livingrivers.org/pdfs/TheOne-DamSolution.pdf.

1. No longer is there a need for a single-use dam at Glen Canyon

It was not until the fall of 2004, more than 40 years after Glen Canyon Dam began impounding Lake Powell that Lake Powell water storage actually augmented water storage downstream. But with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

2. It's time for more efficient storage

With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge

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facilities.

3. Revive Grand Canyon

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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.

# 4. Manage the sediment

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

5. Revise the Colorado River Compact

The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states. The Compact allocated 11 percent more water than the river has to give, and affords the Lower Basin 20 percent more water than the upper basin. With river flows expected to decline 18 percent by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

While the Bureau of Reclamation will state that its present focus is developing strategies solely for low reservoir conditions, stress that given the growing challenges and looming shortages facing Colorado River water users as a result of these dams, that a far more comprehensive assessment addressing the issues above is fully warranted, and should be done through an Environmental Impact Statement.

Thank you for the opportunity to bring these remarks to your attention.

Mindful of the enormous responsibilities which stand before you, I am,

Yours sincerely, Robert E. Rutkowski

CC: Nancy Pelosi President George W. Bush

2527 Faxon Court Topeka, Kansas 66605-2086 P/F: 1 785 379-9671 r\_e\_rutkowski@myrealbox.com 3

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CC: "Nancy Pelosi" <sf.nancy@mail.house.gov>, "George W. Bush" <comments@whitehouse.gov>

From:Tom K <wb2tk@optonline.net>To:<Strategies@lc.usbr.gov>Date:7/25/05 7:00AMSubject:WATER LEVEL ON LAKE MEAD

Although weather patterns appear to be the cause of the lack of water in lake mead, I suspect that the tremendous building expansion in the Las Vegas area must also impact on the water.

If a reduction in building projects were put in place and home owners were required to conserve water 2 I believe this too would have a positive effect on the water problem

From: To: Date: Subject:	<pwellner@getupstandup.net> <strategies@lc.usbr.gov> 7/25/05 12:19PM Lake Powell</strategies@lc.usbr.gov></pwellner@getupstandup.net>	
Please examine to viability of perma employing just or Colorado River flo	the nently ceasing operations at Lake Powell and ne reservoir to capture and manage the bulk of ows.	
1. No longer a ne	eed for a single-use dam at Glen Canyon	1
It was not until the fall of 2004, more than 40 years after Glen Canyon Dam began impounding Lake Powell that Lake Powell water storage actually augmented water storage downstream. But with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.		I
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The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states. The Compact allocated 11 percent more water than the river has to give, and affords the Lower Basin 20 percent more water than the upper basin. With river flows expected to decline 18 percent by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

Pamela Wellner 1009 DeHaro St. San Francisco, CA 94107

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From: "Crista Worthy" <cristaworthy@hotmail.com>
To: <strategies@lc.usbr.gov>, <strategies@usbr.gov>
Date: 7/25/2005 9:21 PM
Subject: Glen Canyon Dam

#### LC strategies - Glen Canyon Dam

I understand that the Bureau of Reclamation is accepting public comments on the future operation of the nation's two largest reservoirs, Lake Powell and Lake Mead.

I spend a lot of time in the Glen Canyon area, and have an active interest in what happens there. For the most part, my activities consist of hiking in the canyons. I also operate a houseboat on Lake Powell.

The Bureau should start thinking long-term, not just how to deal with the current drought emergency. Until 2004, the Glen Canyon Dam was not even needed. In the future, we will have even drier weather, and a larger population using more water. It is likely that the dam will not even fill. Lake Mead can easily hold the water, but underground storage via aquifers is preferable to Lake Powell, with its ridiculous evaporation rate.

The dam is a waste.

I understand the dam generates electricity, which is worth millions of dolars. But how many millions of dollars does Los Angeles or the entire state of Nevada pay for all its water each year? Because that's how much water the Glen Canyon Dam wastes.

In the future, water will cost more.

We can generate electricity in other ways and in other places, but we can't create more water.

The amount of sediment that arrives in Glen Canyon each day is hard to comprehend.

This sediment is being prevented from continuing its journey into the Grand Canyon, and the lack of sediment combined with the unnaturally cold water released from the depths of Lake Powell is destroying the ecosystem of a National Park. This is illegal.

Should sediment removal become necessary, it is easier to remove 2 it from Lake Mead.

The creation of Lake Powell wiped out the vast majority of all life along a 200-mile stretch of the Colorado River through the heart of the Colorado Plateau. Birds, plants, insects, mammals, fish and amphibians--gone.

But just the last few years of lowered water levels due to the drought has shown that this life will return, as it is now returning in the side canyons along Glen Canyon, the San Juan, and the Escalante. I have seen it myself.

The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, is totally outdated and based a few years where the Colorado River carried an unusually large volume of water. The Compact allocated 11% more water than the river has to give, and affords the Lower

Basin 20% more water than the upper basin. With river flows expected to decline 18% by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

Considering the looming shortages facing Colorado River water users and the massive environmental damage created by Glen Canyon Dam, a more comprehensive assessment addressing the issues above is fully warranted, and should be done through an **Environmental Impact Statement**.

If Lake Powell disappears, I will lose my houseboat, and several thousand people will lose their jobs. However, many of these jobs can be converted into new jobs managing what ought to be the GLEN 4 CANYON NATIONAL PARK, a thriving ecological community, at the center of which is the free-flowing Colorado River. I would gladly convert to pure hiking or even stay out of Glen Canyon forever, knowing the ecosystem is restoring itself.

There are lots of places to hike, and there are lots of other reservoirs. BUT THERE WAS ONLY ONE GLEN CANYON!

Sincerely,

Crista Worthy

16664 Calle Brittany

Pacific Palisades, CA 90272

(310)454-4329

From:<Meapeak@aol.com>To:<strategies@lc.usbr.gov>Date:7/26/05 6:32AMSubject:Glen Canyon Dam

Dear BOR:

As an Arizona resident, former river guide in the Grand Canyon and citizen concerned with water and environmental issues, I would like to suggest that there is no longer a need for a single-use dam at Glen Canyon. I'd like to see more efficient storage at Lake Mead and further restoration of Grand Canyon, one of the world's most famous and geologically and ecologically unique river canyons. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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.

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative.

Thank you,

Mary Ellen Arndorfer Flagstaff, AZ 2

From:	Atwood Carl-E11745 <catwood@motorola.com></catwood@motorola.com>
То:	"'strategies@lc.usbr.gov'" <strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 10:43AM
Subject:	FW: Las Vegas Review Journal on Living Rivers' Glen Canyon Dam proposal

For the record, I stand opposed to the dismantling of the Glen Canyon Dam. I believe it's presence during the recent/current drought has proven it's worth as the conditions would have probably been worse than the dust bowl earlier last century. The reservoir, know as Lake Powell, continues to work as planned as a buffer for these conditions, contributing to water delivery as needed to folks dependent on it's flow.

But beyond being a resource for water storage, delivery and electrical output, Lake Powell serves as a great resource and value for recreation and contributes to the overall economy.

I recommend that the dam remains and all efforts made to keep water releases to the minimum contracted amounts during the years until the drought is proven to be out of cycle.

Sincerely,

Carl Atwood 16432 Santa Cristobal San Diego, CA 923127 619/890-7905 catwood@motorola.com <mailto:catwood@motorola.com>

From: posting@livingrivers.org [mailto:posting@livingrivers.org] Sent: Tuesday, July 26, 2005 8:17 AM To: listserv@livingrivers.org Subject: Las Vegas Review Journal on Living Rivers' Glen Canyon Dam proposal

http://www.reviewjournal.com/lvrj\_home/2005/Jul-26-Tue-2005/news/26940665.html Future of Colorado River subject of meeting

Utah environmental group seeks dismantling of Glen Canyon Dam, proposes pumping reserve water into aquifers

By HENRY BREAN LAS VEGAS REVIEW-JOURNAL July 26, 2006

The Bureau of Reclamation will hold a public meeting in Henderson today on the future of the Colorado River, and a Utah environmental group plans to be there to call for an end to North America's second largest man-made reservoir.

<Stuff cut...blah...blah, blah....>

Comments can be sent by fax to 702-293-8156, by e-mail to strategies@lc.usbr.gov, or by surface mail to Regional Director, Bureau of Reclamation, Lower Colorado Region, Attention: BCOO-1000, P.O. Box 61470, Boulder City, NV 89006-1470.

PO BOX 466 Moab, UT 84532 Tel: 435.259.1063 Fax: 435.259.7612

info@livingrivers.org www.livingrivers.org

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From:scottbennett <scottbennett@mynuskin.com>To:<strategies@lc.usbr.gov>Date:7/26/05 8:27AMSubject:Save Lake Powell

To Whom it make concern:

I think that doing anything to the detriment of Lake Powell would be a travesty. Lake Powell is an incredible place of Nature that is only enjoyed by people because of the Lake. If you close Lake Powell you will be hurting communities, human lives, and one of the worlds greatest recreational areas.

Sincerely, Scott Bennett 801.403.7027 scottbennett@mypharmanex.com SKYPE username: scottbennettotg

July 26, 2005

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

Dear Director:

This is in response to your request for public comments concerning the operations of Lake Mead and Lake Powell reservoirs.

Lake Powell is an anachronism and Glen Canyon Dam should be de-commissioned. Adequate storage capability exists in Lake Mead. The continued existence of Lake Powell is no longer needed and, indeed, increases threats to the health of the river, the native fish, and the general environment in Glen Canyon.

Demands on river water already meet or exceed what can be provided. This situation will only get worse. Evaporation from Lake Powell is significant, is wasteful in the extreme, and cannot be justified.

Freeing the river to again flow freely through Glen Canyon Dam will promote the return and survival of native, endangered fish in the Grand Canyon.

Glen Canyon is a truly special place, even on a global scale. It is rich in environmental, geological, and architectural treasures. Allowing it to be periodically flooded is destructive to all of these and, worse, does little to nothing to advance the reason for the dam in the first place.

The Colorado River Compact in sore need of revision to address the fact that the river is overcommitted and that this is only likely to get worse. Indeed, I would recommend a full Environmental Impact Statement be prepared to address all the ramifications of allowing Glen Canyon Dam to continue to operate.

Thank you for your attention.

Sincerely.

Jim Esla

Jim Essler 1905 W. 32<sup>nd</sup> Street Austin, Tx. 78703

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### 1.058

From:"Mr. Chad Evans" <cevans@siprep.org>To:<strategies@lc.usbr.gov>Date:7/26/05 10:52AMSubject:One Dam Solution

**Regional Director** 

Bureau of Reclamation, Lower Colorado Region

Attention: BCOO-1000

P.O. Box 61470

Boulder City, Nevada 89006-1470

To Whom It May Concern:

I am writing to you today to urge you to consider the viability of permanently ceasing operations at Lake Powell and employing just one reservoir to capture and manage the bulk of Colorado River flows. A number of factors contribute to this suggestion.

1. No longer a need for a single-use dam at Glen Canyon

It was not until the fall of 2004, more than 40 years after Glen Canyon Dam began impounding Lake Powell that Lake Powell water storage actually augmented water storage downstream. But with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

# 2. It's time for more efficient storage

With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

# 3. Revive Grand Canyon

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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

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4. Manage the sediment

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

5. Revise the Colorado River Compact

The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states. The Compact allocated 11 percent more water than the river has to give, and affords the Lower Basin 20 percent more water than the upper basin. With river flows expected to decline 18 percent by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

Thank you for your attention to this matter. I look forward to action on your behalf for the benefit of the Colorado River. Sincerely, Chad Evans

Chad Evans Religious Studies Department St. Ignatius College Preparatory San Francisco, CA

CC:

"Mr. Paul Totah" <ptotah@siprep.org>, <info@livingrivers.org>

From:	"David Kapell" <davek@dreamscape.com></davek@dreamscape.com>
To:	<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov></strategies@uc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 9:19AM
Subject:	Glen Canyon Dam

Gentlemen:

I have heard that the Bureau of Reclamation is accepting public comments on the reoperation of Lake Powell and Lake Mead.

I have followed the recent news of the drought which has pushed water levels in Lake Mead to record lows. It is unlikely that the lake will ever rise to its prior height. With the sediment build-up behind the dam, and the low water levels, new intake pipes will be required to use the water impounded there.

Further, I do not believe that there was ever a logical need for this dam. Water lost to evaporation has reduced the amount available to satisfy the Compact, and prevented states along the Colorado River from receiving the water they need.

I believe that the best solution would be to breach the dam and let the river run its natural course through Glen Canyon.

David

From:	"Peter LaMorte" <lamorte@sopris.net></lamorte@sopris.net>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 10:58AM
Subject:	Lake Powell

Pie ChartsTo Whom It May Concern,

We need Lake Powell more than ever. Please rework the Colorado River Compact, as to put more emphasize on conversation and lower the release of waters so we continue to manage the resources in a logical way. Thank You Peter LaMorte LaMorte and Company, Limited 0477 Lions Ridge Rd Carbondale, Colorado 81623 office 970-963-1776 Fax 970-963-1072 (e) lamorte@sopris.net

--No virus found in this outgoing message. Checked by AVG Anti-Virus. Version: 7.0.338 / Virus Database: 267.9.5/58 - Release Date: 7/25/2005

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From:<runningbears@comcast.net>To:<Strategies@uc.usbr.gov>Date:Tue, Jul 26, 2005 4:23 PMSubject:Colo River Draught Plan

Gentlemen:

I have read on more than one occasion that the original compact dividing up the Colorado River water was based on an assumption that there was in excess of 17 million acre feet of water available for distribution and use. It has been proven over time that this 17 million acre feet was overstated.

Why are we still using the 17 million acre foot amount? The first thing that should be done in the draught plan is to use a base of 15 million acre feet (or 14-1/2 million) to be divided. I suggest that the base should be reduced and each state then receive the current percentage; that is, the same percentage as contained in the 1922 compact, but utilizing the lower number.

Sincerely,

Jay R. Lower runningbears@comcast.net 9636 Silver Hill Circle Lone Tree, CO 80124-5418

From:	<desertrox913@aol.com></desertrox913@aol.com>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 5:15PM
Subject:	Colorado Water Shortage

My first suggestion is to impose limits on growth. It's out of control and we don't have the resources to support the growth.

Second suggestion - a pipeline to the California coast and a desalinization plant contract. Expensive yes but a solution.

Sandra Needham Henderson, NV 1

From:	"Steve" <wow2@rof.net></wow2@rof.net>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 2:04PM
Subject:	The dam also provides another benefit: electricity.

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

"Glen Canyon Dam is an insurance policy for the Upper Basin," said Larry Anderson, director of the State of Utah's Division of Water Resources. "It allows us to meet our downstream commitment without having to cut off any of our water users."

"The dam also provides another benefit: electricity. With a capacity for nearly 1300 megawatts of electricity, enough power for about a quarter-million homes, the dam provides power to rural electrical co-ops, municipalities, irrigation and electrical districts, Indian reservations and governmental facilities throughout the southwest. This power, produced by the U.S. Bureau of Reclamation (Bureau) and marketed by the Western Area Power Administration (WAPA), an agency of the Department of Energy, is the primary source of revenue for paying back the dam's capital costs, and operation and maintenance costs."

"Until 1991, water releases out of Glen Canyon Dam for downstream users were orchestrated to maximize power production..."

"People need to understand that Glen Canyon Dam has gone from a 1,300 megawatt resource, to a 900 megawatt resource and even down to 330 megawatts this past summer," said Leslie James, executive director of the Colorado River Energy Distributors Association, an organization representing over 130 power providers in the Colorado River Basin and member of the Adaptive Management Work Group. "You take that amount of capacity out of the western wholesale market and its going to have a serious impact on prices."

<http://www.water-ed.org/rrwinter0001.asp> Life after NEPA, ESA, and AMP

Thank you, Steve Parmelee, Snowmass, Colorado

Storing water at the higher elevation means less evaporation. Thus keeping Lake Powell nearly full will be the better storage location.

We support 7.5 MAF released annually from Lake Powell as the Maximum...per your request :

\_\_\_\_\_

Reclamation Seeks Public Comment on Development of Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions

The Bureau of Reclamation today filed a Federal Register Notice requesting

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public comment on the development of management strategies for Lakes Powell and Mead, on the Colorado River, under low reservoir conditions. Among the management strategies anticipated are shortage guidelines for the Lower Colorado River Basin.

The strategies will likely identify those circumstances under which the Department of the Interior would reduce annual Colorado River water deliveries and the manner in which annual operations of the Colorado River reservoirs would be modified under low reservoir conditions.

The Department expects the strategies to provide guidance to the Secretary's Annual Operating Plan decisions, and provide more predictability to water users throughout the Basin, particularly the Lower Basin states of Arizona, California, and Nevada.

The Annual Operating Plan - developed in consultation with the Basin States, water and power users, Tribes, environmental and recreational groups and other interested parties - guides operation of the Colorado River. Among other elements, it specifies whether the amount of Colorado River water available to be released from Lake Mead to Lower Basin users in a given year will be "normal" (7.5 million acre-feet), "surplus" (more than 7.5 million acre-feet).

http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=6061

CC: <joshua.penry.house@state.co.us>

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From:	"Nancy Rader" <nrader@igc.org></nrader@igc.org>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/26/05 10:39AM
Subject:	Colorado River operations during low reservoir conditions

Dear Regional Director, Bureau of Reclamation for the Lower Colorado Region:

Regarding the above-mentioned subject, I would like to urge the Bureau to commission an independent evaluation of the solution proposed by Living Rivers, which I read about in the Las Vegas Review Journal on July 26. Living Rivers' proposal makes a lot of sense: (1) the Glen Canyon Dam will become full of silt at some point in any case; (2) the alternative of pumping the water into groundwater aquifers has the added benefit of reducing losses from evaporation; and (3) decommissioning Glen Canyon Dam will restore natural habitat along the Colorado and protect wildlife, recreation and cultural resources within the Grand Canyon.

I am a frequent visitor to the Glen Canyon area and recently traveled to Lake Powell to see land revealed by the drought. As numerous stories in the press nationwide attest, America is just discovering this marvelous area. Decommissioning the dam will draw many recreationalists and reveal God's creation once again. Though the value is not quantifiable, it should be considered in addition to any cost-benefit evaluations.

Nancy Rader 1198 Keith Avenue Berkeley, CA 94708 510-845-5359 From:"Tim and Anna" <timnanna@cox.net>To:<strategies@lc.usbr.gov>Date:Tue, Jul 26, 2005 6:32 PMSubject:water shortage

1

Maybe we to start thinking about desalinization!
From:"VegasBilly" <vegasbilly@cox.net>To:<strategies@lc.usbr.gov>Date:7/26/05 9:28PMSubject:Eliminatate ALL grass

People are using precious drinking water to water grass. Use Artificial grass like the new Wynn Casino in Las Vegas.. It looks beautiful

From:<Rduba513@aol.com>To:<gale\_norton@ios.doi.gov>, <strategies@lc.usbr.gov>, <strategies@uc.usbr.gov>Date:7/27/05 4:03PMSubject:Water Fluctuations in Lake Powell

Dear Secretary Norton and Directors Johnson & Gold:

I am writing to express my thoughts about water storage in Lake Powell. Since I am a member of the Glen Canyon Institute, ultimately, I would like to see Lake Powell drained completely and the magnificent Glen Canyon fully restored. Practically, however, I recognize this may not happen in my lifetime.

It is stirring, however, to read about how all of those beautiful treasure of Glen Canyon are being restored to human view because of dropping water levels. While I know that due to my health and advanced age, I will never see the Cathedral in the Desert, Register Rock, Fort Moqui and the thousands of petroglyphs in the canyon, just to know that they have once again been viewed by other people is enough to give me great satisfaction. And better yet is knowing there is a chance that those that follow will have access to these magnificent sites!

Please, don't keep the waters fluctuating in Lake Powell. Use Lake Mead to store all of the "surplus" waters of the Colorado and let nature take its course with the water levels of Lake Powell. And ultimately, I hope that all of you will consider restoring Glen Canyon to all its splendor!

