

**DEFENDERS OF WILDLIFE * ENVIRONMENTAL DEFENSE
FRIENDS OF ARIZONA RIVERS * LIVING RIVERS
NATIONAL AUDUBON – CALIFORNIA
NATIONAL WILDLIFE FEDERATION * PACIFIC INSTITUTE
SIERRA CLUB * SOUTHWEST RIVERS**

March 26, 2002

Mr. Bruce Ellis
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Dear Mr. Ellis:

This letter contains comments on the Bureau of Reclamation's (BOR) Draft Environmental Impact Statement (DEIS) for the Implementation Agreement (IA), Inadvertent Overrun and Payback Policy (IOP), and Related Federal Actions, submitted by Defenders of Wildlife, Environmental Defense, Friends of Arizona Rivers, Living Rivers, National Audubon – California, National Wildlife Federation, Pacific Institute, Sierra Club, and Southwest Rivers representing approximately 5.55 million members and supporters.

While we continue to applaud BOR's efforts to reduce California's use of Colorado River water to its basic allocation of 4.4 million acre-feet (maf), we remain concerned that the cumulative effect of these efforts – including but not limited to those attributed to the IA and IOP directly – will be significant, unacceptable, and substantially unmitigated harm to the Lower Colorado River and its delta, as well as other resources dependent on water from the lower Colorado River. The Colorado River delta as it exists today contains critical native habitats that sustain numerous species including thousands of resident and migratory birds, native fish, and the world's smallest marine mammal, the vaquita porpoise. More native cottonwood and willow habitat grows along the Colorado River corridor south of Morelos Dam than remains along the entire reach of the Colorado River in the United States. These native gallery forests in the Colorado River delta are a critical link in the Pacific Flyway, and provide habitat for the endangered southwestern willow flycatcher.

In September 2000, many of our organizations commented on the detrimental impacts to the Colorado River delta of the Interim Surplus Criteria and asked BOR to consider an environmental alternative (the Pacific Institute alternative). Now, we submit comments that explain our concerns with the IA and IOP, and their cumulative effect when examined together with the impacts of all projects proposed in the Quantification Settlement Agreement (QSA), including the Interim Surplus Guidelines and the lining of

the All American Canal, as a comprehensive and integrated suite of changes in river and water management that cannot be examined in piecemeal fashion. As described in detail in the following comments, BOR's decision to issue separate EISs for connected actions violates NEPA. In addition, this DEIS inadequately defines the IOP, and fails to provide and rigorously explore no action and other alternatives for both the IA and the IOP. The IOP would forgive overrun accounts under certain conditions, in clear violation of the 1964 Supreme Court Decree. Furthermore, the DEIS inadequately assesses direct and indirect impacts, and fails to provide a dam re-operation alternative as mitigation for impacts along the reach of the Colorado River below Parker Dam. The DEIS inadequately assesses transboundary impacts and cumulative impacts, and is further compromised by a set of faulty assumptions.

The Bureau has unlawfully segmented NEPA compliance for QSA Activities

BOR has decided that the IID transfer, the IA, the IOP, and other projects, although all “linchpins” of the QSA, are separate ‘major federal actions.’ This is in violation of NEPA. All of these actions are connected and require one EIS. “Agencies shall use the criteria for scope to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.” 40 C.F.R. § 1502.4(a) (emphasis added).

“To determine the scope of environmental impact statements, agencies shall consider 3 types of actions They include: (a) Actions (other than unconnected single actions) which may be: (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.” 40 C.F.R. § 1508.25(a) (emphasis added).

