

The  Owens Valley Committee

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January 14, 2003

Mr. Clarence Martin
Los Angeles Department of Water and Power
300 Mandich Street
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Subject: Comments on Draft EIR/EIS for the Lower Owens River Project

Dear Mr. Martin:

The Owens Valley Committee and the Sierra Club have carefully studied the Draft EIR/EIS for the Lower Owens River Project. We value the enormous potential of the LORP to enhance recreation, improve local economies and restore wildlife habitats, but are concerned that, as described in the Draft EIR/EIS, implementation of the project may fall far short of that potential. We are particularly concerned with the less than solid financial commitment fully to fund the monitoring and adaptive management programs that will be critically important to the eventual success of the project. A similar lack of commitment to fund proposed mitigation measures, including control of saltcedar and other noxious weeds that if unrestrained could put the entire project at risk, is very troubling. In addition we are concerned whether the monitoring and adaptive management programs are adequate. We have discussed in detail these issues relating to funding in the attached comments. A summary of some of our principal concerns relating to monitoring and adaptive management, active management strategies, and delivery of water to the brine pool areas of the LORP follows. A detailed discussion of the funding issues related to implementation of the project is found in our comments.

I. Monitoring And Adaptive Management

16-1

The LORP is the most important mitigation identified in the 1991 EIR to offset the environmental damage caused by LADWP's groundwater pumping. The project is intended to

16-1 enhance and expand existing riparian vegetation for the benefit of wildlife and improve habitat in the Delta. What will actually happen when water is re-introduced is highly speculative, and it may be years before it is known what many of the consequences will be. Hence, in the opinion of the Sierra Club and Owens Valley Committee the monitoring and adaptive management elements of the plan are critically important to the eventual success of the project. See p. 2-73, 2.10.1 ¶1. If monitoring and adaptive management are not properly implemented then the whole basis for successful implementation of the project is seriously compromised.

The text in Section 2.10.1 of the DEIR/EIS and the text in the Monitoring and Adaptive Management Plan chapter of the LORP Plan (Chapter 7) provide only very general introductory information, statements of purpose and approach, a description of the duration of the monitoring program, and identification of primary and secondary monitoring years. The DEIR/EIS and LORP Plan do not contain a monitoring plan or program as such. A monitoring program must be included in the LORP DEIR/EIS that does conform to the MOU requirements, and that ensures that the goals of the LORP are reached.

16-2 For the most part monitoring sites have not been identified and protocols for data collection, analysis and reporting have not been established. Although the duration and frequency of each monitoring component is generally presented, there is little or nothing describing the data analysis and reporting other than statements that data will be analyzed or summarized and a report prepared. The proposed monitoring program is inadequate to meet the need to establish protocols for data collection, analysis and reporting that is required by the MOU (Section II.E and Attachment A, p.11, part VI.A).

16-3 The DEIR/EIS monitoring plan contains no plans to actually monitor any target species. Nor are there any plans to monitor any of the identified habitat indicator species, species that would appear to be obvious candidates for selection as monitoring target species. Except for the fishery habitat surveys, the habitat characteristics that will be monitored have not been identified. There are some vague statements about measuring trends in habitat characteristics that relate to the "habitat indicator species," special status wildlife species, and plants of concern to Native Americans. But, there is no statement of what those habitat characteristics are and how they relate to the species of concern. In our opinion the proposed monitoring program is inadequate to meet the need to select target species and habitat characteristics for monitoring that is required by the MOU (Section II.E and Attachment A, p.11, part VI.B).

16-4 The monitoring program is further deficient in not proposing that pre-project baseline data be collected at those sites to be monitored for riparian and wetland habitat development and grazing in all four LORP areas. The same is true in the case of recreational use. There is no baseline data documenting current, pre-project recreational use.

16-5

16-6 The MOU requires that a connection be made between the monitoring program results and the adaptive management plan. DEIR/EIS Section 2.10.2, ¶2, sentence 2, item 4 states that the monitoring program table for each element of the LORP “describes the general conditions (as observed through the monitoring program) that will trigger consideration of implementation of the measure.”

The problem is, with a few exceptions for measures dealing with water quality and maintenance of baseflows, that there are no threshold levels derived from monitoring data that will identify when management measures would be triggered. The monitoring triggers are typically quite vague, using such phrases as “not occurring to the extent expected” and “hindering achievement of habitat goals.” Monitoring triggers should inform the public when each adaptive measure would actually be implemented. Most of those in the DEIR/EIS do not do so.

16-7 The monitoring and adaptive management program does not meet the requirements of CEQA Guideline §15097. Under that section the Lead Agency is responsible for implementing the monitoring and reporting program. The program cannot be implemented, consistent with the goals of the LORP set forth in the MOU, unless there are “general standards for determining project compliance with the mitigation measures” or project goals. §15097(e)(4).

16-8 The LORP is itself a “mitigation” project intended to compensate for damage in the Owens Valley attributable to augmented ground water pumping. As a mitigation project it is legally required that the monitoring and adaptive management components of the project be structured in a manner that promotes the gathering of accurate information to measure project success and that provides appropriate protocols to guide adaptive management so that project goals are fully realized. Sundstrom v. County of Mendocino, 202 Cal.App.3d 296 (1988).

II. Need For “Active” Management

16-9 In Section 2.1.4 of the DEIR/EIS, it is stated that the LORP will be implemented “with little intervention or manipulation” through the “proposed flows and land management actions.” Whereas, the goals for the LORP in the important river corridor and Delta areas will include the creation of new habitat and the enhancement of existing habitat, it appears that the management actions will be limited primarily to manipulations of water flows within prescribed limits and implementation of new grazing management to protect the developing riparian areas.

Both the Agreement and the MOU contain provisions and statements which imply that to some extent an active management approach was envisioned to insure that LORP objectives would be attained. For example, Agreement Section XII, Lower Owens River, requires plans for water management, fisheries management, channel maintenance, tule and other plant control, and fish stocking. According to the MOU, Section II.B.1, within each of the four physical elements of the LORP one goal is to “create and maintain through flow and land management, to the extent

feasible, diverse natural habitats consistent with the needs of the habitat indicator species”
[emphasis added].

Although, what is meant by land management was not defined in the MOU, Sierra Club and OVC understood this to include several management options that were under discussion when the MOU was being negotiated. These included:

- control of tules through burning or mechanical means;
- control of weeds, such as saltcedar, through eradication efforts to prevent them from compromising project goals;
- removal of beaver and beaver dams;
- construction of dykes or berms in the Delta and Blackrock areas to direct flow or contain flow for the benefit of the habitat indicator species and to create new habitats; and
- construction of riparian fencing and development of grazing management strategies that would protect the developing riparian habitats.

16-9

Several items in the LORP Action Plan work program (MOU, Attachment A) reinforced that understanding; these include items II.C.2 (Address beaver dams, and influence on hydrology), II.C.4 (Address tule and muck management concerns), III.C.3 (Determine water control techniques), III.C.4 (Identify habitat improvement opportunities), and III.C.10 (Consider practical measures to minimize and control the abundance and extent of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP).

In the case of the Delta Habitat Area there are contemplated to be no physical modifications. In fact, a statement is made on page 2-32, ¶4, *“As called for in the MOU and developed by Ecosystem Sciences, the restoration of the Delta Habitat Area will not include any physical modifications within the Delta, such as modifying existing channels, creating new channels, constructing berms, or otherwise modifying the topography to increase water spreading or ponding in the Delta.”*

We strongly believe that to satisfy the goals of the LORP project requires active interventions. Adaptive management plans that require active interventions, should be a prominent part of the overall DEIR/EIS. After all, the entire river environment has been dramatically altered and degraded by years of human activities, and the regime created after implementation of the LORP will still be a highly artificial one, far different from natural conditions. Therefore, while the creation of self-sustaining habitats that do not require active intervention is a worthy ultimate goal, the MOU states they should be *“as self-sustaining as possible”* (Section II.B.1). Given the flow limitations in the MOU, the artificial flow regime that will be established, and past impacts to the system (including drying of the channel for many decades and introduction of exotic species such as beaver, saltcedar and perennial pepperweed), it may not always be possible for the habitats to be completely self-sustaining and still meet the MOU goals. We believe that the

“*self-sustaining as possible*” MOU provision means as self-sustaining as possible while still meeting the habitat goals for the project, through active intervention.

16-9 It seems likely that active adaptive management intervention beyond altering flow regimes may be necessary, particularly in the early phases of the project, in order to get processes going in the right direction or reverse negative trends. Indeed, monitoring and adaptive management may be the most important functions to ensure project success. Examples of adaptive measures which may likely be necessary include the following active interventions: suppression of invasive plants such as tules, perennial pepperweed and saltcedar which if uncontrolled could prevent reaching LORP goals; opening of blocked channels to spread water out of the main channel into the floodplain (see our comments on Section 4.3); creation of berms in the Delta to prevent flooding in undesirable areas or direct the limited water into desirable areas; planting and reintroduction of desirable plants and animal species; and removal of non-native species such as saltcedar and beaver. Actually, despite the overall management philosophy of using little intervention or manipulation articulated in this and other sections of the DEIR/EIS, most of these examples of active intervention are included in the DEIR/EIS adaptive management program (Section 2.10, p. 2-82, 2-88, 2-93, 2-95). We believe it is essential that the FEIR explicitly adopt active management intervention as an adaptive management tool.

III. Dispute Resolution In The Context Of Adaptive Management

The DEIR/EIS sets forth a dispute resolution procedure that can result in stalemate and non-action. The Inyo/Los Angeles Technical Group will review the annual report including monitoring data and adaptive management recommendations to determine if modifications are needed. The Technical Group will also, in December of each year, adopt an annual work program describing LORP work to be performed (including adaptive management) the following year.

16-10 In the event there is disagreement over the need to implement adaptive management measures or over content of the work program, the disagreement will be submitted to the Inyo County/Los Angeles Standing Committee for resolution. If that fails the disagreement will be submitted to the governing boards of each entity for resolution. If the governing boards fail to reach agreement, the measure will not be adopted.

This dispute resolution approach means that one of the Parties can block a proposed action resulting in stalemate. As a result, it is possible that an adaptive measure needed in order to achieve a goal of the LORP might never be carried out. There are reasonably foreseeable measures needed such as salt cedar control, tule control, and beaver control that LADWP has made no real commitment to and without which the project may fail. Later annual work plans can be denied simply because LADWP does not agree with Inyo County.

16-10 We do not believe that the dispute resolution procedure described above, however, is the only dispute resolution procedure that can be invoked. If monitoring is not performed, and adaptive management is not governed by criteria and standards that are scientifically sound, there will have been a failure on the part of the Lead Agency to discharge an obligation or perform a duty which the MOU requires to be performed, within the meaning of Section VI of the MOU (dispute resolution). After an attempt at dispute resolution within the terms of Section VI, the dispute, if unresolved, can be brought before the Superior Court.

The MOU requires that there be monitoring sites and gaging stations, and a program for data collection, analysis and reporting. Section IIE. The MOU provides also that should the reported information reveal that “adoptive modifications to the LORP management are necessary to ensure the successful implementation of the project, or the attainment of the LORP goals, such adoptive modifications shall be made.” If these or other duties are breached, the dispute resolution mechanisms of the MOU will be invoked. The DEIR-EIS should make it clear that alternative dispute resolution procedures are available, and should provide a mechanism that does not result in non-action that would thwart the satisfaction of the LORP goals.

III. The Existing Injunction Imposes No Constraints On Delivery Of Water To The Brine Pool Area To The Extent The Water Has Been Used In Furtherance Of Project Goals.

16-11 With respect to the brine pool area, the maps accompanying the DEIR text unambiguously portray the brine pool transition area as being within LORP. See Figures 6-1 (Delta Habitat Area), 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 6-10, 6-11, 11-1. To the extent the brine pool transition area is within the LORP, water deliveries to that area come within the LORP exception under the injunction as amended. Guideline §15124 requires that “the precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The identified maps depict the project boundaries, on a topographical base. Guideline §15124. If there is a conflict between text and map, the map should govern. Guideline §15124. The maps show the “precise” location and boundaries of the proposed project.

16-12 Even if the brine pool area is not within the LORP, any water coming from the LORP project that is used in furtherance of the LORP habitat objectives, as set forth, comes within the LORP exception under the injunction as amended. The goal for the overall project “...is the establishment of a healthy, functioning Lower Owens River Riverine riparian ecosystem, and the establishment of healthy functioning ecosystems in the other physical features of the [project] for the benefit of biodiversity and Threatened and Endangered Species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities.” The goal of the Owens River Delta habitat Area is “...to enhance and maintain approximately 325 acres of existing habitat consisting of riparian areas and ponds suitable for

shorebirds, waterfowl, and other animals and to establish and maintain new habitat consisting of riparian areas and ponds suitable for shorebirds, waterfowl, and other animals...”

16-12

At pp 6-28 - 6-29 the DEIR states that “because release to the Delta habitat Area under the project will potentially be less than existing flows during the months of October to May, the project is likely to decrease the volume of the flows reaching the brine pool transition area. ...[i]t is acknowledged that there is a potential for a reduction in habitat in the brine pool transition area during the months of October to May under the proposed project.” The DEIR states that an existing injunction in People v. City of Los Angeles (Superior Court of the State of California, County of Riverside) constrains the City from allowing “water to flow onto the brine pool transition area in an amount greater than is necessary to meet the goals of the LORP and the MOU.” It is clear, however, that any water flowing into the brine pool area that meets the goals of LORP is not in any manner affected by the injunction, as modified.

Attached is a document containing our detailed comments on the Draft EIR/EIS, including more detailed comments on the subjects and concerns discussed above.

We look forward to our comments receiving thoughtful review and anticipate the Final EIR/EIS will reflect the necessary corrections and additions. In light of the problems detailed, we believe it would be appropriate to recirculate the DEIR/EIS for additional comments under an accelerated schedule.

Sincerely,

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Michael Prather
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OUTLINE OF COMMENTS

1. Outline and Notes

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15. References

NOTES

The following abbreviations, acronyms and terms are used in our comments:

- Action Plan – LORP Ecosystem Management Plan Action Plan and Concept Document, Attachment A of the MOU, 1997
- Agreement – 1991 Inyo/Los Angeles Long Term Water Agreement
- CEQA – California Environmental Quality Act
- Court Injunction – *People vs. City of Los Angeles, et al.* 34 Cal.2d 695, 701; 214 P.2d1 as modified by stipulation and order of the Superior Court of California County of Riverside, No.34042 Stipulation for Modification of Injunction, September 29, 2000
- DEIR/EIS – Draft Environmental Impact Report & Environmental Impact Statement, Lower Owens River Project, November 1, 2002
- EPA – United States Environmental Protection Agency
- ESA – Endangered Species Act
- HCP – Habitat Conservation Plan
- LADWP – Los Angeles Department of Water and Power
- LORP – Lower Owens River Project
- LORP Plan – LORP Ecosystem Management Plan, August 2002
- MOU – 1997 Memorandum of Understanding amongst LADWP, Inyo County, California Department of Fish and Game, State Lands Commission, Sierra Club, the Owens Valley Committee, and Carla Scheidlinger
- NEPA – National Environmental Policy Act

2. LOWER OWENS RIVER RIVERINE-RIPARIAN SYSTEM

GENERAL COMMENTS

The MOU states, "*The goal of the LORP is the establishment of a healthy, functioning Lower Owens River riverine-riparian ecosystem, and the establishment of healthy, functioning ecosystems in the other features of the LORP, for the benefit of biodiversity and Threatened and Endangered Species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture and other activities*" (MOU II.B). The goal of the LORP encompasses:

- Establishment and maintenance of diverse riverine, riparian and wetland habitats in a healthy ecological condition. The LORP Action Plan identifies a list of habitat indicator species for each of the areas associated with the four physical features of the LORP. The objective within each area is the creation and maintenance through flow and land management, to the extent feasible, of diverse natural habitats consistent with the needs of the "habitat indicator species."
- Compliance with state and federal Threatened and Endangered species laws.
- Management consistent with water quality standards.
- Control of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP. These control measures will be implemented with other responsible agency programs.
- Management of livestock grazing and recreation use consistent with other goals of the LORP.