Yours truly, Roger L. Duba 2802 Las Gallinas Ave. San Rafael, CA 94903 (415) 479-6758 1

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From:	Paul Fretheim <paul@inyopro.com></paul@inyopro.com>
To:	<strategies@uc.usbr.gov>, <strategies@lc.usbr.gov>, <posting@livingrivers.org></posting@livingrivers.org></strategies@lc.usbr.gov></strategies@uc.usbr.gov>
Date:	7/27/05 4:17PM
Subject:	Comment on Operation of Glen Canyon and Hoover Dams

Dear Director:

I have read the arguments below regarding the operation of Glen Canyon and Hoover Dams and the water storage policies related to their operation. I agree with the argument that keeping Lake Mead as full as possible and no longer filling Lake Powell is the best policy to follow.

I make my living selling my photography to tourists who visit the National Parks, and I have a product that includes the Glen Canyon National Recreation Area. I believe that times have changed so much since the 1950s that the sort of solitude and colorful scenery found on the Kaiparowitz plateau and along the Colorado river in the Glen Canyon area and its tributaries that today tourism could be equally attracted by Glen Canyon National Park, which could provide recreation of a different type that is not so oil dependent as boating on Lake Powell is. The tourism business of the Page area will just evolve, not disappear if the lake is allowed to drain completely.

You probably know that a small houseboat has a 600 gallon fuel tank and that it is possible to empty such a tank in a trip to Rainbow Bridge and back from Wahweap. With fuel at the Marina nearing \$5 a gallon, that is \$3000 to fill the tank for a couple of days of cruising. That can't go on forever either.

Please decommission Glen Canyon dam.

Thank you.

Paul Fretheim Owner, Inyo Pro - Publishers of Interpretive Products on the National Parks

Living Rivers & Colorado Riverkeeper A C T I O N A L E R T July 25, 2005

Comments needed to Change the operation of Glen Canyon Dam Submit by: Wednesday, August 31, 2005

The Bureau of Reclamation is accepting public comments on the reoperation of the nation's two largest reservoirs, Lake Powell and Lake Mead. Your voice is needed to demand that they examine the viability of permanently ceasing operations at Lake Powell and employing just one reservoir to capture and manage the bulk of Colorado River flows. Join in calling for The One-Dam Solution as outlined in Living Rivers' new report prepared for this reoperation public scoping process.

Let the Bureau of Reclamation know that: 1. No longer a need for a single-use dam at Glen Canyon

It was not until the fall of 2004, more than 40 years after Glen Canyon

Dam began impounding Lake Powell that Lake Powell water storage actually augmented water storage downstream. But with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

# 2. It's time for more efficient storage

With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

## 3. Revive Grand Canyon

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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.

## 4. Manage the sediment

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

## 5. Revise the Colorado River Compact

The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states. The Compact allocated 11 percent more water than the river has to give, and affords the Lower Basin 20 percent more water than the upper basin. With river flows expected to decline 18 percent by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

While the Bureau of Reclamation will state that its present focus is developing strategies solely for low reservoir conditions, stress that given the growing challenges and looming shortages facing Colorado River

water users as a result of these dams, that a far more comprehensive assessment addressing the issues above is fully warranted, and should be done through an Environmental Impact Statement.

All comments must be received by close of business (4:00 p.m. Mountain Daylight or Pacific Daylight Time) on Wednesday, August 31, 2005.

Comments can be mailed, faxed, or e-mailed to:

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

Fax (702) 293-8156 strategies@lc.usbr.gov

Regional Director Bureau of Reclamation Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 Fax (801) 524-3858

strategies@uc.usbr.gov

For Additional Information:

The One Dam Solution: Preliminary report by Living Rivers to the Bureau of Reclamation on proposed reoperation strategies for Glen Canyon and Hoover Dam under low water conditions. http://www.livingrivers.org/pdfs/TheOne-DamSolution.pdf

Reclamation Seeks Public Comment on Development of Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=6061

PO BOX 466 Moab, UT 84532 Tel: 435.259.1063 Fax: 435.259.7612

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From:David Hoch <dfhoch@yahoo.com>To:<strategies@lc.usbr.gov>Date:7/27/05 8:21AMSubject:Lake Mead

Dear Folks,

I have been a resident of Las Vegas since 1979 and have boated on Lake Mead nearly the entire time. It is a wonderful resource for recreation and millions enjoy the vistas and innumerable coves and beaches.

I was here when Lake Mead overflowed the spillways at Hoover Dam in 1983 and have watched the levels decline ever since, to the present level of 1139 feet. I've seen the Las Vegas Bay marina go dry and move to the present location south of Heminway harbor. I am gratified to see the levels increase this year and that the total storage has risen to 60%, up from 50% in January. I realize we are still in a drought and caution is needed.

It's no secret that Las Vegas is growing rapidly and its water consumption is growing daily. I also know that we have a small fraction of the overall allotment from the Colorado river.

I think we need some clear and enforceable regulations on use of water from the Colorado so local entities can make plans for their futures as respects water use. It appears to me that there is a free-for-all when it comes to water from the Colorado, with no well-defined agreeements for water conservation. At a time when water is so scarce, the southwest needs to act quickly to put effective conservation measures in place until the drought is clearly over and our system is full of water. There is way too much grass being grown, for example. I think agressive conservation measures are needed now.

I would leave the decision respecting conservation measures to the political process, hoping that reasonable limits could be agreed upon by all states and tribes. Once we all know how much we can use, plans can be made to adjust our environment to live within the boundaries of our allotment. If this resource goes dry, the consequences would be horrendous, even for the entire United States. No one knows when or if, the drought will abate. The answer to when the drought will end may depend upon whether or not global warming is a root cause.

David Hoch

1

From:Darik N <darik702@yahoo.com>To:<strategies@lc.usbr.gov>Date:7/27/05 8:20AMSubject:save Lake Powell!!!

It would be an utter tragedy to dismantle Glen Canyon Dam. Lake Powell is one the most beautiful places in the United States and without the lake, no one could enjoy such beauty. It is unfortunate that certain ratical special interest groups waste so much time and effort trying to destroy things that mean so much to many people.... Most of these people wanting to destroy Lake Powell probably have not ever even been on the lake. Let's not make a disasterous mistake in losing such a national treasure.

-- D. Nielson

-----

Start your day with Yahoo! - make it your home page

 From:
 "Steve" <wow2@rof.net>

 To:
 <strategies@uc.usbr.gov>

 Date:
 Wed, Jul 27, 2005 10:04 AM

 Subject:
 Please add this and me to your scoping process on Development of Management

 Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions

Regional Director Bureau of Reclamation Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 Fax (801) 524-3858

Tamarisk eradication efforts

Dave Augustine of the U.S. Forest Service presented the biology and history of the water-robbing phreatophyte, noting that it was first imported from central Asia in the 1800s for use as an ornamental plant, to create windbreaks, and to provide stability for erosion-prone stream banks. Augustine, a biologist for the Cimarron and Comanche National Grasslands, noted that a single Tamarisk plant can consume up to 200 gallons more water per day than the native vegetation it replaces and can produce up to 250 million seeds a year. They have now spread to cover some 1.5 million acres in the western USA, are moving into Canada, and are blamed for using some 170,000 acre feet more water per year than native plants would have used just in Colorado alone.

They are blamed for lowering water tables, crowding out native vegetation and wildlife habitat, increasing soil salinity and destroying riparian grazing areas. A combination of mechanical cutting, prescribed burns, and herbicide applications are used to control them along the Purgatoire and Cimarron Rivers, he said.

Ken Lair of the U.S. Bureau of Reclamation noted...loss of water, water quality, and habitat... They exude "brine" - a salty solution of up to 41,000 parts per million into nearby soil.

Katy Fitzgerald of the U.S. Fish and Wildlife Service, outlined other negative impacts of Tamarisks. Not only do they destroy wildlife habitat, but they are also responsible for altering the structure of rivers and increasing flooding risks. They slow the flow in a river and diminish its ability to do stream restructuring on its own. They produce a heavy fuel load in a river bed and Tamarisk fires burn hotter and create more frequent fires, further damaging other native species.

There is a loss of plant diversity and animal food sources, a loss of visibility which increases predator risk to species like deer, a loss of native vegetative stratification, a decrease in available nesting habitat for species like wild turkeys, and a retention of heat within Tamarisk's vegetation which decreases the ability of many birds to reproduce. They are bad for fish, bad for birds, and bad for the rivers themselves, she said.

...The National Park Service (NPS) uses a combination of chainsaw removal and chemical herbicides an achieves about a 95 percent kill rate. But it is expensive, said Carl Zimmeramn of the NPS.

"You can't afford to wait," Zimmerman said. "The longer you wait, the worse it gets. The cost of chemicals and labor (to remove them) goes up." Zimmerman said the NPS uses no special revegetation techniques. The native vegetation naturally returns on its own.

Cost for removal can vary from about \$170 per acre in a project along the Canadian River in New Mexico to \$500 per acre plus labor costs a the Bent's Old Fort project to a range between \$150 and \$300 and acre for mechanical plus follow-up chemical removal.

<a href="http://www.lamardaily.com/Stories/0,1413,121~7979~2938829,00.html">http://www.lamardaily.com/Stories/0,1413,121~7979~2938829,00.html</a> You can't afford to wait...it only gets worse

This one way to help the lower and upper Basin States get more water from the NON-Native "water-robbing phreatophyte" Tamarisks

Thank you, Steve Parmelee, Snowmass, Colorado

Reclamation Seeks Public Comment on Development of Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=6061> http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=6061

CC: <joshua.penry.house@state.co.us>, <senator\_allard@senate.gov>

1288 Campus Drive Berkeley, CA 94708 July 27, 2005

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

Dear Sir,

I first visited the lower Escalante River in the spring of 1965 as Lake Powell was filling. The fabulous places on the mainstem of the Colorado were gone by then, but we were able to see the Cathedral in the Desert and many other amazing places before they were needlessly drowned. I returned this past spring to pay a visit to the Cathedral once again. It is much diminished by the sediment in its bottom, but it's still there—just as all the original features are still there—just awaiting liberation. I urge you to act swiftly to decommission the dam, drain the reservoir, and let Glen Canyon live once again.

I'm no technical expert on these matters, but I've seen it argued persuasively that the reservoir is not needed either for water storage (the wastage from evaporation is said to be enormous) or for electricity generation. Lake Mead has plenty of storage capacity. The power can be replaced from other sources or conservation. Glen Canyon can only be replaced by Glen Canyon.

Thank you for your attention and please keep me informed of your progress.

Sincerely,

Tom Turner

Tom Turner

1.073

Subject: [Fwd: 0405 Desalt.pdf] Date: Thu, 28 Jul 2005 11:17:47 -0700 From: Mark Bird <mark\_bird@ccsn.edu> To: stategies@lc.usbr.gov

To whom it concerns: The following are comments regarding the July 26 Henderson meeting on the future of the Colorado River: 1) Please include the forwarded magazine article on the current costs to 1 desalt water for the Colorado River in a report that may be prepared. 2) Please increase the BOR desalting research and development budget at 2 least fivefold. 3) Please go to the Friends of Lake Powell website. This website has a list of 25 reasons why Lake Powell should not be dismantled. If 3 appropriate, please include these 25 reasons in your report. 4) I believe the current farm-urban water allocation is a hideous inequity. In the future, I hope you report and publicize what percent 4 of river water goes to farms and what percent goes to cities. I also hope you report and publicize the current acre-foot cost of river farm water and the current acre-foot cost of water for residents in cities like LA, San Diego, Phoenix, and Las Vegas. The public, press, and politicians can not make informed decisions on this issue until they are aware of such farm and city data. 5) Please mail me the Bureau's latest report having to do with the 5 future of the Colorado River and the report that may result due the public comment on these meetings. 6) Please inform me by email if you can mail me by U.S. mail a report on the future of the Colorado River and whether or not you can include

or reference the forwarded desalting article in your report.

Cordially, Mark Bird, mail code W1D CCSN 6375 W. Charleston Las Vegas, NV 89146

Subject: 0405 Desalt.pdf Date: Fri, 20 May 2005 11:55:06 -0700 From: Mark Bird <mark\_bird@ccsn.edu> To: mark\_bird@ccsn.edu

http://www.wcponline.com/PDF/0405%20Desalt.pdf

# **\$000** Current Seawater Desalting Costs?

# By Mark Bird



Photo and map courtesy of Colorado River Commission

# Introduction

Can nations now desalinate a million---or a billion---gallons of seawater at no real cost? Could \$000 be the real cost to purify an acre/foot of desalted ocean water? This article answers these questions in the affirmative if the indirect desalting benefits are considered.

The United States Colorado River system will be used as an example of 19 benefits that are derived from desalination. Similar results would apply to multiple water shortage locations around the world. Most of these 19 benefits would be applicable to nations adjacent to an ocean. For example, clean water benefits would apply to a far greater extent to nations other than the U.S.

# An example

Lakes Mead and Powell on the Colorado River are the two largest reservoirs in the U.S. As the only large river system in the southwest, the Colorado is a lifeline for over 25 million people. Almost every year for the past 25 years, no river water has entemed the ocean.

It took from 1963 to 1980 (17 years) for Lake Powell to fill completely. The water now remaining in Lake Powell could all fit into Lake Mead and Lake Mead would still be far from being full. Insofar as the Colorado River system now provides water to around 10 million more people than when Lake Powell was filling, it appears likely that it will take more than 17 years for both lakes to fill under normal river flow conditions.

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Population growth, possible plans by the state of Colorado to pipe water to the east side of the Continental Divide, Native American water claims, increased reservoir evaporation from global warming and other factors will intensify water shortages in the southwest. Exacerbating the problem will be rising temperatures: the five warmest years in over a century, in order, have been 1998, 2002, 2003, 2004 and 2001.

Global warming may be the cause of less annual snowfall, vegetation needing more water, more evaporation from all Colorado River reservoirs and more evaporation from over 1,000 miles of river canals. That evaporation is no trivial matter as it is estimated as much as 20 percent of river flow evaporates under normal conditions. If global warming is the primary or a leading contributor to low river flows for the past five years, there is the distinct likelihood that these reservoirs will never fill from river flow.

If the U.S. government had pursued desalination research and development more vigorously during the past 30 years, the following 19 factors would now be less severe. If the U.S. pursues desalination R&D and other remedies to restore these lakes now, these factors will become less severe. As over 200 cities including the largest cities in Arizona, Nevada and California are highly dependent on the Colorado River, if the U.S. ignores desalination R&D and other remedies, the worst case scenario is the economic collapse of these three states.

# 19 Factors

Inland Areas

California desalting potentially allows more river water for reservoirs and the other six Colorado River states. Ac-

Water Conditioning & Purification 11

cording to the U.N., about half of the world's rivers are depleted and polluted. Major rivers, including the Ganges, Yellow and Rio Grande, now regularly run dry. Coastal desalting at these or other river deltas would provide water for inland areas.

#### Pollutants

In 2004, the non-profit organization American Rivers designated the Colorado as the "Number One Most Endangered River in the U.S.," a rank earned more because of pollutants than because of water scarcity.

As an example of one pollutant, American Rivers noted that 400 pounds of rocket fuel flow toward Lake Mead each day. Among the over 100 pollutants and chemical compounds found in the two lakes are arsenic, chlorine compounds, cow manure, Cryptosporidium, lead, mercury, medical waste, paint derivatives, parasites, pesticides, phosphates, plane exhaust derivatives from the nearby Las Vegas airport (that now hosts 40 million passengers per year), plastics, septic tank discharge, sewage sludge, ski boat gasoline and urban storm runoff. Last but not least is residue from the years of atmospheric nuclear testing at Nevada test sites. This water flows untreated to farms in Arizona and California. Fruits and vegetables from these farms are shipped to all 50 states.

California desalting plants would mean people would be ingesting higher quality water. If the U.S. had vigorously pursued desalination over the past few decades, both lakes would likely be at a higher water level today. These pollutants are concentrated in the lower levels of the lakes. Now that both lakes have declined considerably, there is a very real chance that higher concentrations of these pollutants are entering our food supply and will continue to do so.

## Groundwater deterioration

Subsurface water is far more subject to contamination from mining, agriculture and industry than desalted water. Higher concentrations of metals, pesticides, toxins and human and nonhuman fecal matter are contained in groundwater than desalted water. Subsurface water is likely to experience declining water quality in the decades to come. Desalting can help prevent further groundwater deterioration by giving cites and nations less justification for groundwater withdrawal. *Diseases* 

Cancer, birth defects, internal organ malfunctions and over a dozen other dis-

eases are partly attributable to low quality water. Seventy percent of the human body and 90 percent of blood is water. The thousands of waterborne disease deaths from the December Asian tsunami catastrophe is a global reminder of the necessity of clean water.

#### Electricity

Glen Canyon Dam at Lake Powell has lost 25 percent of its power generation capacity. Hoover Dam at Lake Mead has lost 17 percent of its power generation capacity. Increased power costs have already been passed on to some consumers. Glen Canyon Dam may lose 100 percent of its power capacity in another three years.

#### Recreation

According to National Park Service records, in 2004 Lake Mead had roughly one million less visitors than in the year prior to the last five low flow years. Some people incorrectly think Lake Mead is closed to recreation as they have seen the low water levels on major news networks. In the past five years, tens of millions of recreation dollars have been lost to the region. Millions have been spent just from marinas having to repeatedly relocate due to the declining water levels.

#### Food prices

A significant portion of the food consumed in the United States is grown in Southern California. Coastal desalination would increasingly assist farms, allowing Colorado River water to be used for prudent inland agriculture.

#### Water shortage preparation

Desalination far better prepares arid regions for probable future periods of water shortages. It gives water agencies and states more flexibility. The National Weather Service is forecasting that the inflow to Lake Powell from April to July will be 114 percent of average. It would probably take ten consecutive years of inflow to fill Lakes Powell and Mead.

## Global warming

Climatologists are nearly unanimous in their belief that global warming is occurring and that it will intensify in the future. A few years ago, an iceberg the size of Delaware chipped off of Antarctica. In the past 30 years, an area of ice larger than Texas has been lost in the Arctic. Alaskan villages have already been relocated due to rising water levels. Desalting plants currently in operation over 10,000 of them—have already reduced damages caused by global warming by taking water out of the oceans.

The dollar value of inundated an Florida or Southern California coastal land could be considered an asset for desalination. Relative to the Colorado River states, desalination further reduces global warming damages as millions of people in the southwest are being urged to undergo turf conversion, eliminate lawns and generally water less with the partial consequence that less cooling and less oxygen enter the warming atmosphere.

## Environmental damages

Substantially less adverse ecological destruction to wildlife, endangered species, national parks, flora, public land, roads and utilities would occur with desalination than with comparable groundwater development.

#### Litigation

Since there is a relatively infinite amount of ocean water and less impact with desalination as compared to landbased water development, the cost of litigation (calibrated in both time and money) would be substantially reduced. A previous legal dispute between Arizona and California lasted for over a decade before being decided by the U.S. Supreme Court. Recent news stories have indicated most river states, many Native American tribes, environmentalists representing the parched river delta and others all thought their water interests were shortchanged before the last five low flow years.

Currently, given the water scarcity in the Colorado River system, there is talk of the potential for litigation between the lower basin Colorado River states, and possible disputes between the lower and upper basin states. If states do not reach agreement on how future water reductions will be managed, it is probable that such litigation will be in the courts for years.

#### Mexico

Mexico has an annual legal entitlement to 1.5 million acre-feet of water from the Colorado River. In 1974, Congress authorized the construction of a desalting plant at Yuma Arizona to ensure water quality going to Mexico. As the U.S. recognizes these obligations, ocean desalination thereby reduces probable costs, salinity damages and international embarrassment by helping to maintain Mexico's water supply. Colorado River salinity damages are not trivial; they typically range from \$500 to \$750 million dollars per year. Besides being lethal to

crops, river salt is harmful to machinery, fish and wildlife. In this context, desalination is not only an interstate solution but also fosters positive international relations.

