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Sent: Monday, April 30, 2007 2:09 PM
To: strategies@lc.usbr.gov
Cc: tom.buschatzke@phoenix.gov
Subject: Comments on the Draft EIS

Importance: High

Attachments: DEIS Colorado River Comment Letter.pdf

Attention: Regional Director

The original will follow via US mail.

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City of Phoenix
OFFICE OF THE CITY MANAGER

April 30, 2007

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

Re: Notice of Availability and Notice of Public Hearings for the Draft Environmental Impact ("EIS") Statement for the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.

Dear Director,

The City of Phoenix ("City") submits its comments to the Draft EIS for the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (72 Fed. Reg. 9026 dated February 28, 2007). The City is keenly interested in the outcome of the shortage criteria and coordinated operations for Lake Powell and Lake Mead. The City has previously commented during the scoping process pursuant to the Notice of Intent to prepare the EIS. Likewise, the City has directly participated in the negotiations between the Seven Colorado River Basin States culminating in the Seven Basin States proposal to the Secretary of the Interior dated February 3, 2006 and in stakeholder meetings within the State of Arizona resulting in shortage criteria proposed to Reclamation by the Arizona Department of Water Resources and agreed upon by all the Basin States. Phoenix' commitment to these processes is a necessary outgrowth of its reliance upon Colorado River water, delivered through the Central Arizona Project ("CAP"). The City serves over 1.4 million people and Colorado River water currently supplies over 35% of its total water demand. The City's CAP water supplies include sources with a variety of priorities, and its exposure to shortages varies accordingly. The City holds subcontracts for Municipal and Industrial priority water and leases for Indian priority water. The City also holds a contract for a substantial volume of lower-priority non-Indian agricultural CAP water. As a result, the City must consider many potential drought scenarios that the majority of the municipalities relying upon CAP water do not need to be concerned with.

The City's plight is further complicated by the fact that the CAP is the major junior priority user under the Law of the River. It is imperative that the Secretary of the Interior ("Secretary") be mindful of this factor when selecting and implementing a preferred alternative. Thus, Arizona water users face the greatest risks when a shortage declaration is made and the preferred alternative must recognize and minimize impacts to those water users.

The City has a long-standing track record of sound water resources management including diversifying its water resources portfolio, building integrated infrastructure to allow efficient use of those resources, reusing reclaimed water, a strong water conservation program that has been in place for over two decades that has resulted in declining rates of water use and a drought management program that allows for the imposition of mandatory demand reductions. Despite all these efforts by the City, catastrophic shortages on the Colorado River could pose serious problems to the City's ability to continue to fully serve its customers.

The Proposed Alternatives

The Final EIS Should Designate the Basin States Alternative as the Preferred Alternative

The Basin States Alternative provides the greatest degree of certainty for the City of Phoenix because it is consistent with the agreement reached by the Basin States and can be implemented upon approval of the Record of Decision ("ROD") without the need for additional action. This alternative best meets the goals of the proposed action discussed in the February 28, 2007 Federal Register Notice, i.e., "[T]his action is proposed in order to provide a greater degree of certainty to U. S. Colorado River water users and managers of the Colorado River Basin by providing detailed and objective guidelines for the operations of Lake Powell and Lake Mead, thereby allowing water managers and water users in the Lower Basin to know when, and by how much, water deliveries will be reduced in drought or other low reservoir conditions." (72 Fed. Reg. 9027 dated February 28, 2007.) Moreover, certainty provided by the Basin States Alternative goes well beyond the actual criteria and numbers. The Agreement reached by the Basin States, and reflected in the Basin States Alternative, creates an increased level of confidence that legal issues over the interpretation and implementation of the Colorado River Compact, the Mexican Treaty, accounting under the Arizona v. California Decree, and equalization of Lake Mead and Lake Powell will not result in costly and divisive litigation with an uncertain outcome for water users. The value of collaboration by the Basin States can not be overstated.

