# Defenders of Wildlife \* Living Rivers /Colorado Riverkeeper Maricopa Audubon Society \* National Wildlife Federation \* Pacific Institute Sierra Club Southwest Waters Committee \* Yuma Audubon Society

June 1, 2009

Mr. Sean Torpey Environmental Planning and Compliance Group, Manager Bureau of Reclamation, Yuma Area Office 7301 Calle Agua Salada Yuma, AZ 85364

Via Mail and e-mail: <a href="mailto:storpey@usbr.gov">storpey@usbr.gov</a>

Re: Draft Environmental Assessment for Yuma Desalting Plant Pilot Run

Dear Mr. Torpey:

We offer the following comments on the Draft Environmental Assessment for the Yuma Desalting Plant pilot run on behalf of Defenders of Wildlife, Living Rivers & Colorado Riverkeeper, Maricopa Audubon Society, National Wildlife Federation, Pacific Institute, Sierra Club Southwest Waters Committee and Yuma Audubon Society, together representing more than four million members nationwide. Individually and collectively, our organizations have actively promoted restoration of riparian and wetland areas of the Colorado River and its delta, including the Ciénega de Santa Clara. We appreciate the opportunity to comment on the Draft Environmental Assessment (EA) but must reiterate our opposition to operation of the Yuma Desalting Plant (YDP) that would have adverse effects on the environment, including the Ciénega de Santa Clara and its wildlife.

The Draft EA fails to acknowledge and address nearly all of the significant issues raised by our scoping comments.<sup>1</sup> Scoping is an "early and open" process for identifying the range of actions, alternatives and significant issues related to the action. 40 C.F.R. §§ 1501.7, 1508.25. The CEQ has instructed agencies to "be guided by these concerns, or be prepared to briefly explain why you do not agree. Every issue that is raised as a priority matter during scoping should be addressed in some manner in the EIS, either by in-depth analysis, or at least a short explanation showing that the issue was examined, but not considered significant for one or more reasons." Memorandum for General Counsels, NEPA Liaisons, and Participants in Scoping: Scoping Guidance (Apr. 30, 1981), available at http://ceq.hss.doe.gov/nepa/regs/scope/scoping.htm.

<sup>&</sup>lt;sup>1</sup> We hereby incorporate by reference the comments submitted by these same environmental organizations in response to the September 29, 2008 press release from the U.S. Bureau of Reclamation requesting scoping comments on the proposed interim operation of the Yuma Desalting Plant (YDP). *See* Letter from Kara Gillon, Defenders of Wildlife to Sean Torpey, Bureau of Reclamation (Oct. 16, 2008). In addition to being a part of the official record, the comments are available at <a href="http://www.pacinst.org/topics/water\_and\_sustainability/colorado\_river/10\_08\_scoping\_comments\_YDP\_re-operation.pdf">http://www.pacinst.org/topics/water\_and\_sustainability/colorado\_river/10\_08\_scoping\_comments\_YDP\_re-operation.pdf</a>.

The scope of the Draft EA is a significant issue raised in our comments but which remains obscured. There are several aspects of the proposed action which have not been included in the Draft EA, including agreements for Intentionally Created Surplus (ICS) credits and for monitoring and mitigation measures, that are connected and cumulative actions that should be integrated into the scope of the Draft EA. When describing the agency action, NEPA regulations direct agencies to "use the criteria for scope," 40 C.F.R. § 1502.4(a), which is determined by the action, alternatives, and effects. *Id.* § 1508.25. Actions 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. (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id.* § 1508.25(a).

Reclamation states "the Proposed Action is *exclusively intended* to provide benchmark data which can only be obtained through sustained plant operation...." Draft EA at 19 (emphasis added). As noted below, the proposed action is also apparently intended to provide ICS credits to three municipal water agencies. Failure to disclose this information, and the broader purpose of the subject action, is a significant flaw in the Draft EA. Reclamation must revise the Draft EA to describe and evaluate the execution of ICS agreements and the implementation of monitoring and mitigation.

In addition, Reclamation's Draft EA does not provide detailed analyses, but instead relies on questionable and baseless assumptions to justify its conclusions that there will be no adverse or significant impacts as a result of this action. "[C]onclusory remarks [and] statements that do not equip a decisionmaker to make an informed decision about alternative courses of action, or a court to review the Secretary's reasoning" are insufficient. *Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988). For example, Reclamation repeatedly asserts without supporting analysis that compliance with existing applicable laws will ensure no significant impacts occur and will mitigate adverse effects. *See, e.g.,* Draft EA at 29 (no adverse effects to biological resources because of AZPDES permit conditions), 36 (water quality), 40 (hazardous materials), 48 (noise). In largely deferring to the certification and permitting of other agencies, Reclamation fails to perform the case-by-case balancing analysis required by NEPA. *See Calvert Cliffs' Coordinating Comm., Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1122-25 (D.C. Cir. 1971) (rejecting agency practice that abdicated NEPA obligations to other agencies' judgments).

In another example, Reclamation asserts that it will "operate the plant in compliance with the *Resource Recovery and Conservation Act* (RCRA), *Pollution Prevention Act*, and the *Emergency Planning and Community Right to Know Act*" and directs the reader to section 3.6.2.2 for additional discussion. Draft EA at 19. There is not, however, any discussion of Reclamation's obligations and commitments under these laws in this section of the Draft EA, or in any other section.

Reclamation evades its NEPA obligations by simply claiming that compliance with applicable standards will always ensure that its action has no adverse or significant impact. Many environmental laws, permitting requirements and other standards do not require complete mitigation or avoidance of impacts. Reclamation must revise the Draft EA to discuss all effects of the action, applicable legal requirements, whether and to what extent these requirements may mitigate the effects of the action.

For these reasons, as explained more fully below, we strongly recommend that Reclamation revise and recirculate this NEPA analysis to incorporate the entire scope of the proposed action, its alternatives and its effects, to quantify the significance of the direct, indirect and cumulative effects using the complete measure of significance and to take a "hard look at [the] environmental consequences" of the proposed action. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (internal quotation omitted).

## Purpose and Need

NEPA requires the statement of purpose and need to reflect the true purpose and need "to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R § 1502.13. Reclamation has failed to articulate a purpose and need that explains the need for a pilot run, that distinguishes the pilot run from the demonstration run, that ensures the development and selection of alternatives that meet the purpose and need, and that allows for a range of reasonable alternatives.

**Purpose**. What are the specific objectives, data needs and performance benchmarks Reclamation seeks to obtain from the pilot run? *See* Draft EA at 9. Without this information, the public cannot assess or advise as to whether what Reclamation seeks truly will "evaluate long-term operation," Draft EA at 9, or whether Reclamation will propose another short-term run of the plant, terming it an experiment or feasibility study or investigation, attempting operation of the plant in short-term bursts while avoiding full-scale environmental review.

An examination of Reclamation's treatment of the 2007 demonstration run – before and after – is a model of use of vague and moving targets. Reclamation proposed the demonstration run of the YDP at 10% capacity for 90 days "in a manner consistent with the operation previously analyzed in the *Final Environmental Statement Colorado River Basin Salinity Control Project Title I* (Reclamation 1975)." Bureau of Reclamation Categorical Exclusion Checklist: 90-day Demonstration Operation of the Yuma Desalting Plant at 10-percent capacity YAO-CEC-07-001 (Dec. 18, 2006). The purpose of the demonstration run was "to acquire current operational data, test equipment already replaced to address design deficiency, and conduct research applicable to the resolution of remaining design deficiencies." *Id.* The run "will provide the information necessary in order to realistically compare this bypass flow recovery method to other recovery and replacement alternatives" and "will allow for definitive data collection about current plant equipment condition and actual costs to operate." *Id.* 

The Draft EA, on the other hand, states that the purposes of the demonstration run were "to demonstrate the YDP could operate, demonstrate the plant's use of current technologies, validate cost and performance estimates for the plant, improve overall plant readiness and provide

measurements of water quality impacts." Draft EA at 9. None of these five objectives addressed design deficiencies, bypass flow replacement methods or actual operating costs. *See, e.g.,* Bureau of Reclamation, *Yuma Desalting Plant Demonstration Run Report* 1, 3 (2008) (noting the demonstration was not intended to determine costs for commercial operation). Moreover, the actual demonstration run did not use the same pre-treatment process as the original plant design and operation. *See* Draft EA at 9.