With regard to the Riverine-Riparian System area itself the goal "*is to create and sustain healthy and diverse riparian and aquatic habitats and a healthy warm water recreational fishery with healthy habitat for native fish species*" (MOU II.C.1.a).

A diverse riverine-riparian ecosystem requires a diversity of species, seral stages, habitats and structure within riparian and aquatic habitats. There are obstacles to the achievement of these MOU goals if the project as currently described in the DEIR/DEIS is carried out. The following sections discuss our major concerns with the document as it is now constituted as related to the Riverine-Riparian System.

FUNDING

16-13 | A self-sustaining, diverse ecosystem supporting listed habitat indicator species will not occur without funded management action proposals that will control weed species, tules, cowbirds and beaver. As described here, the project provides no funding for essential adaptive management driven by monitoring unless Funding Option Two is selected (see discussion on funding in our Monitoring and Adaptive Management comments section).

SEASONAL HABITAT FLOWS

Potentially insufficient magnitude and duration of flows

The MOU (II.C.1.b.ii) states, "*A seasonal habitat flow. It is currently estimated that in years when the runoff in the Owens River watershed is forecasted to be average or above average, the amount of planned seasonal habitat flow will be approximately 200 cfs, unless the Parties agree upon an alter-native habitat flow, with higher unplanned flows when runoff exceeds the capacity of the Los Angeles Aqueduct. In years when runoff is forecasted to be less than average, the habitat flows will be reduced from 200 cfs to as low as 40 cfs in general proportion to the forecasted runoff in the watershed.*"

The MOU goes on to state that "[t]he purpose of the habitat flow is the creation of a natural disturbance regime that produces a dynamic equilibrium for riparian habitat, the fishery, water storage, water quality, animal migration and biodiversity which results in resilient and productive ecological systems."

The project described may not provide sufficient seasonal habitat flows throughout the river to achieve the following MOU goals, among others: (MOU II.C.1.b.ii):

- "minimize the amount of muck and other river bottom material that is transported out of the riverine-riparian system, but will cause this material to be redistributed on banks, floodplain and terraces within the riverine-riparian system and the Owens River delta for the benefit of the vegetation"
- "fulfill the wetting, seeding, and germination needs of riparian vegetation, particularly willow and cottonwood"
- "control tules and cattails to the extent possible."
- "enhance the river channel."

16-14

We believe that in order to improve chances of scouring tules, wash out beaver dams and raise the river out of its channel to redistribute nutrients and enable the wetting/germination of willow and cottonwood seed, a seasonal habitat flow of at least 200 cfs throughout the river, a corresponding 150 cfs flow to the delta (with the 50 cfs pumpback station), and a flushing flow may be the best options.

According to the DEIR/EIS, the seasonal habitat flow will be released at the River Intake and will not be augmented by water released from spillgates downstream of the River Intake, except to provide refuges for fish at spillgates during the first three seasonal habitat flows if deemed necessary due to water quality deterioration. In our opinion, however, the MOU does not specify that the seasonal habitat flow be released only at the River Intake and can be interpreted to mean that 200 cfs flows can be maintained throughout the river with additional water added at downstream spillgates to make up for channel losses. Indeed, a seasonal habitat flow of 200 cfs throughout the river may very well be necessary to create sufficient "natural disturbance" to meet the objectives of the MOU quoted above. Modeling upon which conclusions are based assumes a flow of 200 cfs throughout the river, not a single point of release at the River Intake (DEIR/EIS p.11-16, Section 11.4.3 and 4.3.2).

16-15

Even 200 cfs flows throughout the river may not be enough. According to section 4.3.2 of the DEIR/EIS (see pages 4-9 to 4-13, 4.3.2, Potential Impacts – Surface Water Hydrology), 1993 modeling (which assumed 200 cfs flows throughout the river) and field studies indicate the proposed baseflow and seasonal habitat flows will be confined to the existing channel under most conditions, stream velocities will be too low to remove many tules and beaver, and existing vegetation will impede flow. If this turns out to be true in reality, it is likely that the stated MOU goal of natural disturbance will not be fully achieved. Lack of flooding and bottom scouring will limit redistribution of bottom sediments to channel banks, limit spread of riparian vegetation and wetland vegetation to the immediate river banks, limit establishment of new habitat for animal species, and limit enhancement of the river channel by not eliminating all blockages. If the limited water available for the project proves to be insufficient, adaptive management limited solely to manipulations of flow, as is contemplated in the present plan, may not be adequate to achieve disturbance objectives. Therefore, even more careful and active management of the resource will be necessary to derive the greatest benefits (see our comments on passive vs. active adaptive management and insufficient funding in the section on Monitoring and Adaptive Management). Furthermore, another alternative may need to be considered if these actions do not achieve desired MOU goals; please see our comments under "Water Quality and Fish Kills -Alternatives" below.

Inadequate description of flows and inadequate monitoring and adaptive management

The MOU notes that the LORP Plan will "*recommend the amount, duration, and timing of flows necessary to achieve the goals for the system under varying hydrologic scenarios*" (MOU II.C.1.b.ii). Implicit in this statement is the assumption that amount, duration, and timing of seasonal habitat flows will be based on some rationale that is meant to best promote MOU goals. However, the rationale for determining length and duration of flows is never described in the DEIR/EIS, nor is that rationale described in the LORP Ecosystem Management Plan.

16-16 For example, on p. 2-24 of the DEIR/EIS (Chart 2-1, section 2.3.5.3, Seasonal Habitat Flows), a nomograph of seasonal habitat flows is presented without an explanation of how that particular model of flows best promotes achievement of MOU goals. The model appears to depend on a simple y/x slope between the point at which zero cfs seasonal habitat flows are released (50 percent of normal runoff in the valley) and the point at which full 200 cfs flows are released. How was this model determined? A hyperbolic (or curved) function might better describe the best flow rate to achieve MOU goals, or a step function, or even a line with a shallower slope that allows flows that are directly proportional to percentage of normal runoff (for example, at 90 percent of normal runoff, 90 percent of habitat flows would be released, and so on, to 50 percent, at which point seasonal habitat flows could be eliminated without respect to a formula). Without an explanation of how this nomograph was derived, it is difficult to determine whether MOU goals were given priority in its derivation. It is also impossible to determine

16-17 how monitoring and adaptive management measures would change the formula for determining the magnitude of peak seasonal flows.

16-18 Chart 2-2 (section 2.3.5.3, Seasonal Habitat Flows) on the next page continues the omission. The DEIR/EIS should describe the rationale here behind ramping schedules for the seasonal habitat flows. Would peak flows of longer duration better achieve goals? If not, why not? How will the ramping schedule selected help promote MOU goals of creating disturbance, flooding, seed germination and distribution downstream as well as muck removal and redistribution? Why not ramp up and down over longer periods or maintain maximum flow for longer periods than one day? Clarification here would help greatly.

16-19 According to the DEIR/EIS, "*Ecosystem Sciences' predictions for the development of riparian habitats along the river are based on a 200 cfs flow for the entire length of the river*" (p. 11-16, 11.4.3, Alternative Releases for the Seasonal Habitat Flows; see also p. 4-8 to 4-9, section 4.3.2, Potential Impacts - Surface Water Hydrology). Modeling results in Tables 4-2, 4-3, and 4-4 (p. 4-9 to 4-11, 4.3.2, Potential Impacts - Surface Water Hydrology) are all based on assumptions of 200 cfs flows throughout the river and thus fail to account for any changes due to evapotranspiration or percolation if habitat flows are only released from the River Intake as proposed. It is unreasonable to assume that the same goals will be achieved with such drastically different elements. However, there are no monitoring systems in place to quickly determine whether or not that assumption is true and to adjust magnitude and duration of flows accordingly. On the contrary, it appears that there will be no adaptive management response for at least five years (see p. 2-82,

16-20 top two rows, Table 2-19, Riverine-Riparian System Adaptive Management Measures). It is not clear from the project description whether a second necessary adjustment will not be made for another five years, and so on, nor is it clear how much the magnitude and duration of flows will be modified each time, or what, exactly, will determine the size and duration of the change. What is described here in the LORP DEIR/EIS is monitoring and adaptive management without monitoring, adaptation, or management.

Further disturbing and fundamental flaws in the monitoring program are described in our comments on "Monitoring And Adaptive Management," in particular in our comments on DEIR/EIS section 2.10.1, Monitoring.

16-21 The DEIR/EIS should clearly describe the rationale on which magnitude and duration of flows are based. Furthermore, a monitoring program that is adequate to meet the goals of the MOU should include monitoring measures than can be obtained, analyzed, and responded to reasonably quickly, as that is the principle on which adaptive management is based.

Other comments – seasonal habitat flows

2.3.4 Required River Flows and Habitat Indicator Species

16-22 **2-18, item ii, top of page in italics:** The phrase "*in general proportion*" should be defined mathematically within or shortly after italicized text. It should be clear in the mathematical definition that "*in general proportion*" does not mean "in direct proportion" (for example, a thirty percent reduction in runoff results in far more than a thirty percent reduction in habitat flows). It should also be made clear that "in general proportion" applies only when runoff is greater than fifty percent of normal and less than 100 percent of normal (i.e., anything more than normal runoff will not result in more than a 200 cfs habitat flow; likewise, seasonal habitat flows cease to exist at fifty percent of normal runoff).

16-23 **2-23, 2.3.5.3, ¶2, first sentence:** This states that the volume of water reaching the pump station "*could be reduced*" by a number of factors causing channel losses. The statement should be "*will be reduced*" unless there are possible conditions in which no evapotranspiration would occur as the water moves down 62 miles of river channel. We do not believe such conditions exist.

16-24 **2-25, 2.3.5.3, Seasonal Habitat Flows, Table 2-10:** The amounts listed under 200 cfs peak flow add up to 2,780, not 2,778 as listed in the table. Amounts listed under 160 cfs peak flow add up to 2,024, not 2,035.

4.2 Proposed Project - Seasonal Habitat Flows: This section also discusses the nature of the planned seasonal habitat flows. Our comments on this subject provided previously are also applicable here. A reference to a technical memo (if any) which provides a clear rationale for the timing, duration and volume of these flows would be useful here.

11.4.3 Alternative Releases for Seasonal Habitat Flows (With Either a 50 cfs or a 150 cfs Pump Station)

16-25 Under this alternative seasonal habitat flows would be released from the River Intake and at various downstream spillgates to make up channel losses in order to ensure a 200 cfs flow throughout the river. The increased flows would provide greater environmental benefits for the riverine-riparian area including removal of bottom muck and transfer to river banks, increased spreading of water to the floodplain, increased seed germination and consequent increased growth of riparian plants, increased habitat for animal species, greater desirable physical disturbance, better water quality, etc. Under this alternative greater seasonal habitat flows would also reach the delta, with the 50 cfs pump station allowing the greatest flow to reach the delta.

In this section LADWP states this alternative may be feasible with the 150 cfs pumpback as it will allow it to capture most of the seasonal habitat flow, but not feasible with the 50 cfs pumpback because up to 150 cfs flow could escape capture. The section also repeats earlier arguments about MOU prohibitions on supplemental releases, difficulties of monitoring and maintaining a 200 cfs flow throughout the river as reasons why this alternative is not feasible.

16-25 Regarding the infeasibility of the 50 cfs pumpback, this statement contradicts the statement in Section 11.4.1 in which the 50 cfs pump station is considered feasible. To repeat, the contradictory statements in the various sections of the report regarding the feasibility or infeasibility of the 50 cfs pump station require clarification. We will not repeat our arguments regarding the interpretation of the MOU and the 1991 EIR, the ability to monitor and supplement the seasonal habitat flows and the severity of LADWP's water supply losses if maximum 9 cfs baseflows and seasonal habitat flows (with 50 cfs pumpback) are permitted to reach the delta.

16-26 **11-18, ¶2:** If it is possible to monitor 40 cfs flows throughout the river, and to monitor water quality throughout the river during habitat flows, it should also be possible to monitor a higher flow rate just as effectively, albeit with more work. Monitoring stations can be established to determine how quickly flows reach the lower stretches of the river, how much is lost en route, how much sediment is carried, etc. This information would also help determine whether MOU goals are being met, and what factors play an important role. Shouldn't information gathering and determining how to respond effectively to that information be part of monitoring and adaptive management?

WATER QUALITY AND FISH KILLS

Releases based on water quality versus time and flow amount

16-27 **2-21, 2.3.5.2: Water Quality Monitoring and Spillgate Releases for Baseflows (¶ 3):** Under this plan, during baseflow releases, it seems that operation of the three spillgates to create refuges for fish should be wholly contingent on the first two conditions described in this paragraph, whichever occurs earlier, and not on time and flow factors which are included in the last two conditions. What is the basis for ending the spillgate releases after a 6-month period or when a 40 cfs baseflow is achieved throughout the river, whichever occurs earlier, rather than when water quality improves or when fish stop exhibiting signs of stress?

16-28 **2-25, 2.3.5.4: Water Quality Monitoring for Seasonal Habitat Flows, ¶2:** The second paragraph in this section states that after the first 3 seasonal habitat flow releases, water quality monitoring will be discontinued. This seems imprudent given that only the first seasonal habitat release is guaranteed to be a 200 cfs release. If the second and third year of the project have less than average predicted runoff in the valley, the seasonal habitat flow releases during those years will be less than 200 cfs, or may not occur at all if runoff is predicted to be 50% of normal or less (Chart 2-1). Because the DEIR/EIS states that it is uncertain how long degraded water quality effects will last, especially those due to periodic disturbances by the higher seasonal habitat flows (4.4.3.1, Impact Conclusions, paragraph 1), it would be prudent to continue water quality monitoring during the seasonal habitat flow releases for as many years as it takes to see a trend toward stabilization of water quality during several 200 cfs releases.

16-29 **2-26, 2.3.5.4: Water Quality Monitoring for Seasonal Habitat Flows, ¶4:** Under this plan, it seems that operation of the three spillgates to create refuges for fish should be wholly contingent on the first two conditions described in this paragraph, whichever occurs earlier, and not on time as stated in the third condition. What is the basis for ending the spillgate releases one month after the commencement of the seasonal habitat flow, rather than when water quality improves or when fish stop exhibiting signs of stress?

16-30 **4-38, Fish Kills due to Initial Releases (Short-Term Impacts), ¶ 3:** This paragraph states that the potential adverse impacts to fish during the initial releases represents a significant and unmitigable Class I impact that could cause substantial fish kills during the initial years of the project until water quality conditions improve. The third sentence in this paragraph states *"To reduce the impacts of poor water*

16-30

quality during the initial flow years, LADWP would consider (underline - our emphasis) *implementing Mitigation Measure F-1 (see below) which involves releases of high quality water from spillgates for an extended period of time.*” When one reads Mitigation Measure F-1, one sees that in it LADWP commits only to consider the release of higher quality water from spillgates beyond periods already identified. In other words there is no commitment on the part of LADWP to carry out this mitigation measure as needed. It is solely dependent on their discretion and commitment to the project's success. See additional pertinent comments below.