By publishing three separate environmental compliance documents, one for the IA, IOP, and related other federal actions, another for the Imperial Irrigation District Water Conservation and Transfer Project / Draft Habitat Conservation Plan Project, and still another for the lining of the All American Canal, BOR has unlawfully and unnecessarily segmented the analysis of a series of integrally related changes proposed for the Colorado River system.¹ The IA’s approval of the transfer creates a federal nexus to the impacts at the Salton Sea. However, the list of environmental consequences of the proposed actions does not include a reduction of inflows to the Salton Sea (p. 3.0-2). All of these projects are required elements of the QSA and must be completed before the QSA is signed. For example, the QSA cannot be implemented without any of the above

¹ The preparation of a separate NEPA document for the Interim Surplus Guidelines has further segmented proper review of the QSA’s projects. See IA DEIS 4-5 (“[t]he ISG is critical to the overall implementation of the IA and QSA . . .”).

projects. *See* QSA Art. 6.1, 6.2(2)(a). *See also* 66 Fed. Reg. 14211 (“The Department of Interior believes the proposed QSA cannot be lawfully carried out absent a fully executed IA.”); IOP Scoping Report at 11 (“The IOP is a condition precedent to the execution of the QSA . . .”); and DEIS 1-16 (1:13-14); Transfer DEIS ES-1 (the terms of the water transfer are set forth in the 1998 transfer agreement and QSA).

It is not appropriate for the IA DEIS to isolate impacts to the Salton Sea and mitigation measures in the Transfer DEIS. “[W]hen the projects in a particular geographic region are foreseeable and similar, NEPA calls for an examination of their impact in a single EIS.” *See Churchill County v. Norton*, 276 F.3d 1060, 1077 (9th Cir. 2001) (citations omitted). The proposed IA, in implementing the QSA and transfer, will significantly impact the Salton Sea, and the IA DEIS must assess the IA in the context of these impacts and mitigation measures proposed to offset its impacts. Thus we include here a brief commentary on the Habitat Conservation Plan for the IID Transfer.

Not only has BOR segmented the environmental analyses, it has also inadequately evaluated and mitigated these impacts in the separate EISs. We have previously commented on the inadequacy of the EIS for the Interim Surplus Guidelines. Detailed comments regarding the IID Transfer and Draft HCP will be submitted during the comment period.

The DEIS Inadequately Defines the IOP, as well as the No Action and Other Alternatives for Both the IA and IOP

The DEIS for the IA and IOP does not fulfill the intent of the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*, which requires federal agencies to include alternatives to the proposed action in their review of major federal actions. 42 U.S.C. § 4332(2)(C)(iii). The alternatives are the heart of the EIS. 40 C.F.R. § 1502.14. CEQ regulations call on agencies to “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated,” “devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits” and “include appropriate mitigation measures not already included in the proposed action or alternatives.” *Id.* (emphasis added).

No alternatives are provided, or were even considered, for the IA, which will provide federal approval and implementation of an agreement negotiated among California parties and will result in the reduction of Colorado River flows to its delta, and an acceleration in the rate of degradation at the Salton Sea. The DEIS should include, at minimum, one environmental alternative. Other alternatives could include signature of the IA and QSA after the QSA’s December 31, 2002, deadline and an alternative IA if the IID Transfer is implemented without the QSA (as considered in the Transfer DEIS).²

² This is but one example of how BOR’s failure to look at these projects synergistically and cumulatively

The DEIS does not even include a draft of the actual IOP policy, in contrast to the inclusion of the draft QSA and IA. Without being able to read the actual policy, several questions remain:

- What is the term of the Inadvertent Overrun Policy? The DEIS states that the IOP would not be materially modified for a 30-year period. (DEIS 2-22.) Does this mean the policy terminates in 30 years? Or does it mean that the policy is adopted indefinitely and may not be changed for 30 years? If the latter is true, does the Secretary have the authority to limit future Secretaries in this manner? Furthermore, this flies in the face of the IA Sec. B.8 (“If at any time the implementation of the water budget components falls short of the requirements of the QSA, the Secretary may . . . change or alter the Inadvertent Overrun and Payback Program . . .”).