Given the draft's dismissal of the data generated by the 2007 demonstration run, we are very concerned that, in the near future, Reclamation (or the municipal agencies) will again propose a new 'pilot' run, with the rationale that the current action is somehow deficient or unrepresentative of normal operating conditions and therefore needs to be repeated, with insufficient and inadequate environmental review and discussion.

**Need.** The need for short-term YDP operation has shifted from an assessment of alternative bypass flow replacement methods to information about the ability of the YDP to produce water for "multiple end uses." Draft EA at 9. What are these potential end uses, and how will the proposed action inform these uses and the ability of the YDP to satisfy them? In addition, Reclamation must clarify whether and how this proposed project is relevant to Reclamation's ongoing effort to study methods to replace the bypass flow, since the demonstration run was supposed to but did not. *See* Bureau of Reclamation, Lower Colorado Region, Bypass Flow Replacement or Recovery Methods, available at

<u>http://www.usbr.gov/lc/region/programs/bypass.html</u> (last visited May 27, 2009) (a public process "to solicit information about potential methods to recover or replace agricultural return flows from the Wellton-Mohawk Irrigation and Drainage District that bypass the Colorado River and are discharged to the Cienega de Santa Clara in Mexico (the bypass flow)").

To comply with NEPA and to assure the public that the operation is worthwhile and necessary, Reclamation must revise the purpose and need statement to make explicit the objectives sought and the operations proposed to fulfill those objectives.

## Alternatives

With the shift in purpose and need for operation of the Plant over the years, it appears that Reclamation has narrowly defined the purpose and need in order to predetermine operation of the YDP as the only practical alternative, despite our request to the contrary in our scoping comments. But Reclamation may not put forward a purpose and need statement that is so narrow as to "define competing 'reasonable alternatives' out of consideration (and even out of existence)." *Simmons v. U.S Army Corps of Eng'rs*, 120 F.3rd 664, 666 (7<sup>th</sup> Cir. 1997); *see also Alaska Wilderness Recreation and Tourism Ass'n v. Morrison*, 67 F.3d 723 (9<sup>th</sup> Cir. 1995).

Despite the artful crafting of a purpose and need statement, Reclamation's proposed alternative may yet fail to meet the agency's purpose and need because it possess the same flaws as rejected alternatives. Rejected alternatives, on the other hand, may yet fulfill the purpose and need. *See infra*, Authorization. Reclamation did not examine reasonable alternatives that meet the purported purpose and need. For example, if an objective is to preserve water for beneficial uses

in the U.S., then many other viable alternatives, such as those identified in the YDP Working Group White Paper,<sup>2</sup> should be included and assessed as part of the NEPA process.

**Proposed Alternative**. The description of the proposed action is not clear, and is potentially misleading. Reclamation first implies that 7,300 acre-feet of MODE water will be discharged to the Gila River Pilot Channel, twenty-one miles upstream of the NIB:

For the Proposed Action, the MODE water will be diverted via a diversion structure on the MODE near Drainage Point of Connection (DPOC) One. This diversion structure is a permanent water management facility called Reclamation's 'MODE 1 Diversion/Return Facility.' The structure discharges into the Gila River Pilot Channel which intersects with the Colorado River.

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For example, from January 2008 through January 2009, Reclamation discharged approximately 457 AF of MODE water to the Colorado River via this [diversion/return] facility, which is located approximately twenty-one miles from the Northerly International Boundary (NIB).

Draft EA at 14. Figure 2-2 depicts the location of this facility above the confluence of the Gila River and the Colorado River. If this facility is located twenty-one miles upstream from the NIB near the Gila River pilot channel, according to Reclamation's "River Miles Chart" (available at <a href="http://www.usbr.gov/lc/region/pao/rvrmiles.pdf">http://www.usbr.gov/lc/region/pao/rvrmiles.pdf</a>, last visited May 19, 2009), the facility is located slightly more than ten miles upstream of the confluence of the Gila and Colorado Rivers.

In describing how the proposed action will differ from the no action, Reclamation offers few specifics:

During the Proposed Action, about 7,300 AF of water at 2,664 ppm [*discharged?*] from Reclamation's MODE 1 Diversion-Return Facility would increase river salinity [by] 30 ppm to 808 ppm. There is no evidence that a 30 ppm increase in salinity or 808 ppm total salinity will cause any impact to the flora or fauna of the river either at this location or downstream. Furthermore, the addition of 7,300 AF of water over twelve to eighteen months at this location will result in an incalculably small change in river level.

Draft EA at 15.

However, Figure 2.3 and its accompanying text, Draft EA at 16-17, suggest that these 7,300 acre-feet will not be discharged into the Gila River Pilot Channel from the MODE 1 Diversion/Return Facility, but rather will be blended, at the rate of approximately 20 acre-feet/day, with the YDP product water and "discharged into the Colorado River." Draft EA at 16. Reclamation fails to name the facility that will discharge this water into the Colorado River, or the location of this facility. Presumably, the water would be discharged via gravity from a location downstream of the YDP and upstream of the NIB. The failure to name this facility or its

<sup>&</sup>lt;sup>2</sup> "Balancing Water Needs on the Lower Colorado River: Recommendations of the Yuma Desalting Plant/Cienega de Santa Clara Workgroup" (April 22, 2005).

location, especially given the draft's photograph, description and location of the MODE 1 Diversion/Return Facility, is quite remarkable.

Your email of May 21, 2009 to Michael Cohen indicates that the text on p. 15 is correct, and that the MODE water will be discharged, without blending, directly into the Gila River Pilot Channel at a point approximately 18 miles upstream of the point where the YDP product will be discharged, without blending, directly into the Colorado River. The 'blending' that occurs does so only on paper; the MODE water and the YDP product water actually mix with Gila River water and Colorado River water, and are not actually 'blended' together prior to being discharged into the rivers. Reclamation must describe this clearly in the revised draft; it is far from clear in the existing draft EA.

Presumably, the facility to be used to discharge the YDP product water is the same one used during the 2007 demonstration run. Inexplicably, the Draft EA fails to include information generated by this demonstration run. *See supra* at 3-4.

**Scope of the Proposed Action**. While Reclamation quotes at length from the municipal utilities' letter (hereinafter, "the letter") proposing the subject action, *see* Letter from David S. "Sid" Wilson, Gen. Manager, Central Arizona Water Conservation District to Lorri Gray, Reg'l Dir., Bureau of Reclamation (Jan. 14, 2009), Reclamation fails to state that these same municipal agencies offer, in the same letter, to contribute to the costs of operating the YDP in exchange for ICS credits for some portion of the product water generated by the proposed action. This critical information must be included as an interdependent connected action, including detailed information on the amount of funding offered by the agencies and the volume of water they expect as ICS credits. The document should also clearly state the authority under which the YDP may be operated to generate ICS credits for municipal agencies, and how such activity is consistent with the document's stated purpose and need.

According to the proposed action, the water discharged to the Colorado River will be delivered to Mexico as part of its annual schedule of water deliveries pursuant to the 1944 Water Treaty. *See* Draft EA at 8, 16, 19. This will reduce the amount of water released from Lake Mead, thereby increasing the amount of water in storage, protecting against shortage.<sup>3</sup> Although raised during scoping, Reclamation has not addressed whether the proposed alternative truly will add water to the Colorado River system, whether it will result in additional releases from Lake Mead, as occurs under the No Action Alternative, or whether the municipal utilities will receive ICS credits.