4.6.3 Mitigation Measures

16-31

4-41, Mitigation Measure F-1: The mitigation measures described here, F-1 and F-2, are to mitigate potential adverse impacts to fish during the initial water releases in the LORP project which represent a significant and unmitigable Class I impact that could cause substantial fish kills downstream of Mazourka Canyon Road during the initial years of the project until water quality conditions improve (4.6.2 - paragraph 3). In F-1 the suggested mitigation for this Class I impact is that *“LADWP shall consider releasing higher quality water from spillgates beyond those periods already identified...if it appears that the supplemental water will adequately improve water quality conditions for fish.”* We believe strongly that it is not a mitigation measure for LADWP to simply say that they will consider an action. To be considered a mitigation measure and to be listed as such, this paragraph must be worded more strongly by eliminating the word “consider,” changing the word “releasing” to “release” in the sentence cited above, and deleting the last sentence of this paragraph. In addition, LADWP should commit to conducting water quality monitoring activities during seasonal habitat flow releases for more than the first three releases (see comments on page 25, 2.3.5.4 above) or no data will be available for deciding if this mitigation is necessary. This mitigation measure should be included in the final EIR/EIS document as a necessary mitigation.

16-32

Furthermore, supplemental high quality water would likely always improve water quality conditions for fish. How much will water quality need to improve conditions? What specific trigger points or criteria would LADWP use to make such a decision? How long would supplemental water be released? How much water? All of this should be specified in mitigation measure descriptions.

Insufficient data

4.6.2 Potential Impacts – Game and Native Fish

16-33

4-38, Fish Kills due to Initial Releases (Short-Term Impacts): The Jackson (1994a) report referenced in section 4.4.3 also contains recommendations that the sludge deposits in the Lower Owens River below the Mazourka Canyon Road should be completely characterized, including analyzing the organic sediment deposit's chemistry, grain size, lateral extent and volume in order to more completely understand the water quality problems posed by erosion of the deposit. We concur with those recommendations. Such a study should have been carried out and the results included in this DEIR/EIS to better design mitigation for this significant impact, but this essential data is missing from the document.

Alternatives

11.3.1 Water Quality Degradation and Fish Kills (Two Class I Impacts)

This section discusses alternative water release schemes for the LORP that may affect two Class I impacts including, 1) short-term water quality degradation downstream of Mazourka Canyon due to probable flow interaction with organic sediments that have accumulated over time in the river channel, and 2) fish kills

that may be caused by the short-term degradation of water quality. Under the Proposed LORP Implementation Schedule (Table 2-3) Phase I water releases will be initiated as soon as the diversion construction is completed in the river bed, and will be ramped up to achieve the 40 cfs baseflows at the end of construction of the pump station (planned to begin ramping by July 1, 2004). Under the proposed project the first seasonal habitat flow of 200 cfs is planned for release in May or early June 2005. Three alternatives to the proposed water releases were described in Section 11.3.1.

16-34

After careful consideration of the proposed LORP Implementation Schedule, the three alternatives suggested in Section 11.3.1, and the data contained in the 1993 Lower Owens River Planning Study (Jackson, 1994) we have found that neither the proposed project, nor any of the three alternatives described in the Section 11.3.1 of the LORP EIR/EIS, adequately minimize the potential water quality impacts. Neither the proposed project nor the three alternatives in Section 11.3.1 minimize either the period of time when short-term water degradation may occur due to flow interaction with the organic sediments deposited below Mazourka Canyon or the fish kills that may be caused by this short-term water quality degradation. For reasons discussed below we believe that there is no evidence to support claims in the DEIR/EIS that project baseflows would result in significant fish kills (4.4.3.1). Rather this impact is most likely to be caused by release of the higher seasonal habitat flows.

16-35

We suggest that you consider adopting a different alternative strategy for minimizing the period of time when short-term water quality degradation and fish kill impacts are possible. We will outline this alternative strategy below, which we will refer to as Alternative Initial Release Regime 4, following the naming convention of the alternatives in Section 11.3.1 of the EIR/EIS. Regime 4 would follow the proposed LORP Implementation Schedule (Table 2-3), but adds to that schedule a 200 cfs seasonal habitat flow to be released during the first winter of LORP implementation. The objective of this 200 cfs flow is the same as the initial flow proposed in DEIR/EIS Regime 2, that is to flush the river of vegetative debris and organic sediments, breach beaver dams and create openings in the tule stands. Flows should be of an adequate volume and duration to scour the organic sediments out of the river channel and redistribute them on banks, floodplains and terraces within the riverine-riparian system and the Owens River delta for the benefit of vegetation (MOU II.C.1.b.ii). This proposed initial winter flushing flow should be considered different and separate from the spring-time seasonal habitat flows because the main purpose would be to flush years of accumulated muck out of the channel, thereby reducing the potential for fish kills with the next high flow event. The annual spring seasonal habitat flow has another purpose that is not met by the initial winter flushing flow, that is to benefit the germination and establishment needs of riparian vegetation, particularly willow and cottonwood.

The 200 cfs flushing flow should be released during the first winter of LORP implementation when water temperature is at its coldest (5°-10°C), regardless of whether the baseflow has been fully ramped up to 40 cfs by that time or not. The flushing flow should be released during the coldest winter months, when the surface water temperature is at its coldest, so that the flow can scour the river system below Mazourka Canyon of organic sediments during the time of year when it would cause the least harm to water quality and to the fish population.

Release of a 200 cfs flushing flow during winter is likely to reduce or avoid the water quality degradation that may kill fish during LORP implementation because colder water temperatures with higher oxygen solubility lead to higher oxygen concentration in the water to begin with. At the same time, colder temperatures slow breakdown of the stirred up organic sediments and reduce microbial oxygen consumption, and so these processes will remove far less oxygen from the river water during the winter. In addition, using high flows to flush the river of the organic sediment during the winter will result in less risk to the fish because fish metabolic rates are slowed by the cold water temperatures. For the river flushing to be as effective as possible high flows should be maintained throughout the river system below Mazourka Canyon for a long enough period of time to flush the river channel of the organic sediments.

This will necessitate either releasing higher flows at the River Intake, or supplementing flows down river as necessary from various spillgates. This first flow should be allowed to bypass the pumpback station to allow the organic rich sediment (muck) to be transported and deposited on banks, floodplain and terraces within the riverine-riparian system and the Owens River delta for the benefit of the vegetation. Such a redistribution of "muck" is an objective directly provided for in the MOU (Section II.C.1.B.ii, item 1).

It is important that the flushing flow be released during the first winter of LORP implementation so that, if fish kills do occur during the flushing event, fish can be planted during the following spring and summer season, which will ultimately result in the earliest possible re-establishment of a healthy warm water fishery in the LORP. Flushing the sediments during the first winter of LORP implementation also serves to minimize the period of time when short-term water quality degradation downstream of Mazourka Canyon due to flow interaction with the organic sediments is possible, thus minimizing this potential significant impact. Because the initial flushing flow has a different objective than the seasonal habitat flows, the first seasonal habitat flow should be released in the first spring following the initial flushing flow to benefit the riverine-riparian and delta systems, particularly for establishment of willow and cottonwood, as provided for in the MOU (Section I.C.1.b.ii).

Under our proposed Alternative Initial Release Regime 4, we see no need to delay initiating the baseflow of 40 cfs. This corresponds with the proposed project described in DEIR/EIS Section 2.3.5.2. The baseflow should be initiated as soon as possible, without regard to its timing with respect to the release of the winter flushing flow for the following reasons. The Inyo County Water Department report entitled "Lower Owens River Planning Study: Transient Water Quality in the Lower Owens River During Planning Study Flow Releases in July and August of 1993" (Jackson, 1994) is cited in Section 4.4.3 of the DEIR/EIS in describing the potential effects to water quality that could result from the release of flows as proposed under the LORP. Unfortunately this study is of limited use for predicting the effects of initiating baseflows of 40 cfs on water quality in the LORP because very little water quality data was collected during the ramping up period in this study.

As reported in Jackson (1994) Inyo County and LADWP conducted an experimental study between July 6 and August 12, 1993 in which a flow of 20 cfs was initially released to the Lower Owens River and then rapidly increased to 155 cfs by day 15 of the study. The flows were then subsequently reduced to the normal summer flow regime of 1-5 cfs at Keeler Bridge by day 40 of the study. When one looks at the data presented in Appendix A, Table 1 of the report, we see that very little crucial water quality data was gathered prior to day 10 of the study, when the flows (LAA Intake) had already been increased to 115 cfs. At Mazourka Canyon no dissolved oxygen (D.O.) readings were reported until day 11. On that day the D.O. was 6.3 mg/l, but the flow was not recorded. However on day 12 the flow was recorded as 29 cfs at that station. D.O. was not read again at Mazourka Canyon until day 15 when the flow had increased to 59 cfs and the D.O. was 3.1 mg/l. At Manzanar Reward Road, D.O. was not measured until day 18 when flows were 55 cfs and D.O. was 2.4 mg/l. At Reinhackle Spring D.O. was not measured until day 15 when the flow was 14 cfs and D.O. was 5.5 mg/l. By day 18 at Reinhackle Spring the flow had increased to 49 cfs and the D.O. was 2.4 mg/l. At Lone Pine Ponds, no water quality data were recorded to document initial water quality conditions in the ponds; the first water quality readings were not recorded until day 14 when D.O. was below 1 mg/l., where it stayed until day 39 of the study. At Lone Pine Station Road the first water quality readings were not taken until day 11 when flow was 14 cfs and D.O. was 4.2 mg/l. Another reading was not taken at Lone Pine Station until day 14 when the flow had increased to 73 cfs and D.O. was 0.9 mg/l. At Keeler Bridge the first water quality readings were taken on days 9 and 11 when flows were less than 0.1 cfs and D.O. concentrations were 5.2 and 6.5 mg/l, respectively. The next water quality data from Keeler Bridge was taken on day 14 when the flow had already increased to 63 cfs and D.O. was 3.7 mg/l.

16-35

16-36 Table 4-10 in Section 4.4.3.1 of the EIR/EIS contains mean values of the water quality data measured at the various stations throughout the 1993 study. However these means have no value for estimating the effects of releasing the 40 cfs baseflows on water quality in the LORP because most of the measurements were taken after flows had been increased to well above 40 cfs. It is more instructive to look at the few data points that were gathered during the earliest parts of the 1993 study, before flows had increased to above 40 cfs. Jackson, 1994, Appendix A Table 1 reports the following: at Mazourka Canyon Road when flow was 59 cfs, D.O. was 3.1 mg/l; at Manzanar Reward Road when flow was 55 cfs, D.O. was 2.4 mg/l; at Reinhackle Spring Station when flow was between 34 and 55 cfs, D.O. was 3.8 mg/l; at Lone Pine Station Road when flow was 14 cfs, D.O. was 4.2 mg/l and then no data were taken until after the high stage had been reached in the river flow (73 cfs); at Keeler Bridge when flow was 63 cfs, D.O. was 3.7 mg/l. The data from Lone Pine Ponds is useless for this analysis because no initial conditions were recorded.

In Jackson (1994) Figure 2 shows that at dissolved oxygen concentrations of 1-5 mg/l warm water pond fish survive, but their growth is slowed with prolonged exposure. D.O. levels above 5 mg/l are the desirable range for these fish and levels below 1 mg/l can be lethal if the exposure is prolonged. As we see in the data from Jackson, 1994, Appendix A, Table 1, dissolved oxygen levels can be expected to remain well above 1 mg/l during initial releases of the 40 cfs baseflows, and most likely they will remain above 2.5 to 3 mg/l. Although the Jackson (1994) report is inconclusive as to what exactly killed the fish during the 1993 release, and although fish growth and health may be affected, we see no evidence presented or referenced in the report that would lead to the conclusion that initiating a baseflow of 40 cfs in the LORP will lead to significant fish kills. The fish kill impact is most likely to be associated with release of the higher seasonal habitat flows unless the organic sediment is removed from the river channel by a wintertime flushing flow as suggested in our Alternative Initial Release Regime 4.

Our discussion and analysis of the three Initial Release Regime alternatives listed in Section 11.3.1 follows:

11-5, Alternative Initial Release Regime 1 – Gradual Baseflows and Deferred Seasonal Habitat Flows: Recommendations by Jackson (1994) and Ecosystems Sciences (Technical Memorandum No. 11, no date) are referenced in this section of the EIR/EIS. Their recommendations are for slow and gradual ramping of the initial water releases to achieve the baseflows in order to reduce the magnitude of water quality and fish kill impacts. Alternative Initial Release Regime 1 in the DEIR/EIS is designed to follow these recommendations.

16-37 However, the Jackson (1994) report contains absolutely no data or references that support his conclusion that gradual flow increases made over a period of weeks, months, or years is necessary to avoid water quality degradation and fish kills when initiating the 40 cfs baseflow, or that such a scheme would avoid these impacts when higher seasonal habitat flows are eventually released. Jackson (1994) does show that water quality degradation did occur during the July-August 1993 water releases to the lower Owens River, but the data in the report show that severe water quality degradation did not occur until the flows reached their highest levels during the study (155 cfs at the LA Aqueduct Intake). The few oxygen readings that were taken during the critical ramping up period indicate that dissolved oxygen concentrations stayed above 2.5 mg/l until the flows increased to more than about 55 cfs (Jackson, 1994, Appendix A, Table 1). Moreover, the report is inconclusive as to what exactly killed the fish during the 1993 release. We see no evidence presented or referenced in the Jackson (1994) report that would lead to the conclusion that gradually increasing the flow in the Owens River is necessary to avoid fish kills, or would mitigate the impact when the flow is increased to 200 cfs during the first May-June seasonal habitat flow.

16-38 We are concerned that Alternative Initial Release Regime 1 will only work to lengthen the period of time when there will be a possibility of poor water quality and resultant fish kills due to implementation of the LORP. Higher seasonal flows in the river will cause a disturbance of organic sediments, no matter whether the flow occurs during the first year or the sixth year of the project, as long as the sediments remain in place to be disturbed. The best course is to remove the sediment with flushing flows during the cold winter season when water quality is likely to be least degraded and fish are likely to be least severely impacted, as described above in our proposed Alternative Initial Release Regime 4. The data in Jackson (1994) indicate that taking up to 36 months to reach the 40 cfs baseflow as described in Regime 1 is unnecessary. It is highly speculative that a slow release of the 40 cfs baseflow will have anything to do with improving water quality during the first 200 cfs flow release when water quality is most likely to be the most severely degraded. This gradual increase in baseflow seems more likely to draw out the water quality degradation problem for a longer period of time and will only delay the fish kill that is likely to happen when higher seasonal flows are released during the first springtime seasonal habitat flow which would not occur until two or three years after the baseflow is finally established under Regime 1 as described in the DEIR/EIS. Ultimately the alternative presented in Regime 1 will only cause a several year delay in the re-establishment of a stable fishery in the LORP.

11-6, Alternative Initial Release Regime 2 – Begin with Seasonal Habitat Flows to Flush the System:

It is our opinion that flushing the river with high flows is a good idea, but that these flows should be released during the first winter of the LORP implementation as described in our proposed Alternative Initial Release Regime 4, instead of during summer 2004, as described in Alternative Initial Release Regime 2. Because disturbance of organic sediments during high seasonal habitat flows in the river is inevitable, the best alternative is to flush these sediments out of the river channel during the season when they are likely to cause the least water quality degradation and damage to the fish population.

16-39 If the flushing flows are released in the winter season it is possible that the organic sediments can be removed from the river channel without causing massive fish kills. This flushing should be done sooner rather than later during LORP implementation, so that in case there are any fish kills, the job of restocking the river and re-establishing a healthy fishery can begin as early in the process as possible.