## Incentives

The federal government can develop conservation contingent desalting funding agreements with cities and states, and this can work on an international scale in the same fashion. Desalting can be legislatively contingent upon EPA-type monitoring of farm wastewater and per capita water consumption rates. This would promote conservation as well as reduce the time and quantity of desalination.

#### Coastal aquifers

Cities in Southern California and around the world are subject to seawater intrusion into municipal aquifers. Desalting reduces seawater intrusion and groundwater withdrawal-induced subsidence because if a coastal aquifer is near normal capacity, the substantial water pressure prevents seawater intrusion.

#### Mineral development

Desalting is likely to lead to cheaper development of the abundance of gold and dozens of other minerals in the oceans. Salt has hundreds of uses besides the small percentage used as table salt. In the virtually impossible event that desalting costs do not continue to rapidly decline, new chemical separation techniques applied to saline residue could make desalting a literal goldmine.

#### Trade imbalance

If the U.S. does not pursue desalting, Japan or other countries will assume leadership. Such neglect is likely to cost the U.S. tens of billions of trade dollars in the 21st century. By the middle of the century, the U.S.-Japan desalting trade imbalance could be as large as the highest U.S.-Japan auto trade imbalance. Unlike just three decades ago when the U.S. was on the cutting-edge in desalination development, Japan now produces and sells about three times as much desalination technology as the United States, according to former U.S. Senator Paul Simon (deceased).

#### War prospects reduced

Israel has engaged in several armed disputes over water. Prior to Iraq's invasion of Kuwait, Turkey and Syria were making vigorous plans to build upstream dams on the Tigris and Euphrates rivers.

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Both rivers flow through the center of Iraq for hundreds of miles. As Kuwait has some of the best desalting facilities, this was suggested as a crucial motive for the invasion. Similarly, strife in Somalia was attributed both to drought and to Ethiopia preventing water from flowing into Somalia. Egypt has threatened to go to war if several downstream nations try to divert water from Nile River tributaries. Desalting reduces future prospects for conflict in these and other locations with scarce water. What if U.S. and Israeli scientists assisted Middle East countries in building desalting plants as a means of promoting political stability?

## One billion people

Over a billion people now have inadequate drinking water, according to the United Nations. This includes millions of children whose lives are measurably shortened or ended by poor quality water. Given auspicious desalting cost trends and global ocean-land distribution, desalting helps to bequeath to posterity an infinite clean water source.

#### Future costs

People buy homes, stocks and land because of an anticipated higher future value of these commodities. Governments regularly make decisions based on a future economic value. Hence, governments should also consider not only the present price of desalination but also the future price.

The following table depicts historic and future costs of desalting ocean water. Costs increased in the 1980s due to escalating energy costs. It appears certain to this writer that future less-energy-intensive desalting technology will accelerate a decrease in costs. The following table was adapted and updated from former Senator Simon's book, Tapped Out, page 123.

Decade Cost per 1,000 gallons			
1950s	. \$	15-2	20
1960s	.\$	6-	9
1970s	. \$	2-	7
1980s	. \$	4-	7
1990s	. \$	4-	6
2000s	. \$	2-	5
2010s	. \$	1-	2 ?
2020s	. \$		??

Future desalting costs are also likely to decline given anticipated advances in pre-treatment, membranes and computer monitoring of desalination functions. Some scholars anticipate major theoretical desalting discoveries in the near future. Four types of potential innovations are tidal-solar desalting, vertical desalt-

ing, microbial desalting and environmentally benign fusion desalting. Conventional plants may also be modified to serve a vastly less expensive innovation. While desalting costs are certain to decline, the price of land-based water development is certain to increase.

## Conclusion

According to the U.N. Commission on Sustainable Development, between three and four million people annually die from waterborne diseases. According to Water Partners International, "Waterrelated diseases are the leading causes of death in the world. This killer takes the lives of more than 14,000 people each day and is responsible for 80 percent of all sickness in the world."

Many water experts would contend that desalting is an impossibility for poor countries. But millions of people subsist on 10 gallons or less per day. At a current desalting rate of \$3 per 1,000 gallons, the lives of millions would improve at a cost of three cents per day.

The world's current desalting plants save thousands of lives per year. By the end of the 21st century, with vastly improved desalting technology in use all over the planet, desalting is likely to save over a million lives per year. By governments not explicitly recognizing the current life-enhancing properties of desalting, are they not implicitly placing a low value on life?

A proper scientific analysis of desalting entails estimating the dollar and human value of the above 19 factors, and then using this value when evaluating the costs of ocean desalting. If all or even half of the above cost factors were considered, ocean desalting becomes an increasingly attractive option. Given these 19 factors, could the current real cost of ocean desalting be less than \$000 per billion gallons for the U.S. Southwest?

## About the author

• Mark Bird is a faculty member at the Community College of Southern Nevada. He is a former federal water planner and author of over 30 water-related articles. Bird can be reached via email at mark\_bird@ccsn.edu



Water Conditioning & Purification

1.074

From:	<dazzlingdodads@aol.com></dazzlingdodads@aol.com>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/28/05 12:27AM
Subject:	WATER SHORTAGE IN LAS VEGAS

Suggestions:

Stop growth ordinance NOW 1 All golf courses go artificial turf NOW 2 All new building projects: no water features NOW 2 Red Rock Station advertises a wall of water will flow continually. 3 Of course these are pipe dreams of mine, as we all know these 3 features have been approved and are "grandfathered-in". Someone needs to tell the Governor, the Senators, and anyone else with authority that, THERE WILL BE NO WATER!!! Will it be YOU?

From:	Russell Blalack <russell@outsidetestingservices.com></russell@outsidetestingservices.com>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	Fri, Jul 29, 2005 9:29 AM
Subject:	Comment on the Reoperation of Lake Powell and Lake Mead

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

Dear Regional Director,

While the Bureau of Reclamation is developing strategies for low reservoir conditions, I wish to point out that the growing challenges and looming shortages facing Colorado River water users can be mitigated by removing Glen Canyon Dam, an impoundement that is one of the main causes of the present water shortages.

For more than 40 years, Glen Canyon Dam did nothing to augment water storage downstream. Now, with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. If there ever were to be a water surplus in the future, Lake Mead on its own could accommodate it without Lake Powell.

Lake Powell and Lake Mead lose upwards of 17 percent of the water that flows into them to evaporation . It's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

Sediment is a another unresolved problem that threatens the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

I live in the West, so let's put this in simple terms. The West has long, hot, dry summers that dry up surface waters. Dams accumulate sediment and lose water. Aquifers purify water and lose nothing to evaporation. Halt the operation of Glen Canyon Dam.

Thank you for accepting my comments.

Best regards,

Russell Blalack 1081 Milky Way 2

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Cupertino, CA 95014.

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From:"Iris Daley" <iris4268@cascadeaccess.com>To:<strategies@lc.usbr.gov>Date:Fri, Jul 29, 2005 9:23 AMSubject:lake powell

I believe it is time to drain Lake Powell, which is now called Lake Fowl.

Let the waters flow !!

There will be thousands of volunteers to clean up the "junk" left by boaters over the years.

You should listen to the people not to the politicians.

Iris Daley 702-346-4268

<fredhf@aol.com></fredhf@aol.com>
<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
7/29/05 4:09PM
Comments on Water Worries

# Water worries

I keep hearing that all we need to do is conserve water. This is based on thinking that the water that fills the Colorado River and Lake Mead is a renewable resource, constantly renewable. Unfortunately, it is not constantly renewed. The last time I know of that Lake Mead had a surplus of water that had to be released was in the early 1980s.

If you picture our water supply, electrical supply, or any other critical resource as a pie, you can visualize conservation. If you make a pie and slice it into eight pieces for eight guests, all is well. Now if four more people are coming in for pie, you must slice the pieces smaller. Now you can "conserve" your pie until each slice is infinitely small and serve an infinitely small slice to each guest, but pretty soon you are serving mostly a slice of nothing. This will only work if you keep adding pies. We can add generating capacity but we can't add new rivers or new lakes without new sources of water. In Nevada's case of taking water from upstate Nevada is robbing Peter to pay Paul. Water is rare in the southwest. Everyone treasues it, not just Nevadans

It is time to wake up and sneeze because of the dust. We live in a desert and the climate will not change drastically enough to make us a lush tropical rainforest for a long time. It is time to start conserving the State of Nevada, not its resources.

From:	<gaileyviolin@aol.com></gaileyviolin@aol.com>	
To:	<strategies@lc.usbr.gov.></strategies@lc.usbr.gov.>	
Date:	Fri, Jul 29, 2005 12:26 PM	
Subject:	(no subject)	

RE: dismantling of Glen Canyon Dam:

The subject of dismantling Glen Canyon Dam is an old subject--there was great pressure brouht to bear to prevent the building of the dam, and also since it's construction. the prospect has been brought up many times. Fortunately, cool heads prevailed .

I was with the Visitor Services Division at Hoover Dam for 17+ years and was well aware of the operation of facilities on the Colorado River. A number of times, I was told by visitors who had been at the Grand Canyon thet they had been informed by some Park Ranger(s)

that those dumb people with the Bureau of Reclamation had built Hoover Dam and they were really dumb becausse it would be silted up in 50 years. When the 50th anniversary arrived, Hoover Dam was as it is 20 years later, a functioning facility. And the last report that I received was that it would be functioning for many, many years to come before silting would become a problem. Now, I read that John Weisheit says that Glen Canyon Dam will not last forever. He and we will be long gone before silt becomes a problem and the solution of the problem is far, far away, but I am sure it will be addressed then. As for Glen Canyon itself, there are many

beautiful canyons and areas that are reachable by any of us. It appears that the whole idea of destroying Glen Canyon Dam would not improve anything but would certainly disrupt the entire Colorado River system--just to please a few people and certainly not to be in the best interest of the people of the Southwest nor in the best interest of the people of the United States. Having lived in Southern California and Southern Nevada for 59 years (I am now 80), I have thoroughly enjoyed the benefits of living in those areas. Now, as a concerned citizen, I can only hope that cool heads again will prevail and that we can make the necessary adjustments to our life-styles to live with

the possibilities of droughts as well as with an oversupply of waters. Cycles of drought and plenty have existed throughout history. Because we have a drought during this period does not signify that we will have a drought next period.

Now retired, I am thankful for the benefits of what was accomplished when the whole Colorado River systemhas brought to us in the Southwest as well as to the rest of our Country---a well-controlled water supply, a considerable amount of hydro-electric power, the low cost of fruits and vegetables thanks to irrigation, and the recreational facilities behind the dams and between the lakes.

These and other benefits of living here in the Southwest have made life enjoyable for me and my family

The people who developed and have operated th Upper and Lower Colorado Regions of the

U.S. Bureau of Reclamation have done and will continue to do an outstanding job. I has long been apparent that they really know what they are doing. Thae fact that we have had

5 years of drought , the longest period on record is a predictable occurence on the desert,

one that has been studied for years by people who know how to handle whatever may arise.

The people who would destroy the Colorado River system have talked the same talk for years--maybe they could spend some effort on improving things instead. The idea of using aquifers and other devices sounds great, but the results and the costs would be prohibitive. The suggested loss of 6% through

evaporation and seepabe is probably in greater than through he use of aquifeers--why consider it? The stated loss of 800,000 acre feet of water of Lake Powell sounds like a well-inflated figure to me.

And the suggest "improvement of the Grand Canyon" would be the floods that would tear up the banks of the Colorado.

It would be nice to hear some positive words instead of the negative ones!

Tom Gailey 702) 897 2573 gaileyviolin@aol.com July 29, 2005 From:"Richard HILLS" <RHILLS@weber.edu>To:<strategies@lc.usbr.gov>Date:Fri, Jul 29, 2005 8:30 AMSubject:Caution on Filling Lake Powell Reservoir

Do not add any additional water to Lake Powell Reservoir untill Lake Mead is full to its appropriate capacity. This will without question minimize loss due to evaporation. In addition, loss due to leakage may be reduced.

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Richard G Hills 787 E Center St Centerville, UT 84014

DENNIS

Dennis Portnoy MFT 1537 Franklin **St.** #310 San Francisco, CA 94109 415/922-3567

Regional Director Bureau of Reclanation Upper colorado ATTN: UC-402

JULY 29, 2005

I URGE YOU TO CEASE OPERATIONS AT LAKE **POWELL** AND EMPLOY JUST ONE RESERVOIR TO CAPTURE AND MANAGE THE BULK OF COLORADO RIVER FLOWS

\* Since climate change is already causing long-term flow **reductions**, and water consumption levels near the **river's** historic average flow and **rising**, ifs unlikely that Lake **Powell** will fill again.

\* Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined—and with far greater efficiency. Upwards of 810,000 acre-feet of water annually—enough water for 1.6 million households of four people each—could be saved by eliminating Lake Poweli and operating Lake Mead principally for distribution to groundwater recharge facilities.

\* Native fish have gone extinct and Lake Poweli dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and **recreation**, as well as the stabilization of archeological sites.

\* Sediment is a major unresolved problem threatening the long-term operations of Lake Poweli and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Poweli is the most feasible and least expensive likely alternative,

Given the growing challenges and looming shortages facing Colorado River water users as a result of these **dams**, a comprehensive assessment <sup>4</sup> addressing the issues above is **needed**, and should be done through an

Environmental Impact Statement.

Denis Pat

From:	<crowl95@aol.com></crowl95@aol.com>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	7/31/05 6:59AM
Subject:	Reoperation of Lake Powell and Lake Mead

Regional Director

Bureau of Reclamation, Lower Colorado Region

We are writing to provide comments on the reoperation of Lake Powell and Lake Mead. We live in Chandler, Arizona with our two young children and hope a solution can be found which provides much needed water for the citizens of this region while at the same time demonstrates good stewardship of the Colorado River and Glen Canyon. We believeThe One-Dam Solution as outlined in Living Rivers' latest report is a solution which addresses these two, seemingly incompatible goals.

There is no longer a need for a single-use dam at Glen Canyon. There is massive yearly evaporation of stored Colorado River water from Lake Powell. We believe 800,000 feet of water could be available to the lower basin. With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge faci lities.

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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.

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

Your present focus is developing strategies solely for low reservoir conditions, but given the growing challenges and looming shortages facing Colorado River water users as a result of these dams, a far more comprehensive assessment addressing the issues above is fully warranted, and should be done through an Environmental Impact Statement.

You have an opportunity to develop a solution which provides water to the citizens of this region and demonstrates good stewardship of this great land, please take it.

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Sincerely, Chris and Aileen Crowl Chandler, Arizona From:"Vince Specht" <vmspecht@earthlink.net>To:<strategies@lc.usbr.gov>Date:7/31/05 3:32PMSubject:Water Shortages

The only feasible solution (which may already be too late) is to put an immediate stop to building more residences and businesses. Even a fifth grade student knows when you are out of water you stop additional uses.

Vince Specht Henderson, NV 89074-1210 (702)361-5834

Vince Specht vmspecht@earthlink.net

1

From:"Robert E. Warnick" <rwarnick@burgoyne.com>To:<strategies@uc.usbr.gov>Date:Sun, Jul 31, 2005 10:26 AMSubject:Lake Powell proposals

This dam was built at a large expense and manpower. Can we abandon it for the whims of a few?

What would be the cost of Living Rivers proposal? And are the American people once again willing to foot the bill?

When are those bent upon tearing down the dam going to stop their foolishness?

This dam has been a blessing to many who have benefited from it's storage and a tourist haven for many. Are they willing to give up what they have enjoyed for so many years? It is a foolish and impractical proposal to me.

Carol Warnick 310 South 400 East, Ephraim, Utah 84627

rwarnick@burgoyne.com

Page	1	
i ugo		

From:"Robert Rutkowski" <rutkowski@terraworld.net>To:<strategies@lc.usbr.gov>, <strategies@uc.usbr.gov>Date:8/4/05 8:11AMSubject:Operation of Glen Canyon Dam

Mr. Bob Johnson, Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, NV 89006-1470 Fax (702) 293-8156 strategies@lc.usbr.gov

Mr. Rick Gold, Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 Fax (801) 524-3858 strategies@uc.usbr.gov

**Dear Regional Directors:** 

The Bureau of Reclamation is accepting public comments on the reoperation of the nation's two largest reservoirs, Lake Powell and Lake Mead. I urge you to examine the viability of permanently ceasing operations at Lake Powell and employing just one reservoir to capture and manage the bulk of Colorado River flows.

Please accept these comments.

\* There is no longer a need for a single-use dam at Glen Canyon

It was not until the fall of 2004, more than 40 years after Glen Canyon Dam began impounding Lake Powell that Lake Powell water storage actually augmented water storage downstream. But with climate change already causing long-term flow reductions, and water consumption levels near the river's historic average flow and rising, it's unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

\* It's time for more efficient storage

With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and operating Lake Mead principally for distribution to groundwater recharge facilities.

\* Revive Grand Canyon

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of both these reservoirs has impacted the Canyon, but Glen Canyon Dam has been far more devastating. Since its 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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\* Manage the sediment

Sediment is a major unresolved problem threatening the long-term operations of Lake Powell and Lake Mead. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

\* Revise the Colorado River Compact

The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, cannot meet its intended purpose of sharing Colorado River water equitably between the Upper and Lower Basin states. The Compact allocated 11 percent more water than the river has to give, and affords the Lower Basin 20 percent more water than the upper basin. With river flows expected to decline 18 percent by 2040, this inequity will worsen as the Upper Basin is required to deliver to the Lower Basin its full share regardless of declines in river flow.

Thank you for the opportunity to bring these remarks to your attention.

Mindful of the enormous responsibilities which stand before you, I am,

Yours sincerely, Robert E. Rutkowski

cc: Nancy Pelosi President George W. Bush

2527 Faxon Court Topeka, Kansas 66605-2086 P/F: 1 785 379-9671 r\_e\_rutkowski@myrealbox.com

CC: "Nancy Pelosi" <sf.nancy@mail.house.gov>, "George W. Bush" <comments@whitehouse.gov>

From:	Mark Bird <mark_bird@ccsn.edu></mark_bird@ccsn.edu>
To:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	8/8/05 11:06AM
Subject:	water future

This is a repeat of Comment Letter I.074, Bird

Note: I sent the following by U.S. mail about 10 days ago. Can you answer items " 5 and 6" below by email? Also, when is the last day one can submit comments?

# To whom it concerns:

The following are comments regarding the July 26 Henderson meeting on the future of the Colorado River:

1) Please include the forwarded magazine article on the current costs to

desalt water for the Colorado River in a report that may be prepared.2) Please increase the BOR desalting research and development budget at least fivefold.

3) Please go to the Friends of Lake Powell website. This website has a list of 25 reasons why Lake Powell should not be dismantled. If appropriate, please include these 25 reasons in your report.
4) I believe the current farm-urban water allocation is a hideous inequity. In the future, I hope you report and publicize what percent of river water goes to farms and what percent goes to cities. I also hope you report and publicize the current acre-foot cost of river farm water and the current acre-foot cost of water for residents in cities like LA, San Diego, Phoenix, and Las Vegas. The public, press, and politicians can not make informed decisions on this issue until they are

aware of such farm and city data.

5) Please mail me the Bureau's latest report having to do with the future of the Colorado River and the report that may result due the public comment on these meetings.

6) Please inform me by email if you can mail me by U.S. mail a report on the future of the Colorado River and whether or not you can include or reference the forwarded desalting article in your report.

Cordially, Mark Bird, mail code W1D CCSN 6375 W. Charleston Las Vegas, NV 89146

http://www.wcponline.com/PDF/0405%20Desalt.pdf

From:<SuperMolar@aol.com>To:<strategies@lc.usbr.gov>Date:Wed, Aug 10, 2005 8:28 PMSubject:(no subject)

I am asking you to please consider the vision the Glen Canyon Institute has for the Glen canyon dam. I believe their plan is the best chance for sustainable use of the river. Thank you-Bob Rosenfield

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From:"The Old Book Shop" <oldbkshp@earthlink.net>To:<strategies@lc.usbr.gov>Date:Wed, Aug 10, 2005 1:55 PMSubject:RE: Glen Canyon Dam

With the serious water shortage facing us in the southwest now and in the future, it hardly makes sense to keep the Glen Canyon Dam when millions of gallons of water are lost from Lake Powell each year to evaporation...water that then goes east and causes flooding and other excess water woes.