<u>Intentionally Created Surplus</u>. The ICS program allows Colorado River water users to create, store and release water that has been intentionally conserved for storage in Lake Mead, allowing for subsequent delivery at a later date. "ICS may be created through projects that create

<sup>&</sup>lt;sup>3</sup> Since 1974, the U.S. government has bypassed approximately 108,000 acre-feet of saline agricultural wastewater each year to the Ciénega de Santa Clara in order to control the salinity of Colorado River waters delivered to Mexico. Because the drainage water in the bypass drain is not desalted and returned to the river, this method of operation results in the release from Lake Mead of comparable quantities of water, which otherwise would not be needed if the bypassed water was delivered to Mexico as a part of the U.S. Treaty delivery obligation.

water system efficiency or extraordinary conservation or tributary conservation or the importation of non- Colorado River System water into the Mainstream." Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, 73 Fed. Reg. 19873, 19883 (April 11, 2008). The primary purposes of ICS are to:

(a) Encourage the efficient use and management of Colorado River water; and to increase the water supply in Colorado River System reservoirs, through the creation, delivery and use of ICS; (b) help minimize or avoid shortages to water users in the Lower Basin; (c) benefit storage of water in both Lake Powell and Lake Mead; (d) increase the surface elevations of both Lake Powell and Lake Mead to higher levels than would have otherwise occurred; ...

*Id.* The municipal utilities have proposed that the pilot run generate system efficiency ICS that would be apportioned among the utilities, deposited in their Lake Mead accounts, and delivered at a later date. Reclamation plays a key role in making ICS credits available, because ICS can be created and delivered pursuant only to a certification report submitted to the Secretary of the Interior, a delivery agreement to which the Secretary is a party and an ICS determination made by the Secretary via an ICS account maintained by the Secretary. *See generally id.* 

Reclamation must therefore address and resolve the issue raised in our scoping comments, of whether or not the municipal utilities will receive ICS credits in exchange for partial funding of the proposed action, and if so, how Reclamation will account for the water the YDP adds to the system and whether additional releases from Lake Mead will still occur. The generation of system efficiency ICS cannot proceed without the proposed action and would be implemented by Reclamation, and thus meet the definition of a connected action under NEPA.

Indeed, even as Reclamation fails to address this issue under its purview, the agency gives it credence with the release of the municipal utilities' letter confirming their interest in ICS credits:

Should a decision be made to conduct the proposed pilot run, the Municipal Utilities would also consider providing additional funds to partially fund the cost of implementing the Pilot Run in exchange for intentionally created surplus (ICS) credits in accordance with the 2007 Colorado River Interim Guidelines.

Letter from David S. "Sid" Wilson, Gen. Manager, Central Arizona Water Conservation District to Lorri Gray, Reg'l Dir., Bureau of Reclamation, at 5 (Jan. 14, 2009), available at <a href="http://www.usbr.gov/lc/yuma/environmental-docs/ydp/ydp-request-14Jan09.pdf">http://www.usbr.gov/lc/yuma/environmental-docs/ydp/ydp-request-14Jan09.pdf</a>.

Reclamation cannot hide its head in the sand – there is an abundance of public statements regarding the states' funding and ICS agreements, plans and expectations. *See, e.g.*, September 9, 2008, Executive Director's Monthly Report to the Colorado River Board of California, available at <u>http://www.crb.ca.gov/Executive%20Directors%20Report/2008/2008Sep09\_ED.pdf</u> (stating that the states will indeed benefit, under the auspices of the ICS program); December 12, 2008 Executive Director's Monthly Report to the Colorado River Board of California, available

at <u>http://www.crb.ca.gov/Executive%20Directors%20Report/2008/2008Dec12\_ED.pdf</u> (same)<sup>4</sup>; January 13, 2009 Executive Director's Monthly Report to the Colorado River Board of California, available at

http://www.crb.ca.gov/Meetings/2009/Executive% 20Director's% 20Report/2009Jan13\_ED.pdf (same); October 2, 2008, Regular Meeting of the [CAWCD] Board of Directors, available at http://www.cap-

az.com/meetings/index.cfm?action=showMinutes&meetID=530&criteria=desalting%C3%BEpla nt%C3%BA0%C3%BA09%2D01%2D2008%C3%BA05%2D20%2D2009 (stating that CAWCD's share would be approximately \$1.4 million (ten percent of the non-federal parties' cost) for approximately 3,000 acre-feet of intentionally created surplus (ten percent of the anticipated surplus) and that CAWCD would contribute approximately \$70,000 toward environmental monitoring); Agreement Among the United States of America, through the Department of the Interior, Bureau of Reclamation, the Metropolitan Water District of Southern California, the Southern Nevada Water Authority, and the Central Arizona Water Conservation District, for Funding Environmental Compliance for a Proposed Pilot Project for Operation of the Yuma Desalting Plant, Agreement No. 09-XX-30-WO538, §§ 3.4, 7.

<u>Authorization</u>. Reclamation must also discuss whether and how the execution of ICS agreements is consistent with the Colorado River Basin Salinity Control Act (CRBSCA). The CRBSCA authorized the Secretary of the Interior to operate and maintain the YDP "to enable the United States to comply with its obligations under the agreement with Mexico of August 30, 1973 (Minute 242 ...) ... in accordance with the provisions of the Act." 43 U.S.C. § 1571(a).<sup>5</sup> The Act also made "[r]eplacement of the reject stream from the desalting plant, ... and of any Wellton-Mohawk drainage water bypassed to the Santa Clara Slough to accomplish essential operation except at such times when there exists surplus water of the Colorado River under the terms of the Mexican Water Treaty of 1944, ... a national obligation ...". 43 U.S.C. § 1571(c). *See also* Reclamation, CRB-Salinity Control Project Yuma Desalting Complex Unit, General Description, <u>http://www.usbr.gov/dataweb/html/yumadesalt.html</u> ("The objectives of the Desalting Complex Unit are to reduce the quantity and improve the quality of saline irrigation drainage water pumped from the shallow aquifer beneath the farmlands of the Wellton-Mohawk Division of the Gila Project. The purpose of improving the quality of this saline drainage water is to make it usable as part of the delivery of Colorado River water to Mexico in accordance with

<sup>&</sup>lt;sup>4</sup> "Through the pilot project about 30,000 acre-feet of water will be returned to the Colorado River at a cost of \$23 million.

The Central Arizona Project (CAP), Southern Nevada Water Authority (SNWA), and

The Metropolitan Water District of Southern California (MWD) are participating in discussions with Reclamation on providing non-federal funding for operations of the YDP during the pilot project. These non-federal parties have tentatively agreed to the following funding percentages: MWD 60%; SNWA 30%; and CAP 10%. The quantity of the blended water, which is returned to the Colorado River, would be credited to the non-federal funding parties as System Efficiency ICS in accordance with the December 2007 Interim Guidelines. This System Efficiency ICS water would be credited to each party's ICS account based upon the portion of funding provided by each party for operations of the YDP." *Id.* at 4.

<sup>&</sup>lt;sup>5</sup> To address the high salinity of Mexico's treaty deliveries, the two countries negotiated Minute 242. Congress has requested a report from Reclamation on the status of the YDP and alternatives to meeting the requirements of Title I of the Colorado River Basin Salinity Control Act. If this report has been completed, please send a copy to each of us, at the addresses indicated below.

the treaty with Mexico of February 3, 1944, and the International Boundary and Water Commission's Minute No. 242 of August 30, 1973."). Reclamation must assess the implications of delivering Colorado River system water produced by the proposed action to the municipal utilities as ICS rather than to Mexico as a treaty delivery.