- The proposed policy provides two different definitions of an “inadvertent overrun:” one – “deemed to be beyond the control of the water user” and two – “Colorado River water that is diverted, pumped or received by an entitlement holder in excess of the water user’s entitlement for that year.” DEIS 2-22. The first definition is subjective and includes no criteria for the Secretary (presumably) to consider in deciding whether the overrun was truly beyond the user’s control. Therefore, we suggest that the second definition serve as the official definition. Should BOR desire to add an element to that definition that indicates a lack of control on the part of the user, it should include firm criteria for determining when such lack of control exists, to avoid the likelihood that a contractor takes more water in the hopes of a projected flood control release.

- Why does BOR assume that adoption of an IOP will not change the “rules of the game?” The IOP, as defined at 66 FR 4856, could create an incentive for users to maximize their overrun account. A worst-case scenario permitted by the current proposed rule (which should be included as part of the DEIS analysis) is illustrated below:

- year 1 overrun of 310 kaf
- year 2 year 1 Decree accounting report published, overrun of 310 kaf
- year 3 payback of 103 kaf required for year 1, year 2 Decree accounting report published (total account balance at 517 kaf at year’s end)
- year 4 flood control or space-building release of 100 kaf, overrun account of 517 kaf is forgiven (system loses 417 kaf)

has led to inadequate NEPA review. The meaningfulness of the Transfer DEIS’s alternative, without a corresponding alternative IA in this DEIS, is questionable, if not suspect. Furthermore, the issuance of a biological opinion on the execution of the IA, nearly a year before this DEIS on the IA (and less than a month after issuance of a draft QSA), raises additional questions about the meaningfulness of the NEPA process. Departmental and agency guidance suggest performing the two processes on a parallel course, to ensure adequate consideration of alternatives in both processes. See 40 C.F.R. §1502.2(g) (“Environment impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.”). Completion of the ESA compliance logically leads one to believe (a) that the Bureau has already determined its course of action, rendering the EIS’s consideration of alternatives, impacts, and mitigation superfluous, and (b) that the Bureau is unlikely to heed the EIS or the public’s comments on it.

Although the example above is a worst-case scenario for a single user, there is nothing within the IOP as currently drafted that would prohibit this situation. The DEIS for the ISG (p. 3.6-11) projects at least a 24% annual probability of flood releases for the next 20 years. Given this probability, any rational user on the system would not be especially concerned about inadvertent overruns, and perhaps would seek to maximize this accounting loophole to their benefit. This suggests that BOR's assumptions about average account balances for the IOP are inappropriate. The anticipated average total account balance for the inadvertent overrun policy is based on analysis of past variability in water use. BOR's reliance on this projected average is not only flawed, it also serves to misrepresent the likely impacts of the IOP. BOR must analyze the impacts of the IOP using a broad range of possible account balances. Eliminating the "forgiveness" provision, and capping the overrun account at 75 kaf, would reduce the incentive to abuse the IOP program.

- Why were overrun and payback actions of southern Arizona's Colorado River water users excluded from the IOP modeling analysis? It is certainly within the realm of possibility that Arizona's Colorado water users with quantified, diversion, or consumptive use rights (including Wellton-Mohawk, Yuma, North Gila, Yuma Mesa Irrigation and Drainage Districts, and others) could accrue overrun account balances, which could add as much as 52 kaf to a maximum account balance. If BOR has entered into special agreements with Arizona's Colorado River water users regarding the Central Arizona Project's ability to absorb the overruns of other water users in the state, it should be fully explicated in the DEIS.

- Any payback plan submitted to BOR by a user with a payback obligation must go through environmental review to ensure the protection of Colorado River and Salton Sea aquatic and riparian resources. Plans for payback that include supplementing Colorado River system water supplies with non-system water supplies must be limited to substitution of non-system water supplies to meet a user's need in place of diversion of Colorado River system water supplies to meet the need, creating an intentional forbearance. Introduction of non-system water into the Colorado River system must be explicitly prohibited to prevent the introduction of non-endemic species.