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

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

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

Finally, the Basin States Alternative is the only alternative that meets all the criteria discussed in Section 1.1 of the Draft EIS that states, "[T]he Secretary intends to consider, adopt and implement the proposed federal action consistent with applicable federal law and judicial decisions, and, further, in a manner that will not require any additional statutory authorization." (DEIS at p. 1-1).

The No Action and Water Supply Alternatives

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

The Reservoir Storage Alternative

The Reservoir Storage Alternative ("RSA") proposes levels of shortages starting at 600,000 AF and increasing to 1,200,000 AF and the magnitude of the average shortage volumes during the interim period are the highest under this alternative. (DEIS at p. ES-10). Shortage levels beyond 600,000 AF (including 17% for Mexico or 500,000 AF just for the Lower Basin) are draconian in nature for Arizona water users on their face, and their adoption can not be justified when compared to reductions of 400,000 AF, 500,000 AF and 600,000 AF (including 17% for Mexico or 300,000 AF, 400,000 AF and 500,000 AF just for the Lower Basin) proposed under the Basin States Alternative. The Basin States recognized the harsh nature of shortages greater than 600,000 AF (including 17% for Mexico or 500,000 AF just for the Lower Basin) and have agreed to consult with the Secretary if shortages are projected to exceed this volume (Seven Basin States Letter to Secretary Norton, February 3, 2006, Attachment A., at p.6). The RSA does not meet the goal stated in the Federal Register Notice, i.e., "to (1) Improve Reclamation's management of the Colorado River by considering the trade-offs between the *frequency*

and magnitude of reductions of water deliveries..." (72 Fed. Reg. 9027 dated February 28, 2007. emphasis added). Furthermore, this alternative would require changes to the Law of the River prior to its implementation.

The Conservation Before Shortage Alternative

The Conservation Before Shortage Alternative ("CBS") also falls short of meeting the certainty provisions of the proposed action as evidenced in Table ES-1, Matrix of Alternatives. Column one of that table states that for the CBS alternative, "shortages are implemented in any given year to keep Lake Mead above SNWA's lower intake at elevation 1000' (absolute protect of elevation 1,000)." Water users in the Lower Basin will be left to the whims of the Annual Operating Plan for determining when and how much of a shortage will be declared under this alternative. This greatly reduces certainty for water users like Phoenix.

This alternative is also dependent upon the creation and use of ICS but reliance upon ICS would require changes to the Law of the River prior to this part of the alternative being implemented. In addition to this inherent fatal flaw, the City also points out that this alternative essentially would allow 4.2 million AF to be stored in Lake Mead compared to a maximum storage of 2.1 million AF under the Basin States Alternative. Creating ICS of this magnitude could create too much risk for losing expensive ICS water to spills in wet years and earmark too much Lake Mead water for a particular water use, rather than for the system.

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

Summary

When weighing the proposed alternatives against one another it is evident that the Basin States Proposal is superior to any of the other alternatives because it provides the greatest degree of certainty to water users, avoids potential litigation, creates shortage criteria that are reasonable in magnitude and are readily predictable based upon elevations at Lake Mead, and present a package that can be implemented without the need for further legislation or ESA compliance.

Furthermore, the Basin States Alternative best meets all the aspects of the purpose and need for the action and has the support of the Basin States which will enhance the Secretary's ability to manage the Colorado River system in a collaborative manner. The City of Phoenix urges the Secretary to adopt the Basin States Proposal as the preferred alternative in the Final EIS.