<u>Purpose and Need</u>. Reclamation must also revise the Draft EA to clarify how, if Reclamation does intend to enter into ICS agreements with the municipal utilities, the proposed action alternative with ICS agreements would meet the stated purpose and need. ICS deliveries would suffer the same fatal flaw as the no action alternative, because "Reclamation would lose the ability to maximize water use efficiency in the LCR system," Draft EA at 13, and the alternative would not add 29,000 acre-feet of water to the LCR system. Draft EA at 19. This is such an important part of the proposed action that alternatives that did not discharge water to the river or add water to the Colorado River system during drought were rejected. Draft EA at 19.

**Funding**. There are varying figures out there for the cost of operating the YDP. There are also allusions to agreements among Reclamation and the municipal utilities to fund all or a part of the cost of operation during the pilot run. *See, e.g.*, September 9, 2008, Executive Director's Monthly Report to the Colorado River Board of California (stating that through the pilot run "about 30,000 acre-feet of water will be returned to the Colorado River at a cost of \$23 million"); October 2, 2008, Regular Meeting of the [CAWCD] Board of Directors (reporting that CAWCD will contribute 10%, or \$1.4 million, to the non-federal share of the cost).

Congress has deemed all costs associated with the YDP and associated facilities as nonreimbursable. 43 U.S.C. § 1571(l). Nonreimbursable costs are those that are borne by the federal government because certain purposes of the project are viewed as national in scope. These costs include those allocated to flood control and navigation, as well as the majority of the costs allocated to fish and wildlife enhancement, highway transportation, and recreation. The purpose of the YDP – to comply with an international treaty – is just such a national interest. *Id.* § 1571(a). Other CRBSCA provisions support this designation. *See id.* § 1571(c) (designating bypass flow replacement as a national obligation).

Reclamation must be transparent about the cost of operating the YDP during the pilot run and any financial agreements made with non-federal parties to fund all or a portion of the pilot run.<sup>6</sup> This is necessary not only for transparency's sake, but also because the non-federal funding of this project raises serious questions about the use of a project for purposes other than those for which it was authorized. Private funding also raises grave concerns about the propriety of

<sup>&</sup>lt;sup>6</sup> We note that Reclamation also has not been transparent about the non-federal funding of the environmental compliance for the pilot run, including this Draft EA. NEPA regulations do allow applicants or consultants to prepare environmental documents if the agency retains sufficient control of or responsibility for the process. These requirements extend to EAs, for when an applicant prepares the EA the agency must "take responsibility for the scope and content" of the EA. 40 C.F.R. § 1506.5(b). This obligation takes on added importance when comments challenge the accuracy of such information. *See Steamboaters v. Fed. Energy Regulatory Comm'n*, 759 F.2d 1382, 1393 (9<sup>th</sup> Cir. 1984) (vacating permit after finding that agency did not fulfill independent duty to verify permit applicant's information and respond to public comments).

operating the YDP to benefit only a few stakeholders in the Colorado River basin while the project is one of national interest and that should serve more than just the narrow interests of the municipal utilities.

Indeed, it may be more accurate to characterize the purpose and need statement as the municipal utilities', not Reclamation's:

Without this real-time information, the municipal utilities would not be able to determine whether the YDP could reliably operate on a long-term basis and what, if any, improvements to the facility may be necessary to ensure the most efficient, cost effective and reliable long-term operation.

Draft EA at 8. This statement implies the municipal agencies have the responsibility and authority to make such a determination. Please cite and describe the legal authority empowering the municipal agencies to direct this federal action.

**Design Deficiencies**. According to Draft EA, twelve out of eighteen design deficiencies identified in the early 1990s have been corrected. Draft EA at 8. In 2005, Reclamation had informed Congress that of those eighteen deficiencies, six had been remedied but that "twelve still require resolution – seven of them prior to commencing one-third capacity operations." *See* Letter from P. Lynn Scarlett, Asst. Sec. for Policy, Management and Budget, Dept. of the Interior, to Honorable Pete V. Domenici, Chairman, Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. Senate (Oct. 26, 2005) (Report to the Congress, at 9).

Reclamation must disclose which design deficiencies have been remedied and which remain. This is particularly so since simple math tells us that at least one design deficiency that requires resolution before one-third operations remains. It is of great concern to us that Reclamation has not disclosed nor corrected the design flaws. In addition to disclosing the remaining design flaws and its plan for dealing with them, especially those that need correction before one-third operations, Reclamation must also address whether and to what extent these flaws, corrected or otherwise, affect YDP operation, its impacts on the environment, and the data Reclamation expects to obtain from the pilot run. Please describe the YDP's six unresolved design deficiencies and their projected and potential impacts on plant operation, including costs and safety.

## Affected Environment and Environmental Consequences

In addition to expanding the scope of the Draft EA to evaluate connected and similar actions, Reclamation must expand the scope of its analysis to include all direct, indirect and cumulative effects. *See* 40 C.F.R. § 1508.25(c). Reclamation has omitted discussion of environmental impacts to transboundary resources, climate change, noise, water quality and quantity, air quality and environmental justice and the impacts of hazardous materials and energy use on the environment.

An EA may be used to determine whether an action may have a significant environmental effect and may require an environmental impact statement (EIS). When an EA establishes that a proposed action "may have a significant effect on the … environment," the federal agency must prepare an EIS. *Sierra Club v. Bosworth*, 510 F.3d 1016, 1018 (9<sup>th</sup> Cir. 2007). When evaluating the significance of an action and its effects, Reclamation must measure the context and intensity of the action. 40 C.F.R. § 1508.27. Context means that the action and its impacts must be considered in geographical context and in a short and long-term context. *Id.* § 1508.27(a). Intensity refers to the severity of the environmental effects, *id.* § 1508.27(b), including both "direct effects," that are "caused by the action and occur at the same time and place," and "indirect effects," that are "later in time or farther removed in distance, but are still reasonably foreseeable." *Id.* § 1508.8(a), (b). The definition of "effects" also includes "cumulative effects," *id.* at § 1508.25(c), which the regulations define as the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions *regardless of what agency* (*Federal or non-Federal*) *or person undertakes such other actions.*" *Id.* § 1508.7 (emphasis added).

The intensity, or severity of the environmental effects, requires consideration of the degree to which the action affects unique wetlands, ecologically critical areas, historic and cultural resources, or threatened or endangered species; the degree to which these impacts may be controversial, unique, uncertain, or unknown; whether the action is related to other actions with a cumulatively significant impact; and whether the action violates federal law or other requirements for environmental protection. *See id.* § 1508.27(b).

Based on the errors and omissions described below, Reclamation has not supplied a statement of convincing reasons as to why the proposed action will not have a significant impact, *see* 40 C.F.R. § 1508.13, and may not issue a Finding of No Significant Impact ("FONSI") based on this EA.

**Transboundary Impacts**. We continue to believe Reclamation's approach to transboundary impacts is improper.<sup>7</sup> That some impacts will occur in or around the Ciénega de Santa Clara in Mexico does not excuse Reclamation from its obligation to analyze the full extent of impacts from arising from actions taken in *this* country. We note that only a few years ago the Secretary of the Interior recognized the potential for adverse effects and the efforts of Reclamation to assess the extent of these effects. Bureau of Reclamation, 2004 Annual Operating Plan for Colorado River System Reservoirs, at 21 ("Existing data suggests that operation of the YDP would negatively affect the Cienega de Santa Clara, a wetland of approximately 14,000 acres that is within a Biosphere Reserve in the Republic of Mexico. Reclamation's Yuma Area Office has initiated an environmental planning effort that will determine the extent of the effects.").