DEIS Inadequately Assesses Direct and Indirect Impacts

The description of the hydrologic impacts of the No Action Alternative for the IOP is incorrect. As defined by BOR, "'no action' represents a projection of current conditions to the most reasonable future responses or conditions that could occur during the life of the project without any action alternatives being implemented" (BOR NEPA Handbook, 8.6.1). It therefore is problematic for the DEIS to claim under the No Action Alternative that "The Secretary would apply existing law and not deliver water in excess of a State's, water district's, and other entity's entitlement. *This would severely limit the operational flexibility of users* with limited storage capacity and those with highly variable demand patterns (such as agricultural users)." (DEIS 3.1-26) (emphasis added).

An action that severely limits or changes present conditions is not “no action,” and should be properly described as an additional alternative, even though this suggests that the Secretary is not currently enforcing existing law.

The DEIS erroneously states that the IOP will not impact habitat in the reach of the Colorado River between Parker and Imperial dams. (3.2-20.) However, BOR estimates that in that same reach, as much as 35 surface acres of the open water in the main channel, 17 acres of open water in backwaters, and 28 acres of emergent vegetation in backwaters could be lost due to implementation of the IA. The IA will change the diversion point for 400 kaf/yr. However, BOR dismisses the effect the IOP will have on this habitat. This is inconsistent given that the IOP, by BOR’s own admission, may diminish river flow in this same reach by as much as 176 kaf in any given year (DEIS 3.1-36), nearly half the volume of the flow deficit created by the IA. A flow deficit created by the IOP could have some additional impact on open water and wetland habitat and should be modeled and explained.

BOR's study of IOP impacts on excess flow magnitude and frequency are not clear and may be flawed. BOR reports a probabilistic study of the impacts of "average" and "maximum" account balances, stating that: a) the average balance of 66kaf will result in excess flows to Mexico that are 24 kaf less than would occur without the IOP, and b) the maximum balance of 331 kaf will result in excess flows to Mexico that are 61 kaf less than would occur without the IOP (DEIS 3.12-12). However, the data for this analysis is not included in the DEIS or its appendices, and we question the accuracy of the numbers, even considering the impacts of equalization and the Interim Surplus Guidelines. We request a clear and detailed explanation of the calculations that were used to generate these reductions in excess flows. Furthermore, we request the inclusion of this same analysis run (and documented) using corrected figures for "maximum" account balances that include Arizona irrigator's potential to accrue IOP debt.

BOR's assertion that impacts of reduced flow on river hydrology in the reach below Parker Dam are linear is unreasonable and should be corrected (3.2-15). For the purpose of understanding the impacts of changing river stages, it is not sufficient to assume a linear relationship when extrapolating monthly records of river flow into instantaneous flow. River hydrology is a function of multiple variables including channel geomorphology and the porosity of channel soils. Hydrologists typically develop rating curves that correlate river flow to river stage (elevation in the channel or floodplain). A linear relationship assumes a river channel that has perfectly consistent bank slope and channel width, more probable in an engineered floodway than a natural river channel. We are concerned that BOR's calculation of impacts to river elevation below Parker dam is incorrect and thus the impacts to main channel open water, backwater, and marsh habitats are incorrect as well. We request the inclusion of a corrected analysis of the hydrology and biological resources in the FEIS.

Mitigation for habitat lost on the river between Parker and Imperial dams, an impact of the IA, should not be limited to the construction of offstream refugia. We recommend a better alternative, one that would minimize impacts to this reach of the

river. Daily maximum instantaneous releases from Parker Dam (see 3.1-10) should be maintained at historic levels, to ensure that backwaters are flushed consistent with historic river operation and management, and that groundwater levels are maintained at historic levels. The 1996 BA (p.44) shows the daily variation in releases at Parker and the opportunity to modify these releases to maximize river stage consistent with current operations. Reducing the minimum instantaneous release from Parker would generate the decreased volume called for by the change in point of diversion. This should minimize ecological impacts and impacts to power generation, as well.

Whatever mitigation alternative is selected, we request that BOR a) implement a monitoring program to determine the effects of river operation on this reach, and b) commit to mitigate impacts identified in the monitoring process. This is the only way that BOR can satisfactorily ensure adequate mitigation for the impacts of unprecedented changes in river management.