If that same water was in the river as it should be, the loss to evaporation would be a manageable level, possibly 99% less, meaning Arizona and other southwestern states could have access to much more water. Not to mention the benefit to the midwestern states who would no longer have to cope with the rains from the evaporation.

Barbara Young Tubac, AZ

From:	"Steve Gliva" <sgliva@tmglink.com></sgliva@tmglink.com>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	Thu, Aug 11, 2005 10:05 AM

1.Fill Lake Mead First

Consumptive water use in the Upper and Lower Basins has increased significantly since Glen Canyon Dam was built. There is not enough water in the system to fill both of these reservoirs. It is essential that we first fill Lake Mead to maximize power generation and maintain water supply for large cities in the lower basin such as Las Vegas, Los Angeles and Phoenix. There is no need for Lake Powell.

2. Storage in Lake Mead is enough to capture surplus water Lake Mead, combined with downstream aquifer-recharge projects, has sufficient storage capacity to hold all surplus Colorado River water. More water will be available to those dependent on Colorado River water by storing all surplus water in Lake Mead. There will be less water lost to evaporation when Lake Mead is full than when both Lake Mead and Powell are kept at half capacity.

3. Ensure maximum generation of electricity

More power can be generated by running Hoover Dam at full capacity than by running Hoover and Glen Canyon Dams at half capacity.

4. Restore Two International Treasures

Decisions made regarding the operations of these reservoirs present an historic opportunity to create a better water delivery system for the West while restoring Glen and Grand Canyons. The negative environmental consequences that dams have on rivers are becoming increasingly known. We now have the opportunity to protect Glen and Grand Canyons from further environmental and cultural degradation by moving all water storage out of Glen Canyon and into Lake Mead.

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August 11, 2005

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Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 S State St SLC, UT 84318-1147

To Whom It May Concern,

Thank you for the opportunity to give my input on the management of low water reservoirs on the Colorado River.

As the demand for water continues to grow and the possible supply of water decreasing, we will be faced with more low water reservoirs in the future. The good news is there will be less loss to evaporation. With this in mind, perhaps we should keep only one reservoir near full and use Lake Powell to deliver historic type flows through the Grand Canyon to mimic natural flows (similar to Flaming Gorge) along with a moderate silt load using some of the sediment of the San Juan River. The target would be to keep a one year supply of water in Lake Powell rather than a wasteful two year supply. Recreation on Lake Powell would continue as it is today only with less sediment coming in, boating on Lake Powell would last longer.

Demand for more water needs to be controlled and conservation needs to happen immediately. The compact of 1922 needs a reality check and should be re-written.

It has been suggested that underground storage is feasible. This should be studied as a viable alternative to store water on the years that Lake Powell could be filled. Lake **Powell** should not be filled above the 3600' level (it's already near-full with silt in the upper reaches). Whatever the gain would be wiped out by the evaporation factor.

I attended the public meeting in SLC and I thought the Living Waters group made a lot of sense. 1 was a little puzzled to read in the Tribune the next morning that the Bureau was trashing their input. I hope the media made a mistake.

Sincerely,

felada

Dee Holladay

544 EAST 3900 SOUTH • SALT LAKE CITY • UTAH 84107 holiday@bikeraft.com • www.bikeraft.com 801-266+2087 • FAX 801-266-1448

From: To: Date: Subject:	Melissa <melissa@infusion-design.com> <strategies@lc.usbr.gov>, <strategies@uc.usbr.gov> Thu, Aug 11, 2005 5:19 AM Glen Canyon</strategies@uc.usbr.gov></strategies@lc.usbr.gov></melissa@infusion-design.com>	
Storing water in basin will allow f Glen Canyon Ins cease allowing f generation at Ho your comments. 1. Fill Lake Mea	Lake Mead and underground aquifers in the lower for the restoration of Glen and Grand Canyons. The stitute proposes that operations at Glen Canyon Dam ull use of Lake Mead storage capacity and power pover Dam. The following are some talking points for d First	1
Consumptive water use in the Upper and Lower Basins has increased significantly since Glen Canyon Dam was built. There is not enough water in the system to fill both of these reservoirs. It is essential that we first fill Lake Mead to maximize power generation and maintain water supply for large cities in the lower basin such as Las Vegas, Los Angeles and Phoenix. There is no need for Lake Powell.		1
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From:todd runck <azdback2000@yahoo.com>To:<strategies@lc.usbr.gov>Date:Thu, Aug 11, 2005 7:26 AMSubject:Colorado River

I am writing to encourage sustainable water management decisions for the Colorado River by filling lake Mead, resulting in more efficient storage, to maximize generation of power & restore Glen & Grand Canyons. Thank you, Todd Runck

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Start your day with Yahoo! - make it your home page http://www.yahoo.com/r/hs

From:Grant <grantzzz@yahoo.com>To:<strategies@lc.usbr.gov>Date:Sun, Aug 14, 2005 12:08 PMSubject:Drain Lake Powell

I have long been a supporter of emptying Lake Powell to restore the scenic marvels that were submerged so needlessly several decades ago. Now that both Lake Powell and Lake Mead are 1/2 to 2/3`s full, it makes sense to drain Lake Powell and fill up Lake Mead. We here in the southwest can certainly use the millions of gallons of water lost to evaporation in Lake Powell and we can also use the extra electric power that can be generated by a full Lake Mead. Common sense dictates that we should begin immediately to effect this change. The ONLY downside might be dislocation to the few small businesses in the area. As future tourist traffic to the area will likely increase maybe lawmakers can offer long term/low interest government loans to help the affected small businesses transition to accomodate the new, increased tourist traffic.

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Sincerely,

Grant Durante 4517 E Rock Wren Rd Phoenix Az 85044

Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com From:Drake Bloebaum <dbloebaum@yahoo.com>To:<strategies@lc.usbr.gov>Date:Mon, Aug 15, 2005 9:08 AMSubject:Lake Powell

Dear sir,

As you plan for the storage and use of the waters of the Colorado river please keep in mind a few thoughts:

1)Filling lake mead to capacity before filling lake powell will allow for maximum power generation. Running one dam at full capacity is more efficient than running two dams at half.

2)Most efficient storage of water can be achieved if the surface area exposed to the harsh desert climate is minimized. Filling one lake, Mead, will limit evaporation as well as bank seepage and ultimatley save water.

3)We have a chance to rethink delivery and storage of western water while restoring and protecting two national treasures: Glen and Grand Canyons.

Please take these ideas into consideration when planning for the storage and use of colorado river water. Please consider filling lake mead to capacity first. Thank you for your time.

Drake Bloebaum

Do You Yahoo!? Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com

From:	"spectrumcabinets@netzero.net" <spectrumcabinets@netzero.net< th=""></spectrumcabinets@netzero.net<>
То:	<strategies@lc.usbr.gov></strategies@lc.usbr.gov>
Date:	Tue, Aug 16, 2005 6:33 AM
Subject:	Drought conditions at Lake Powel and Lake Mead

It hardly seems feasible to remove an existing dam the size of Glenn Canyon. The assumption of this being a viable option is absurder. It is also illogical to argue less overall storage translates into better water management.

This is an unfortunate attempt by environmental groups to remove a structure they couldn't stop from being built 40+ years ago. however, they were successful in stopping Marble and Bridge Canyon Dams which would have added another 40% in overall storage to the lower Colorado system.

The more rational approach is to work with Glenn Canyon Dam as it stands without removing it. Misleading and false information by these environmental groups is hardly aiding in a solution to the water problems we currently have. Furthermore, dams and extensive water systems are the only way we can live in the west.

I have yet to see someone from one of these environmental groups volunteer to go without water or electricity to save the environment. The hypocrisy from these groups is over the top. The old saying stands true, "you can't have it all".

Lake Powell and Lake Mead are functioning exactly how they were intended. \*Without Lake Powell the draw down condition on Lake Mead last summer would have been so low generation of electricity would not have been possible.

\*This assumes all of the water in Lake Powell was never impounded and flowed as flood water through Hoover Dam in wetter years, for example 1983-1985 and 1997-2000

Without Lake Powell the ability to store as much water as possible in wet years is diminished by half. Historically Lake Mead water levels fluctuated dramatically before the construction of Glenn Canyon Dam.

The demand on Hoover prior to the construction of Glenn Canyon Dam was a fraction of today's needs and the fluctuation of water in the reservoir did not create water and power delivery issues. This is not the case today.

Hoover dams' power and water delivery is at capacity most of the year. The dramatic fluctuation of Lake Powell allows the level of Lake Mead to remain relatively stable most of the year with minimal content change.

Granted, Lake Mead would be at or near full pool this year if Lake Powell did not exist. What would happen if we get another year of above normal snow in the Rockies? Lake Mead has no capacity for flood control with reservoir capacity above 75% in an above normal weather year. If we were to have several years of wet weather the excess water would be runoff without the additional storage at Lake Powell.

Since the Colorado river was over apportioned and all interested parties are now in need of the water from the river. The only viable solution is efficient use of the existing resource.

The only way this can be done is to stop the waste by the agricultural industry in the west. Agriculture accounts for more than half of all the water that flows through the Colorado. The irrigation practices used in the western United States are deplorable.

The use of flood irrigation in such an arid climate is foolish along with the multitude of water intensive

crops being irrigated. 15% evaporation of loss due to reservoir storage is hardly an issue in comparison.

If agriculture changed it's irrigation practice to drip systems and grew less water intensive plants Mead and Powell would most likely not be in a drought condition today.

Perhaps the incentive is to charge the agricultural user what the municipal user pays! This would assure the implementation of water conservation by the agricultural industry in the west.

Sincerely, Scott A. Grogan

From:llaitner@charter.netTo:<strategies@uc.usbr.gov>Date:Tue, Aug 16, 2005 6:33 PMSubject:Glen canyon dam operations

I support the One Dam Solution. The Glen Canyon Damn only wastes water while it provides doubtful benefits and entombs one of the greatest canyons on earth. Remove the damn. Raffle off the right to push the plunger that blows the thing to smithereens. The raffle would pay for the entire demolition project. The reservoir is nearly empty now, so it wouldn't take long to empty it. Act now.

Larry Laitner 801 Pinecrest Ashland, OR 97520 CONNIEDEWITT 5844 Shasta Circle Littleton, Colorado 80123

August 17, 2005

Regional Director j j Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, Nevada 89006-1470 Fax (702) 293-8156

Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147 Fax (801) 524-3858

Dear **Regional** Directors:

My understanding is that the Bureau of Reclamation is accepting public comments on the **reoperation** of the nation's two largest reservoirs, Lake Powell and Lake Mead.

We oppose the concept of one reservoir to capture and manage the bulk of Colorado River flows.

1. There is a need for the dam at Glen Canyon

Lake Powell is needed now more than ever. Some "environmental groups" make unsubstantiated claims that it is unlikely that Lake Powell will fill again. This statement is simply untrue, where is the science, Lake Powell does not have to fill to its brim to be a **substantial** asset to the country.

Another statement made by "environmental groups" is that Lake Mead on its own could accommodate the water in both Lake Mead and Lake Powell. Again, this is simply untrue. Lake Powell holds a tremendous amount of water that cannot be held by Lake Mead. This is a ludicrous and untrue statement. i

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2. Lake Powell is a reasonable and efficient storage device.

At the present time and for the foreseeable future the Dam at Glen Canyon is the most efficient store device for water in the west

"Environmental groups" claim that there is more efficient storage available, such as the use of under ground aquifers. There is no scientific documentation of this and no cost benefit analysis of this opinion. Again the "environmental groups" have made untrue and unfounded statements that defy logic. The impact of Lake Powell on the country far exceeds this representation by "environmental groups". It is interesting that "environmental groups" acknowledge that Lake Powell holds at least 810,000 acre-feet of water annually -enough water for 1,6 million households of four people each,

3. Grand Canyon is doing just fine, thank you.

Between Lake Powell and Lake Mead lies one of the world's most famous and geologically and ecologically unique river canyons, Grand Canyon National Park. The operation of these reservoirs has not negatively impacted the Grand Canyon.

Again where is the scientific evidence to **support** the statements of the proponents of the single reservoir plan. ;

4. Sediment - is it really a problem? No.

"Environmental groups" claim that sediment is a major unresolved i problem threatening the long-term operations of Lake Powell and Lake .! Mead The fact is that sediment is not a major factor in the long term operation of Lake Powell or Lake Mead. It will be in the range of approximately 600 years before Lake Powell will be filled with sediment Given that time frame, and technology, how can any plan be implemented.

Although there are always differences among scientists, it is clear that reputable scientists and engineers do not now warn that major problems could occur sooner, i

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# 5. The Colorado River Compact

While everyone has **different** interests in the Colorado River and everyone might like a different agreement then The Colorado River Compact of 1922, which largely governs the discharge of flows from Lake Powell to Lake Mead, it works and has worked for many years.

#### **Recreational Uses:** 6.

Lake Powell presently is visited by up to 3 million visitors annually. The use Lake Powell for much needed water recreation. It serves recreational users from west of the Mississippi to the Pacific Ocean and receives many visitors from rest of the country as well as foreign guests. It is truly one of the "wonders of the world" and would be sorely missed if drained.

## 7. Power production:

Glen Canyon Dam is a significant source of clean, reliable and efficient energy. The single dam concept would reduce power production from Glen Canyon Dam to zero. This is a waste of a significant natural resource.

### Conclusion;

One of the significant aspects of Lake Powell is that it is doing just fine, in fact great It is providing water during the times of drought, it is producing efficient and clean power and providing recreation to millions of citizens and visitors.

A new environmental impact statement is not warranted. To call for such a 2 document is a waste of a huge amount of taxpayer money. Glen Canyon Dam and Lake Powell proved their worth and viability during the latest drought cycle.

Thank you for a job well done.

Sincerely,

Million

Connie DeWitt

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#### RICK DEWITT 5844 Shasta Circle Littleton, Colorado 80123

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

Fax (702) 293-8156

Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 | ] 125 South State Street ! Salt Lake City, Utah 84318-1147

Fax (801) 524-3858

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One of the **significant aspects** of Lake Powell is (hat it is doing just **fine**, in fact great It is providing water during the times of **drought**, it is producing efficient and clean power and providing recreation to millions of citizens and visitors.

Thank you for a job well done.

Sincerely

Rick Dewitt

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Mr, Rick Gold, Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147

#### August 24.2005

#### Dear Mr.Gold:

I am writing to express my concerns about the management of the Colorado River water and the management of it in Lake Powell and Lake Mead,

I would encourage you to give serious consideration to the possibility of ceasing operations at the Glen Canyon Dam, There are several reasons that this scenario would be beneficial.

Water consumption levels for the Colorado River are near the river's historic average flow and are expected to rise. It is unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

There is evaporation of about 17 percent of the water that flows into the se reservoirs; it's time that a more efficient means is explored for storing this precious water. Vacant space in underground aquifers on. or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency

Lake **Powell's** water storage capacity diminishes yearly as the **sediments accumulate in** the **slack** water. Maintaining **Powell** as an efficient reservoir would require the implementation of an expensive dredging program.

Removing sediment from Lake Mead rather than Lake Powel) is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sconer. The sediments accumulating behind the Glen Canyon dam will resume their original beneficial role in the maintenance of the natural ecology of the Colorado River in our Grand Canyon National Park when they are allowed to continue on past the dam. Allowing the flowing water to begin restoring a healthy ecosystem to the Grand Canyon River corridor is reason enough, I feel, to seriously consider the possibility of decommissioning the Glen Canyon Dam.

The growing challenges and looming shortages facing Colorado River water users as a result of these dams requires that a far more comprehensive assessment addressing the issues above is fully warranted, and should be done through an Environmental Impact Statement. Thank-you for considering my comments.

Sincerely,

erquer

Tom Ferguson 826 West **Howe** Street **Tempe, AZ.** 85281 489-966-5418

To Robert Johnson of the Bureau of Reclamation:

The dropping of Mead and Powell reservoirs greatly concerns boaters like me. Only God can send more rain. But you have the power to send any excess water in the Colorado to where it is really needed – Lake Mead. It doesn't make good boating or fishing to have two half full lakes and twice the evaporation! Lake Mead should be highest (and oldest priority) for the runoff. It is closest to the population centers and it is a beller boating lake by far. Let the second priority be Lake Powell to fill only when Mead is full. Otherwise leave Powell's skinny little canyons to the kayakers and muddy hikers.

Sincerely, Luy Cloutier

GUY CLOUTIER KATHERINE ANDERSON 4426 E LINDEN ST TUCSON, AZ 85712 520-881-7476

guycloutier@cox.net

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**Regional Director** Bureau of Reclamation Lower Colorado Region Attn: BCOO-1000

#### Background

As a protestant in the matter of jurisdiction, the State Water Resources Control Board's attorney concluding statement was:

--- "The Secretary of the Interior is the watermaster of the Colorado River, and that ought to tell you something."

With the powers of the Rivermaster run responsibilities. And I commend the Secretary for initiating the development of management strategies for Lake Powell and Lake Mead, and particularly the development of Lower Basin shortage guidelines under low reservoir conditions.

#### **Requests:**

- 1. Based on the technical operating data. I request that the criteria for determining "shortage flow status" shall be as clear and concise as possible. 2.
  - I request that there be several levels of shortage flow status, e.g.
  - "Level one" which would affect the Central Arizona Project а.
  - b. "Level two" which would affect other lower Basin States contractors

#### Comments

It is my understanding that IID's present perfected rights are recognized within the Boulder Canyon Project Act, and, whether it is now or later, I look to the Imperial Irrigation District to submit to you information concerning its present perfected and contractual rights.

I support IID and the other lower Basin States contractors establishing contingency plans for equitable distribution under a shortage flow allocation, as applicable.

Cliff Hurley

**Cliff Harley** 

\* 1108 W. Evan Hewes Hwy, El Contro, CA 92243 \*

Phone/fax (760) 352-6496

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

Dear Robert-

I wanted to write and share my thoughts on the Glen Canyon/Lake Powell debate. I have witnessed the reservoir full, and now have been watching as drought and water demands have brought about lower water levels. The low water levels have revealed a beautiful landscape and it's amazing to see features like Fort Moqui, Cathedral in the Desert, and the many side canyons emerge. I feel that raising water levels threatens the cultural, biological, and scenic resources that can be found in Glen Canyon. I am advocating that we keep water levels low and send spring run-off to Lake Mead to be captured there while we truly re-consider the ramifications of Glen Canyon Dam and it's necessity.

I am gravely concerned with the massive ecosystem changes that the dam has brought about in the Grand Canyon. I realize that an environmental impact statement (EIS) was prepared in the mid 90's. It was nice to see this long-overdue effort. This document showed that there was (and still are) issues related to the dam and offered solutions to fix them. I waited very excited to see the results of simulated seasonal flooding in the Grand Canyon. Unfortunately, these tactics showed little promise as a long run solution.

At this point I think we need to seriously consider the decommissioning of the dam as an option. The original EIS failed to do this. I have tried to do my research carefully, and my concerns about sedimentation, evaporation, and long-term water delivery demands always lead me back to the question whether or not draining the lake is for the best. When I add in my other concerns about cultural, biological, and scenic assets affected.... the choice become clear. I feel we need to keep lake levels low, research options related to decommissioning of the dam, and then move in that direction. I want Glen Canyon to resurface. Thank you.