The Draft EA makes no mention of Executive Order 12114, except to say that it has complied with it. Based on his "independent authority," and "in order to further environmental objectives

<sup>&</sup>lt;sup>7</sup> *Cf.* Bureau of Reclamation, *Implementation Agreement, Inadvertent Overrun and Payback Policy, and Related Federal Actions Final Environmental Impact Statement* at 3.16-1 (2002) (recognizing that "[t]he body of NEPA law directs federal agencies to analyze the reasonably foreseeable consequences of a project or action, regardless of where impacts might occur."), available at http://www.usbr.gov/lc/region/g4000/FEIS/Volume%20I.pdf.

consistent with the foreign policy and national security policy of the United States" the President imposed environmental-study obligations upon federal agencies for actions impacting the "environment outside the United States." Exec. Order 12,114, 44 Fed. Reg. 1957 (Jan. 9, 1979). The Order imposes obligations analogous to those imposed through NEPA and directs agencies to consult with the State Department and CEQ. *Id.* Reclamation must explain the purpose of E.O. 12114, the requirements imposed by the order, and how Reclamation complied with the order.

While recent legislation may "re-affirm[] the IBWC's longstanding practice of consultation on matters occurring outside the boundary of the U.S. pursuant to the 1944 Water Treaty," Draft EA at 11, IBWC practice is not relevant to determining the scope of Reclamation's NEPA review of the proposed action. Draft EA at 11 ("EA only addresses potential effects of the Pilot Run within the U.S." in accordance with all applicable law, including Section 397 of Public Law 109-432). This statutory provision applies to the projects addressed in the rest of Subtitle J of Title III of Division C of the statute; the YDP is not implicated as an All-American Canal project. Pub. L. No. 109-432, Div. C, § 395-397 (Title III, Subtitle J – All American Canal Projects).

If the same municipal entities who proposed the proposed action, funded the environmental compliance and may fund the proposed federal project are also funding the proposed monitoring, those arrangements should be disclosed as a connected action. *See* Southern Nevada Water Authority Board of Directors Meeting, 11/20/2008, Approved Minutes, available at <a href="http://www.snwa.com/cfml/agenda/minutes.cfml?doc\_id=10541&reason=detail\_search\_results& agenda\_org\_id=1">http://www.snwa.com/cfml/agenda/minutes.cfml?doc\_id=10541&reason=detail\_search\_results& agenda\_org\_id=1</a> (approving agreement among the Metropolitan Water District of Southern California, the Central Arizona Water Conservation District and the Authority to fund environmental monitoring associated with the pilot operation of the Yuma Desalting Plant for an amount not to exceed \$94,165). The Draft EA should describe the goals, objectives and methodology of any monitoring plan undertaken in conjunction with the proposed action to help the public understand the breadth of the proposed action. We also recommend additional information regarding the joint effort to reduce or eliminate changes in flows to the Ciénega, as it too is a connected action and is extremely relevant to evaluating the proposed action.

**Ciénega de Santa Clara Literature Review**. We also adopt the comments of Dr. Osvel Hinojosa Huerta of Pronatura Noroeste. *See* Comments on the Literature Review of the Ciénega de Santa Clara by the U.S. Bureau of Reclamation, Dr. Osvel Hinojosa Huerta – Pronatura Noroeste (March 15 2009 – updated May 20 2009). We enclose additional analysis by Dr. Edward P. Glenn, Dr. Jaqueline Garcia Hernandez and Maria de Lourdes Mexicano Vargas on the potential adverse effects of the proposed action on the Ciénega (Attachment A).

**Climate Change**. Reclamation's dismissal of potential climate change impacts – "because the scope of this action is short-term as well as geographically limited" – is unsupported and unsupportable. Draft EA at 24. *See Massachusetts v. EPA*, 549 U.S. 497, 521 (2007) (confirming that climate change is having and will have adverse effects on the environment). The Environmental Protection Agency has issued a proposed finding that carbon dioxide endangers public health and welfare, lending additional weight to the need to weigh the direct, indirect and cumulative emissions of greenhouse gases from YDP operation. *See* Proposed

Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18885 (April 24, 2009).

Since it is reasonably foreseeable that greenhouse gas emissions from the proposed project will contribute to climate change, Reclamation must evaluate the climate change impacts of YDP operation. *See Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 508 F.3d 508, 549-50 (9th Cir. 2007) ("The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct."); *Border Power Plant Working Group v. Dep't of Energy*, 260 F.Supp.2d 997 (S.D.Cal. 2003) (requiring NEPA analysis of carbon dioxide emissions from power plants that would export power via transmission lines for proposal to grant rights-of-way for lines); *Mid States Coalition for Progress v. Surface Transp. Bd.*, 345 F.3d 520 (8th Cir. 2003) (violation of NEPA to fail to analyze the CO2 emissions of coal transported by proposed rail line once used by power plants). Potential sources of greenhouse gas emissions include YDP energy consumption and vehicular use.<sup>8</sup>

Reclamation has not taken even the basic step of quantifying potential emissions<sup>9</sup>, but its inquiry does not end there. Simply quantifying emissions without analyzing the impact of these emissions on climate change or on the environment is inadequate. Reclamation must assess carbon dioxide and other greenhouse gas emissions attributable to YDP operation, as well as the actual environmental effects associated with climate change. *Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 508 F.3d 508, 558 (9th Cir. 2007) ("While NHTSA did the calculations necessary to determine how much extra carbon dioxide would be emitted, it failed completely to discuss in any detail the global warming phenomenon itself, or to explain the benchmark for its determination of insignificance in relation to that environmental danger. ... NHTSA's bald conclusion that the mere magnitude of the percentage increase is enough to alleviate its burden of conducting a more thorough investigation cannot carry the day.") (citations omitted). *See also* EPA Asserts Tougher Stance on GHGs in NEPA Review Proceeding, Clean Air Report (July 12, 2007) (reporting that EPA appears to be intensifying its scrutiny of NEPA reviews that fail to consider greenhouse gas (GHG) emissions).

<sup>&</sup>lt;sup>8</sup> For sample methodologies for an analysis, *see, e.g.*, Governor's Office of Planning and Research, Technical Advisory, CEQA & CLIMATE CHANGE: Addressing Climate Change through California Environmental Quality Act (CEQA) Review (June 19, 2008), <u>http://www.opr.ca.gov/ceqa/pdfs/june08ceqa.pdf</u>; Ass'n of Environmental Professionals, *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*, June 29, 2007, available at <u>http://www.califaep.org/userdocuments/File/AEP Global Climate Change June 29 Final.pdf</u>; Massachusetts Executive Office of Energy and Environmental Affairs, April 23, 2007, *MEPA Greenhouse Gas Emissions Policy and Protocol*, available at http://www.mass.gov/envir/mepa/pdffiles/misc/GHG% 20Policy% 20FINAL.pdf.

<sup>&</sup>lt;sup>9</sup> While Reclamation has not provided the public with any information regarding potential energy use, documents provided by Reclamation to Environmental Defense Fund suggest that the proposed pilot YDP operation will require 38,877 MWh/year. Most power generation available on the Arizona grid releases 1.05 tons carbon per MWh, so the proposed YDP pilot is expected to release more than 40,000 tons carbon into the atmosphere.

Reclamation is also obligated by Secretarial order to address climate change. Secretarial Order 3226, *Evaluating Climate Change Impacts in Management Planning* (January 16, 2009). Secretarial Order 3226 mandates, in Section 4, the following:

Each bureau and office of DOI shall, in a manner consistent and compatible with their respective missions: Consider and analyze potential climate change impacts when undertaking long-range planning exercises, setting priorities for scientific research and investigations, and/or when making major decisions affecting DOI resources.

Although the Department of the Interior has not yet developed climate change-related guidance for Reclamation, this fact does not excuse Reclamation's duties, here, to comply with Secretarial Order 3226.

Reclamation overlooks a measure of significant impact when it fails to analyze the proposed action's contribution to climate change. Significance is measured by both the context and intensity of the action, *id.* § 1508.27, and an action that may violate federal or state law or other requirements for environmental protection, *see id.* § 1508.27(b), may have a significant impact. *See also id.* § 1502.16(c) (environmental effects section shall include discussions of possible conflicts between the proposed action and federal, state, local or tribal plans, policies or controls for the area); *id.* § 1506.2(d) (requiring discussion of any inconsistency with state or local plans or laws and of the extent to which the proposed action will be reconciled with the plan or laws).