The interpretation of the impacts of the IA on land use is incorrect (p. 3.4-8). California SB 221, approved by the Governor on October 9, 2001, requires cities and counties to make a finding that a sufficient reliable water supply is available for any new subdivision of more than 500 residential units. While acknowledging that “the reliability of SDCWA’s water supply would increase under the IA,” BOR has erroneously concluded, “this would not lead to changes in land use within the SDCWA service area.” (3.4-8.) If the IA provides reliability for SDCWA’s water supply, then it changes the ability of developers to meet the standard established in SB 221. The IA’s impacts on land use and socioeconomics in the area served by the SDCWA must note this impact.

Analysis of impacts to air quality at the Salton Sea is incomplete, citing only an increase in odorous emissions (p. 3.11-6). However, serious concerns have been raised about potential increases in dust suspension and PM₁₀ emissions. The IID Transfer DEIS is similarly incomplete, failing to provide quantitative estimates of the transfer’s impacts on air quality resulting from windblown dust, but nevertheless concludes that “the predicted decrease in Sea level and increase in exposed area would increase the potential for dust suspension” (Transfer DEIS p. 3.7-34).

Because existing concentrations of PM₁₀ at the Salton Sea on occasion violate national and state ambient air quality standards, we are concerned with BOR’s conclusion in the Transfer DEIS that the only acceptable mitigation measure consists of additional fallowing in IID to allow Salton Sea shoreline levels to remain at baseline. The IID water transfer agreement specifically prohibits fallowing by farmers, making this mitigation option unlikely.

DEIS Presents an Inadequate Assessment of Transboundary Impacts

BOR has not presented a thorough analysis of the transboundary impacts of the proposed action in the DEIS. Information presented in the section on Transboundary Impacts should be as complete and thorough as information presented in the chapters

analyzing impacts on hydrology, biological resources, etc. We offer one example: in the chapter on hydrology, BOR reports an exercise in modeling river elevations at specific locations along the river. However, none of the locations selected are in Mexico, and the transboundary analysis does not include information on projected river elevations.

Moreover, statements in Technical Memorandum No. 1 give reason for readers to question the rigor with which BOR analyzed transboundary impacts. The analysis makes contradictory and baseless claims regarding the use of water in Mexico. In one section, the memorandum states the Bureau cannot model water use below Morelos Dam “due to uncertainty of how Mexico may choose to use excess water.” (App. G, 5.1-2.) On the other hand, pages later the memorandum states, “As stated before, excess flows are generally diverted by Mexico when possible.” (App. G, 5.1-7.)

In fact, BOR does possess data concerning the use of water in Mexico, data that contradicts the latter claim:

relatively little of the water in excess of the 1.5 to 1.7 MAFY treaty allocation is diverted for irrigation. Diversions to irrigation canals below Morelos Dam exceeded 1.7 MAFY in only 14 of the 24 years since 1950 in which deliveries to Mexico were greater than 1.7 MAFY. In those 14 years, an average of about 523,000 AFY was diverted to irrigation canals Therefore, on average, about 10 percent of the flood flows were diverted for irrigation in those 14 years.

Salton Sea Restoration Draft EIS/EIR (BOR 2000) at 3-23 (emphasis added). In other words, in 24 of 48 years excess flows have reached Morelos Dam and in 14 of those 24 years Mexico diverted a small fraction of that water. In all of those 24 years Mexico sent flows to the delta and in the other 24 years no flows reached the delta.

BOR erroneously concludes in the cumulative impacts analysis of transboundary impacts that decreased magnitude and probability of excess flows to Mexico between 2002 and 2019 will result in no substantive impacts to vegetation. (4-20.) This conclusion is based on the limited effect these excess flows are likely to have on groundwater tables below Morelos Dam. However, this analysis fails to address the likely degradation of riparian corridor species composition. “Excess flows” to Mexico serve an important ecological function, flooding the river’s riparian corridor, flushing accumulated salts, and allowing the germination of native cottonwood and willow trees. Without these floods, the native species are out-competed by the invasive salt-cedar.