Conjunctive Operation of Lake Mead and Lake Powell

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

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

As stated in the City's scoping comments dated November 30, 2005, water supply has a higher priority than hydro-generation and water users in Phoenix should not be subject to shortages for the benefit of hydropower production. Absent the adoption of the Basin States Alternative (and after the expiration of the ISG in 2016) the City believes the Secretary must adhere to the following: (1) the 602(a) storage algorithm must be reviewed and revamped so that it accurately reflects the requirements of Section 602(a) of the Colorado River Basin Project Act of 1968; (2) the algorithm should be changed so that the current storage in Lake Powell of an additional amount over 5 million acre-feet to protect hydropower production is no longer included in the operating criteria; (3) actual Upper Basin depletions and a measurable realistic projection of new depletions to calculate the 602(a) storage requirement must be incorporated into the algorithm. The use of overstated depletion schedules results in significant increases in Lake Powell storage before equalization occurs; and (4) review the methodology that determines available storage in reservoirs authorized by the Colorado River Storage Project Act to determine whether forecasted active storage in the Upper Basin is greater than the Section 602(a) storage requirement under subarticle II(3) of the Coordinated Long-Range Operation of Colorado River System Reservoirs to insure that active storage in the Upper Basin is being properly calculated.

If the Basin States Alternative is adopted and implemented in the guidelines set out in the ROD, at the end of the interim period in 2026 or if the guidelines are changed, whichever comes first, Reclamation can not revert to its current interpretation of the 602a requirements. In that case, Reclamation must consult on the modification of the guidelines to make them consistent with the legal priorities established by the Law of the River.

For these reasons and because the coordinated operations of Lake Powell and Lake Mead are essential components to shortage criteria, the Secretary should adopt the Basin States Alternative.

The Record of Decision and Implementation of the Preferred Alternative

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

Cumulative Impacts of Shortages in Arizona

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

Socioeconomic Impacts to Municipal Water Users in Arizona

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

Arizona municipal water providers and the City of Phoenix have already expended substantial sums of money in anticipation of shortages on the Colorado River. Municipal water users in Arizona, including the City of Phoenix, will rely in part on recovery of water stored underground by the Arizona Water Banking Authority to make up for shortfalls due to Colorado River shortages. Through calendar year 2006, the Arizona Water Banking Authority ("Bank") has stored about 2,243,000 AF of water at a cost of about \$101 million. More appropriately for the City, about 1,158,000 AF of water at a cost of about \$63 million dollars has been stored in the Phoenix Active Management Area. Funding for the Bank comes primarily from a property tax in Maricopa, Pinal and Pima Counties, from a pump tax paid by groundwater users in

those counties and some appropriations by the Arizona Legislature. To prepare for the onset of Colorado River shortages through supply-side protection, significant sums have already been expended. Additional sums will be need to be expended to store additional water underground to meet the goals of the Bank, to replace the banked water when it is used, or for access to other supplies to make up shortfalls.

Because the City's municipal priority CAP water may not be fully replaced by the Bank and because the City uses non-agricultural priority CAP water and Indian lease water not eligible to receive water from the Bank during shortages, the City is pursuing the acquisition and use of drought back up water supplies and the infrastructure necessary to use those supplies. To date the City has stored 171,600 acre-feet at a cost of about \$7 million (excluding the capital costs of the facilities to store or treat water). Additionally, the City has embarked on a two year planning study to identify other options for supply enhancement for shortages. The cost of that study is estimated at about \$1.8 million and the implementation costs, once options are chosen, is expected to be in the range of \$50-100 million for both drought supplies and new supplies to meet normal demands.

Through the City's water resources planning function, a water resources plan is completed and published about every five years. The latest plan, the Water Resources Plan, 2005 Update, concludes that in extreme drought supply enhancement will not be sufficient to deal with shortages. During moderate and extreme drought conditions the City will also implement its Drought Management Plan, first promulgated in 1993. That Plan, and the City ordinances implementing it, allow for mandatory reductions in deliveries to customers and thus require cut backs in water use. There is an additional cost, over the \$1.5 million the City is spending annually on its water conservation efforts, associated with implementing mandatory water user restrictions. In 2003 and 2004, in the midst of water allocations reductions by the Salt River Project, the City explored the costs associated with implementing Stage II of its Drought Management Plan which contains relatively benign mandatory water use restrictions. The estimated cost of implementing that program, at that time, was about \$1.5 million per year. Implementing Stage III and Stage IV restrictions would necessitate incurring even higher costs.