If Alternative Initial Release Regime 2 is adopted for the LORP as written in Section 11.3.1, the 200 cfs flushing flow would be released during July 2004 during the time of year when water temperatures peak, dissolved oxygen concentrations drop, rates of decomposition climb, and fish oxygen requirements are maximal. In short, Regime 2 would maximize the negative impacts that will occur when the first 200 cfs flow is released into the LORP. Our proposed Alternative Initial Release Regime 4 would garner all of the positive aspects of using high flows to flush the organic sediments out of the river channel, while giving the greatest protection for water quality and fish.

11-6, Alternative Initial Release Regime 3 – Delay Releases for Baseflows Until Winter 2004-2005:

16-40 An argument similar to that presented in the discussion for Regime 1 also holds for Regime 3. While Jackson (1994) does show that water quality degradation did occur during the July-August 1993 water releases to the lower Owens River, the data in the report show that severe degradation did not occur until flows were increased to the highest levels during the study period. Unfortunately, LADWP and Inyo County did not take many dissolved oxygen readings in the river during the ramping up period in July 1993. The few readings that were taken during the critical ramping up period indicate that dissolved oxygen concentrations stayed above 2.5 mg/l until the flows in the river were increased to more than 55 cfs (Jackson, 1994, Appendix 1, Table 1). Furthermore, the 1993 study was done during July and August, the warmest summer months, and so the data reflect the worst case scenario as far as impacts to dissolved oxygen concentrations go. The data in the report indicate that there is likely to be little water quality degradation at the proposed baseflow of 40 cfs, regardless of when the initial baseflows are released. Though the report is inconclusive as to what exactly killed the fish during the 1993 release, we see no

evidence presented or referenced in Jackson (1994) that would lead to the conclusion that dissolved oxygen concentrations will be reduced to a lethal level for warm water fish (Jackson, 1994, Figure 2) at flows up to the proposed baseflow of 40 cfs no matter what time of year they are released.

16-40

The plan in Alternative Initial Release Regime 3 would only work to lengthen the period of time when there will be a possibility of poor water quality and resultant fish kills due to implementation of the LORP, because in this alternative release of the initial 200 cfs seasonal habitat flow would not occur until late May or early June one year after the establishment of the 40 cfs baseflow. Higher flows in the river will cause a disturbance of organic sediments, as shown in Jackson (1994) no matter whether the flow occurs during the first year, the sixth year, or later in the project, as long as the sediments remain in place to be disturbed. Higher flows in the river will cause a disturbance of organic sediments, as shown in Jackson (1994) no matter whether the flow occurs during the first year or the sixth year of the project, as long as the sediments remain in place to be disturbed.

The best course is to remove the sediment with flushing flows during the cold winter season when water quality is likely to be least degraded and fish are likely to be least severely impacted, as described in our proposed Alternative Initial Release Regime 4. Alternative Initial Release Regime 3 is likely to draw out the water quality degradation problem for a longer period of time and will only delay the fish kill that is likely to happen during the first spring seasonal habitat flows, if the river is not first flushed to remove organic sediments during the colder winter season as described in our Alternative Initial Release 4. In addition, because of the delays that have already occurred in the LORP and the additional 6-month delay that LADWP has built into this document by neglecting to have plans already drawn up for a 50 cfs pumpback station, we feel that adopting Regime 3 would cause an unnecessary further delay in implementation of this project without furthering the goals of the project.

We agree that Alternative Initial Release Regime 3 is infeasible because it would result in a delay in the establishment of the 40 cfs baseflow even beyond that of the proposed project. Delaying the first seasonal habitat flow for a year after delaying the establishment of the 40 cfs baseflow, as described under Regime 3, would only serve to postpone the time when the high flows will disturb the organic sediments, affect water quality, and perhaps cause fish kills in the river. Ultimately it seems that this strategy will only delay the re-establishment of a healthy warm water fishery in the Lower Owens River.

BASEFLOWS

(Please see additional comments on baseflows under “Water Quality and Fish Kills – Alternatives)

2.3.4 Required River Flows and Habitat Indicator Species

2.3.5 Proposed Release Regime

16-41

2-19, 2.3.5.1: The last sentence of the third paragraph in this section states that the variability in the 40 cfs baseflow would be about 5 cfs. It should be clarified whether that means an estimated range of 35 cfs to 45 cfs or a range of 37.5 cfs to 42.5 cfs.

WILDLIFE ISSUES

Comments relating to the Fish and Wildlife found in the Riverine-Riparian area are discussed in the Fish and Wildlife section. They include concerns regarding Endangered and Threatened Species, Species of Special Concern, Habitat Indicator Species, deleterious species, beaver, grazing, non-native fish, fish kills, and the invasion of tules, noxious weeds, and saltcedar.

VEGETATION AND CHANNEL MANAGEMENT

16-42 **2.3.6 Channel Clearing Prior to Phase 1 Releases:** Given that muck and sediment are one of the most valuable commodities taken from the river (aside from water), it seems odd to stockpile 7,800 cubic yards of sediment. Furthermore, soil that has converted to sand (after disturbance and removal of lighter soil by wind) is exceedingly difficult to revegetate. Could muck be used in revegetation efforts?

Also see comments in the Monitoring and Adaptive Management section regarding concerns about plans to limit removal of channel obstructions to first two miles and other significant obstructions, and the apparent lack of plans to open channels for the benefits of fish migration and floodplain flooding.

16-43 **2.3.9 Channel Sediment Muck Management:** We are concerned that there are no plans to physically remove channel sediments and that data regarding the flow regime contemplated suggest the baseflows and seasonal habitat flows may be insufficient to move much of the bottom sediments for deposit on stream banks and the floodplain as called for in the MOU.

16-44 **2.3.9 Tule Management:** According to this section active tule removal will be conducted only in rare instances and will be limited by funding considerations despite MOU strictures to "*control tules and cattails to the extent possible*"(MOU II.C.1.b.ii). MOU and project goals (diverse riparian habitat) will not be met if germination and growth of willow and cottonwood don't occur. Homogeneous stands of tules retard germination and growth. How will the riparian trees out-compete tules (and saltcedar) in newly watered portions of the river as well as in currently tule-choked areas? Shading cannot take place without trees. We provide further comments on this issue in our Monitoring and Adaptive Management comments section.

2.3.9 Saltcedar Management: No activities to control saltcedar are contemplated. Unchecked saltcedar growth in newly watered river stretches and at existing saltcedar areas will prevent the achievement of the MOU project goal of a diverse riparian habitat due to willow, cottonwood and understory species such as wild rose and desert olive being out-competed. Volumes of data from river drainages in the southwestern U.S. show how displacement of native vegetation is inevitable without intervention.

16-45 Additionally, the LORP is court-ordered mitigation for years of environmentally damaging activities engaged in by LADWP and should be considered a separate project from other habitat enhancement projects undertaken by LADWP or Inyo County in the Owens Valley. Current noxious weed control programs are designed and funded for current habitats. The LORP will create new habitats that will be susceptible to invasive noxious weeds. Consequently, discussions of funding for current saltcedar programs are irrelevant to the critical issue of controlling saltcedar in the new LORP habitat areas. For successful implementation, the LORP must include a specific program for control of noxious weeds within the LORP areas. If not, the DEIR/EIS should provide evidence that habitat goals of the LORP can be achieved without a fully funded noxious weed control program specifically designed for the LORP areas.

See our Monitoring and Adaptive Management section for further comments on this issue regarding funding limitations and passive adaptive management.

2.3.9 Riparian Vegetation Management: According to the draft document for the first 15 years manipulation of flows will be the primary adaptive management measure to promote riparian vegetation growth along the river. Other more active measures such as seeding and planting will be dependent on funding. See our Monitoring and Adaptive Management section for further comments on this subject regarding funding limitations and passive adaptive management.

16-46 | **4-31, last ¶:** Historically, many revegetation or mitigation measures have either not been implemented or have not worked as well as hoped (e.g., Five Bridges). Differences between tardy or non-viable revegetation methods and the methods referred to in this DEIR/EIS should be spelled out so that their potential success can be evaluated.

WETLANDS AND RIPARIAN HABITAT

16-47 | **4-30, Wetlands and Riparian Habitat, Potential Impacts – Vegetation, 3rd ¶ from bottom:** This impact deserves expanded discussion: what animal species use upland vegetation for habitat? How will they be affected by the change?

16-48 | **4-30, last ¶:** The removal of 3.7 acres of emergent freshwater marsh, in conjunction with destruction of other wetland reaches, may be a significant temporary impact. Created wetlands are not always as high in quality as the original wetlands, and—more important—there will be a gap in time between the destruction of the marsh and the creation of the new wetlands, thus creating a temporary gap in habitat for species dependent on the area. In addition, if the LORP is not fully funded for such measures as adaptive management and noxious weed control, new emergent wetlands may not be as high in quality as anticipated.

3. PUMP STATION AND DELTA

GENERAL COMMENTS

16-49 By choosing not to complete design drawings for a 50 cfs pumpback station, LADWP has chosen to delay LORP implementation by six months should the 50 cfs pump station be chosen as the preferred option for this project. Such a delay in implementation would be unfortunate, but for a number of reasons discussed below we believe that the 50 cfs pump station option must be selected in order to achieve MOU habitat goals for the Delta Habitat Area and comply with the provisions of the Inyo-LA Long Term Agreement. It should be noted that LADWP's decision to not have design drawings completed for a 50 cfs pump station by the time the DEIR/EIS was released is a circumstance well within LADWP's control, should this decision delay implementation of the LORP.

16-50 There is little discussion of impacts if the full capacity (100 cfs) of the 50 cfs pumpback station is used or if the potential full capacity (158-176 cfs) of the 150 cfs pumpback station is used (see pages 2-45 and 5-10 of DEIR/EIS for a very brief discussion of full capacities). The effects and implications of full capacity use should be discussed in chapters six, ten, and eleven of the DEIR/EIS.

16-51 **2-3, 2.1.5 Relationship of the LORP to Groundwater Pumping and Surface Water Management in the Owens Valley:** The document states, "...nor does the LORP include an increase in groundwater pumping in the Owens Valley as part of the project." A 150 cfs pump station appears to only be economically reasonable if new groundwater pumping is anticipated. As such, this size pump station suggests the need to include groundwater pumping as a distinct part of the LORP project. As pointed out by EPA (2002), *"the excess, under utilized capacity (of the larger pump station) would provide strong incentive for LADWP to pump additional water from the Owens Valley."*

Because the DEIR/EIS leaves open the possibility that new wells and groundwater pumping could ultimately be used to supply water for the LORP project, we believe that this document should fully analyze potential groundwater impacts of this project. See comments on this topic in our section on Water Supply Impact And Growth Inducing Effects.

PUMP STATION CAPACITY

General Comments

16-52 LADWP has proposed that the pump station have a capacity of 150 cfs. This is large enough to capture a majority of the spring-time seasonal flows that would otherwise escape to the Owens River Delta during the two-week high flow period. Inyo County and the Environmental Protection Agency have proposed a 50 cfs capacity pump station which they believe is the size required by the Agreement. This is sufficient capacity to capture the 40 cfs baseflow that will be in the river for 50 weeks a year. A LORP pump station of up to 50 cfs capacity is called for in the Water Agreement, but LADWP believes that language in the MOU allows them to build the larger station. All other MOU parties (Inyo County, Sierra Club, Owens Valley Committee, California Department of Fish and Game, and State Lands Commission) disagree with the City's interpretation of the MOU. This continuing disagreement may cause further delays in the project. As LADWP concludes in the DEIR/EIS (p. S-9), *"It is anticipated that dispute resolution, litigation, or agreement (following issuance of the Final EIR/EIS and project decisions by the involved agencies) will determine which of these alternative pump station capacities will be implemented."*

OVC and the Sierra Club believe that the larger pump station violates the Agreement and is not economically justified unless its real purpose is to export additional groundwater from the Owens Valley. The Environmental Protection Agency's analysis, in addition to our own analysis of LADWP's numbers, show that the larger pump station will cost more to build, maintain and operate than it will return from the value of the extra water it would capture over the 50 cfs station. EPA, in a February 2002 letter to LADWP, stated that "*LADWP's proposal for the larger pump station does not appear to be economically or environmentally justified.*" (EPA 2002) Additionally, the Agency concluded that "*the indirect and cumulative impacts that would result if LADWP constructs a 150-cfs pump station (increased groundwater pumping, and/or reduction in water supplied by LADWP for use in the Owens Valley) are a significant and legitimate concern*" (p. 12-20).

16-52

During the negotiations that resulted in the MOU, Sierra Club and Fish and Game, at least, made it very clear that the by-pass of seasonal habitat flows to the delta from a 50 cfs pump station was a very important part of the water commitment that the City was making to the delta. We understood that the MOU goals for the Delta would only be achieved with the 6-9 cfs baseflow if there was a large annual pulse flow provided by the seasonal habitat flow. The large by-pass flows allowed by the 50 cfs pump station would spread broadly, fill small shallow ponds and recharge the fresh water lens that the whole delta ecosystem is dependent upon. Since the Inyo County-LA Water Agreement requires that the pump station not exceed a capacity of 50 cfs, the MOU parties were assured by LADWP representatives that a limitation on its size was not necessary in the MOU.

We believe the MOU contemplates high seasonal flows to the delta that are in excess of the 50 cfs pumpback capacity of the station when it states as a purpose of the seasonal habitat flow that it will "...cause this material [muck and other river bottom material] to be redistributed on banks, floodplain and terraces within the riverine-riparian system and the Owens River delta..." (MOU II.C.1.b.ii) The proposed 150 cfs pump station would eliminate, or nearly eliminate, seasonal habitat flows from reaching the Delta.

Specific Comments on Pump Station Capacity

16-53

S-8, Table S-3, 50 cfs pump station alternative. Under heading "Is it Feasible? (as Determined by Lead Agencies): "Yes. (*LADWP believes a 50 cfs pump station is feasible but unnecessary to meet the MOU goals. However, the higher baseflow of 9 cfs annual average is feasible if MOU goals are not being met.*)" LADWP apparently agrees that the 50 cfs pump station is, indeed, feasible, but contradicts itself on page S-9, last ¶, with a statement that "*LADWP has concluded that the MOU allows for the proposed 150 cfs pump station, and that the 50 cfs pump station is neither feasible nor necessary for mitigating environmental impacts identified in the EIR/EIS.*" The 50 cfs pump station is feasible or it is not.

16-54

S-9, Section 7, Comparison of impacts between a 150 cfs and 50 cfs pump station: LADWP, in this section, shows no objective reason to omit the 50 cfs pump station as option 1. The only potential new impact is anticipated with a maximum seasonal habitat flow that may occur for 3 to 5 days every other year. Even so, this impact "could range from significant to beneficial."

16-55

S-9, ¶ 4: "*LADWP has not completed design drawings for a 50 cfs stand-alone option. Completing the design would require approximately six months from the time the option is selected. Thus, a delay in project implementation of up to six months would result if this option were selected.*"

The Inyo/LA Water Agreement mentions the size of the pumpback station only once (p. 23): "*The pumpback system will be capable of pumping UP TO 50 cubic feet per second (50 cfs) from the river to*

the aqueduct. Due to seasonal fluctuation in the flow of the river, the average annual pumping will not exceed approximately thirty-five cubic feet per second (35 cfs)."

- 15-55 The MOU mentions pumpback facility/pumpback system/pumpback station ten (10) times and never states, hints, or suggests a change in the size from the 50 cfs agreed to in the Water Agreement. The numbers 200 cfs or 150 cfs never appear in the MOU. Nothing in the MOU modified the size of the pumpback station. Therefore, according to the Water Agreement (Section 1-General Provisions, Paragraph C) the size remains as was consented to in the Water Agreement.