The statement that under the no action alternative “[t]he magnitude of flood flows varies from 0 to over 6 MAF, with large flood flows (over 250 KAF) anticipated approximately 20 percent of the time and flood flows over 1 MAF less than 15 percent of the time” (p. 3.12-4) would be best substantiated by tabular data. We request the development and inclusion of tables similar to 3.12-2 that document the frequency of occurrence of excess flows that are greater than 250 kaf below Morelos Dam.

BOR acknowledges that the estimated flood flow needed in the Colorado River delta’s riparian corridor is 250 kaf or greater, citing Luecke et al., A Delta Once More. In

fact this report estimates that the delta's riparian ecosystem needs 260 kaf, specifically at a frequency of one in four years, on top of baseline flows of adequate quantity and quality. The frequency of flood flows is a critical component of the delta ecosystems' needs, and should be considered in BOR's analysis of transboundary impacts. Similarly, reports have estimated a need for perennial flow of 32-50 kaf to maintain native riparian vegetation. This information should also be taken into account in the DEIS's transboundary impacts analysis. See Edward Glenn, *The Importance of United States' Water Flows To the Colorado River Delta and the Northern Gulf of California, Mexico*, October 13, 1998.

In light of these comments on the inadequacies of the transboundary impacts analysis, we question why the International Boundary and Water Commission (IBWC) was not consulted, as has been done before, e.g., in the NEPA processes for the Interim Surplus Guidelines (ISG). Furthermore, consultation with the IBWC would identify Mexico's concerns with the cumulative transboundary impacts of the IA and IOP, the ISG, and the lining of the All American Canal, as required by an international agreement for reciprocal consultations. Before issuing a Final EIS, BOR must consult with the IBWC.

Finally, we request that BOR mitigate transboundary impacts with a commitment to monitor the long term effects of any actions adopted, and a commitment to fully mitigate any impacts identified in this monitoring process.

DEIS Inadequately Assesses Cumulative Impacts

The cumulative impacts analysis should include BOR's plan for bypass flow replacement. Analysis of cumulative impacts must include "past, present, *and reasonably foreseeable future actions.*" (40 C.F.R. § 1508.7) (emphasis added). In numerous public hearings and the Technical Memorandum No. 1 (App.G, 2-4), BOR has described long-term plans for annual replacement of 120 kaf that is presently bypassed into the Main Outlet Drain Extension, which terminates at the Ciénega de Santa Clara in Mexico. While we believe BOR should still be getting credit for water conserved in the lining of the Coachella canal, we appreciate that BOR is planning now for its need to replace the bypass flow at some point in the future. BOR has identified Yuma groundwater recovery, offstream storage and conservation as the three possible options for bypass flow replacement, and should include bypass flow replacement generally, and these three options specifically, in its cumulative impacts analysis.

The cumulative analysis of impacts on hydrology, biological resources, and transboundary impacts wrongly omits consideration of the impacts of the Rule for Offstream Storage. See DEIS 4-12 ("Table 4.2-1 and Table 4.2-2 detail the expected combined impacts of the ISG, IA, IOP, and PVID Program, which would be similar, and in addition, to impacts resulting from the Offstream Storage Rule.") (emphasis added). BOR completed a Programmatic EA (PEA) analyzing the impacts of the Rule; there is no reason why this information cannot be included in the IA DEIS.

The DEIS excuses this omission in the transboundary impacts section by claiming, "without a specific proposal to evaluate, no prediction of impacts is possible." DEIS 4- 20. This is simply untrue. First, BOR could include the impacts from the PEA and Biological Assessment issued in 1999, which concluded that the Rule would reduce the magnitude and likelihood of flood control releases and a reduction in the average amount of water available to Mexico. Rule BA at 39-40. Second, BOR did have a specific proposal to evaluate, as Arizona, Nevada, and the Secretary of the Interior were negotiating a Storage and Interstate Release Agreement (SIRA) during preparation of this DEIS. Believing that "specific details of the SIRA were known," on August 1, 2001, BOR consulted with the Fish and Wildlife Service on this SIRA. Att. to Draft EA on Storage and Interstate Release Agreement, dated Feb. 17, 2002.