A concerned voter and taxpayer

Eveny 1

Jeremy Robida 539 W 18<sup>th</sup> St. Tempe, AZ 85281

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FAX TS: 702-293-8156 1) Lake Court & Thiskop For The Future ? How MANY PEOPLE WILL POUL TO NEWADA AFTER A MATER QUARE GALF. NEWADA HAS THE HIGHEST MULLIN LATE IN THE U.S. SYLARS RUNNING GLEN CANYON DAM 15 UNSAFE & WILL FAIL CAUSING A MERA TASAMI (REDUILD IT, WHAT HAPPENS TO ALL THE WATER AFTER THE DRONT. ( NO CONSTRA ROOVE GROUND LAKES & UNDER GROUND AQUITERS ADD THE ONLY SOLUTION. ( BRING ALL NUCLEAR TO NEW MEXICO SALT MINES ADIATION LEAKARS AR & MATEL & RIVER UCCA MOUNTAIN. THE 50 CALLED REPOSITORY 13 NOTHING KUT A DUMP W/WINDOW BRESSING, & Will NOT AND SHELLONET & THE PLACE FOR DEADLIEST JULSTANCE KNOWN TO MAN THE MANUTAIN IS ONLY STROLE FOR 200 YEBRS ACCOMMENTS TO TOUR ENGINIERS. THE DOE. HAS NOTE BUT FAILS, MEANING HAS NEVER LOCA ALLE TO BUILD A SAFE HOLDING FACILITY ANYWHERE IN THE U.S. THE TASTS SHOWN TO THE PUBLIC ON How SAFE THE CONTAINERS COURS BE ARE FICTION THE WEIGHT OF THE MOUNTAIN WILL ARUSH THE CAMISTERS BY 999 BILLION P.S.T. 123 A MATTER OF UHER ? MINUTES, HOURS, WEEKS, MONTHS, YEARS 173 A MATTER OF WHEN? VILLA ALSO SITS AN THE SHOST LINE FRUIT THAT WALL PRODUCE & MEGNITURE 7. 5 OR DESTER, AND WHAT AboUT THE UNBLIGHOUND AQUITERS ON lakes That 10% TO 40 ON 50 PENCENT OF FUTURE POPULATION NEEDS HURSE HUCCAN ANSWER WHERE THE WATER TRIJES BEGIN OR FND WUCCA WILL NESTROY THE SOUTHWEST AS UN NEED IT CLARK + NO OTHER COUNTY IN THE SOUTH WILL BE ALLE TO EXPAND NOR EXIST DUE TO THE DESERTION OF THE D. O.E. + CORPUPT POLITICAL FERRIES, COMMON SENSE OR &

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Mr. Bob Johnson, Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470Boulder Ciry, NV 89006This is a duplicate letter to 1.099, Ferguson. Commenter and comments are the same.

#### August 24.2005

#### Dear Mr. Johnson:

I am writing to express my concerns about the management of the Colorado River water and the management of it in Lake Powell and Lake Mead.

I would encourage you to give serious consideration to the possibility of ceasing operations at the Glen Canyon Dam. There are several reasons that this scenario would be beneficial.

Water consumption levels for the Colorado River are near the river's historic average flow and are expected to rise. It is unlikely that Lake Powell will fill again. The surplus water that filled it during 17 years the first time is no longer there to build a storage cushion. Even should surplus water accumulate, Lake Mead on its own could accommodate it.

There is evaporation of about 17 percent of the water that flows into the se reservoirs; it's time that a more efficient means is explored for storing this precious water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency.

Lake Powell's water storage capacity diminishes yearly as the sediments accumulate in the slack water. Maintaining Powell as an efficient reservoir would require the implementation of an expensive dredging program.

Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner. The sediments accumulating behind the Glen Canyon dam will resume their original beneficial role in the maintenance of the natural ecology of the Colorado River in our Grand Canyon National Park when they are allowed to continue on past the dam. Allowing the flowing water to begin restoring a healthy ecosystem to the Grand Canyon River corridor is reason enough, I feel, to seriously consider the possibility of decommissioning the Glen Canyon Dam.

The growing challenges and looming shortages facing Colorado River water users as a result of these dams requires that a far more comprehensive assessment addressing the issues above is fully waranted, and should be done through an Environmental Impact Statement. Thank-you for considering my comments.

reprov

Tom Ferguson 826 West Howe Street Tempe, AZ. 85281 489-966-5418

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1025 Jasmine St. #7 Denver, CO 80220

August 25, 2005

Mr. Bob Johnson, Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, NV 89006-1470 Fax (702) 293-8156

RE: Colorado River Dam Operations

Dear Mr. Johnson:

I am writing to encourage that you consider discontinuing use of Lake Powell and 1 consolidate all water storage at one location on the Colorado River. It is clear that Lake Powel is no longer needed in order to achieve water storage and that the surface area of storage water at this site only leads to evaporative losses. In addition, the presence of Lake Powell is destructive to the environment of the Grand Canyon and drowns beautiful 2 and valuable landscape in Glen Canyon. Additionally, the silt buildup can be much better 3 addressed at Lake Mead.

I appreciate your consideration of this matter.

Sincerely,

Adam Strunk

adam Strump

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Dear Regional Director, Bob Johnson, Boulder City, NV FAX: (702) 293-8166 Regional Director, Rick Gold, Salt Lake City, UT FAX: (801) 524-3858 (Bureau of Reclamation, Lower & Upper Colorado Regions.)

The Colorado River through Glen Canyon and Grand Canyon National Park is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is not getting at the fundamental problem.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. With Lake Powell and Lake Mead losing to evaporation upwards of 17 percent of the water that flows into them, it's time that more efficient means be explored for storing this precious Arizona water. Vacant space in underground aquifers on, or accessible to, existing Colorado River infrastructure could accommodate more water than these two reservoirs combined-and with far greater efficiency. Upwards of 810,000 acre-feet of water annually-enough water for 1.6 million households of four people each-could be saved by eliminating Lake Powell and 2 operating Lake Mead principally for distribution to groundwater recharge facilities.

Given the looming shortages facing Colorado River water users (including Tucsonl) as a result of these dams, a far more comprehensive assessment should be done through an Environmental Impact Statement.

Sincerely, Edward B. Kinst

Edward B. Kirsten, Ph.D

Tinian J. Gusten

Miriam J. Kirsten

CC: Senator John McCain, Senate Office Bldg. Washington, DC. FAX: (202) 228-2862

### Kucera, Cindy

From:	Sandstoneone@aol.com
Sent:	Friday, August 19, 2005 3:45 PM
То:	strategies@lc.usbr.gov

Subject: Glen Canyon Dam

Robert Johnson Regional Director Bureau of Reclamation Lower Colorado Region

Dear Mr. Johnson,

I am a physician living in California but I have visited the Glen Canyon/Lake Powell area many times. As you know the situation in this area is in a state of flux and changes are imminent. I would urge that you consider filling Lake Mead before attempting to re-fill Lake Powell. The demands for water and power in the Southwest has grown so much since the lake was last filled that it is doubtful that it can be filled again, and by filling Mead instead, the evaporation loss will be minimized and power generation will be maximized, since more power can be generated by a full Lake Mead than by the two lakes at half full levels. This would limit the damage to and enhance access to one of the greatest of God's gifts to man, Glen Canyon. Lake Mead has the capacity to hold all the water that is available. Please take this opportunity to leave a lasting mark on this country that will reflect most favorably on you and your Bureau. Thank You

Jack E Miller MD

## Kucera, Cindy

From:	Bill Wolverton [canyonratbw@scinternet.net]
Sent:	Saturday, August 20, 2005 6:40 PM
То:	strategies@lc.usbr.gov; strategies@uc.usbr.gov
Subject:	Colorado River operations

Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, Nevada 89006-1470 Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, Utah 84318-1147

Subject: Operation of Colorado River Dams

It is time that the Bureau of Reclamation seriously consider whether all of the dams on the Colorado River are really necessary to serve the objective of providing a dependable water supply. It has been known for decades that the Compact of 1922 overallocated the river, and that it cannot deliver the full amount of water provided for in the compact. It is also well known what the consequences of the dam in Glen Canyon have been for the river through the Grand Canyon, and that these consequences are simply not acceptable. It has also been fairly well demonstrated that no changes in the operation of the dam in Glen Canyon in order to alleviate these consequences are going to be successful. The benefits derived from the artificial flood releases from the dam have been temporary at best. Sediment continues to accumulate in all of the many tributaries of Glen Canyon the Colorado River, the San Juan, the Escalante, the Dirty Devil, and all, of the innumerable minor tributaries, while it continues to disappear from the Grand Canyon. Nothing can ever change this. There is not likely any way that it can ever be removed from Glen Canyon and transported past the dam into the Grand Canyon, and it will ultimately result in the end of the reservoir in Glen Canyon. However, if it were not for the dam in Glen Canyon, all of this sediment would be accumulating in just one major location in Lake Mead, where it would be much more accessible for removal, instead of being dispersed in numerous, nearly inaccessible canyons. Something MUST ultimately be done about the sediment accumulation in these reservoirs. Western society cannot go on indefinitely relying on these reservoirs to supply water, all the while growing recklessly and irresponsibly and demanding and consuming ever more water. Something has to change.

It is also well known that both of these reservoirs, and all other reservoirs, lose significant amounts of water to evaporation. In the case of the reservoir in Glen Canyon it is estimated to be enough to supply a city the size of Salt Lake, no small amount. It is also well known that upstream consumptive use has been steadily increasing in the years since the dam in Glen Canyon was built, and that there is significantly less water coming down the river into Glen Canyon than there was. This is not going to change, and is only going to continue. The result will be that there will be ever less water to be stored in Glen Canyon, making the reservoir there increasingly unnecessary.

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It is time to find other ways of storing water than in open, onstream reservoirs that are destined to fill in with sediment, all the while losing huge amounts of precious water to evaporation. One reservoir of the size of either Glen Canyon or Mead is enough to control the flow of the river.

It is time to start seriously studying how to do something about the sediment accumulation in order to make Lake Mead last. Given the impracticality of removing any significant amount of sediment from the reservoir in Glen Canyon, it is time to seriously consider decommissioning it, allow the sediment to begin to move on down into and replenish what has been lost from the Grand Canyon, and let it enter Lake Mead where it can be removed. Lake Mead and the other dams downstream must be used as a diversion system to other, offstream storage facilities, such as underground acquifers where evaporative losses are minimal.

I realize that Congress has prohibited the use of any federal funds to study the possibility of decommissioning the dam in Glen Canyon. This was done by Utah Congressman Jim Hansen, in a knee jerk reaction to efforts by citizens to restore Glen Canyon. He has since retired, but the prohibition has remained in place, supported by other members of the Utah delegation. I believe that the Bureau of Reclamation now knows the folly of the present system and that the reservoir in Glen Canyon is not necessary. I have heard from several reliable sources that a few officials of the Bureau have actually admitted, privately, that the dam in Glen Canyon is not necessary. It is time that the Bureau face up to this and confront Congress in order to allow a full study of all options regarding management of the Colorado River, including the decommissioning of the dam in Glen Canyon. Prohibiting this possibility is a classic case of behaving like an ostrich sticking its head in the sand, in effect simply saying, "I don't want to know".

Quite frankly, I DO want to know.

Sincerely,

William H. Wolverton Box 393 Escalante, UT 84726

### Kucera, Cindy

From: Sent: To: Subject: Mark Bird [mark\_bird@ccsn.edu] Monday, August 22, 2005 12:49 PM strategies@lc.usbr.gov [Fwd: 0405 Desalt.pdf]

Attachments:

0405 Desalt.pdf



0405 Desalt.pdf

To whom it concerns:

Earlier, I sent you folks a black and white version of this April 2005 magazine article. The article contends \$000 is the current acre-foot cost of desalted seawater for the Colorado River. This version is in color and and is easier to read. I hope you print out this 3-page article and include it the document you are preparing. I also hope you will inform me whether or not you can include or reference my article in the document you are preparing. Cordially,

Mark Bird

## Duren, Sabre

From: LarryLaitner [llaitner@charter.net]

Sent: Tuesday, August 23, 2005 10:46 PM

To: strategies@lc.usbr.gov

I would like you to remove the Glen Canyon Dam. I support the one canyon option. It seems to be the only thing that nakes sense economically and environmentally.

Karen L. Salley 801 Pinecrest Terrace Ashland. OR 97520

#### Date: Varies, see Commenter List (see note below)

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

This Form Letter B was received from approximately 931 individuals (Commenters). All the letters were identical. For efficiency purposes, the commenter contact information has been entered into a database and each different comment noted/identified on this letter are noted to have been received 931 times within the Comment database. 2

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### Kucera, Cindy

From:	scubadive1@prodigy.net
Sent:	Thursday, August 25, 2005 3:56 AM
То:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

The Colorado River is dying through Glen Canyon and Grand Canyon National Park under current dam management operations.

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River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be officially revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all issues. Current low reservoir conditions, increasing demands, and looming shortages require that every alternative be considered.

I respectfully request that the Bureau prepare an Environmental Impact Statement that

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Sincerely,

ERIC PIHL 129 NORTH WILKE ROAD ARLINGTON HEIGHTS, Illinois 60005

#### Kucera, Cindy

sheathelm@msn.com
Thursday, August 25, 2005 5:04 AM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

I recently had the opportunity to raft through the Grand Canyon for six and one-half days. It was one of the great experiences of my life. We must do whatever we can to preserve this treasure and bring it back to its natural state. I was able to speak with some of the officials studying fish and wildlife in the canyon.

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

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As a resident of Tucson I am very concerned about the efficient use of Colorado River water. We are very proud of the conservation work in the Tucson area but much more needs to be done. For example, why can't Las Vegas and some of the California cities be forced to discontinue the excessive water use? Why not a per capita limit on distribution?

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Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Herbert Sheathelm 38117 S Canada del Oro Dr Tucson, Arizona 85739 5

### Kucera, Cindy

aoyama@swva.net
Thursday, August 25, 2005 5:11 AM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

I formerly worked at Glen Canyon in 1982, the year they perportedly "filled" the lake to meet the obligation to Mexico on water rights. Even then, it was so obvious what a tragedy this dam was all about and many people fought to have the dam restored to its prior state. I photographed many petrogpyphs and indian sites that are now wiped out by the filling of the dam.

Sadly, it was to avail and now, the Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations.

Attempted mitigation to preserve the river ecology has failed.

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Sincerely,

Suki Mahar 724 Hale Road NE Check, Virginia 24072

### Kucera, Cindy

ncampion@aol.com
Thursday, August 25, 2005 6:38 AM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Do not cave in to the demands of the powerful extreme environmental groups such as the Center for Biological Diversity with regards to the Colorado River dam management. These dams such as the Glenn Canyon and Hoover are vital to the economic and social wellbeing of the country. Flood management and water distribution that these dams provide must be continued.

Do not consider the elimination of Glenn Canyon Dam in any program designed to manage the water flow of the Colorado. Every and all alternatives should be considered. Thank you for listening to the views and concerns of an ordinary citizen.

Sincerely,

Nick Campion 27681 paseo barona san juan capistrano, California 92675

#### Kucera, Cindy

From: Sent: To: Subject: gaia@citcom.net Thursday, August 25, 2005 7:24 AM strategies@lc.usbr.gov Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

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Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental I mpact Statement that includes decommissioning Glen Canyon Dam.

I've been telling Floyd Elgin Dominy for years that it should never have been built and now we should blow the SOB up.

Dominy's gone now, so let's get on with the demolition.

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Sincerely,

DON RICHARDSON 525 WINDOVER DRIVE BREVARD, North Carolina 28712

### Kucera, Cindy

From:	susan_zakin@yahoo.com
Sent:	Thursday, August 25, 2005 7:56 AM
То:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Dear Mr. Johnson and Mr. Gold:

The Colorado River is probably the most meaningful natural resource in the West. It is both symbolically important and, of course, important as a source of water.

To many of us, Glen Canyon dam is also symbolic, as the ultimate symbol of the worst example of old-style Western water policy.

With so many dams coming down around the country, it is time to signal that change has come by dismantling Glen Canyon dam. Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities-- are dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

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River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that

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addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

SUSAN ZAKIN P.O. Box 87515 Tucson, Arizona 85754

From:	forests@ucla.edu	
Sent:	Thursday, August 25, 2005 8:46 AM	
То:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

Lake Powell is a mess. What would John Wesley Powell say to this sticky, muddy, ugly mess of a Lake that loses vast amounts of water through evaporation and through pressure into the sponge-like rock basin. It's an aesthetic mess. It's a biological mess. it's a geologic mess.

Rethink this project. Conduct a comprehensive EIS on the operations of Glen Canyon and Hoover Dams. Glen Canyon Dam has been around a long time, but that doesn't mean it has been a success, or that it should be around any longer.

Sincerely,

MELI SSA SAVAGE 1477 1/2 CANYON ROAD SANTA FE, New Mexico 87501 1

### Figueroa, Amanda

From: Sent: To: Subject: PrimatePerson2004@yahoo.ca Thursday, August 25, 2005 8:53 AM strategies@lc.usbr.gov Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Please help protect the beautiful river and canyon that GOD has created!

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues. Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Bassam Imam 1625 Maisonneuve W #1109 Montreal, H3H 2N4 Canada

From:	brazenking@earthlink.net	
Sent:	Thursday, August 25, 2005 9:13 AM	
То:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam. HAYDUKE LIVES......I PROTESTED THE DAM BEING BUILT AND NOW I WANT IT TAKEN DOWN......FOR EDWARD ABBEY

Sincerely,

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ALLEN DECKER 4250 BEULAH DR. LACANADA, California 91011

From:	kev1nomi@aol.com	
Sent:	Thursday, August 25, 2005 9:14 AM	
To:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

DON'T BE LITTLE GIRLIEMEN, GET THIS GOING AND GET RID OF GLEN CANYON DAM. The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment. Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled <sup>2</sup> at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

4,5

KEVIN FURLONG 103 EBENEZER DR. WEST SENECA, New York 14224

From:	jimbo@tetonmountainhome.com Thursday, August 25, 2005 9:33 AM	
Sent:		
То:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

I spend many weeks on the Colorado river each year. The devastation of the dam is quite evident in the Grand Canyon. We must bring back the warmer water and the sediment to the canyon!

There are alternatives to the resevoir in order to provide water for the region. Glen canyon must be restored, it's beauty and potential recreation opportunities far outweigh whats being done on the current resevoir. America neads to consume less gas. Gas guzzling fuels terrorism. By restoring Glen Canyon, recreational activities in the area would consume far less gasoline. The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

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Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental I mpact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Jimbo Collins 1190 murphy In Moab, Utah 84532

## Duren, Sabre

From:letterip@hotmail.comSent:Thursday, August 25, 2005 9:36 AMTo:strategies@lc.usbr.govSubject:Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

These people that want the damm decomissioned are nuts. Please do not give them any 1 credence at all.

Thank you for your attention to this matter!

Sincerely,

Joe Cuccio 447 West Leadora Ave Glendora, California 91741

I.519

From:	aqua4fun@hotmail.com Thursday, August 25, 2005 9:44 AM	
Sent:		
То:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

I urge you to consider decommissioning Glen Canyon Dam and utilize Lake Mead or recharge aquafirs for water storage instead.

With global warming and the forcast of a continuing drought it doesn't make sense for water to be evaporating from two large bodies of water when Lake Mead can hold it all.

An added advantage to decommissioning the dam would be the restoration of Glen Canyon with its 1500 native sites and the incredible beauty of the slot canyons.

The Colorado River reservoir operations should be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental I mpact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

DONNA RI DDLE 61240 PRESCOTT TR JOSHUA TREE, California 92252

From:	jrexcoyote@aol.com	
Sent:	Thursday, August 25, 2005 1:34 PM	
То:	strategies@lc.usbr.gov	
Subject:	Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled 2 at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental I mpact Statement that includes decommissioning Glen Canyon Dam.

We cannot pretend anymore that we understand river and riparian ecology enought to manage this vital river. Let's allow the river manage itself -- please study how to create an exit strategy for the Glen Canyon Dam.

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Sincerely,

Jan Garton 219 WESTWOOD RD Manhattan, Kansas 66502-3850

From: Sent: To: Subject: coner@telus.net Thursday, August 25, 2005 1:34 PM strategies@lc.usbr.gov Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Examine the science of removing the dam- you will see that the benefits far outweigh the negatives. Listen to all the arguments, not just those of entrenched economic interests. The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

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james mackay 7205 fitzsimmons road whistler, VON1B7 Canada

thecoffeebug@yahoo.com Thursday, August 25, 2005 5:47 PM	
Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

Attempted mitigation to preserve the river ecology of the Colorado River through Glen Canyon and Grand Canyon National Park has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

Water at Lakes Powell and Mead is subject to significant evaporation. Groundwater recharge is a far more efficient way to store Colorado River water.