GOALS FOR THE DELTA HABITAT AREA

General Comments

- 16-56 Part of LADWP's justification for proposing the 150 cfs capacity pump station is that they will be able to achieve the MOU Delta habitat goals with the larger station. However, we believe that their stated goal for the Delta Habitat Area, "...LADWP's goal will be to enhance and maintain the Delta conditions" (p. 6-15), does not comply with the goals as stated in the MOU and reiterated on the same page in the DEIR/EIS. LADWP defines Delta conditions as "*The amount of water and vegetated wetland within the Delta Habitat Area boundary existing at the time of the commencement of flows to the Delta under the LORP...*" (p. 6-15). This time is at the very start of the project, so the project will not have affected the development of the Delta conditions.

LADWP's stated goal completely ignores the portion of the MOU which states that part of the goal for this area is "*to establish and maintain new habitat consisting of riparian areas and ponds suitable for shorebirds, waterfowl and other animals. . .*" (MOU II.C.2, emphasis ours). We believe that the MOU intended for this goal to be met by implementation of the LORP, not by events that happened prior to implementation of the project. It is especially important now, given the lengthy delays that have already occurred in the LORP EIR/EIS process, that the baseline for determining whether new habitats have been created by the project are the Delta conditions existing at the commencement of flows to the Delta under the LORP.

Existing Conditions

- 16-57 Three issues related to existing Delta conditions are covered in the recent comment letter on this project dated January 9, 2003 by the Great Basin Unified Air Pollution Control District (GBUAPCD). One issue is the description of the existing conditions in the Delta concerning a discrepancy in what GBUAPCD considers "Aeolian" lands and lack of description of the methods used to delineate vegetated wetlands from historical photos. The second issue is the Delta wetland delineation and the DEIR/EIS assertion that the GBUAPCD study of jurisdictional wetlands in the Delta (Jones and Stokes Associates 1996) overestimated the extent of wetlands by approximately 40%.

The third issue has to do with the abundance of saltcedar (tamarisk) in the Delta. The DEIR/EIS (p. 6-13) characterizes saltcedar in the Delta as occurring in "*scattered clumps*" or "*scattered individuals*" and that "*[l]arge trees or groves are generally absent*". The GBUAPCD letter relates that their District biologist has been conducting monitoring for some years in the Delta (1996-2002) and reports that there are several thousands of saltcedar in the Delta population, including observations of many large trees (documented by several photos included in the letter). We would like to incorporate the GBUAPCD comments of January 9, 2003, pp. 2-6, on these three issues into our comments by reference.

These observations of saltcedar in the Delta reported by GBUAPCD are confirmed by our own personal experience. In fact, more than two years ago, we informed the other MOU parties (including LADWP and Inyo County) of our observations of saltcedar that were contrary to statements in the Delta Habitat Area Technical Memorandum. Unfortunately, as no correction has been made, these comments are applicable to the current DEIR/EIS:

- 10) In the "Existing Conditions" section of Tech Memo 8, in the subsections on "vegetation types" and "Salt Cedar," there is no mention of the existence of salt cedar in the delta habitat area, a potentially serious alien problem species. Recent observations by Sierra Club members indicate that there are substantial amounts of salt cedar in the delta area, many are large trees that must have been there at the time Ecosystem Sciences conducted their delta studies. In the "Future Conditions" section of Tech Memo 8, in the subsection on "Salt Cedar" (p.37), it is stated "While there is some salt cedar in (the) delta, the species is not wide spread or dominant in any areas. The potential risk of infecting new areas with salt cedar or increasing vigor and productivity of existing stands is considered a significant issue throughout the LORP." Given that risk and with many mature salt cedar in the delta, why wasn't a salt cedar reduction and control program recommended for the delta? It appears that the Tech Memo does not provide necessary, documented information on the distribution and abundance of salt cedar in the delta habitat area so that the assessment of risk of a significant project impact could be made. The final LORP Plan (or at the very least the LORP EIR) should include data on the distribution and abundance of salt cedar in the delta habitat area. (October 13, 2000 email memo to MOU Parties from Mark Bagley and Mike Prather)

With all the efforts made to map vegetation and habitat types, the DEIR/EIS contains no scientific data on the distribution and abundance of salt cedar in the Delta Habitat Area. This is a serious omission regarding a potentially very serious problem with this invasive plant, a potential problem which could impede or prevent attainment of the Delta habitat goals articulated in the MOU. The DEIR/EIS contains a two sentence description on the occurrence of saltcedar, a description that is contrary to our observations that were reported to LADWP more than two years prior to release of the DEIR/EIS and which make no attempt to explain the discrepancy.

The above problems with the description of the existing conditions in the Delta are troubling because achievement of project goals will be measured in the future against the documented Delta conditions. These problems must be addressed in the EIR/EIS.

Habitat Indicator Species

In the Delta habitat mapping conducted for the DEIR/EIS what was the level of resolution when it came to open water habitats in the Delta? What level of resolution will be used in determining "Delta conditions" and in future monitoring? Is that level of resolution sufficient to pick up small shallow flooded areas and ponds important for waterfowl, wading birds and shore birds? These are all habitat indicator species for the Delta and the goals for the Delta include creation and maintenance of "*diverse natural habitats . . . consistent with the needs of the habitat indicator species.*" (MOU II.C.2) There is little indication in the DEIR/EIS that the needs of the habitat indicator species in the Delta, or in the other project areas for that matter, have been given serious consideration. The DEIR/EIS must establish specific habitat goals or objectives that are consistent with the needs of the habitat indicator species listed in the MOU. The DEIR/EIS must establish performance standards in achieving those objectives in order to have an effective monitoring and adaptive management program to ensure the success of the project.

The analysis in DEIR/EIS Section 6 focuses on vegetated wetlands and the apparent needs of the vegetation, not on the needs of habitat indicator species that primarily use unvegetated shallow flooded

16-60 areas. There is very little on existing conditions and effects of the proposed flows to the Delta with respect to the shallow seasonally flooded areas, often found in the playa habitat type. This despite the acknowledgement in the DEIR/EIS (p. 6-11) that “[t]he shallow flooded, unvegetated or sparsely vegetated alkali playa provides unique habitat for many resident and migratory waterfowl and shorebirds.”

For example, the proposed mechanism for establishment of baseflows (6.2.2) relies entirely on the needs of the vegetation: “Seasonal baseflows will thus be established based on direct measurement of water demand for vegetation resources ...” (p. 6-18). No thought appears to have been given to establishing objectives or performance standards for the baseflow based on habitat parameters most important to the habitat indicator species. The whole basis for establishing baseflows should be reconsidered in this light and for other reasons discussed below under our heading “Quantity of Water Released to the Delta Habitat Area.”

Specific Comments on Goals for the Delta Habitat Area

2.4.1 Goals for the Delta Habitat Area

16-61 2-31, first ¶: One of the goals of the MOU as quoted here (and as it appears in the original MOU) is to “establish and maintain new habitat.” Yet the rest of this section implies that maintaining current conditions is sufficient to fulfill the goals of the MOU. How will new habitat be established in the Delta area under this plan?

16-62 2-32, ¶4: How and when will LADWP “implement appropriate adaptive management measures as described in section 2.4.3” if there is no estimated budget for said measures (see ¶1 p. 2-7)?

16-63 6-15, 6.2.1 MOU goals: How does LADWP “establish and maintain new habitat” in the Delta area? How will annual habitat flows be achieved (not pulse flows)?

16-64 6-15, 6.2.1, MOU Goals: “...amount of water and vegetated wetland . . . existing at the time of the commencement of flows to the Delta under the LORP are hereafter referred to as the “Delta conditions.” At the earliest, commencement of flows will begin in mid-2005. There is reason to be cautious with that date. No mention is made here that flows have decreased in the delta for at least the last three years causing the delta to dry up from spring into fall. If this seasonal drying continues until 2005 or longer the “Delta conditions” may be significantly smaller in acreage due to enforced drought. This impact should be discussed.

16-65 6-25, 6.3.1, Baseflow Impacts: “...expected to die and not regenerate naturally.” and “...13 acres of decadent riparian forest identified in 1999...will be replaced by water and marsh.”

MOU goals for the Delta include establishing and maintaining new habitat consisting of riparian areas and ponds. Cattle and beaver don’t allow germination and growth of riparian habitat in the Delta. Mitigations such as tree planting (“self-sustaining as possible”) should be planned to offset any losses.

16-66 6-26, last sentence: “LADWP’s goal will be to enhance and maintain the Delta conditions”: What about the MOU goal of creating new habitat in the Delta area?

IMPACTS OF 50 CFS VS 150 CFS CAPACITY PUMP STATIONS

General Comments

In addition to two pump station options, the DEIR presents two different assessments of the impacts to the Delta for each option. OVC and Sierra Club believe that the impact assessments done by URS Corporation, and backed by Inyo County, clearly make a lot more sense and have much stronger supporting arguments than the other assessments backed by LADWP.

Quantity of Water Released to the Delta Habitat Area

16-67

OVC and Sierra Club believe the larger pump station would restrict flows to the Delta that are necessary to meet habitat goals agreed to in the MOU. The baseflows and pulse flows provided by the LORP (approximately 6 to 9 cfs annual average) are less than the estimated average 10-11 cfs that has been reaching the Delta over the past 15 years. The smaller pump station will allow more of the seasonal habitat flows to reach the Delta, partially offsetting this difference. Additionally, LADWP states that their goal will be to enhance and maintain the vegetated wetlands and water in the Delta Habitat Area that exists at the time of the commencement of flows to the Delta under the LORP. The additional MOU goal to “*to establish and maintain new habitat*” is completely ignored. The proper analyses have not been conducted since the proper MOU goals for the Delta were not considered.

Important ecological considerations do not appear to have been taken into consideration in the DEIR/EIS analysis of the effect of the quantity of water released to the Delta area. Considerations related to the saline shallow groundwater that lies under and around the Delta Habitat Area are discussed in the GBUAPCD comment letter of January 9, 2003 under the heading of “Seasonal Habitat Flows to the Delta Habitat Area.” These consideration should be taken into account in the analyses presented in DEIR/EIS sections related to the issue of the effects of the quantity of water to be released to the Delta. We would like to incorporate the GBUAPCD comments of January 9, 2003, pp. 6-7, on this issue into our comments by reference.

11.3 EVALUATION OF CEQA ALTERNATIVES

16-68

11-3, Table 11-1, Alternatives to avoid a reduction in existing flows to the Delta: It is not clear why LADWP considers the 50 cfs pumpback station and average 9cfs baseflows infeasible. LADWP agreed to the 50 cfs station size in the Agreement and did not attempt to modify the size while negotiating the 1997 MOU. It will not cost significantly more than the other option and, in fact, costs significantly less. It has sufficient capacity to return water to the aqueduct except approximately once every other year, during seasonal habitat flows, and those flows were not intended by the Agreement or the MOU to be recaptured. Why, then, is a 50 cfs pumpback station infeasible?

16-69

As for the feasibility of adjusting Delta baseflows to 9 cfs if necessary, the court injunction does not limit LADWP from discharging water to Owens Lake as part of its MOU requirements in achieving the goals of the LORP. A 9 cfs baseflow is allowed under the terms of the LORP and is most likely to promote the goals of the LORP. Annual habitat flows were also agreed upon in the MOU. No part of this alternative seems infeasible under the current terms of the MOU; in fact, this seems like the most feasible option to fulfill the goals of the MOU and the Agreement and to avoid a Class I impact.

11.3.2 Reduction in Existing Flows to the Delta (Class I Impact)

16-70

Executive Summary Impact #6 – There is uncertainty about the impacts of the proposed flow regime to the Delta Habitat Area on existing habitats. Two impact conclusions with opposing conclusions are presented in the EIR/EIS. One analysis concludes that the proposed flows to the Delta would reduce the amount of water released to the Delta from that released over the past 15 years. This reduction could

possibly reduce the extent of existing aquatic and wetland habitats (including brine pool transition). Another analysis, prepared by LADWP, concludes that the reduction in flows would not be significant.

16-70

Section 6-3 and 6.4 – The differing opinions concerning the potential impacts of the 50 cfs and 150 cfs pump stations on the delta are discussed in the referenced section and will not be repeated here. Since the goals of the MOU for the Owens River Habitat Area include maintaining and enhancing existing delta habitat and establishing new habitats and as a result of the MOU flow restrictions which will result in even less water reaching the delta when the LORP is implemented than at present, it seems very logical that the best approach would be to allow as much water as possible to reach the delta within the MOU limits. This could be accomplished by allowing the maximum baseflow of 9 cfs to the delta and building the 50 cfs pump station which would allow greater seasonal habitat flows to reach the delta than a 150 cfs pump station would permit. Therefore we subscribe to the URL Corp. analysis and recommendations as described in Section 6.3.2 and 6.4.2.

Section 11.3.2 – Alternative: 50 cfs Pump Station with Higher Baseflows and Modified Seasonal Habitat Flows – Under this alternative the following would occur:

- Baseflows and pulse flows to the delta would be increased to the maximum average annual flow of 9 cfs.
- Construct the 50 cfs pump station which would allow any seasonal habitat flow in excess of that capacity to pass to the delta.
- Modify the seasonal habitat flow by providing supplemental water from spillgates to offset channel losses and ensure that the target seasonal habitat flow are achieved at the pump station.

16-71

Section 11.3.2, page 11-9 - LADWP has determined that this alternative is infeasible and inconsistent with the objectives of the LORP. LADWP has also determined that the MOU specifies only that seasonal habitat flows must be released at the River Intake and that supplementing the flows to achieve the seasonal flows along the river is not practical or feasible and is not required under the MOU. With regard to the flow regime within the riverine-riparian system, the MOU provides that *“It is currently estimated that in years when the runoff in the Owens Valley watershed is forecasted to be average or above average, the amount of planned seasonal habitat flows will be approximately 200 cfs, unless the (MOU) parties agree upon an alternative flow...”* Thus, LADWP has committed to meet the Delta baseflows required, and there is no obligation to provide additional water from the spillgates to supplement the seasonal habitat flows released at the River Intake. LADWP has also determined that it is not feasible to supplement the seasonal habitat flow along the entire river because monitoring and maintaining a specific flow throughout the 62-mile reach of river is not possible, given that flows will be changing daily. Lastly, LADWP believes this alternative is inconsistent with the intent and commitment in the 1991 EIR, which calls for a pump station to be constructed so that larger flows could be released to the river and minimize impacts to Los Angeles’ water supply.

We disagree with LADWP’s analysis of this alternative in that this alternative is feasible and is consistent with the objectives of the MOU. Contrary to the statement that the seasonal habitat flow must be released at the River Intake, the MOU states in Section II, Part Cbii *“A seasonal habitat flow. It is currently estimated that in years when the runoff in the Owens River watershed is forecast to be average or above average, the amount of planned seasonal habitat flow will be approximately 200 cfs, unless the Parties agree upon an alternative habitat flow.”*

This can be interpreted to mean that a seasonal habitat flow will be maintained throughout the river in the same manner as the baseflow of 40 cfs will be maintained throughout the river, by adding supplemental water at downstream spillgates as necessary to offset channel losses. In fact, by maintaining this flow all

the way, it would be far more likely that the needed disturbance will be created to meet the MOU goals stated in Section II, part C.b.ii, paragraph two.

16-71

Contrary to the statement by LADWP that it is not feasible to monitor seasonal habitat flows along the river, if it is feasible to setup monitoring stations to monitor the 40 cfs baseflow and add water from spillgates as needed to maintain a flow at that level throughout the river, is it not logical that these same gauging station and spillgates could be utilized to monitor and maintain a 200 cfs seasonal habitat flow throughout the river?