Impacts from the Offstream Rule and proposed SIRA include offstream storage of 1.2 maf, reduction of an average of 23 kaf/yr of flood control releases available to Mexico, and decreased flows between Hoover Dam and Lake Havasu. These impacts must be included in a revised cumulative analysis.

Faulty Assumptions Damage the Impacts Analyses

BOR's analysis of impacts to river operations and water supply include assumptions about shortage criteria that are not formally defined. We have suggested that BOR formally define shortage criteria in its Long Range Operating Criteria for the Colorado River. Until formal shortage criteria are defined, we must question the results of BOR's modeling exercises. We suggest that in the FEIS BOR provide a full explication of which assumptions used in modeling shortage criteria are codified and which are not.

According to the assumptions common to all alternatives, Mexico will receive a surplus declaration of 200 kaf only under Lake Mead flood control releases (3.1-19). The 1944 Treaty sets only a minimum delivery requirement, not a maximum. Mexico is eligible to receive surplus waters in years other than flood control releases; to assume otherwise may establish international policy that has no basis in current law. This DEIS may not establish a *de facto* Mexico surplus declaration trigger.

BOR has also assumed that the Yuma Desalting Plant will begin operating in 2022, (App. G, 2-4), but did not include this assumption in the main text. Although its operation is assumed in the modeling, impacts of such operation are not included in the transboundary impacts section. Operation of the plant will have significant environmental impacts on the delta, particularly the Ciénega de Santa Clara. Section 3.12 (3.12-24), summarily concludes that this action will not affect the Ciénega without observing that operation of the plant would cut return flows to the Ciénega to a third of their current flows, while tripling their salinity. Section 4 (4-19,20) omits any discussion of the Ciénega. Neither section analyzes the significant adverse impacts to endangered species and their habitats. This analysis must appear in the FEIS, and must be

reconsidered in BOR's ESA compliance.

Endangered Species Act (ESA) Compliance

BOR submitted a supplemental Biological Assessment (BA) to FWS on January 9, 2001, on Transboundary Effects in Mexico for the Interim Surplus Criteria, and the Final BO (Jan. 12, 2001) states that "FWS will provide separate memoranda on findings for the effects of the proposed actions to listed species in . . . Mexico." (App. E, at 2.) but there is no evidence in the DEIS that FWS ever responded to this supplemental BA. Does FWS intend to provide a supplemental Biological Assessment? App. E of the FEIS must contain this memoranda, and if it has been prepared, we request that BOR provide it to us as well as all interested parties in advance of publishing the FEIS.

There is no evidence in the DEIS and its appendices that BOR has consulted with FWS on the Inadvertent Overrun Policy (page 4-1 mentions only the IA). Until records of such consultation are made public, we cannot be sure that BOR has complied with section 7 of the Endangered Species Act.

Recommendations

BOR should implement the IOP with the "no forgiveness" alternative. Any policy that decreases the magnitude or frequency of flood flows to the Colorado River delta's ecosystems ("excess flows" in BOR's terms) is unacceptable since it does not constitute an action that "protect[s], restore[s] and enhance[s] the environment." 40 C.F.R. § 1500.1(c) (purpose for NEPA process).

It should come as no surprise to BOR that the adoption of any policy related to inadvertent overruns *other than timely payback of the overrun amount* has the potential for significant negative impacts to the river ecosystem, especially when considered cumulatively with other regulations and policies regarding operation of the Lower Colorado River. If uses exceed the 7.5 maf allocated to Lower Basin users, the amount of water available to sustain endangered species and riverine habitats in the U.S. and Mexico is decreased. If that amount is not restored as soon as possible, the potential for irreversible impacts increases.

Furthermore, the Supreme Court Decree in *Arizona v. California*, Article III(D), unequivocally states that users may not consume mainstream water in excess of their apportionments. Therefore, all inadvertent overruns *must* be paid back to the system, or else they are in violation of the Decree.