In the river corridor, beaches and wildlife have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams.

The Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than 2 exists in the system.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

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Sincerely,

B. FRANK P. O. BOX 152 HESPERUS, Colorado 81326

seth@sethhenry.com	
Thursday, August 25, 2005 5:47 PM	
strategies@lc.usbr.gov	
Colorado River Reservoir Operations Comments	

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

Dear Regional Director Johnson,

I am writing to ask you, as you evaluate reoperation of Lake Powell and Lake Mead, to consider carefully the option of ceasing operations at Lake Powell and decommissioning Glen Canyon Dam. For many reasons, I believe the time has come to adopt a single reservoir approach to managing Colorado River flows.

By limiting the reoperation assessment to only address low reservoir conditions, the Bureau of Reclamation is inviting failure. Demands are increasing, and shortages are looming. The river already can?t meet the flows allocated in the 1922 Colorado River Compact, and flows are expected to decline further. It is time to give reservoir operations on the river a full analysis that addresses all of these issues.

If such an analysis were undertaken, I think it would point to decommissioning Glen Canyon Dam as the best solution. Lake Powell is notoriously inefficient water storage. Existing aquifer space that is accessible to existing Colorado River infrastructure could accommodate more water than Lake Powell and Lake Mead combined, with far greater efficiency. Lake Mead on its own could accommodate any surplus water that may accumulate.

Glen Canyon Dam has had devastating impacts on native fish, habitat, and archeological sites. Sediment is a major threat to long-term operations, and removing sediment from Lake 3 Mead is more feasible and less expensive than from Lake Powell.

I am a native of Colorado and have nurtured a relationship with the Colorado River for over thirty years. I urge you to prepare an Environmental Impact Statement that includes an option to decommission Glen Canyon Dam. Thank you for considering these comments.

Sincerely,

Seth Henry 232 Gay St Longmont, Colorado 80501 1

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From:	spotts@infowest.com
Sent:	Thursday, August 25, 2005 5:47 PM
То:	strategies@lc.usbr.gov
Subject:	My Comments on Colorado River Reservoir Operations

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

at Hoover Dam in the near and long terms.

Dear Regional Director Johnson,

Please accept these comments in response to your Federal Register Notice on possible changes in operations for the Colorado River reservoirs (Lake Powell and Lake Mead).

As you know, the Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment. Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations

as well as wildlife and must be removed at both dams, but could be more effectively handled

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered.

I respectfully request that the Bureau prepare an Environmental Impact Statement that

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evaluates a reasonable range of alternatives to address these issues. These alternatives should

include: 1) more stringent water conservation requirements for those government entities receiving future Colorado River water;

2) more use of groundwater recharge with less surface storage to reduce high evaporation losses; 3) decommissioning Glen Canyon Dam; 4) aggressive tamarisk removal along Colorado River system waterways to capture more water now lost to evapotranspiration; and 5) an eclectic combination of these alternatives to maximize water savings and require the most efficient water uses.

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It is myopic, incremental, and ineffective to only look at reservoir operations without addressing these larger issues.

There is NEPA law stating that an ELS can consider an alternative outside of the agency's current legal authorization if it may offer a feasible solution to a serious problem. This EIS analysis may persuade Congress to change the authorization to solve the problem.

Please do not hide behind the existing legal authorizations, and start thinking creatively about how to solve these problems. The status quo is not working, and new thinking to find solutions is urgently needed.

Thank you very much for your consideration.

Sincerely,

**Richard Spotts** 1125 W. Emerald Drive St. George, Utah 84770-6026

From:	mailmanage@fastmail.fm Thursday, August 25, 2005 6:36 PM	
Sent:		
To:	strategies@uc.usbr.gov; strategies@lc.usbr.gov	
Subject:	Colorado River Dams	

G'day and thank you for your time. I will keep this short and just voice my desire that the One Damn proposal be adopted to restore the Colorado river and Glen Canyon to their more 1 natural states and to save water storages overall.

Thank you, E Lokey Colorado Voter

--

http://www.fastmail.fm - I mean, what is it about a decent email service?

From:	cknuth@aol.com
Sent:	Friday, August 26, 2005 3:49 AM
To:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed.

Groundwater recharge is a far more efficient way to store Colorado River water.

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The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the riverThis sediment affects dam operations as well as wildlife and must be removed at both dams, but 2 could be more effectively handled .

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Cynthia Fischer 956 Conner Rd. West Chester, Pennsylvania 19380

From:	
Sent:	
To:	
Subject:	

dartley@connectwireless.us Friday, August 26, 2005 9:20 AM strategies@lc.usbr.gov Colorado River Reservoir Comments

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park is being ecologically harmed under current dam management operations. The managers know thaT all mitigation to preserve the river ecology has been a failure.

The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is also flawed. The Bureau of Reclamation has something to hide from the public. Thats obvious.

Much of the water that flows into Lakes Powell and Mead is lost to evaporation due to the expansion of surface water through the dams.

Groundwater recharge is a far more efficient way to store Colorado River water. Your hydrologists know this and tell you this, yet you ignore them. Why?

River flows have been declining significantly over time. Something must be done.

The Colorado River Compact of 1922 requires a revision. The Compact itself is flawed, since it set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system.

This Compact must be redone!!

The compact must also address:

1) Current low reservoir conditions,

2 increasing demands and water shortages (including the needs for fish and wildlife).

I demand that the Bureau prepare an full EIS that includes tearing out Glen Canyon Dam.

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If this isn't done soon, my next letter will be to my Senator and Representative asking then why the Bureau is not doing its job.

Sincerely,

Richard Artley 415 EN 2nd Grangeville, I daho 83530

### Wilde, Rebecca

From: Sent: To: Subject: avatar11@rediffmail.com Friday, August 26, 2005 7:15 AM strategies@lc.usbr.gov Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact 1,2 Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Ravi Grover PO Box 802103 Chicago, Illinois 60680

#### Duren, Sabre

From:Denayone@yahoo.comSent:Friday, August 26, 2005 1:35 PMTo:strategies@lc.usbr.govSubject:Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

I remember the first 'Ecology' class I took back in the early 60's at Merrit Jr. collage in Oakland, CA. We saw photos of the Exquisite wildness of Glen Canyon Before it was ruined by the Dam. It was incomprehensible to me then that Anybody could destroy this incredible place and it's beauty and magic! I have never forgotten this impact on the environment or on 'me'. I became an Advocate for the Environment then and am 100% committed to doing all possible to address the Restoration of Glen Canyon now.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower 1 Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues. Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

Sincerely,

Demelza Costa 28626 Ridgeway Rd. Sweet Home, Oregon 97386

I-832

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## Kucera, Cindy

From:Joan Falconer [joan-falconer@uiowa.edu]Sent:Friday, August 26, 2005 1:48 PMTo:strategies@lc.usbr.govSubject:Lakes Mead & Powell--Comment

Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000

# \*\*I am sending this same comment to the Regional Director of the Upper Colorado Region\*\*

I support the *One-Dam Solution* as proposed by "Living Rivers." You have those arguments already, so I am not repeating them, but speaking instead as a "river runner" who has made leisurely trips through Cataract Canyon, on the San Juan, and twice down the Colorado through Grand Canyon. I have also taken a commercial trip on Lake Powell to Rainbow Bridge, in the course of which we navigated through several of what remained of Glen Canyon's renowned slot canyons. All this I've done within the past decade, and as I am now in my mid-seventies, I speak chiefly out of concern for future generations of Americans.

Grand Canyon has been put at increasing risk by Glen Canyon Dam. Along with the fish extinctions, the difference in the river shores between my two trips in 1996 and 2000 was striking, especially in the amount of tamarisk that is crowding out what is left of the sandy beaches. The NPS will soon have to impose further restrictions on those who want to make river trips, as there simply won't be enough camp sites. There's scarcely space for the 23,000 who go there now. A consequence will be the pricing out of the market (i.e. off the river) all but the wealthiest--the class of citizens that already can afford to run around Lake Powell in polluting power boats. --Actually, that's already happening. Those of us who are single can manage the Canyon trip, but a family of four (for example) would have to be wealthy indeed. Between the spread of the tamarisk (no longer kept in check by annual runoff) and the erosion of the beaches, there will be ever less place for people to set foot on the shore.

Another reason for "shutting down" Lake Powell is the huge water loss by evaporation, and absorption into the sandstone walls, as well as that lost to thirsty tamarisk. I've been to Zion National Park, where climbers are not permitted on the walls of that same sandstone when it is wet, due to its tendency to spall off. We all know what almost happened in 1983. The dam is really not a secure structure.

Shut down the dam, start waging war against the tamarisk, store water in the aquifers as Arizona is already doing, and perhaps Nevada will be able to afford Las Vegas a while longer. And you will have restored one of God's most beautiful creations.

Thank you for your consideration.

Sincerely yours,

Joan O. Falconer

The trouble with the world is that the stupid are cocksure and the intelligent are full of doubt. --Bertrand Russell

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### Kucera, Cindy

From:	Thomas Elliott [trelliot1@mindspring.com]
Sent:	Friday, August 26, 2005 4:36 PM
То:	strategies@lc.usbr.gov
Cc:	strategies@uc.usbr.gov

Subject: Glen Canyon dam/Lake Powell comment

Dear Directors,

I am writing as a long time member of the Center for Biological Diversity to express my strong OPPOSITION to the Center's newly announced position supporting the de-commissioning of Glen Canyon dam and Lake Powell. I am embarrassed by the decision and saddened that the Center will allow its efforts and energies to be distracted from their usual environmental work for this counterproductive and foolish quest.

Although I would certainly protest the building of Glen Canyon dam now if it were not already built, I think we all need to recognize what a tremendous asset the dam has created in Lake Powell. The access to wild and beautiful terrain and wonderful vacations afforded by the lake is unmatched by any public facility in the nation.

Aside from the obvious water storage and flood control issues that would be problematic without the dam (the 1983 floods were not that long ago, and could happen again), the loss of the recreational value of the lake would be enormous.

Please resist efforts currently underway to evaluate decommissioning of the dam. Hopefully the Center (along with the Sierra Club) will return to their fundamental mission of resisting the gradual degradation of our ecosystems and loss of biodiversity, and refrain from promoting these futile and counterproductive "radical" projects.

Thank you for your consideration.

Thomas R. Elliott

From:	YesRobin@aol.com
Sent:	Saturday, August 27, 2005 8:42 AM
То:	strategies@lc.usbr.gov
Subject: (no subject)	

PLEASE, remove Glen Canyon dam. I have read the environmental reports and feel this is the responsible course of action. Remove the dam. Thank you.

Robin Brooke Ashland, Oregon

steve.okane@cfu.net
Saturday, August 27, 2005 8:33 AM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

I am one of the authors of the upcoming Flora of the Four Corners (a joint project between San Juan College, Farmington and the Missouri Botanical Garden). I am writing to support the restoration of Glen Canyon because it has been my observation that the "lake" system is contributing seriosly to a growing weed problem in the American West. Fluctuating water levels create an ideal seed bed and source of dispersal for exotic plant species. Once established, weed populations can easily move through the canyon system by floating seeds and by seeds that hitch a ride on boaters that land on beaches formed by low water levels.

I'd be happy to provide more detail should you so wish.

Sincerely,

Steve O'Kane, Ph.D. Department of Biology Cedar Falls, I owa 50614-0421

haseltin@u.arizona.edu
Saturday, August 27, 2005 1:00 PM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Restoring the Glen Canyon to its natural beauty is something I've long dreamed of, and I thing the time has come that is feasible. Please make this a possility!

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment. Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

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Sincerely,

MI CHAEL HASELTI NE 710 N ALAMO AVE TUCSON, Arizona 85711

erindart12@yahoo.com
Saturday, August 27, 2005 3:02 PM
strategies@lc.usbr.gov
Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

I hope things are going well for you in your life but unfortunately the Colorado River through Glen Canyon and Grand Canyon National Park is deteriorating under current dam management operations. The attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's development of management strategies only address low reservoir conditions...this is not enough.

Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is lost to evaporation due to the expansion of surface 1 water through impoundment-groundwater recharge is a more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. River flows have been declining over time, and the Colorado River 2 Compact of 1922 requires revision. Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental I mpact Statement that includes decommissioning Glen Canyon Dam. Thankyou for your time. Please think about what is happening to the beautiful environment!! :)

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Sincerely,

Erin Dart 55 Kensington Dr. Canton, Massachusetts 02021

From: Charles M. Ewing [cmewing@mail.jhmi.edu]Sent: Saturday, August 27, 2005 12:40 PMTo: strategies@lc.usbr.gov

Dear Robert Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels..

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

Your Name Charles M. Ewing Address 17420 Masemore Road Phone number Email address cmewing@jhmi.edu

From:	robburson@hotmail.com
Sent:	Sunday, August 28, 2005 5:11 PM
To:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

Leave the Glen Canyon Dam as it is.

Sincerely,

Robert Burson 31930 SE Pipeline Rd. Gresham, Oregon 97080

From:	bdonnyboy@aol.com
Sent:	Sunday, August 28, 2005 9:41 PM
To:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park--a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities is fine the way they are.

I feel that draining lake powell will adversly affect the natural river flow in the grand canyon. Please don't bow down to the cbd group. They do not have the publics best interest's in mind.

sincerely, Don Bedford carlsbad, ca

Sincerely,

don bedford 1953 swallow lane carlsbad, California 92009
From:	lobuck@adelphia.net
Sent:	Sunday, August 28, 2005 10:03 PM
То:	strategies@lc.usbr.gov
Subject:	Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

As a person living in Yuma, AZ, at the end of the Lower Colorado River, I am in complete opposition of the recommendation solicited by the Center for Biological Diversity and actionnetwork.org to request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

I do however FULLY SUPPORT the decision by DOI Secretary Gale Norton in May 2005 to maintain Colorado River water releases from Lake Powell at their scheduled level for the next five months because drought conditions in the Colorado River Basin have eased during the 2005 water year.

The safety and livelihood of our area greatly depends on proper regulation and releases of water from all of the dams and reservoirs on the Colorado River, including Glen Canyon and Lake Powell.

Futhermore, many people throughout the world rely on the agribusiness in the Lower Colorado River Area, which would not be possible without the proper management of water.

Here is a link to a DOI press release announcing Secretary Norton?s decision. http://www.doi.gov/news/05\_News\_Releases/050502c

I respectfully request that the DOI and Bureau of Reclamation continue this path of good judgment and keep the water that we so desperately need accurately regulated.

Sincerely,

Glenn Montgomery 4480 W. 17th Place Yuma, Arizona 85364

From	Lisa Grob [lisagrob@verizon net]
Sonti	Monday, August 20, 2005 12:48 DM
Sent.	Monday, Adgust 29, 2003 12.46 FM
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.

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.

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.

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.

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.

Lisa Grob 4609 Beechwood Rd

College Park, MD 20740

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From:	Richard Schwartz [richard@mtperson.com]
Sent:	Tuesday, August 30, 2005 2:42 PM
То:	strategies@lc.usbr.gov; strategies@uc.usbr.gov
Subject:	Comments on low water conditions in Powell and Mead: UC-402 and BCOO-1000

#### Attachments:

BuRec Powell comments.doc



BuRec Powell comments.doc (50 ... Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P. O. Box 61470 Boulder City, NV 89006-1470 strategies@lc.usbr.gov

Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, UT 84318-1147 strategies@uc.usbr.gov

Dear Sir or Madam:

Attached are comments on the development of management strategies for low reservoir conditions on Lakes Powell and Mead.

Please let me know if you have trouble opening the Word attachment.

Sincerely,

Richard Schwartz HC 64 Box 2503 Castle Valley, UT 84532 richard@mtperson.com Regional Director Bureau of Reclamation, Lower Colorado Region Attention: BCOO-1000 P. O. Box 61470 Boulder City, NV 89006-1470 <u>strategies@lc.usbr.gov</u>

Regional Director Bureau of Reclamation, Upper Colorado Region Attention: UC-402 125 South State Street Salt Lake City, UT 84318-1147 <u>strategies@uc.usbr.gov</u>

Dear Sir or Madam:

These comments are provided to you in response to the solicitation of comments on the development of management strategies for low flow regimes into Lakes Powell and Mead.

While the solicitation specifically requests comments on management for low reservoir conditions, the challenges of urban and agricultural growth in the Colorado River Basin and the likelihood of low flows as the norm rather than the exception make it imperative that a more wide-ranging Environmental Impact Statement be undertaken. Dams, reservoirs, water delivery systems, and urban infrastructure have lifetimes measured in decades or centuries and it is essential that management strategies adopted today be farsighted enough to guide prudent stewardship of the arid West's water for many decades.

The scientific evidence indicates several salient facts that should be taken into account in the development of any management strategies for the two lakes:

- The river flows used to allocate Colorado River water between the upper and lower basin states in the Colorado River Compact of 1922 were based on unusually wet years. The result, after 80 years of intensive development in the two regions, is that the Colorado River system is over-allocated
- Climate change due to human and cyclic factors will likely reduce the amount of water in the Colorado Basin in the future.
- Water consumption for agricultural and urban development is already at the Colorado River's historic flow levels and is rising.
- Given the low level of and reduced flows into Lake Powell, it is unlikely that Lake Powell will refill to maximum pool elevation for many decades, if ever..
- Restoration of the Colorado River riparian environment, particularly in Grand Canyon National Park, cannot be expected, and, indeed, will continue to deteriorate, unless significant changes are made in the way Lake Powell and Glen Canyon Dam are managed.

Management strategies for both the upper and lower basins should be based on the following:

- The Colorado River Compact must be revised so that it is based on realistic flows, including an adjustment for likely flow reductions due to climate change.
- The amount of water allocated between the upper and lower basin states should reflect these realistic flows and should result in an equitable division of water between the two basins.
- The price of water as delivered to end users should reflect the actual cost of providing the water. Specifically, agricultural users should not receive water whose price is subsidized by taxpayers and urban users.
- Lake Powell is not an efficient storage mechanism for water. Its large surface area and porous surrounding rock means that many thousands of acre-feet of water are lost each year to evaporation and seepage. Much greater efficiency could be achieved by eliminating Lake Powell and using Lake Mead as a buffer for water that is then distributed to groundwater recharge facilities. Storing water in underground aquifers is both feasible and efficient.
- Restoration of the Grand Canyon ecosystem appears to be impossible as long as Glen Canyon Dam impounds natural water flows. Over the last several years attempts at restoring fish habitat, sand and gravel bars, and riparian habitat by replicating natural floods not been successful.
- A major reason for the failure of restoration attempts in Grand Canyon National Park, a planetary jewel, is the sediment trapped behind Glen Canyon Dam. The role of Glen Canyon Dam exacerbates the sediment problem is two ways. First, by trapping the sediment in Lake Powell, it is removed from the downstream river environment. This has major impacts on fish, riparian ecosystems, recreational beaches, archeological structures, and virtually every aspect of the Grand Canyon. Second, by trapping the sediment, Glen Canyon Dam is destroying the ability of Lake Powell to store water.

Thank you for the opportunity to provide comments on this critical subject.

Sincerely,

Richard Schwartz HC 64 Box 2503 Castle Valley, UT 84532 richard@mtperson.com 3

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From:	
Sent:	
To:	
Cc:	
Subject:	

Pat Palmer [ppalmer@aoc.nrao.edu] Wednesday, August 31, 2005 2:57 PM strategies@lc.usbr.gov ppalmer@nrao.edu Lake Powell

Greetings,

I writing because I am concerned about the future of Lake Powell. I spend about 2 weeks per year in that vicinity, mostly on the Dirty Devil River and the Escalante River. I have done this for a number of years.