Finally, concerning LADWP's contention that this alternative is inconsistent with the 1991 EIR that calls for construction of a pump station so larger flows could be released to the river and the water recovered to minimize impacts to LA's water supply. This contradicts the impact analysis on page 11-8 which relates that this alternative could reduce the amount of water available for export, because an additional 1,286 acre/ft of water would reach the delta. However, it is also stated, "*The total LORP average annual water demand would be increased from 15,433 acre/ft to 16,719 acre/ft. This increase is not considered significant, as the planned water demand for the LORP is 16,000 acre/ft per year.*"

16-72

One final point, as the impact analysis of this alternative indicates, the increased seasonal habitat flows under this alternative may cause overtopping of the river bank below the pump station which according to the analysis may or may not be beneficial. This possibility is discussed in Section 6.3.2.4 page 6-38 and Section 6.4.2.3 page 6-44 of the DEIR/DDEIS. If this possible event is determined to be adverse, the effect could be easily averted by physically intervening by raising the height of the barrier. However, according to LADWP under present plans no human interference within the Delta area is contemplated (p. 2-3), "*As called for in the MOU and developed by Ecosystem Science the restoration of the Delta Habitat Area will not include any physical modifications within the Delta such as modifying existing channels, creating new channels, constructing berms, or other wise modifying the topography to increase waterspreading in the Delta.*" Contrary to this statement there is nothing in the MOU which specifically prohibits direct intervention for the purposes of achieving the goals of the LORP.

16-73

11-8, Impacts associated with 50 cfs alternative, second ¶ from bottom: Seasonal habitat flows were originally meant to reach the Delta under the terms of the MOU and should not be regarded as a negative impact.

16-74

11-9, last ¶: Whether or not supplementing flows is required by the MOU, the MOU does specify 1) that seasonal habitat flows reach the Delta and 2) maintenance of current Delta conditions and the addition of new habitat.

16-75

11-10, top of page: How is it possible to maintain consistent 40 cfs flows throughout the river but not consistent habitat flows?

11.4 EVALUATION OF NEPA ALTERNATIVES

11.4.1 50 cfs Pump Station (Option 2)

16-76

Contrary to the discussion of CEQA alternatives in Section 11.3.2 in which the 50 cfs pump station is considered infeasible, in this section the 50 cfs pump station is considered to be feasible, as there are no prohibitions or limitations under the Agreement or MOU that would preclude it. While feasible, LADWP believes the 50 cfs pump station is unnecessary to meet MOU goals. This contradiction should be addressed and cleared up in the final EIR/EIS

16-76 We agree that the 50 cfs pump station is feasible and because higher seasonal habitat flows will reach the delta, the probability of attaining LORP habitat goals for the delta are higher. We support this alternative.

16-77 LADWP believes the maximum 9 cfs baseflow to the delta is not feasible unless the MOU goals are not being met by the lower range flows. However they are using the wrong goals. Why is it not feasible? We support the maximum 9 cfs baseflow to the delta because under LORP overall flows to the delta will be reduced compared to present conditions even with the maximum allowed average annual flow rate. Therefore, all logic would suggest the maximum flow allowed should be utilized in order to obtain the maximum environmental benefit. This will result in an estimated 1,375 ac-ft decrease in water available for export (the difference between a 7.1 cfs average annual flow and an 9 cfs average annual flow), too insignificant an amount, in our opinion, to cause an adverse impact to LA's water supply.

11.4.3 Alternative Releases for Seasonal Habitat Flows (With Either a 50 cfs or a 150 cfs Pump Station)

Under this alternative seasonal habitat flows would be released from the River Intake and at various downstream spillgates to make up channel losses in order to ensure a 200 cfs flow throughout the river. The increased flows would provide greater environmental benefits for the riverine-riparian area including removal of bottom muck and transfer to river banks, increased spreading of water to the floodplain, increased seed germination and consequent increased growth of riparian plants, increased habitat for animal species, greater desirable physical disturbance, better water quality, etc. Under this alternative greater seasonal habitat flows would also reach the delta, with the 50 cfs pump station allowing the greatest flow to reach the delta.

16-78 In this section LADWP states this alternative may be feasible with the 150 cfs pumpback as it will allow it to capture most of the seasonal habitat flow, but not feasible with the 50 cfs pumpback because up to 150 cfs flow could escape capture. The section also repeats earlier arguments about MOU prohibitions on supplemental releases, difficulties of monitoring and maintaining a 200 cfs flow throughout the river as reasons why this alternative is not feasible.

Regarding the infeasibility of the 50 cfs pumpback, this statement contradicts the statement in Section 11.4.1 in which the 50 cfs pump station is considered feasible. To repeat, the contradictory statements in the various sections of the report regarding the feasibility or infeasibility of the 50 cfs pump station require clarification. We will not repeat our arguments regarding the interpretation of the MOU and the 1991 EIR, the ability to monitor and supplement the seasonal habitat flows and the severity of LADWP's water supply losses if maximum 9cfs baseflows and seasonal habitat flows (with 50 cfs pumpback) are permitted to reach the delta.

Specific Comments On Impacts of Pump Station Capacity

16-79 **2-41, Option 1. 150 cfs Pump – LADWP's preferred Alternative, background:** If some or all of the water captured at the pump station is diverted to Owens Lake, the amount of water pumped could be greater than 150 cfs. This is because the lake is located at a lower elevation and will not require the same vertical lift as is required to reach the Aqueduct; therefore, more water can be

**Maximum Water Released to the Delta Area from Seasonal Habitat flows
 of 200 cfs maximum, Occurring Approximately Every Other Year (cfs)**

Day	Channel Losses (based on 1 cfs/mile)	Habitat Flows Remaining	Max. at River Diversion (add min. 40 cfs baseflow)	Max. Reaching Pump Station (after 9 cfs base flow)	After Lakebed Mitigation Diversion of 59 cfs	Remaining Available for Pumpback to Aqueduct (cfs)
1	62	-12	40	31	-28	0
2	62	1	40	31	-28	0
3	62	17	40	31	-28	0
4	62	37	40	31	-28	0
5	62	62	62	53	-6	0
6	62	93	93	84	25	25
7	62	138	138	129	70	70
8	62	98	98	89	30	30
9	62	66	66	57	-2	0
10	62	40	40	31	-28	0
11	62	20	40	31	-28	0
12	62	4	40	31	-28	0
13	62	-9	40	31	-28	0
14	62	-22	40	31	-28	0
Total						125

16-79

pumped. Thus, greater than 150 cfs may be diverted from the river if flows of that magnitude reach the river and are pumped to the dust control project. LADWP's first priority would be to deliver water as needed to the dust control project, and secondarily to the Aqueduct if flows are not needed for the dust control project.

How much more water can be pumped? The first priority is water for the dust control project. Average daily flows for zones 1 and 2 range from 38 to 59 cfs (p. 2-45, 5th ¶). Presumably a 50 cfs pump station would provide at least the lower amount conveyed to the lakebed project. However, as noted in the chart above, only a maximum of 3 days every other year would provide flows meeting the 59 cfs/day dust mitigation level (after 9 cfs allowed through the Delta bypass). For 360 days per year, maximum allowed flows through the pump station are 37 cfs/day. The remaining 5 days are calculated maximums that may or may not occur, depending on annual valley runoff. By these limitations, a 50 cfs pump station is more than sufficient to meet the LORP project needs. For 360 days each year, baseflow must be augmented by conveyance from the Boulder Creek aqueduct diversion. Any larger design is useful only if another water project is anticipated for use through this station. The size of the pump station must be specific to the LORP project, and not designed for future water source(s).

2-45, Operations: "...actual pumping rate could be greater than 150 cfs during the seasonal habitat flows because of the low-pressure gradient when delivering water to Owens Lake. The increased capacity occurs because the pump station will be designed to lift approximately 150 cfs to the Aqueduct." And: "...the successful contractor may elect to supply pumps with a capacity totaling 158-176 cfs. Consequently, the exact capacity of the eight pumps will not be known until a contract for the pumps has been awarded by LADWP."

16-80

It is disturbing to read in ¶2 and ¶3 that the pumping rate may be even greater than 150 cfs during seasonal habitat flows. Annual seasonal flows will already disappear under the 150 cfs option, in spite of the fact that those seasonal flows are a goal of the MOU. If seasonal habitat flows to the Delta are abolished altogether, that is contrary to MOU goals. Regardless of MOU goals, if the pumpback station

may have a capacity from 158-176 cfs, then impacts and implications of such a station should be discussed in this DEIR/EIS.

16-81 There is no opportunity in the LORP project and flow schedules to require a pump station of up to 150 cfs, much less 176 cfs, nor greater than 176 cfs where water for dust mitigation is required. Maximum seasonal habitat flows will be 200 cfs at the River Intake. Conservative channel losses of 62 cfs throughout the course provide a maximum of 138 cfs at the pump station. Five 25 cfs capacity pumps or six 20 cfs capacity pumps would handle even the single highest anticipated flow day with 9 cfs to the Delta and dust mitigation delivery. Where is the justification for a 150 cfs (with substantially more capacity) design?

16-82 **6-39 to 6-40, 6.4 POTENTIAL IMPACTS – PUMP STATION OPTION 2 (50 cfs):** Impact Assessment No. 2 appears to be far more logical than Impact Assessment No. 1, given reasonable evapotranspiration rates, percolation rates, and even the behavior of water. For example, it takes more time for water to flow through an unsaturated zone than a saturated zone (Pielou, 1998). Allowing the Delta to dry more during non-growth seasons and assuming that the freshwater lens can be quickly replenished is therefore unwarranted: pulse flows will take more time to saturate root zones and replenish the freshwater lens given drier conditions. No studies are available that indicate that reducing water flow to river deltas improves or maintains habitat. If a reduction in wetlands occurs (and that appears likely), the 150 cfs option will completely fail to achieve MOU goals; the 50 cfs option (with maximum 9 cfs baseflows) at least allows a possibility of salvaging the Delta and still maintaining 9 cfs average flows.

6.2.2 Proposed Delta Water Management

16-83 **6-16, 6.2.2, 2nd ¶:** How will “*annual seasonal habitat flows*” (as opposed to pulse flows) reach the Delta area under either pump station option?

16-84 **6-17 Second ¶ from bottom:** This paragraph states that a mapping error of 673 acres occurred; page 6-4 states that a mapping error of 515 acres occurred (i.e., 1,289 acres estimated minus second estimate of 774 acres = 515 acres). Which number is correct? How was the 673-acre figure calculated?

16-85 **6-20, Seasonal Habitat Flows, paragraph one, first sentence:** According to the DEIR/EIS, it is not likely that seasonal habitat flows will be greater than 150 cfs when they reach the pumpback station. Paragraph one on this page, however, states that “*LADWP will allow seasonal habitat flows in excess of the 150 cfs capacity pump station to bypass the pump station.*” This sentence conveys no information, and at worst, it implies that seasonal habitat flows will reach the Delta on a regular basis.

16-86 **6-20, last ¶:** If Ecosystem Sciences found that bypass flows during the seasonal habitat flow period would “*...provide a level of disturbance to riparian and wetland communities that will benefit the quality of habitat and is vital to the long-term health of the communities,*” (p. 6-20) and if the GBUAPCD believes that “*any additional water to the Delta has the potential to benefit wetlands (by improving soil salinity conditions) and/or birds (by maintaining aquatic habitat and associated invertebrates)*” (p. 6-36), what information did LADWP use to conclude that “*there are few, if any benefits that will result to the Delta from a short-term high flow every two years*” and that habitat flows can thus be eliminated? Is there a study that proves that there are few benefits to sporadic cyclical flooding or that additional water will not benefit the Delta? If so, how does that study reconcile its views with opposite views in the literature and opposite views cited in this DEIR/EIS?

16-87 **6-26, Seasonal habitat flow impacts:** This particular calculation of “*seasonal habitat flows that will bypass the 150 cfs station*” appears to assume no water loss to evapotranspiration, percolation, or other factors over the length of the Lower Owens River. Is such an assumption warranted?

BRINE POOL TRANSITION AREA IMPACTS

General Comments

16-88 DEIR/EIS Figures 6-1 through 6-11 and 11-1 clearly show the brine pool transition area (or at least a portion of it) within the Delta Habitat Area boundary. The MOU map (MOU Figure 3) showing the location of the Delta Habitat Area identifies it as the “approximate area.” Therefore, the brine pool transition area is a part of the LORP and the September 2000 modification of the Court Injunction allows release of water to this area to maintain, enhance and create new habitat. Maintaining existing flows would avoid the identified impact. Secondly, LADWP and the State could seek another modification to the Court Injunction to allow the continuation of existing flows and changes in timing of flows (necessary because of year-round release of water to the Delta under the LORP) to this area and thereby avoid the potential impacts. These are feasible and reasonable remedies for the potential degradation of the brine pool transition area.

11.3 EVALUATION OF CEQA ALTERNATIVES

11.3.3 Degradation of Brine Pool Transition Area Aquatic Habitats (Class I Impact)

Executive Summary Impact #5 – “*The amount of water flowing from the Delta Habitat Area to the brine pool transition will be less than existing flows, and as such, will result in a decrease in shorebird habitat in the brine pool transition area. LADWP concludes there is no feasible mitigation measure for this impact as a result of a State Court injunction.*”

Section 6.1.4 – The vital importance of the brine pool transition area is acknowledged, as follows: “*The playa within and near the Delta provides greater resources than other playa areas around Owens Lake due to the proximity of freshwater from the river, which supports a greater variety of invertebrate species (food for birds) and provides water for thermoregulation and salt balance for birds.*”

16-89 Section 6.3 – Impacts to the Brine Pool Transition page 6-28 - Under present conditions more water is reaching the Delta and brine pool transition than will be the case after implementation of the LORP because under provisions of the MOU only a baseflow flow between 6-9 cfs and 4 short term pulse flows between 20-30 cfs will be permitted to pass the pumpback station. It has been estimated that after the pump station is built 35% less water will pass to the delta than presently (see Section 6.3.2). Additional water will reach the delta during the one seasonal habitat flow, but in significant volume only if a 50 cfs pump station is built.

Under present conditions little water passes from the delta through the transition zone to the brine pool during the summer months because of ET demands in the delta. After controlled conditions are established, in addition to the lack of water in the summer, the volume of water passing through the transition zone to the brine pool will also be reduced in the winter from current levels due to the overall decrease flow to the delta. This will in all likelihood result in a decrease in shorebird habitat in the brine pool transition area, which is considered, to be a significant but not mitigable impact – Class I. The reason given that mitigation is not feasible is that the brine pool transition is not within the designated LORP area. Therefore, if LADWP allowed more water to pass to this area in excess to what is needed to achieve the goals of the LORP it would be in violation of court injunctions (People vs. City of Los

Angeles, Riverside Superior Court No. 34042) which prohibits LA from diverting water from its aqueduct system onto Owens Lake except for the purpose of implementing the LORP.

16-89 The foregoing is really a very specious argument, for several reasons. First, while it may be easy to dismiss the brine pool transition area based on an interpretation of the fine points of law, to do so, in such a cavalier fashion, is an affront to the noble purpose of the LORP - to complete a major habitat restoration in compensation for the long term environmental degradation as a result of LADWP's groundwater pumping for water export activities. We recognize that this small area has nationally recognized value as habitat for migrating shorebirds and waterfowl and should be an integral part of the Delta Habitat Area. Why would it not be feasible to again amend the Court Injunction prohibiting the discharge of water onto Owens Lake if that is what is necessary?