Arizona is also one of several states to collaborate in the Western Climate Initiative, "created to identify, evaluate, and implement collective and cooperative ways to reduce greenhouse gases in the region." Western Climate Initiative, <u>http://www.westernclimateinitiative.org/</u>. Arizona, in particular, has adopted greenhouse gas emissions targets. Arizona has adopted the goal of reducing its emissions to 2000 levels by 2020 and to 50 percent below its 2000 levels by 2040. Executive Order 2006-13 (Sept. 8, 2006). Reclamation has failed to examine how the proposed action impacts Arizona's greenhouse gas reduction targets.

In sum, Reclamation must make a good faith effort to identify and quantify the greenhouse gases produced by the proposed action and its alternatives, analyze impact of these emissions on climate change and the environment, analyze climate change's impact on the proposed action and alternatives, and examine mitigation measures. *Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 508 F.3d 508, 549 (finding EA's cumulative impacts analysis inadequate because it failed to "evaluate the 'incremental impact' that these emissions will have on climate change or on the environment more generally in light of other past, present, and reasonably foreseeable actions"). *See also* Council on Environmental Quality, Considering Cumulative Effects under the National Environmental Policy Act, 24, 42 (1997) (including documentation and analysis of global warming in the affected environment and effects), available at <u>http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm</u>.

**Affected Environment**. Reclamation claims that "[r]iver and agricultural conditions in the Yuma area during the proposed Pilot Run are expected to be reasonably the same as in 2008; therefore 2008 can be considered a representative year." Draft EA at 10. What is the basis for this expectation and determination?

**Air Quality**. Reclamation's analysis of air quality is inadequate, limiting itself to a brief description of the potential impacts of chlorine and anhydrous ammonia to the exclusion of other, more significant factors. With no analysis, Reclamation claims the proposed action will not affect  $PM_{10}$ . Draft EA at 25. There is a great likelihood, though, that with little effort Reclamation would find the contrary:

 $PM_{10}$  is a byproduct of fuel combustion and wind erosion of soil and unpaved roads, and is directly emitted into the atmosphere through these processes. Currently, Yuma County is designated as a non-attainment area for  $PM_{10}$  by state and federal statutes.

Draft EA at 24. Given Yuma County's non-attainment status and the potential for additional truck and car trips generated by the Proposed Action over unpaved roads – such as those adjacent to the MODE and the Bypass Drain – Reclamation must provide information on the following:

- **§** The current number of car, light truck, and heavy truck trips to and from the YDP, including trips along unpaved roads;
- **§** The projected increase in the number of such trips due to the proposed action (arising from, for example, new staff, new visitors, new vendors, new deliveries, etc.);
- **§** Miles of paved and unpaved roads travelled as part of normal operations and maintenance activities associated with the proposed action;
- § Projected increases in  $PM_{10}$  emissions from each of these activities;
- § Mitigation activities that will be undertaken to avoid non-compliance; and
- **§** A clear, detailed assessment of the ability of such mitigation activities to offset projected  $PM_{10}$  emissions and further degradation of local air quality.

As noted in the Draft EA,  $PM_{10}$  can impair human health. Reclamation must assess the proposed action's potential to increase  $PM_{10}$  emissions via increased diesel emissions and increased disturbance of unpaved roads. Reclamation also fails to recognize that federal actions can not contribute to air quality violations, worsen air quality problems or delay attainment for six pollutants, including particulate matter, that threaten public health. 42 U.S.C. § 7506. The document fails to provide a reasonable air quality analysis and to perform a general conformity review and must be re-done.

In several locations, Reclamation asserts a need to gather "emissions data" from the YDP, Draft EA at 20, but never specifies the type or extent of emissions that is expects from the proposed action. Reclamation must clarify this statement of need and any expected effects from emissions.

**Biological Resources**. Reclamation must provide a full assessment of the potential impacts, both beneficial and adverse, associated with discharging 7,300 AF of water at 2,664 ppm TDS into the Gila River Pilot Channel and associated impacts on the Gila in the roughly ten river miles between the MODE 1 Diversion/Return Facility and the confluence with the Colorado, as described above under 'Proposed Action' and below under 'Water Resources.'

Reclamation artificially limits its discussion of potential effects to biological resources to those related to water quality or quantity in the Colorado River and to those on special status species, overlooking potential effects in the Gila River, effects from energy use, climate change, emissions and hazardous material spills or releases, and effects on all flora and fauna. Reclamation must complete its analysis of effects to wildlife to include all of these resources and impacts.

Reclamation also mistakenly relies on the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) compliance documents to avoid analysis of the effects of a change in the point of diversion along the Colorado River. Draft EA at 30. Relying solely on the LCR MSCP for environmental assessment is flatly inappropriate for several reasons. As the Draft EA acknowledges, the LCR MSCP analysis was programmatic, Draft EA at 50, and lacked sitespecific analysis. In addition, the proposed action was not among the covered activities included within the 1.574 million acre-feet change in point of diversion. *See* Bureau of Reclamation, *Lower Colorado River Multi-Species Conservation Program Final Programmatic Environmental Impact Statement/Environmental Impact Report*, Vol. 1, 1-7 to 1-10 (2004). Lastly, and most importantly, the NEPA analysis for the LCR MSCP was "limited to assessing the impacts of the ESA take authorization being requested for the covered activities and the impacts of the Conservation Plan that is the basis for the incidental take permit." *Id.* at 1-7 to 1-8; *id.* at 1-17 ("this EIS/EIR does not evaluate the environmental effects of the covered activities ... or provide NEPA ... authorization for future activities").

## Water Resources: Surface Water, Water Quality

Figure 3-1, Water Resources Analysis Area fails to indicate the location of the MODE 1 Diversion/Return Facility and the affected reach of the Gila River Pilot Channel to its confluence with the Colorado River. Reclamation has maintained this flaw from the proposed action description throughout the water resources section as a whole, and is a significant failing of the Draft EA. Reclamation's failure to evaluate these water resource impacts also undermines the its evaluation of biological resources, including listed species, which may be impacted in the affected area.

While the addition of 7,300 acre-feet of MODE water at 2,664 ppm TDS may have a manageable impact on the Colorado River at the NIB, Reclamation fails to provide any information on the impacts of the discharge of this water on the water quality and flora and fauna found in the ten river miles between the discharge point at the MODE 1 Diversion/Return Facility and the Gila's confluence with the Colorado River. According to daily flow data from the USGS station 09520500 "Gila River near Dome," total annual flow of the Gila River near the discharge point in 2007 and in 2008 was less than 7,000 acre-feet each year.

Reclamation fails to project daily discharge data for the MODE 1 Diversion/Return Facility, and fails to provide daily flow and salinity data for the Gila River at the point it will receive the 7,300 AF of MODE water. Without this information, it is not possible for Reclamation or the reader to determine the likely impacts of the proposed action. Similarly, absent such information, Reclamation can not reasonably claim that the proposed action will not cause any impacts. During 2008, considered "representative" by the draft EA, daily mean discharge on the Gila

River near Dome dropped as low as 0.78 cfs. Reclamation fails to disclose the proposed mean daily discharge from the MODE 1 Diversion/Return Facility. Assuming a constant rate for the 7,300 AF over the 18-month period of the proposed action yields a daily rate of 6.7 cfs. Application of Reclamation's operating assumption that the YDP would operate 83% of the time over the 18 months, Draft EA at App. C, p. 2, with further assumption that the discharge of MODE water through the MODE 1 Diversion/Return Facility is timed to match this operating schedule, yields a five-day discharge of 10.1 cfs, followed by a one-day zero discharge. Figure 1, below, plots daily flow of the Gila River near Dome in 2008, as reported by USGS gage 09520500, against the constant and variable projected daily discharges of MODE water, at 6.7 cfs and 10.1 cfs, respectively. This figure is intended to show the potential magnitude of the MODE discharge relative to the daily flow of the receiving body, but is purely speculative given that daily MODE diversion data was not included in the draft.