The proposed inadvertent overruns policy provides that "in a year in which the Secretary makes a flood control release or a space building release, any accumulated amount in the overrun account will be forgiven." 66 FR 4857. (DEIS 2-23.) This provision of the proposed policy would violate the Decree, since it would allow a user to

consume mainstream water in excess of its apportionment. The probability of water flowing “unused” to the Sea of Cortez in such a situation cannot be considered and made to justify “forgiveness” of the overruns. Additional uses of water in surplus years are governed by the surplus provisions in Article II (B)(2) of the Decree and associated regulations. Forgiveness of an overrun account in years of high reservoir storage does not constitute a surplus use, and therefore can only be an illegal exceedance of a user’s apportionment.

We recommend that annual inadvertent overruns be capped at 75,000 acre-feet. Absent such a cap, the largest user on the river theoretically could have an overrun account exceeding 600,000 AF, after two consecutive years of maximum overruns permitted under the IOP. From an equity perspective, it would be difficult to justify an overrun account that exceeded the entitlement of an entire lower basin state. Such an account would be especially troubling given the potential loss to the system were such an account forgiven due to a space building or flood control release. While Reclamation would be expected to recognize overruns of such magnitude, the IOP does not grant authority to limit such overruns. An annual cap of 75,000 AF, given the negligible unmeasured return flows credited to this user, would not create undue hardship and would minimize damage to the system as a whole.

- BOR must correct this DEIS, preferably with issuance of a revised DEIS before issuance of the FEIS, to address these comments.³ For example, BOR must include tables and figures that represent relevant information, e.g. the need for perennial flows in the delta and the necessary frequency of flood releases. BOR must also consider the impacts of the IID Transfer as effects of this proposed project, and not defer their consideration to the Transfer DEIS.

- Furthermore, BOR must delete the assumption of the reoperation of the Yuma Desalting Plant, particularly when the agency is currently researching alternatives to operating the plant, as directed by Congress.

³ “The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.” 40 C.F.R. § 1502.9(a).

· When considered cumulatively, and as should be laid out in this DEIS, the cumulative impacts of the IA, IOP, ISG, IID Transfer, and lining of the All American and Coachella Canals, as well as their modeling assumptions, are significant. *See* 40 C.F.R. § 1508.27(b). They entail the loss of 400 kaf flowing through considerable stretches of river and backwater replenishment; the substantial reduction in frequency and magnitude of flood flows to the delta; an increase in the reliability, and hence “supply,” of water to San Diego and the impact on land use; the allowance of water use in excess of a Supreme Court decree; adverse impacts on groundwater in Mexico; a worsening air quality around the Salton Sea; impacts to the Pacific flyway; and the accelerated loss of piscerine and endangered species habitat at the Salton Sea. This list is not exclusive, but illustrates effects on human health, endangered species and their critical habitat, inability to attain air quality standards, and establishes the Watermaster’s desire to put to consumptive use as much Colorado River water as possible, before allowing the river to flow to the Gulf of California, assuming it reaches the Gulf at all. A revised DEIS must examine these projects cumulatively, in terms of both environmental effects and mitigation. *See Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373-74 (1989); *Sierra Club v. Slater*, 120 F.3d 623, 632 (9th Cir. 1997).

· BOR should commit to long-term ecosystem monitoring to determine the impacts of any adopted changes in Colorado River management, and commit as well to mitigating fully any and all impacts identified in that process.

Miscellaneous

Table 3.12-2 is missing data for year 2040.

The map in figure 3.12-1 includes two directional indicators but no scale. Figure 3.12-1 incorrectly places Morelos Dam north of the NIB.

In Appendix G, figure 5.1-2, numbers for the years on the x-axis are incorrect.

Page 3.12-22, l:28 requires a comma between “groundwater” and “excess.”

Thank you for the opportunity to comment. We look forward to working with the Bureau of Reclamation to address these issues. Please feel free to contact any one of us if you have questions.

Sincerely,

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