16-90 Secondly, as the differing opinions expressed in the DEIR/EIS concerning the impacts of the 50cfs versus the 150 cfs pump station demonstrate (Section 6.3 and 6.4), it is possible that as a result of the reduced flows (compared to present conditions) to the delta after implementation of the LORP, environmental conditions may actually deteriorate rather than improve. Therefore, it seems prudent to err on the conservative side and provide as much water as possible to the Delta and brine pool transition by maintaining a maximum 9 cfs baseflow and build the smaller 50 cfs capacity pump station to allow more robust seasonal habitat flows to pass into the delta. Then, instead of operating the Delta flow regime based on allowing a maximum outflow to the brine pool of 0.5 cfs, the flow regime should be managed with the object of allowing as much flow into this area as possible in order to maintain the maximum possible shorebird habitat (within the overall flow limitations of the MOU).

NO ACTIVE FLOW MANAGEMENT

11.4 EVALUATION OF NEPA ALTERNATIVES

11.4.2 Delta Modifications

16-91 This alternative would allow physical modifications of the delta to distribute flows in order to increase water spreading, create seasonal ponds, increase infiltration and enhance wetlands among other benefits. A conceptual plan is presented in Figure 11.1. It is not considered feasible because of the loss of 19 acres due to construction of roads, berms and diversion structures, doubts about the longevity of the structures, doubts about the benefits of the structures and supposed conflicts between the MOU goal of producing self-sustaining habitats and the use of active management and intervention approaches. We support the views expressed by URL Corporation (Section 6.3.2 and 6.4.2) that because flows to the delta will be less under the LORP than at present, it would be prudent to consider managing the available flows efficiently in an active fashion to distribute water as widely as possible, prevent flooding in undesirable areas, create as much disturbance as possible during seasonal habitat flows and prevent rise of underlying saline waters. Nothing in the MOU specifically prohibits an active management approach and use of manmade structures to achieve project goals. We believe the LORP should espouse the active approach for achieving project success rather than find justifications for doing the minimum. A specific plan as shown in Figure 11-1 is good starting point for planning purposes, but is not considered necessary. Later, after some period of project history is obtained, it can be determined what sort of structures or intervention, if any, might be desirable.

OTHER COMMENTS

16-92 **2-40, Sediment management:** Why are sediments being deposited in an oxbow area for dewatering? This is an avoidable impact on a highly productive riparian area, and sediments could be deposited elsewhere. Regardless of how much new habitat it creates, the LORP is meant to mitigate impacts that

- 16-92 | occurred between 1970 and 1990, not create new damage to the remnants of still extant riparian habitat. Destruction of wetlands with this project should be avoided whenever possible, given 1) the time gap between the destruction of old habitat and the creation of new habitat, which harms wildlife even beyond original damage, and 2) the fact that the LORP is meant to mitigate old damage, not create new damage. As for long-term storage after dewatering, sediment could be used in revegetation projects.
- 16-93 | **2-40, 2.4.3.1:** A new power line will be put out to the pumpback station. No mention is made of the ecological implications of this action. The most obvious is that the Common Raven (*Corvus corax*), a proven predator of Snowy Plover and other species, will use these poles for perches and nest supports. Well known and easily installed are the spike-like “perch preventers” that need to be added to the power line standards. Is LADWP willing to modify the power lines to reduce predation on the Federally Threatened Snowy Plover?
- 16-94 | **6-3, 6.1.2, Uses of the Delta, first ¶, second sentence:** This is not a sentence and should be clarified.
6-3 last ¶, second sentence, typographic note: correct “he” to “the.”
6-8, typographic note, first sentence: insert space between “photos” and “is”
- 16-95 | **6-10, footnotes one and two:** If the high discharges from the Keeler gauge in 1968 and 1982-83 were due to a natural phenomenon (e.g., high snow year), then that water should be used to calculate averages (or means, as opposed to medians) or a discussion of their implications to the Delta system should be included. High discharges (even when they are several standard deviations removed) should not be entirely excluded from analysis because those discharges contributed to conditions in the Delta, just as low-water years and cyclical flooding would.
- 16-96 | **6-38, 6.3.2.4, second ¶ from bottom:** If the bank has been manually breached, can it be manually repaired so that flows will not be diverted? This is not inconsistent with other LORP practices, given that many berms, for example, will be built in the Blackrock area.
- 16-97 | **6-44 to 6-45, 6.4.2.3, Potential for By-Pass Flows to be Conveyed Outside the Delta:** If shoring up the west bank is not significantly different from creating a manmade breach or from creating new berms, dikes, forebays, and pumpback stations, then why is shoring up or berming the bank dismissed as being contrary to natural riverine and deltaic processes when the other actions (past and future) are not? Given that the breach is not a natural one, and given that other less natural modifications with more impact will occur throughout the LORP, adding a berm or otherwise modifying the western bank seems consistent and logical to avoid such a significant impact.
- 16-98 | **6-48, 6.6:** There should be a separate monitoring and control program for the potential spread of saltcedar and other noxious weeds on the Delta. Additional wetting, at any time of year, will undoubtedly lead to the spread of saltcedar, which is present in the Delta area. See additional comments for Section 10.4.1.

4. BLACKROCK WATERFOWL HABITAT AREA

GENERAL COMMENTS

16-99 The Fish and Wildlife section of the Blackrock chapter is one page long. It has four sentences on Existing
Conditions, nine on Potential Impacts, and one on Mitigation Measures. This large and complex physical
unit requires more than the superficial attention it received. Threatened and Endangered Species, Species
of Special Concern, and Habitat Indicator Species were omitted and all require comprehensive
16-100 management plans to meet the needs of the species. Other topics that were omitted but need to be
16-101 thoroughly examined are tule and deleterious species control. Potential impacts by mosquitoes, noxious
16-102 weeds and saltcedar were briefly mentioned but no management plans were offered to control them. No
16-103 recreation plan was included for an area that is certain to attract recreationists. Monitoring and Adaptive
Management were not included. The superficial treatment given to the Blackrock area is unacceptable and
needs to be redone.

The MOU (II.C.4) states, "*Diverse natural habitats will be created and maintained through flow and land management, to the extent feasible, consistent with the needs of the 'habitat indicator species' for the Blackrock Waterfowl Habitat Area.*" In the MOU and in the EIR (2-48) the Owens pupfish and Owens tui chub are listed as habitat indicator species. Neither the Project Description chapter (2.0) nor the Blackrock Waterfowl Habitat Area chapter (7.0) identify the needs of these habitat indicator species of fish, and no management plans are presented that explain how these fish are going to be provided for as required by the MOU. The habitat planned for the Blackrock area will be compatible with the biological requirements for both species if

16-104 very small wet corridors are provided during the wetland water drawdowns and facilities are planned to prevent predatory fish from entering the Blackrock system. These are feasible and reasonable suggestions that meet the needs of these fish. The LORP Ecosystem Management Plan states that this would conflict with LORP goals because the wetland water drawdowns could constitute a 'take' of endangered fishes. This is a mischaracterization and misinterpretation of the intent of any law to protect a species. If a population thrives and gains from management that includes the loss of some individuals, the benefit of the population as a whole outweighs the harm of the few. The pupfish is a state and federally endangered species and the law guarantees its legal protection. We support the MOU goals and ask that the Blackrock area plans include wetland development, waterfowl habitat enhancement and a native fish recovery area. The DEIR/EIS (2-50) states, "*If suitable habitat were created in this area, any actions to introduce these species in the Blackrock area would only occur under the provisions of a Section 10(a) permit and Habitat Conservation Plan ('HCP') approved by the U.S. Fish and Wildlife Service.*" It is our belief that suitable habitat will be created and we encourage LADWP to pursue a Section 10(a) permit and Habitat Conservation Plan and introduce pupfish and chub into the Blackrock area. The DEIR/EIS states, (2-61,2.7.1) "*The LORP conservation plan for T&E species is designed to provide future habitat opportunities for listed species, and would complement the approach in the MSRP*" [Multi-Species Recovery Plan prepared in 1999 by USFWS]. If the goals of the MOU for the Blackrock area are successful, the "*future habitat opportunities for listed species*" would be accomplished. If the introduction of the pupfish and chub occurred, LADWP would be the beneficiary of positive public relations at little cost.

16-105 Technical Memoranda #19, Riparian Wildlife Management and #20, Special Status Species Accounts contain much information regarding riparian wildlife habitat requirements. Why was this information not used to prepare the Ecosystem Management Plan? The monitoring and adaptive management plans for

16-106 habitat indicator species are woefully inadequate. This does not meet the intent of the MOU that monitoring and adaptive management will be used to "*ensure the project's successful implementation, and/or the attainment of the project goals.*"

16-107 The MOU (II.C.4) states, “*The goal [for the Blackrock Waterfowl Habitat Area] is to maintain this waterfowl habitat area to provide the opportunity for the establishment of resident and migratory waterfowl populations as described in the EIR and to provide habitat for other native species*” The DEIR/EIS allocates one page (7-20 to 7-21) to Fish and Wildlife (7.2). The three subheadings are existing conditions, potential impacts, and mitigation measures. Nowhere is there a list of the plants and animals that use the Blackrock area, nowhere is there a discussion of the Threatened and Endangered species found in the Blackrock area and the management planned for them, and nowhere is there a discussion of the species of special concern that use the Blackrock area and the management planned for them. Threatened & Endangered species and species of special concern are some of the “*other native species*” that would benefit from the habitat provided, and because of their federal and state status should be considered. In Mitigation Measures (7-21, 7.2.3) LADWP states, “*No adverse impacts to wildlife are anticipated.*” If the flooding and drying cycles occur during the breeding season there will be adverse impacts to ground nesting bird eggs and young not yet fledged. LADWP needs to develop a water management plan that would anticipate these adverse impacts. If tule and cowbird control are not managed, and they were not discussed in this chapter, there are severe negative impacts to wildlife with which LADWP will need to deal. The invasion of noxious weeds, saltcedar, and recreationists all have the potential to have significant impacts on wildlife yet there was only cursory attention to weeds and saltcedar and none on recreationists.

16-108
16-109
16-110 The MOU (II.C.4) states, “*Diverse natural habitats will be created and maintained through flow and land management, to the extent feasible, consistent with the needs of the ‘habitat indicator species’ for the Blackrock Waterfowl Habitat.*” Habitat Indicator Species are listed in the Project Description (2-57, 2.6.2). They were chosen because their habitat usage differs. Some species require large trees, some require dense understory, some require open water with little vegetation, others require open water with tules, some require tree cavities, some require marsh vegetation, etc. The DEIR/EIS (2-72, Table 2-18) states that Project Objectives are to “[d]evelop native riparian and wetlands habitats important to the ‘habitat indicator species’ and special status species” but nowhere is there a description of the types of habitats indicator species of special status species need. The DEIR/EIS includes no management plans for habitat indicator species in the Blackrock Waterfowl Habitat Area. If the needs of these indicator species are not known, how can an assessment be made regarding the success of meeting them?

16-112 It is not clear whether water in the Blackrock area will be primarily stagnant or allowed to flow from unit to unit. Allowing water to flow through the area may yield a more biologically productive wetland (Mitsch & Gosselink, 1993) and may generate less salinity in the long term. If the water remains within one unit until it dries up, what provision has LADWP made for the gradual increase in water salinity and the impact that will have on plants and animals?

16-113 The Proposed Flooding Regime (2-50, 2.5.4) discusses the flooding cycles but omits the timing of the beginning of a flood cycle. Under no circumstances should a flooding cycle occur during the breeding season due to the significant negative impact that would occur to ground nesting birds with eggs or unfledged young.

BIRDS

16-114 **General Comments:** Three of the native birds listed in the Project Description (2-58, 2.6.2) are also State Species of Special Concern. The Least Bittern (*Ixobrychus exilis*) is a known breeder at Billy Lake (Western Birds, 26:165). The Northern Harrier (*Circus cyaneus*) breeds in dense tules and is a known breeder at nearby Cartago Marsh (T. & J. Heindel, pers. data). While data are lacking to prove breeding at Blackrock, there is no reason to believe that this species has never bred there. The Osprey (*Pandion*

16-114 *haliaetus*) is a migrant and could possibly become a breeder if the required elements were present (e.g. open water, fish supply, and trees with snags for nests and perches). Management plans for the Blackrock area must include provisions that address the needs of these species as well as a plan for Native Fish and Native Birds as required by the MOU.

16-115 **2-48 and 2-57, 2.5.2 and 2.6.2 Native Birds:** “Rails” should be more specific. Six species have been found in the county and four of those species have been found in the Owens Valley. The three that are impacted by the LORP are the Virginia Rail (*Rallus limicola*), Sora (*Porzana carolina*), and American Coot (*Fulica americana*).

16-116 **7-20, 7.2.1, ¶ 2, Existing Conditions:** The statement, “*Based on available information, no state or federally listed species or other special status species occur at the Blackrock Waterfowl Habitat Area*” is in error. These Threatened & Endangered species use the area during spring and fall migration: Swainson’s Hawk (*Buteo swainsoni*), Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*), Willow Flycatcher (*Empidonax traillii*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and historically Least Bell’s Vireo (*Vireo bellii pusillus*). Three records of the vireo occurring in the Owens Valley in fall 2002 suggest that colonists from the now-recovering populations to the south may be investigating the area for possible breeding sites. A little over a century ago they were regular breeders along the Owens River (Fisher 1893). With habitat enhancement providing dense willow and cottonwood structure, the breeding of these five species is a distinct probability and, therefore, requires inclusion in a wildlife management plan.

16-117 **7-21, 7.2.2, ¶ 1, Potential Impacts:** The statement, “*These actions would increase opportunities for resident, migratory, and over wintering birds (primarily shorebirds and waterfowl)*” is misleading. Shorebirds are not a primary over wintering assemblage of birds at Blackrock while waterfowl are. Owens Lake and the delta contain prime habitat for shorebirds and are the primary regions for over wintering shorebirds.

FISH

16-118 **2-30, 2.3.11, Threatened and Endangered Species:** Ecosystem Sciences believes that suitable habitat will be maintained and created in the river as a result of the LORP for the Owens pupfish and Owens tui chub. This statement is erroneous. The river will contain non-native game fish that prey on native fish and are responsible for the significant decline in the populations of Owens pupfish and Owens tui chub. This is no doubt the reason the “*creation of open water habitat...isolated from the river*” is the objective for endangered fish species habitat in the Alternative Section 11.4.6 discussed below.

16-119 **11.22, 11.4.6, Native Fish in the Blackrock Waterfowl Habitat Area:** While the objective of this alternative is to provide habitat for endangered fish species in Blackrock it never states exactly where the fish would occur. Where is the “*creation of open water habitat that is isolated from the river*” planned? Why does LADWP consider the USFWS recovery plan for native fish species of the Owens Basin (1998) infeasible? What are the “*significant obstacles to...creating and maintaining flow connections between the Blackrock management units?*”

LAND MANAGEMENT

16-120 **General Comment:** LADWP has denied the public access to the grazing management plans for the LORP, thus precluding adequate evaluation. No description of trends and conditions by map and text are shown for the leases, thereby preventing access to fundamental baseline data for future comparison. This

- 16-120 makes it difficult to assess change (positive or negative) to the habitats due to grazing. Are the goals of the LORP and MOU being met?
- 16-121 **2-66, 2.8.2.1, Twin Lakes Lease:** Why is there no five- or ten- year non-use provision in this lease, especially in the riparian pasture? Is the upper AUM range 2,313 or 2,113? Why are impacts to nesting bird species (ground and understory nesters) not addressed?
- 16-122 **2-67, 2.8.2.2, Blackrock Lease:** Why is there no five- or ten- year non-use provision in this lease, especially in the riparian pasture? Why is the lease for 8 months instead of 7 months like Twin Lakes? Why are impacts to nesting bird species (ground and understory nesters) not addressed?
- 16-123 **2-68, Last ¶, Future Management:** “*Grazing will be prohibited within the 847-acre Riparian Exclosure for at least 10 years.*” What happens after ten years?
- 16-124 **7-14, 7.1.2, ¶ 4, Winterton Management Unit:** How often are the flooded wetlands going to be monitored to document overall species composition, cover, and structure? Who is going to monitor these wetlands? How are the data going to be reported?
- 16-125 **7-15, 7.1.2, ¶ 1, Thibaut Management Unit:** Flooding during both cycle 1 and 2 will occur unless adaptive management determines that the unit should be converted to a dry phase. What are the triggers that would result in the unit being converted to a dry phase?
- 16-126 **7-19, 7.1.3.3, Construction of Berms, Ditches, and Spillgates:** Will berms prevent flow-through of water or block drainage of wetland areas?