Figure 1. Daily Gila River flows, with projected constant and variable MODE discharge. Source: USGS Gage 09520500 Gila River near Dome.

Presumably, the daily salt loadings to the Gila River would have significant impacts on water quality, especially in the normally low-flow summer months. While the addition of 7,300 acrefeet of water over twelve to eighteen months will not significantly affect the level of the Colorado River at or below its confluence with the Gila, it will have a calculable and significant impact on the level of the Gila River over the ten miles before it joins the Colorado. Reclamation must describe and evaluate these impacts.

Reclamation states that it "will obtain a permit from ADEQ for discharge of product water into the river," Draft EA at 34, but fails to note whether a permit from ADEQ will be required to discharge MODE water into the Gila River, or whether such a permit has been obtained.

**Water Resources: Groundwater**. For the demonstration run, ADEQ asserted the need for an aquifer protection permit and after application from Reclamation, issued a temporary permit. Reclamation must clarify, then, why for a pilot run at a higher capacity and for a longer period of time, an aquifer protection permit only "may" be required. Draft EA at 34. Reclamation must also describe impacts to groundwater and requirements of the aquifer protection permit to minimize and mitigate adverse impacts.

**Hazardous Materials**. Reclamation's discussion and analysis of hazardous materials is inadequate. Reclamation notes that "[d]uring the proposed Pilot Run, the YDP is projected to utilize between 391 and 521 tons of liquid chlorine and between 51 and 127 tons of anhydrous ammonia." Draft EA at 39. Reclamation also notes that sulfuric acid is also used on-site. Draft EA at 18. In fact, on May 5, 2005, 4100 gallons of sulfuric acid were accidentally released from a YDP storage tank, due to a valve failure.<sup>10</sup>

Reclamation must answer several questions regarding these materials. How will the liquid chlorine and anhydrous ammonia be delivered to the YDP? How is sulfuric acid delivered to the site? How will wastes be transported from site? How frequently are such deliveries made? What is the seismic risk to hazardous and noxious materials storage facilities? What is the risk that an accidental release of any of these hazardous and noxious materials might occur? Even if such an accidental release were handled according to the updated RMP and PSMP, how might odors emanating from such a release affect nearby Indian Trust Assets, and low-income and minority populations? Conceivably, a spill of any of these materials could have adverse impacts on these populations and their commercial ventures.

Given the YDP's reliance on hazardous and noxious materials, the fact that an accidental release has already occurred at the YDP, and the fact that the delivery and presence of the materials will increase markedly due to the proposed action, the draft should provide a thorough analysis and risk assessment, in addition to its description of compliance with federal mandates.

**Environmental Justice**. Given that potential adverse effects to low-income and minority communities have never been evaluated<sup>11</sup> and that Reclamation relies on faulty analysis elsewhere in the Draft EA, Reclamation's analysis in the Draft EA is inadequate.

Based on previous analysis for air quality in the Air Quality section of this EA, changes in air quality resulting from the Proposed Action will not result in proportionately [sic] high and adverse effects to the environment or to the health of low-income and minority populations.

Draft EA at 46. As noted previously, Reclamation's air quality analysis is narrow and inadequate. Reclamation fails to analyze the increase in  $PM_{10}$  emissions associated with the

<sup>&</sup>lt;sup>10</sup> National Response Center Incident Report #757828, <u>http://www.nrc.uscg.mil/reports/rwservlet?standard\_web+inc\_seq=757828</u> (last visited May 28, 2009).

<sup>&</sup>lt;sup>11</sup> The *Final Environmental Statement Colorado River Basin Salinity Control Project Title I* did not consider impacts to these resources.

proposed action. Reclamation also fails to analyze the risks of an accidental release of the hazardous materials to be used for the proposed action, and the potential for such a release to adversely affect low-income and minority populations in the area, such as the Cocopah Tribe. Reclamation needs to perform this analysis adequately.

**Noise**. The evaluation of the proposed action's impacts to noise levels, like that of much of the rest of the draft EA, is overly-generalized and inadequate. For example:

Operation of the YDP will result in an increase in the ambient noise immediately surrounding the facility. Noise levels generated by the YDP are less than currently existing noise contributors in the area and will not exceed noise standards.

Draft EA at 47. By what amount will YDP operation increase ambient noise? Reclamation notes that "[b]ecause of the use of farming equipment, pumps, vehicle usage and the like, the YDP lies in a 65- decibel (dB) to 80 dB noise corridor." Draft EA at 47. Reclamation then states, "Because of the use of combustion turbines, the noise level of the Yucca Power Plant is greater than the noise generated from the YDP facility." *Id.* While it is encouraging to know that the YDP is not the loudest facility in the area, the relative amount of noise produced does not address the underlying question of exceedance. Reclamation should provide actual data for current noise generated by the YDP and projected increases in decibels due to the proposed action, including noise generated by the additional truck traffic associated with the proposed action. To simply state "The YDP will operate within acceptable ambient noise levels in accordance with applicable noise ordinances or standards, and will not result in significant negative effects due to noise," Draft EA at 48, without providing any basis for such a claim fails to satisfy NEPA and the reader's ability to make a determination.

**Energy Usage**. The Draft EA contains no information regarding the amount or cost of the energy required to operate the YDP. The power requirements, sources and their costs are important NEPA considerations.

That Reclamation's authorization to operate the YDP also conditions Reclamation's acquisition of power source(s) further mandates a discussion of the energy requirements for the YDP. The CRBSCA directs the Secretary "use sources of electric power supply for the desalting complex that will not diminish the supply of power to preference customers from Federal power systems operated by the Secretary." 43 U.S.C. 1571(b)(2)(A). If the Secretary uses power from the Navajo Generating Station, "revenues credited to the Lower Colorado River Basin Development Fund shall not be diminished below those amounts which would have accrued had the power been marketed at the rate determined by the Secretary of Energy for the sale of power from the Navajo Generating Station to utilities and public entities," *id.* § 1571(b)(2)(B), power needs of the Central Arizona Project shall be met first, *id.*, and before obtaining power from the Station, "the Secretary shall complete an analysis of alternative sources of supply." *Id.* 

In addition, Reclamation has not explained how the proposed action comports with Section 6 of Secretarial Order 3226 (requiring reporting of steps to implement Exec. Order 13423) or Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management." Exec. Order, 72 Fed. Reg. 3919 (Jan. 26, 2007). The Executive Order includes

requirements to "improve energy efficiency and reduce greenhouse gas emissions" and "reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the bureau or office," among others. Sec. 2, Exec. Order 13423.

## Endangered Species Act Compliance

Notable wildlife resources at the Ciénega de Santa Clara include significant populations of two species listed as endangered under the Endangered Species Act. The Yuma Clapper Rail (Rallus longirostris yumanensis) is a marshbird endangered from loss of habitat, primarily due to stream channelization and drying and flooding of marshes, as a consequence of water flow management on the lower Colorado River.<sup>12</sup> While early data estimated 450 to 970 birds in the Delta, including the Ciénega, more recent surveys have estimated 6,629 rails in the Ciénega alone in 2000. See O. Hinojosa-Huerta et al., Distribution and Abundance of the Yuma Clapper Rail (Rallus longirostris yumanensis) in the Colorado River Delta, Mexico, 49 J. Arid Env'ts 171 (2001). This is almost 6 times the most recent U.S. population estimate,<sup>13</sup> and dwarfs population estimates along the Lower Colorado River main stem in the United States. Bureau of Reclamation, Lower Colorado River Multi-Species Conservation Program Final App. I-3 (2004) (estimating from 191 to 325 individuals yearly since 2000). Loss of Yuma clapper rails and their habitat at the Ciénega will have very real consequences on the United States populations because recovery of the Yuma clapper rail depends on preservation of the species and its habitat in Mexico.<sup>14</sup> The Fish and Wildlife Service recently reaffirmed the need to protect the Ciénega population when assessing the loss of rail habitat near the Andrade Mesa wetlands:

Primary conservation actions that would aid in the conservation of the Yuma clapper rail include preservation of breeding and wintering habitats, and the water that supports those habitats in the U.S. and Mexico. As part of this process, the Service would like to work with your office on ways to maintain or replace flows that currently support the Cienaga [sic] de Santa Clara. As habitat for the largest known population of Yuma clapper rails in Mexico, maintaining this habitat will be a key action in the conservation of the species in Mexico.