Last Fall, I made a trip down the Escalante River (Coyote Gulch) onto Lake Powell for a coupleof days using small inflatable boats that we carried to the Escalanete River. That is the first time I got to see the areas uncovered as Lake Powell fell more than 130 feet below full pool. It was amazing how fast the areas uncoverd by the recent drought had restored themselves and how much we had lost by covering these regions.

I have read up on the problems caused by drought because we have been suffering from this in New Mexico also. It is clearly better to move away from this old type resevoirs which store water so that evaporation is about maximum. Steadily more people seem to be moving to the southwest, and water is going to be in short supply any way, and with a drought, it will require all of our ingenuity to get by. One logical way to minimize losses it to concentrate all of the water in Lake Meade. Even if we scrape by through this drought, population increase in the region will makle it much more difficult next time. Therefore I 2 urge you to think ahead and get as much head staert as you can on conserving water. That will make things awkward for some now, but not intolerable as a future drought will make it for an increased population.

I strongly favor options that would remove Lake Powell, concentrate all of the water in Lake 3,4 Meade and restore Glen Canyon.

Patrick Palmer 302 Eaton Avenue Socorro, NM 87801

I.1073

Page	1

From:	"Enriquez, Armando" <armando.enriquez@nissan-usa.com></armando.enriquez@nissan-usa.com>
To:	<strategies@uc.usbr.gov>, <strategies@lc.usbr.gov></strategies@lc.usbr.gov></strategies@uc.usbr.gov>
Date:	Thu, Aug 11, 2005 9:28 AM
Subject:	Cease operations at Glen Canyon Dam!

Dear Mr. Gold and Mr. Johnson,

It is imperative that you consider the proposal to cease operations at Glen Canyon Dam and allow full use of Lake Mead's storage capacity, and power generation at Hoover Dam. As you are aware, recent Hydrologic studies have reflected the fact that Lake Powell will probably never be at full pool again.

The drowning of the Colorado River through Glen Canyon has to be one of the biggest mistakes ever made by mankind. The incredible beauty and archaeological sites that seem forever lost beneath hundreds of feet of water are re-exposing themselves and begging for a chance to be restored by nature, only to be thwarted by the unnecessary fluctuations of Lake Powell.

Please consider the following actions:

# 1. Fill Lake Mead First

Consumptive water use in the Upper and Lower Basins has increased significantly since Glen Canyon Dam was built. There is not enough water in the system to fill both of these reservoirs. It is essential that we first fill Lake Mead to maximize power generation and maintain water supply for large cities in the lower basin such as Las Vegas, Los Angeles and Phoenix. There is no need for Lake Powell.

2. Storage in Lake Mead is enough to capture surplus water Lake Mead, combined with downstream aquifer-recharge projects, has sufficient storage capacity to hold all surplus Colorado River water. More water will be available to those dependent on Colorado River water by storing all surplus water in Lake Mead. There will be less water lost to evaporation when Lake Mead is full than when both Lake Mead and Powell are kept at half capacity.

# 3. Ensure maximum generation of electricity

More power can be generated by running Hoover Dam at full capacity than by running Hoover and Glen Canyon Dams at half capacity.

# 4. Restore Two International Treasures

Decisions made regarding the operations of these reservoirs present an historic opportunity to create a better water delivery system for the West while restoring Glen and Grand Canyons. The negative environmental consequences that dams have on rivers are becoming increasingly known. We now have the opportunity to protect Glen and Grand Canyons from further environmental and cultural degradation by moving all water storage out of Glen Canyon and into Lake Mead.

Thank you for your time,

Armando Enriquez

Nissan North America, Inc.

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Specialist, Product Training Managing Editor, SalesTalk Magazine armando.enriquez@nissan-usa.com ph. 310.771.6315 fax 310.771.6176 From:"Tom Herschelman" <tombwca@intella.net>To:<strategies@uc.usbr.gov>, <strategies@lc.usbr.gov>Date:Thu, Aug 11, 2005 5:21 PMSubject:Glen Canyon Dam Comments

Regional Director, Bureau of Reclamation, Lower Colorado Region Attention BC00-1000 and Regional Director Bureau of Reclamtionl, Upper Colorado Region Attention UC-402

# Glen Canyon Dam Comments

Greetings. I wish to thank the BLM for the opportunity provided to share these comments concerning the decommissioning of the Glen Canyon Dam.Please enter these into the official record of comments.

I, Tom Herschelman of Sheboygan Falls, WI. am past Forestry-Biodiversity Chair of the John Muir Chapter (Wisconsin) of the Sierra Club, and was a member of the Lands Management Committee of the national Sierra Club. Other activities were undertaken in the Sierra Club and other organizations.

My focus has now turned from secular environmentalism to sacred creation care. I am a member of the Religious Campaign for Forest Conservation and the Religious Campaign for Wilderness.

My particular interest has changed to the sacred perspective because of my search to find my own spirituality and to attempt to comprehend a Christian Ethics on how we are to relate to the creation based on sound theology. I am currently working on a Masters Degree in Theology (Lakeland College). This spiritual journey has resulted in a revelation that as a species we have profound challenges before us, many of which can only be decided from a moral-ethical (Christian-Jewish, and others) position. I am referring to the issues of carrying capacity of humans on the earth, global warming, deforestation, desertification, loss of native biodiversity, land conversion, sprawl, homogenization, peak oil, pervasive population increases everywhere, etc. etc. My Christian religion I find is a vehicle for possible answers to these ethical-moral questions. To the contrary, though, I perceive secular environmentalism as focusing on science and anthropocentric perspectives, which I feel do not always provide answers to complex issues based on the deepest of ethical considerations and the spirituality within me.

So, the bottom line is, that as a Christian who believes the Psalm statement that "The earth is the Lord's, and all within", and who adheres to the common creation and the Genesis creation stories, and believes in the creation being a blessing to humankind, and who recognizes in God's plan the diversity of life and evolution of matter and time from the big bang on, that we humans have an obligation, being created in the image of God and being given dominion over the earth, to cherish the creation. We are to care for it and for all of life to flourish as God intended; we must not alter rivers. Therefore, I propose the decommissioning of the Glen Canyon Dam based on my Christian beliefs that it is in God's plan for rivers to flow freely and for the life therein to be left to flourish. There are practical and secular reasons to decommission the dam also, such as the fact that the amount of water evaporated from the lake each year is enough to furnish the water needs of Los Angeles.

Although this position is based on faith and therefore does not have to be proven as perhaps a scientific perspective would be, I wish to briefly explain a small part of where my belief on creation care in general and of the needed reconstitution of this area of God's earth of the Colorado comes from. It is obvious in reading the first Genesis Creation account in Genesis 1 that God created the universe, started matter, set up relationships among plants, the soil, animals, the atmosphere, water and humans. God called all these creations and relationships "good". God blessed the creation, and holds the matter created by God as

"good". God set in order the generation of the progeny of all these life forms. Therefore we must respect the creation, nourish it, protect it, and preserve it, and the decommissioning of this dam is the way to do so. The protection and preservation, and reestablishment of a flourishing creation does not just serve anthropocentric ends but also is to serve the animals and plants, the interrelationships that God created in a profound and immeasurably complex web that we humans cannot comprehend.

Please do what is right, what is ethical and what is moral and best for the creation, and decommission this dam and allow this portion of the Colorado to return to its original state.

Shalom,

Tom Herschelman

W3238 Woodland Rd

Sheboygan Falls, WI 53085

CC: "Tom Herschelman" <tombwca@intella.net>

#### Wilde, Rebecca

From: Sent: To: Subject: GC-GENERAL@LISTS.SIERRACLUB.org Thursday, August 25, 2005 5:47 PM strategies@lc.usbr.gov Colorado River Reservoir Operations Comments

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

Dear Regional Director Johnson,

The Colorado River through Glen Canyon and Grand Canyon National Park-a magnificent resource for water, wildlife, aesthetic beauty and recreational opportunities--is dying under current dam management operations. Attempted mitigation to preserve the river ecology has failed. The Bureau of Reclamation's solicitation for comments on the development of management strategies that only address low reservoir conditions is fundamentally flawed.

The reservoir behind Glen Canyon Dam was only recently filled and subsequently reduced by drought. Water at Lakes Powell and Mead is subject to significant evaporation. More than 17% of the water that flows into the reservoirs is then lost to evaporation due to the expansion of surface water through impoundment.

Groundwater recharge is a far more efficient way to store Colorado River water.

The river's beaches, wildlife and archaeological sites have been devastated by the operation of Glen Canyon Dam. Four of eight native fish no longer exist in this section of the river. Beach habitat has been significantly reduced by scouring, while sediment necessary to restore those beaches remains trapped behind dams. This sediment affects dam operations as well as wildlife and must be removed at both dams, but could be more effectively handled at Hoover Dam in the near and long terms.

River flows have been declining over time, and the Colorado River Compact of 1922 requires revision. The Compact set up an inequitable distribution of water between Upper and Lower Basin states, and allocated more water than exists in the system. In an effort to deal rationally and honestly with our water resources, this Compact must be revisited.

Colorado River reservoir operations must be given a comprehensive assessment that addresses all of these issues.

Current low reservoir conditions, increasing demands and looming shortages require that every alternative be considered. I respectfully request that the Bureau prepare an Environmental Impact Statement that includes decommissioning Glen Canyon Dam.

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I-2000 MillerP.txt From: Nan Yoder [NYODER@lc.usbr.gov] Sent: Friday, September 23, 2005 11:48 AM To: Kucera, Cindy; Zubia, Ruben; Duren, Sabre; HGlines@jsanet.com Subject: Fwd: add to mailing list

Ruben,

Would you please add them to the database for future mailings. thanks, nan

>>> Jayne Harkins 09/22/05 01:57PM >>> The following gentleman expressed interest in being placed on the mailing list for shortage guidelines.

Paul F. Miller P.O. Box 47146 Phoenix, AZ 85068-7146

I'll send his business card over.

Thanks.

Regards,

Jayne Harkins, PE Deputy Regional Director Lower Colorado Region Boulder City, Nevada Phone 702-293-8411 Fax 702-293-8614 Cell 702-528-0754

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# From: Richard Merdyk [info@pilgrimagebikes.com] Sent: Tuesday, October 11, 2005 4:44 PM To: strategies@lc.usbr.gov

Dear Gail Norton

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels.

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

Angela Meredyk 3306 E 54<sup>th</sup> St, Minneapolis MN 55417 rmeredyk@pilgrimagebikes.com

**Richard Meredyk** 

www.pilgrimagebikes.com

I-2002 DeMayJ.txt From: santi deva [santi deva@sbcgl obal.net] Sent: Saturday, October 15, 2005 12:43 PM To: gale\_norton@ios.doi.gov; exsec@ios.doi.gov; strategi es@lc.usbr.gov; strategi es@uc.usbr.gov Subj ect: Gl en Canyon

Dear Sirs and Madam: The steadily dropping water levels at Lake Powell reservoir on the Colorado River have revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir l evel s. Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, Fort Moqui, and hundreds of miles of wondrously scenic side canyons are going right back under water, only to be uncovered once again later this year. This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Gl en Canyon. All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations! Sincerely, Jim DeMay

341 S. Orchard St., Apt. 1 Wallingford, CT 06492 (203) 949-0689 (santi deva@sbcgl obal.net)

Mark W. Belles 9318 Willard Street Rowlett, TX 75088 100 **Regional Director** Bureau of Reclamation Lower Colorado Region Attention: BCOO-1000 PO Box 61470 CONTRACTOR Boulder City, Nevada 89006-1470 FOLDER 115 KATHORE 16 October 2005 Dear Regional Director, Regarding the Notice of Intent to prepare an environmental impact statement (EIS) and notice to solicit

comments and hold public scoping meetings on the development of Lower Basin shortage guidelines and coordinated management strategies for the operation of Lake Powell and Lake Mead under low reservoir conditions, as published in the Federal Register (Volume 70, Number 189) dated 30 September 2005, please place my name on the mailing list for this project.

The NOI specifically requested comments from the public at this early stage. My comments are as follows,

1. I am very concerned with the suggestion in the NOI that the Bureau is considering delivery of less than the legally required 7.5 maf of water to the Lower Basin. Even though this legal requirement is for delivery of an **average** of 7.5 maf over a ten-year period, the premise of the NOI is that low water conditions are expect to persist for the foreseeable future and under these conditions it is not reasonable to expect that once the delivery gets behind the average that it will somehow be able to "catch-up" and eventually meet the legal requirement.

Recommendation – Delivery of 7.5 maf to the Lower Basin should be of prime importance, secondary only the meeting our international treaty obligations to the Republic of Mexico.

- 2. The delivery of water to meet legal obligations must supercede the generation of electrical power. Energy, while of obvious value, is clearly obtainable from other sources. There being no substitute for agricultural and culinary water, these uses must trump the need for power generation.
- 3. Consideration of the environmental impact of any shortage guidelines must be founded on the realization that neither Hoover nor Glen Canyon Dams were evaluated for their environmental impact at the time of their construction. The impacts from the proposed guidelines should be evaluated to determine how well they restore the waterways to the pre-dam conditions, not how well they maintain current conditions.
- 4. Serious consideration must be given to the seepage and evaporative losses at Lake Powell. Recovery of this lost water by minimizing the storage at Lake Powell and maximizing the storage at Lake Mead should be a primary goal.

Page 1 of 2

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5. Consideration of the socio-economic impact of the low levels of Lake Meads and Powell should be considered. It is rapidly coming to the point were boat access will be severely limited at both reservoirs. Maximum delivery to Lake Mead will allow for these recreation activities at that location. One useful reservoir for recreation is better than none.

Thank you for the opportunity to comment and participate in this process,

M.L.M. Belle

Page 2 of 2

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I-2004 FayadJ.txt From: LC strategies [strategies@lc.usbr.gov] Sent: Monday, November 07, 2005 11:11 AM To: jmfayad1970@aol.com Cc: Kucera, Cindy; Terry Fulp Subject: Response to Inquiry: Reclamation Scoping ofShortage/Management Strategies Project

Mr. Fayad,

In response to your email inquiry, a summary of the public meetings and comments received (Scoping Report) will be issued in February 2006. A time line of the project process is in the public meeting presentation.

In response to the September 30, 2005 Federal Register Notice of Intent to prepare an Environmental Impact Statement that identifies guidelines and strategies under which the Department of the Interior would reduce annual water deliveries from Lake Mead to Lower Basin States below the 7.5 million acre-foot Lower Basin apportionment and coordinate the operation of Lakes Powell and Mead under low reservoir conditions, comments are due by November 30, 2005.

Comments can be mailed, faxed, or e-mailed to: Regional Director, Bureau of Reclamation, Lower Colorado Region, Attention: BCOO-1000, P.O. Box 61470, Boulder City, NV 89006-1470, fax (702) 293-8156, strategies@lc.usbr.gov; and/or Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State Street, Salt Lake City, UT 84138-1147, fax (801) 524-3858, strategies@uc.usbr.gov.

Project information is available on our website, http://www.usbr.gov/lc/region/g4000/strategies/index.html, and also by direct mail/email. Please Provide me with your mailing and/or email information to be included in Project material distributions.

Nan Yoder Program Manager Boulder Canyon Operations Office

>>> <jmfayad1970@aol.com> 11/07/05 10:43AM >>>
Hi Dr. Terrance,

I am a graduate student at the university of Maryland University College. My group has been assigned the Colorado River allocation. We have started our research and found out that there were four public meeting scheduled to address similar concerns and three were held on November 1st, 2nd, 3rd and one tomorrow. We intend to send our opinion about the (ELS) and we would also like to know the outcome of the pass meetings if possible. Have they been published? As part of the project our group is to develop alternative strategies for resource management. We would like to share our views and receive the public's view. Thanks

Jacob M. Fayad

**From:** Steve Bollock [rembrandt@finestplanet.com] **Sent:** Thursday, November 10, 2005 4:50 PM **To:** strategies@lc.usbr.gov; ÃÂ strategies@uc.usbr.gov **Subject:** Colorado River

Dear Sirs, I am in agreement with those who believe that the "One Dam Solution" is the best option for regulating and dispersing the water that flows through the Colorado River drainage. It's reasoning is sound and findings are as follows:

# The One-Dam Solution: Hoover Dam alone the solution for managing dwindling Colorado River water.

As the Bureau of Reclamation begins developing plans for re-operating the nation's two largest dam and reservoir complexes with public meetings at Las Vegas and Salt Lake City this week, a new report released by Living Rivers reveals that Southwestern water users and the ecological health of the Colorado River would both be better served if one dam were removed.

"Hoover and Glen Canyon Dams may have been icons of 20th century civil engineering, but continuing to operate them in their present fashion is wasting water that could support more than six million people. In addition, Glen Canyon Dam is devastating the ecological integrity of the Grand Canyon and is creating a dam safety problem due to advancing sedimentation in Lake Powell," says John Weisheit, Living Rivers conservation director.

The analysis reveals that increased water use and decreasing supplies raise questions about the need for both dams, especially in light of their tremendous evaporation losses. The report concludes that it would be more efficient to eliminate Glen Canyon Dam from the system and utilize Hoover Dam and adjacent underground storage to capture the limited amounts of surplus water that may be available in the future.

More efficient water storage strategies are needed.

When Glen Canyon Dam was built, nearly 2.6 million acre feet (MAF) of surplus water flowed into Lake Powell annually, allowing the reservoir to fill in 17 years. However, increasing demand upstream has nearly eliminated these reserves. Demand has risen 100 percent since the dam was built and is projected to increase another 23 percent by 2020--placing demand well above the rivers' 13.5 MAF average annual flow.

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Since 1979 there have been warnings that the Colorado River would fail on the supply-side because 11 percent more water has been allocated than the river can historically provide. Even more problematic is that Department of Energy research forecasts that climate change will cause Colorado River flows to decline 18 percent by 2040.

Precious water is being lost from the system

On average, Lake Powell and Lake Mead lose 1.3 MAF of water annually to evaporation, nearly ten percent of the river's annual flow.

It was not until the Autumn of 2004 that Lake Powell's storage actually factored into the water usage of people downstream. Prior to this time it caused the loss of 36 MAF due evaporation and to seepage into the surrounding sandstone. Underground Storage should be more widely utilized

Depleted groundwater aquifers along the Colorado River represent a storage solution that could eliminate much of the water now being lost. In California and Arizona alone it is estimated that suitable sites containing a total of 41 MAF of storage are available along the system, and potentially another 46 MAF nearby. Aquifer recharge infrastructure in place now have the capacity to recharge 1.4 MAF of Colorado River water annually.

There is one dam too many in the Southwest desert.

Removing Glen Canyon Dam from the system, using Hoover Dam to capture annual flows while expanding groundwater storage could recover 810,000 acre feet annually now being lost to evaporation. This is enough water to support 1.6 million households of four people each.

The Destruction of Grand Canyon Resources must be stopped.

More than \$200 million has been spent in failed efforts to halt the demise of Grand Canyon National Parks's river ecosystem due to the impacts of Glen Canyon Dam. Four native fish are now extinct, one is in jeopardy and another is of special concern. Glen Canyon Dam has trapped the sediment necessary to maintain habitat and beaches for wildlife and recreation, as well as the stabilization of archeological sites.

Accumulating Sediment Presents a Serious Looming Problem.

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Sediment is a major unresolved problem threatening the long-term

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operations of both Hoover and Glen Canyon Dams. Ultimately, sediment will have to be removed from one or both of these reservoirs. Removing sediment from Lake Mead rather than Lake Powell is the most feasible and least expensive likely alternative. While original estimates projected that sediment would not effect the safe operations of Glen Canyon Dam for another 60 years, scientists now warn that major problems could occur sooner.

Hydropower and Recreation are Incidental Benefits

Lower reservoir levels have already resulted in reducing Glen Canyon's power production by 40 percent. This loss has been seamlessly absorbed elsewhere in the energy market. The same is true of recreation, which at Lake Powell has dropped 50 percent in the past 15 years. Such uses were deemed "incidental" to water management when these dam were authorized, and should be treated similarly as new management strategies are developed.