As the prior discussion clearly illustrates socioeconomic impacts on municipal water users in Arizona and on the City of Phoenix due to Colorado River shortages are significant and should be documented in the Final EIS.

Comments to Specific Portions of the EIS

The City offers the following comments to specific language included in the DEIS:

1. Section 2.3.1, line 28: The Seven Basin States proposal dated February 3, 2006 goes beyond "suggesting" that consultation occur when shortages greater than 600,000 AF are projected to occur. Because of the impacts on Arizona water users that will likely occur, that provision is an integral part of that proposed package.
2. P. 3-39, Section 3.4.6.1,

- a. Lines 11-16: It should be noted that the AWBA also provides for banked water to be use by municipal water users of Colorado River water both within and outside of the CAP service area.
- b. Lines 28-30: The Final EIS should incorporate the recommendation submitted to the Bureau of Reclamation on October 24, 2006 that presents shortage sharing criteria between on-river P4 water users in Arizona and CAP water users.
3. P. 3-40, Lines 3-5: The DEIS does not provide enough detail to address Arizona water users' efforts to prepare for drought. Individual water users adopted drought Plans over a decade before the statewide drought plan was created. The Arizona Groundwater Management Act, the Arizona Water Banking Authority and other state-wide and local government actions all contribute to Arizona's drought preparedness.
4. P. 3-42, Lines 1-6: The Final EIS should incorporate the terms of the Arizona-Nevada Shortage Sharing Agreement.
5. P. 3-87, Line 37: The City's lease for CAP water with the Salt River Pima-Maricopa Indian Community is for a term of 99 years, not 100 years.
6. P. 3-89, Lines 5-17: The Final EIS should clarify that the EIS assumed that the Gila River Community Indian Water Rights Settlement is in effect. The statement that "CAP water has already been leased to Phoenix area cities" is only correct if that assumption is made clear since the leases can not be consummated until the enforceability date of the Settlement.
7. P. 4-8, Lines 7-9: The Final EIS should recognize that the Southern Nevada Water Authority has plans to complete new intakes at Lake Mead to elevation 856' by 2011 and thus the "limitations" on SNWA's ability to pump from Lake Mead, or form the Colorado River, at that point in time will not be 1000'.
8. P. 4-8, Lines 31-36: The discussion of the bypass flows is confusing regarding the extent of the "obligation" to replace those flows. If a legal obligation to replace those flows exists, the Final EIS should cite to the controlling law, contracts, treaties or other legal instruments evidencing the obligation.
9. P. 4-9, Lines 3-4: The City continues to support the operation of the Yuma Desalting Plant at its full capacity to maximize the efficiency of Lower Colorado River operations.
10. P. 4-238, Lines 21-24: Any "benefits" of increased power revenues on the const of CAP water would likely be more than offset by increased delivery charges ("OM&R") to CAP water users when CAP deliveries are reduced because of shortages. The delivery rate paid by CAP water users will greatly increase because fixed OM&R, the numerator in the rate equation will remain the same, while water deliveries, the denominator in the rate equation, will be less. While the CAP Board of Director's may chose to artificially hold rates down to minimize "rate shock", there is still a negative economic consequence because the funds to hold down the rates will likely come from the tax payers or rate payers within the CAP.
11. P. 4-264, Lines 17-19: The Final EIS should recognize that the cost of water used in this analysis, the "price of excess water pools" for agricultural use is a subsidized water rate. The tax payers of Maricopa, Pinal and Pima counties pay

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an ad valorem property tax set by the CAP Board of Director's. One of the uses for that tax is to lower the cost of water for the agricultural pool.

12. P. 6-3, Lines 3-9. The Final EIS should expand its discussion of Section 8 of the ESA so that it is clear that consultation through the Secretary of State is a voluntary and not a mandatory function.

Conclusion

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

Sincerely

A handwritten signature in cursive script that reads "Tom Buschatzke". The signature is written in black ink and is positioned above the typed name.

Tom Buschatzke
Water Advisor