*See* Letter from Acting Manager, California-Nevada Operations Office, Fish and Wildlife Service to Regional Director, Lower Colorado Region, Bureau of Reclamation, at 3 (Jan. 11, 2006).

<sup>14</sup> The Yuma clapper Rail Recovery Plan calls for obtaining agreements with Mexico for management and preservation of the species in order to achieve recovery. The FWS will assess both United States and Mexican populations in any delisting decision. Stanley H. Anderson, *Yuma Clapper Rail Recovery plan* 12 (1983), *available at* 

http://www.fws.gov/southwest/es/Arizona/Documents/RecoveryPlans/YumaClapperRail.pdf.

<sup>&</sup>lt;sup>12</sup> 50 C.F.R. § 17.11; Yuma clapper rail, available at <u>http://ecos.fws.gov/docs/life\_histories/B00P.html</u> (last visited May 28, 2009).

<sup>&</sup>lt;sup>13</sup> In 1994, the Yuma clapper rail population in the United States was estimated at up to 1,145 individuals. U.S. Fish & Wildlife Service, *Biological and Conference Opinion on Lower Colorado River Operations and Maintenance* 70 (1997).

The desert pupfish (*Cyprinodon macularius*) is endangered due to a number of threats including habitat modification, channelization, water impoundment and diversion, and groundwater pumping. 51 Fed. Reg. 10,842 (March 31, 1986); Paul C. Marsh & Donald W. Sada, Desert Pupfish Recovery Plan 11 (U.S. Fish & Wildlife Service) (September 1993). There are currently twelve natural populations in the United States and Mexico.<sup>15</sup> In the United States, a natural population of this subspecies exists only in California's Salton Sink, which includes the Salton Sea. Marsh, Desert Pupfish Recovery Plan, *supra*, at 1. In Mexico, however, this subspecies exists of the YDP), Laguna Salada, and Cerro Prieto wetlands. Marsh, Desert Pupfish Recovery Plan, *supra*, at 5.

Under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.*, federal agencies are required to determine whether any proposed activity "may affect" or result in the take of listed or proposed species. If so determined, the lead agencies must consult with the Fish and Wildlife Service (FWS) in order to ensure that their actions do not jeopardize listed species and to obtain incidental take authorization. Operation of the YDP is a discretionary action subject to the consultation provisions and other protections of the ESA. *See generally* Attachment C. We urge Reclamation to initiate consultation with FWS early in the scoping process in order to preserve alternatives that are less adverse to listed species and do not conflict with existing efforts to protect and recover listed species.

Section 7 is one of the primary mechanisms established by Congress to accomplish the ESA's goal of species conservation by requiring that all federal agencies consult with the FWS before authorizing, funding, or carrying out any action that "may affect" an endangered or threatened species or adversely modify or destroy critical habitat for such species. 16 U.S.C. § 1536(a)(2). This consultation process provides the means by which agencies assure compliance with the basic substantive mandate of ESA section 7(a)(2) – the duty to "ensure" that their actions do not "jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification of [critical habitat]." *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 422 F.3d 782, 790 (9<sup>th</sup> Cir. 2005) (consultation ensures that agencies meet their substantive duties under the ESA). *See also Babbitt v. Sweet Home Chapter of Cmtys. for a Greater Oregon*, 515 U.S. 687, 692 (1995).

Where an agency action in the United States affects wildlife in another country, provisions of the ESA apply. *See Defenders of Wildlife v. Lujan*, 911 F.2d 117 (8<sup>th</sup> Cir. 1990), *rev'd on other grounds*, 504 U.S. 555 (1992). The ESA's implementing regulations require that the request to initiate consultation describe the action area – "all areas to be affected directly or indirectly by the federal action and not merely in the immediate area involved in the action." 50 C.F.R. § 402.02. Neither this nor other definitions, including 'cumulative effects' and 'effects of the action,' contain geographic limitations. *Id.* Clearly, the Ciénega would be within the area affected by Reclamation's action, and therefore Reclamation must avoid jeopardizing or taking

<sup>&</sup>lt;sup>15</sup> Bureau of Reclamation, Supplemental Biological Assessment on Transboundary Effects in Mexico for Proposed Interim Surplus Criteria 26 (Jan. 9, 2001).

listed species in the Delta. Moreover, adverse effects to the Ciénega's endangered wildlife will have adverse effects on the U.S. populations.

Lastly, Reclamation makes no mention of any ESA obligations pursuant to Section 8 of the ESA. Reclamation does not evaluate any opportunities for international cooperation in the form of financial assistance, technical assistance or other foreign programs. *See* 16 U.S.C. § 1537.

## Migratory Bird Protections

More than ninety birds that have been recorded at the Ciénega are protected under migratory bird treaties. *See* 50 C.F.R. § 10.13; Hinojosa-Huerta, O., H. Iturribarría-Rojas, Y. Carrillo-Guerrero, M. de la Garza-Treviño, & E. Zamora-Hernández, *Bird Conservation Plan for the Colorado River Delta* 6 (Pronatura Noroeste, Dirección de Conservación Sonora. San Luis Río Colorado, Sonora, México 2004), available at

http://www.sonoranjv.org/planning/deltabcp/BCPColoradoDelta.pdf (last visited May 28, 2009). Damage to the Ciénega, such as might be caused by increased salinity, would directly impair migratory birds within the borders of the United States. In fact, since the Ciénega is a major stopover along the Pacific Flyway where the flyway goes through a bottleneck, and the other two stopovers in this bottleneck area are the Salton Sea, which is under serious threat, and the remnants of the Colorado River Delta, impairments to threatened and endangered species at the Ciénega could well affect both agriculture and local ecosystems from the border with Mexico north through Canada to Alaska.

# Errata

- p. 5 revise to read "International Boundary and Water Commission."
- p. 19 define "SCR."

Table 2.1 – The sums and context suggest that "One month of pretreatment returned to the Colorado River" and "Filter backwash returned to the Colorado River" should instead both read "returned *to the Bypass Drain*."

p. 49 – the Draft EA's description of the MSCP's goals differ from those listed by the MSCP program website and should be made consistent. Excluding MSCP language about "conserving habitat" raises concerns that this program goal is not considered sufficiently important to be included.

## Conclusion

Reclamation has not adequately considered and elaborated the possible consequences of the proposed agency action and alternatives when concluding that there will be no significant impact on environmental resources, or even no adverse impact at all. Indeed, Reclamation has poorly defined the alternatives and environmental baseline, has completely ignored potential impacts of the action, and overall, has failed to take a hard look at this action. "Because the very important decision whether to prepare an EIS is based solely on the EA, the EA is fundamental to the

decisionmaking process." *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9<sup>th</sup> Cir. 2000). As demonstrated above, Reclamation's Draft EA would fail to support a decision not to prepare an EIS. *See Found. for N. Am. Wild Sheep v. Dept. of Agric.*, 681 F.2d 1172, 1178 (9<sup>th</sup> Cir. 1982) (rejecting EA where it "failed to address certain crucial factors, consideration of which was essential to a truly informed decision whether or not to prepare an EIS."

Sincerely,

Kan M

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