"There will be no efficient solution to managing the growing crisis in Colorado River water management without seriously rethinking how these dams are used, or not," adds Weisheit. "And when doing so, it's clear than when it comes to saving precious water, and restoring Grand Canyon in the process, one dam is better than two."

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From: Philsimtpr@aol.com
Sent: Monday, November 14, 2005 10:44 AM
To: strategies@lc.usbr.gov
Subject: Shutdown Glen Canyon Dam
I urge the decommissioning of Glen Canyon Dam.

The Hoover Dam is adequate to store the Colorado River flows, and will actually improve the water retained, due to avoided evaporation from Lake Powell.

revise the Colorado River Compact.

Philip Simon

From: Robert Keck [rsuboc1@yahoo.com] Sent: Sunday, November 20, 2005 10:59 AM To: strategies@lc.usbr.gov Subject: Glen Canyon National Recreation Area

Robert Johnson Regional Director Bureau of Reclamation Lower Colorado Region Attention: BCOO-1000 P.O. Box 61470 Boulder City, Nevada 89006-1470 (702) 293-8156

Mr. Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels.. Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year. This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon. All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

Robert Keck 7350 Silver Lake Road, #39B Reno, NV 89506 (775)247-5564 rsuboc1@yahoo.com

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From: Howie Marion [hman@astro.as.utexas.edu] Sent: Tuesday, November 22, 2005 5:53 AM To: strategies@lc.usbr.gov Subject: Glen Canyon - please help Dear Director Johnson,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River revealed spectacular features not seen in decades. These cultural, biological, and scenic resources found only in Glen Canyon are now threatened by fluctuating reservoir levels.

My father took me to see these sublime places when I was young and it is very important to me to take my children and others to experience the beauty of God's earth that is so tangibly present in Glen Canyon.

Restored precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui are going right back under water, only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to these priceless emerging cultural, historic, and scenic sites in Glen Canyon.

All "surplus" water of the Colorado River can easily be stored at Lake Mead instead of in Glen Canyon. We urge the Bureau of Reclamation to protect these priceless treasures by storing "surplus" water in Lake Mead instead. Please uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitats. Please protect Glen Canyon for future generations.

Sincerely,

George H. Marion 2403 Rollingwood Dr. Austin, TX 78746

(512) 347-9925 hman@astro.as.utexas.edu 1

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Regional Director Lower Regimen Regim 8600-1000 P. U. 00 61470 BUULDEL NV 89006-In managing the Glen Campor and Hooon Dam, & you should minimize sediment. Removing it from Lako Mead wouldhelp. Alge, you should plan for the utimate

Oleen Colon 2208 Jacificte Alaneda (Hayso,

I-2009

6706 Moeser Lame El Cerrito CA 94530 November 15, 2005 Regional Director, Bureau of Reclamation ATTN BC00-1000 Hower Colorado Region P. O. JOX 61470 Boulder City NV 89006-1470 I wish to comment on the direction of decisions I would favor regarding Suture, management of Gien Canyou Daw and Hoover Daw, and the in respective preservoirs. Essentially I am very concerned that these daws have seriously and negatively affected the ecology of they water sheds and canyous. It would be highly desinable to reverse these consequences to the ertert possible, by de commissioning fleu Canyon Dam and 1 'ceasing operations at Late Powell. I would vrge that the Colorado River Campact be revised, and that the major problemos 2 Sediment and silting be mitighted and to the extent possible treversed, 3 Thank you very much for considering my interests. Cardially-AtyphinBrown

Nov. 15,2005. Regional Director, Beareau of Reclamation Lover Glorado Region P.O. Box 61470 Boulder City, NU 89006-14 to Re: Glen Caryon Dam Operations Attiv: BCOOF1000, Fish in the Cake Powell ecosystem are being threatened, and in feel, endangered, dub to orier-siltation in the lake Il strangly urge you to act on sediment management in 1 Lake Mead as flus also compronusés water quality + complicates water use desues. I will be following this matter in the news + hust that you will pe proactive on quis vitel issue. Sincerley, Splicka Kostyniuk

To Regional Director, Bureau of Reclamation Lawer colorado Region: For management of the sediment in 61en Canyon Dam and Hower Dam which is a problem threatening long-term Operators; removing sediment from Lake Mead rather than Lake Dowell is the Most feasible and least expensive alternative, than you for consolving this alternative Suncerely Cass, Beals Cassi Def 3668 38th Aue Oakland (A 94619

Ron Royhbart El Cevrire, CA. Nov. 15,2005 To Whom 14 may Concern: The brilding of the Glow Canyon Warn has cheaved many environmental problems, Including the aloevation of the Frank Caryou ecosyster, due y. lack of site a she cold Scaperarane of She water veleased from the relevain This causes beach or shoreline erosion + alters the habirat of narive fish species. I understand you are solicity public In put on operation of the Late Revell and

In put on operation of se late pluven child Lake Mead reservoirs. I support removing the sediment from Lake Mead Parter than take Powell. The 15 the least orponolie Solution, and it is feasible.

Then Kyon for your consideration,

Per Kontono Row RETABARS

BI Cerrito, CA

I-2013

From: Hendrickson, Belinda [bhendrickson@mpowercom.com] Sent: Tuesday, November 29, 2005 12:18 PM To: strategies@lc.usbr.gov Subject: Colorado River Drought Induced Cuts Dear Sir or Madam:

This is not a technical comment, but more of a logical, philosophical one.

1. All states that take water from the Colorado should have strict conservation laws. California has abused the Colorado River ever since Mulholland. Prior to his interventions, Southern California was an arid, desert environment. It should be returned to the desert via conservation. If Southern Californians want palm trees and gardens they should move to Hawaii or Louisiana. Las Vegas is turning into the same water hog that Southern Cal is, again, strict conservation should be the norm for all states that use water from the Colorado.

2. Endangered species and natural wonders (like the Grand Canyon) are much more important that whether some idiot who wants a palm tree in his backyard in the desert. Please take into account both of these and make your decision based on their best interests.

3. Remove the dams - Glen Canyon and Hoover. They don't provide much electricity and do create an enormous, negative environmental impact. Again, the animals and natural wonders are much more important than some guy with a boat...tell him to take it to the ocean (boating in the desert is ludicrous).

Dinosaurs couldn't adapt to their changing environment and died. Man is more flexible and can adapt, but just because we are lazy and stupid as a species doesn't mean it is correct for us to destroy our environment. We need to learn to live within our means (with water, air, other species, etc.) or we won't last any longer than the dinosaurs. 1 2, 3

# ORIGINAL

October 29, 2005

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Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State Street, Salt Lake City, Utah 84318-1147

Subject: Scoping: Colorado River Reservoir Operations: Development of Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead Under Low Reservoir Conditions.

It is very disappointing, but certainly no surprise, to see that "The Department does not intend to evaluate the decommissioning of Glen Canyon Dam." Under "Supplementary Information" in the scoping announcement it is stated that "In the future, low reservoir conditions may not be limited to drought periods as additional development of Colorado River water occurs". All of the studies I have heard of lately make it pretty clear that low reservoir conditions are destined to be normal rather than the exception. Water development in the upper basin states is not going to abate. It is only going to increase, and there is going to less and less water flowing downstream into the reservoir in Glen Canyon as the years pass. Eventually there will be no need for two huge reservoirs on the Colorado River simply because there will not be enough water to fill them. That point may already have been reached.

Any fair, objective, and open minded study of the Colorado River system must include consideration of whether both the reservoir in Glen Canyon and the Mead reservoir are actually needed, or if one of them is adequate. Even if one were not quite enough, and there were years in which one alone could not store all of the runoff, then that surplus, ideally, should be released downstream to help allow the Colorado River delta to come back to life. Human society has no moral right to destroy a living system in order to satisfy its own reckless and selfish desires.

The Department of the Interior, Bureau of Reclamation, and the National Park Service all know very well the harm that has been done to the Colorado River in the Grand Canyon by Glen Canyon dam, and it is obvious to anyone who has followed this issue that the various attempts to mitigate this damage by manipulating the releases from Glen Canyon dam are nothing but band aids that ultimately are destined to fail. The only solution to this is to decommission Glen Canyon Dam.

Given the fact that the reservoir in Glen Canyon is ultimately destined to fill in completely with sediment, and that because of the many tributary canyons that are contributing sediment to it, along with the very difficult surrounding terrain, it will never be feasible to dredge this reservoir, it is long past time to face the fact that it is going to be a very temporary thing, and that there is nothing that can be done to save it. It is time to drain it, decommission the dam, and let the sediment flow on downstream, where it and a relatively free and unregulated river can restore the health of the Grand Canyon. And since the primary sediment input to the Mead reservoir is the Colorado River, and since it is more accessible, it could, indeed it MUST be dredged in order to maintain the

reservoir. If nothing is done to get the sediment out of the system, it is tantamount to conceding that southwestern civilization is doomed by the ultimate failure of its water supply. It is long past time for the Bureau of Reclamation to stop ignoring the cold hard reality of the sediment carried by the Colorado River and get on with doing something about it. Until something it done about it all the shortage planning and everything else that may be done is a complete waste of time.

Thank you for considering my comments.

William NM obeton

William H. Wolverton Box 393 Escalante, UT 84726

Dan Kozarsky [dkozarsky@earthlink.net]
Tuesday, November 29, 2005 9:07 PM
strategies@lc.usbr.gov; strategies@uc.usbr.gov
Reoperation of Lake Powell and Lake Mead

Dear Bureau of Reclamation,

I am writing to urge you to study the feasibility and benefits of permanently ceasing operations at Lake Powell, and instead just using a single reservoir for Colorado River water storage.

Lake Powell has buried one of the nation's scenic treasures, Glen Canyon, which is certainly worthy of national park status were it not flooded. Lake Powell and Lake Mead lose enormous amounts of water to evaporation every year, as you know. Sediment is also a major and growing problem. There must be a more efficient and sensible means of water storage than the current system. Please study alternative solutions such as the use of vacant space in underground aquifers in lieu of longterm operations at Lake Powell.

Thank you for consideration of my comments.

Sincerely, Daniel Kozarsky 366 Sierra Vista Ave., #12 Mountain View, CA 94043

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# Kucera, Cindy

From:	Richard Pott [richard_pott@hotmail.com]
Sent:	Wednesday, November 30, 2005 11:15 AM
То:	strategies@lc.usbr.gov
Subject: water	

Why not save some water by replacing or reducing the current hydroelectric power generation with wind and solar power generators? The water users and the purchasers of the hydroelectric power should pay the cost of building the generators.

The Bureau of Reclamation sounds like it is on the right track with this suggestion.

Secondly let southern California get more of its water from northern California.

**Richard Pott** 

4440 N Chieftain Street

Las Vegas, NV 89129

From:	ivword/french [lyndafrench@citlink.net]	
Sent: To:	strategies@lc.usbr.gov	
Subject	: drought-induced allocation cuts	
1. i think it	's important to determine whether we want to water "people or produce."	
2. i believe delinquent	e california receives an inordinate allocation and that it has been far too in developing sustainable systems - particularly desalination plants.	1
<ol> <li>i think a arizona pro to triple by</li> </ol>	arizona is complacent about the issue and relies far too heavily on the central oject canals to quench populations in phoenix and tucson which are expected 2030.	2
4. i believe sand. it m regarding o	e nevada is the only lower basin state which does not have its head in the ust take a stand and lead the rest of the lower basin states to the rim of reality colorado river water allocation.	
5. i think tl essestial a	hat recycling water and recharging our reservoirs, basins and acquifers are reas of research.	3

thank you for the opportunity to input.

lynda french 1435 franklin drive kingman, az 86401 928.753.1435 lyndafrench@citlink.net

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# Kucera, Cindy

From:	Wegst, Walter [WegstWF@nv.doe.gov]
Sent:	Wednesday, November 30, 2005 8:57 AM
То:	strategies@lc.usbr.gov
Subject: Colorado River Water	

Dear Sirs:

I have two revolutionary ideas on how to save Colorado river water for the highest and best use.

Stop selling the water to farmers in the Imperial Valley of California at highly subsidized cheap prices. Charge the farmers the same price (or even 50%) that city residents must pay. This large increase in price will give the farmers an incentive to install efficient irrigation systems that use much less water while providing the same crop yield. At this time these farmers have no economic incentive to stop using overhead sprinkler irrigation, which wastes large amounts of water (as much as 50% of the water delivered).

An even more revolutionary idea is to stop the Federal subsidies paid to the cotton and sugar cane farmers. These farmers cannot compete in the international market without these subsidies and in fact cotton on the world market sells for ~35 cents per pound whereas it costs ~70 cents a pound to grow in the Imperial Valley.

However, I am realistic enough to know that neither of these solutions will be implemented because the few hundred farmers in the Imperial Valley have far more political power than the millions of people who live in San Diego and Las Vegas. This situation is an egregious example of blatant political discrimination.

Thank you for your attention to these comments.

Walter F. Wegst, PhD 8390 Las Lunas Way Las Vegas, NV 89129 kwwegst@aol.com (Home email)

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# Kucera, Cindy

From:	dr W [gerdeljesmar@yahoo.com]
Sent:	Wednesday, November 30, 2005 7:01 AM
To:	strategies@lc.usbr.gov
Subject	Comments on potential drought-induced cuts to allocations of Colorado River water

RE: November 29, 2005 Colorado River states bracing for cutbacks in water By Launce Rake <<u>lrake@lasvegassun.com</u>> Las Vegas Sun

There's currently a landscape conversion program that allows a rebate for grass turf converted to desert landscaping. It does require 50% or more plant coverage to exist in the areas converted. Drastic times require drastic measures; perhaps the stipulation of 50% plant coverage be eliminated in order to further reduce water use wasted on landscaping.

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## Kucera, Cindy

From:	Gary Vesperman [garyvesperman@yahoo.com]
Sent:	Tuesday, November 29, 2005 8:50 PM
То:	strategies@lc.usbr.gov
Subject:	Comment on Colorado River cuts

Please include the following comment in the public record of comments concerning potential drought-induced cuts to allocations of Colorado River water:

First I reference the link to my compilation of "Advanced Technologies for Foreign Resort Project" which is in http://www.icestuff.com/~energy21/advantech.htm.

My compilation includes this energy source description:

"Environmental Heat Engine. Has some similarity to refrigerator or heat pump. Working fluid of ammonia or carbon dioxide is expanded by propane heater, cold fusion thermal reactor, or environmental heat to move pistons. Applications include vehicle engines, small-scale on-site electrical generators, and large-scale water lifters for dams and canals. (Could double electrical output of Hoover Dam.) This is a variation of Dennis Lee's low-temperature phase-change engine which the now deceased Las Vegas inventor Robert Stewart claimed is superior to Lee's engine."

Recently I came across a company which is preparing to commercially produce and sell an apparently successful new type of environmental heat engine. Their new engine employs a new proprietary working fluid and mechanical design improvements.

For mitigating drought effects, I suggest investigating large-scale water lifters for Colorado River dams based on environmental heat engines.

Gary Vesperman 3133 La Mesa Drive Henderson, Nevada 89014-3649 702-435-7947 gvesperman@hotmail.com 1

Yahoo! Mail - PC Magazine Editors' Choice 2005 http://mail.yahoo.com

## Kucera, Cindy

From:	LC strategies [strategies@lc.usbr.gov]
Sent:	Wednesday, December 07, 2005 1:41 PM
То:	Kucera, Cindy
Cc:	Jayne Kelleher
Subject:	Fwd: Glen Canyon

Hi Cindy,

This comment was late. Just add him to the mailing list, but not the comment database. His comment has been represented by others that did meet the deadline.

Nan Yoder Program Manager Boulder Canyon Operations Office

>>> Bernie Rupe <bernie912@comcast.net> 12/06/05 07:32PM >>> Dear Mr. Johnson,

Please help return Glen Canyon by getting rid of the lake and dam. It is a treasure.

Bernie Rupe 318 N. Elmwood Ln Palatine, I L 60067 1

## Kucera, Cindy

From:	Philsimtpr@aol.com
Sent:	Wednesday, December 28, 2005 12:39 PM
То:	strategies@lc.usbr.gov
Subject: Decommission Glen Canyon Dam	

We would have more water available if Glen Canyon Dam were decommissioned, and the water was stored behind Hoover Dam. Revision is necessary of the colorado River Compact.

Philip Simon



From: George Appleton [appletonlv@juno.com]
Sent: Sunday, January 15, 2006 4:42 PM
To: strategies@lc.usbr.gov
Cc: lrake@lasvegassun.com
Subject: Cuts in Colorado River water to Las Vegas I know I'm late with this but:

The problem with the Las Vegas Water *Authority* (knew we were in trouble when the Water District began using that name) is that they can't see, and won't do anything about, all the totally wasted (mostly by evaporation, especially in summer) water in the area they serve.

First of all, and perhaps worst of all, is that 300+ acre Lake In the Swamp in Henderson where the wash was dammed and the lake filled with (and kept filled with) our drinking water so that the developers could become instant multimillionaires. In July and August, as nearly as I can tell from the District's own figures, that along will evaporate well over 3 million gallons of water a day. Perhaps more than 3.5 million.

Then there are all the other housing development lakes from the old Lakes at Las Vegas to the newer ones where people are whining because they bought lakeside property and find (Oh the Horror!) waterfowl using it, and pooping on their lawns. Pat Mulroy has said, several times, "We all live in a desert, you know." Except that some of "we" can go canoeing off our back yards. Yet I'll be fined if the Water Police catch me washing my vehicle.

Golf courses. More than 60 now, are there? I've seen a number of courses in the eastern part of this country where not one of them had a water hazard instead of sand traps, and certainly not lakes, waterfalls, and running streams.

Before any cuts are made to the average homeowner (our house was built in 1962; we bought it in 1967), it might be wise to turn off the faucets to all the artificial lakes in the Valley. Sure people will whine, as they are about planes from McCarran making right turns, or (in North Vegas) buying a new home across the street from a pig farm and then wanting it closed down.

But this is a large, growing (another source of water use that might well be considered), city where things change constantly. Golfers and certain homeowners have had their lakes and streams, but we're in a drought, and that ought to take precedence before any others to the rest of us. It would certainly mean less water taken from Lake Mead, and more returned to it.

George Appleton 3400 Florrie Ave. Las vegas NV 89121 appletonlv@juno.com 1

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Dear Representative Kolbe,

The steadily dropping water levels at Lake Powell reservoir on the Colorado River have unveiled spectacular features not seen in decades. Emerging cultural, biological, and scenic resources found only in Glen Canyon are now threatened to be unnecessarily flooded this spring.

As it now stands, precious features such as Cathedral in the Desert, Register Rock, petroglyphs, and Fort Moqui will go right back under 25-50 feet of water during May and June -- only to be uncovered once again later this year.

This fluctuation of water levels is unnecessary and destructive to emerging cultural, historical, and scenic sites in Glen Canyon.

All 'surplus' waters of the Colorado River can easily be stored at Lake Mead and in available upper basin reservoirs instead of in Lake Powell . As water levels at Lake Powell drop, they should not be allowed to rise and further damage fragile emerging sacred sites and resources in Glen Canyon.

Please urge the Bureau of Reclamation to protect these priceless treasures by storing the 'surplus' runoff this spring somewhere else. Also, please contact Secretary Norton and communicate to her the importance of protecting emerging and priceless resources in Glen Canyon from unnecessary fluctuation of water levels. Please ask her to uphold the established legal protections for priceless sacred and historical sites and emerging endangered species habitat. Also, please ask her to ensure the National Park Service takes the necessary steps to protect the emerging resources from the impacts of visitors to Glen Canyon "unimpaired for future generations".

Powell called this area one of the most beautiful areas. Now we have the opportunity to see it again. If we turn it into a national park, then future generations will be able to hike it and enjoy it and we can all see the beauty that Powell did. And this will take some of the strain off the Grand Canyon. Also, if the lake continues to fall as expected, people will be able to take river trips through this area, again, relieving some of the demand on the Grand Canyon.

Thank you very much for your time and consideration.

Please protect Glen Canyon for future generations. Sincerely,

Thomas L. Abrams

## 12/06/2005