WATER MANAGEMENT

- 16-127 **2-47, 2.5.1, ¶1: Background:** Does “*flooding*” mean that the surface is entirely or partially covered with water? To what depth? Or does “*flooding*” mean soil saturation with incomplete coverage in some areas? The meaning is unclear and is important to know in order to analyze the biological impacts.
- 16-128 **2-54, Table 2-16, Existing and Future Water Requirements in the Blackrock Waterfowl Habitat Area:** What is the long-term estimated future annual water use in normal runoff years for the Winterton Management Unit?
- 16-129 **2-55, 2.5.10, ¶ 1, sentence 1:** The text states that Thibaut Management Unit receives water from the Thibaut Spillgate but Table 2.16 (p. 2-54) indicates that Thibaut also receives water from the Winterton Diversion. This needs clarification with either the Table corrected or the text corrected.
- 16-130 **7-10, 7.1.2, last ¶, Seasonal Water Level Fluctuations:** A mathematical definition of “*in general proportion*” would be useful here, along with a description of limits to that rule (e.g., is there any point at which, below a certain percentage of runoff, no new flooding will occur?) Presumably, flooding will not be increased above a certain limit in above average years, but allowing for that possibility would also increase flexibility.
- 16-131 **7-15, 7.1.2, ¶ 3 & 4, Dry Year Water Supply:** There is not a chart or table reflecting the Owens Valley annual runoff rates for the last 73 years even though LADWP and ICWD have these data. Why was this not included in the DEIR/EIS? This is crucial to understanding the limits, in dry years, in providing water for the LORP, drought and wet cycle length, seasonal habitat flow estimates, etc. In not providing the data, with explanations if warranted, it appears as though LADWP has something to hide.

16-132 | 7-17, 7.1.3.2, ¶ 1, **Habitat Conversion:** The DEIR/EIS states that the semi-permanent wetlands will be flooded for several years. What studies were used to determine that a flood of several years would be beneficial? The DEIR/EIS continues that the wetlands will then be dried to remove emergent vegetation. How long will they be allowed to dry? What studies were used to determine how long vegetation could be allowed to dry before the disadvantages outweigh the benefits?

16-133 | 7-17, 7.1.3.2, ¶ 4, **last sentence, Habitat Conversion:** How did LADWP conclude, “*The most common habitats that would be created due to the proposed flooding regime are expected to be open water and alkali marsh.*” Based on the statement that the “*waterbodies would have depths ranging from a few inches to several feet*” it would seem that cattails and bulrushes would be far more common than alkali marsh.

16-134 | 11-23, 11.4.7, **Modified Flooding Regime in Blackrock:** The modified flooding regime as suggested by CDFG should increase the success of the LORP in the Blackrock area. We agree that the proposed lengths of wet and dry cycles are excessive, that the dry cycle should be only one to two years in duration, that the near continuous flooding for more than four years could potentially inhibit habitat diversity, that waterfowl would benefit from more than 500 acres of flooded wetlands in wet years, that the amount of water in all flooded units would be reduced in dry years, that an alternative short-term flooding-drying regime that would more closely mimic natural conditions would be beneficial, and that flooding should occur from September to April and partial drawdowns from April to September.

TULE MANAGEMENT

16-135 | 2-50, 2.5.3, ¶ 7, and 7-9, ¶ 3, and 7-13, ¶ 3, and 7-14, ¶ 2, 7.1.2, **Controlled Burns:** The use of controlled burns as a tool to manage vegetation in the Blackrock Wildlife Habitat Area needs to be more specific. The DEIR/EIS states they would be used only “*on a limited basis and only if necessary*” but omits what the triggers are to determine when it is necessary and what the timeframe would be. Burns should only occur between November and February. Special care must be given to planning a burn that would not present problems to the owls that would be nesting in willows and cottonwoods as they have begun by January. In early February some birds are beginning to set up territories and by March they are building nests with some species already laying eggs. Controlled burning should not be conducted before late November due to the extremely negative effect it would have on migrants who rely on cattails and bulrushes for forage and shelter. Some migrants are still passing through in November but by December the few lingerers are in such small numbers that burning would not present a danger. Controlled burning is required to insure that cattails and bulrushes do not overtake the habitat and so is supported but only under the most careful planning.

MOSQUITO MANAGEMENT

16-136 | 7-20, 7.1.3.5, **Potential Impacts-Mosquitoes:** The mosquito problem is a Class II Impact; that is, while significant it can be mitigated. It was not discussed in the Mitigation Measures. A mitigation plan should be included detailing the steps that will be taken to control mosquitoes in the Blackrock area and they should include the introduction of Mosquito fish and installation of bat houses throughout the wetlands of Blackrock.

SALT CEDAR MANAGEMENT

16-137 | 7-20, 7.1.3.5, **Potential Impacts-Noxious Plant Species and Saltcedar:** Why is there no management plan regarding the control of the invasive saltcedar? Without adequate saltcedar control there will not be

16-137 healthy functioning ecosystems, the main goal of the LORP. Funding Option #2 should cover the costs of the full implementation of the LORP including mitigation measure V-2, control of saltcedar in the LORP areas.

NOXIOUS WEED MANAGEMENT

16-138 7-20, 7.1.4: **Mitigation Measure:** Mitigation Measure B-1 states that disturbed areas will be seeded with "*native or naturalized grasses and shrubs common to the valley...*" "Naturalized" species may include invasive, undesirable species that should not be used. Research has demonstrated that seeding with locally collected native plant seeds is more effective than using seed from outside sources (Miller and Libby, 1989). The DEIR/EIS should list specific local native species that will be used to revegetate disturbed upland habitats and provide clarification on who will be responsible for monitoring and mitigation in this area.

16-139 "*The colonization by non-native weeds shall be inhibited by weed control for three years after construction.*" What weed control is going to be used? What happens to non-native weed control after three years?

GRAZING MANAGEMENT

16-140 Why is there no management plan regarding the impact of grazing on natural habitats in the Blackrock area? LADWP has denied access to lessee grazing management plans. Adequate analysis is impossible without those critical documents. Adjacent land managers such as the USFS and BLM provide free and open access to grazing documents in order to facilitate full public review and so should LADWP.

RECREATION PLAN

16-141 There are no recreation plans for this area. A future recreation plan is highly desirable. A good faith effort must be made to schedule one immediately in order to ensure protection for the LORP from significant impacts that can be reasonably expected. What is going to be done to meet the needs of the public for access to fishing areas, trash and toilet facilities, roads and parking lots? It is far more difficult to implement a recreation plan after the recreationists have destroyed the area than it is to plan ahead. A comprehensive recreation plan must be developed for this area, as visitors certainly will use it.

MONITORING AND ADAPTIVE MANAGEMENT

16-142 Monitoring and adaptive management are prominently mentioned in the MOU but are missing from this chapter on Blackrock. The lack of monitoring violates CEQA Guideline 15147 which requires "*relevant information sufficient to permit full assessment of significant environmental impacts...*" Without monitoring, there is no relevant information and that is a violation. To provide for diverse natural habitats, as required by the MOU, management plans will have to be far more complex than turning the water on and off. The lack of monitoring and adaptive management plans indicates a lack of commitment on the part of LADWP to the success of this part of the LORP. The MOU (II.E) defines 'adaptive management' as a "*method for managing the LORP that provides for modifying project management to ensure the project's successful implementation... Should the reported information reveal that adaptive modifications to the LORP management are necessary to ensure the successful implementation of the project...such adaptive modifications will be made.*" It does not say "if feasible", "if warranted", or "if funding is available." It says the modifications will be made. It is clear that CEQA requires the monitoring and the MOU requires the modifications.

MISCELLANEOUS

16-143 Throughout the Project Description of the DEIR/EIS (2-49, 2-51) the MOU is quoted “*when the runoff is forecasted to be less than average, the water supply will be reduced in general proportion to the forecasted runoff in the watershed.*” The phrase “*in general proportion*” needs a mathematical definition.

16-144 2-50, ¶5 When will the Habitat Conservation Plan be prepared for Blackrock?

TYPOGRAPHIC ERRORS

2-54 Table 2-16: Delete “a” in the phrase “in a Normal Runoff Years**” in the last column heading. A second asterisk should be added to the second line below the table so that it reads “**Water use for future wetlands...”

16-145 7-2, 7.1.1, ¶ 4, third sentence, Existing Conditions: insert “as” between “such” and “transmontane” to read “such as transmontane marsh”

7-4, 7.1.1, ¶ 4, sixth sentence, Desert sink scrub: Change “clumps or widely scattered” to “clumps of widely scattered”

7-5, 7.1.1, Last ¶, last sentence: Change “Base” to “Based”

16-146 7-13, 7.1.2, ¶ 3: The cited Technical Memorandum #17, Implementation of the Blackrock Waterfowl Habitat Area is incorrect. Technical Memorandum #17 is Alternative Rewatering Techniques while #18 is Blackrock Waterfowl Habitat Area Implementation. The reference was for additional precautions for using fire in the management unit. The only statement in the memo was that the burning should be implemented during the least sensitive time for ground nesting birds (mid-September through January). A tremendous number of migrants are passing through during September and October with numbers diminishing throughout November.

16-147 7-20, 7.1.3.4, ¶ 1, first sentence: Delete “is” and add a comma in “and stimulate the growth of saltcedar is a” to read “and stimulate the growth of saltcedar, a”

5. OFF RIVER LAKES AND PONDS

GENERAL COMMENTS

16-148 Of the four physical features of the LORP, the Off-River Lakes and Ponds received the least attention: two and one-half pages were given in the Project Description and three pages in the chapter devoted to Off-River Lakes and Ponds. The only topics discussed were background information, goals, water quality and water supply, fish, management approach and potential impacts. Major topics such as wildlife, including sensitive species, threatened and endangered species; habitat indicator species; grazing plans; and the control of cowbirds, tules, saltcedar, noxious weeds, and mosquitoes were missing. Monitoring of the Off-River Lakes and Ponds was not discussed; this violates CEQA Guideline 15147. Adaptive

16-149 Management of the Off-River Lakes and Ponds was not discussed; this violates the MOU's requirement to use adaptive management "to ensure the project's successful implementation and/or the attainment of the project goals."

16-150 The MOU (II.C.3) states, "The goal is to maintain and/or establish these off-river lakes and ponds to sustain diverse habitat for fisheries, waterfowl, shorebirds and other animals as described in the EIR." Neither the Project Description (2.6.2) nor the Chapter (8.0) devoted to Off-River Lakes and Ponds included management plans for waterfowl, shorebirds, or other animals as required. To provide for "diverse natural habitats" management plans will have to be far more complex than turning the water on and off in the Off-River Lakes and Ponds. The lack of a monitoring plan for Off-River Lakes and Ponds will make it difficult to assess potential damage to the area and, as such, will be in violation of the MOU.

The MOU (II.B) states, "The goal of the LORP is the establishment of a healthy, functioning Lower Owens River riverine-riparian ecosystem, and the establishment of healthy functioning ecosystems in the other physical features of the LORP, for the benefit of biodiversity and Threatened and Endangered Species." The lack of monitoring for Threatened and Endangered species or their habitat is in direct violation of one of the goals of the MOU. How is LADWP going to monitor and measure biodiversity within the LORP? The lack of a monitoring plan and the lack of adaptive management measures for the Off-River Lakes and Ponds indicates a lack of commitment on the part of LADWP to the success of this part of the LORP.

BIRDS

16-151 Threatened & Endangered bird species use the area during spring and fall migration and need to be addressed: Swainson's Hawk (*Buteo swainsoni*), Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*), Willow Flycatcher (*Empidonax traillii*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and historically Least Bell's Vireo (*Vireo bellii pusillus*). If willows develop dense clumps around the lakes and ponds the flycatchers and vireo could become breeders. Three records of the vireo occurred in the Owens Valley in the fall of 2002 indicating that colonists from the now recovering populations to the south may be investigating the area for possible breeding sites. They used to be regular breeders along the Owens River a century ago. These Threatened & Endangered species are some of the "other native species" that would benefit from the habitat provided and because of their federal and state status need to be considered. The management plan developed for Native Fish and Native Birds should include threatened and endangered birds.

16-152 2-57 & 2-58, 2.6.2, **Habitat Indicator Species:** The MOU (II.C.3) states, "...management, to the extent feasible, [will be] consistent with the needs of the 'habitat indicator species' for the Off-River Lakes and Ponds." Habitat Indicator Species are listed in the Project Description (2-57, 2.6.2). They were chosen because their habitat usage differs. Some species require large trees, some require dense understory, some

require open water with little vegetation, some require tree cavities, etc. The DEIR/EIS includes no management plans for habitat indicator species except non-native game fish in the Off-River Lakes and Ponds. The MOU did not state that only non-native game fish “habitat indicator species” require management in Off-River Lakes and Ponds, therefore, the lack of management plans for the rest of the “habitat indicator species” is in violation of the MOU.

16-152 Three of the native birds listed in the Project Description (2-58, 2.6.2) are also State Species of Special Concern. The Least Bittern (*Ixobrychus exilis*) is a known breeder at Billy Lake (Western Birds, 26:165). The Northern Harrier (*Circus cyaneus*) breeds in dense tules and is a known breeder at nearby Cartago Marsh (T. & J. Heindel, pers. data). While there are no data to prove breeding at Off-River Lakes and Ponds, there is no reason to believe that this species has never bred there, as the habitat is suitable. The Osprey (*Pandion haliaetus*) is a migrant and could possibly become a breeder if the required elements were present (e.g. open water, fish supply, and trees with snags for nests and perches). Management plans for Off-River Lakes and Ponds should include provisions that address the needs of these species as well as a plan for Native Fish and Native Birds as required by the MOU.

16-153 2-58, 2.6.2, Native birds: “Rails” should be more specific. Six species have been found in the county and four species have been found in the Owens Valley. The three that are impacted by the LORP are Virginia Rail (*Rallus limicola*), Sora (*Porzana carolina*), and American Coot (*Fulica americana*).

FISH

2-58, 2.6.3, Management Approach: “Ecosystem Sciences believes that habitat suitable for Owens pupfish and Owens tui chub will be created in the off-river lakes as part of the LORP.”

16-154 The chapter clearly states (8-1, 8.2) that the lakes and ponds have been enhanced to improve recreational opportunities with warmwater game fish (bass, blue gill, catfish) introduced to these waters to provide recreational angling. It is not “suitable” habitat for pupfish and chub if it contains predatory non-native game fish, which are the main culprits of the pupfish’s near extermination and contributory factors in the chub’s endangerment. Why did LADWP fail to discuss this problem in the Potential Impacts section (8-4)?

16-155 2-57, 2.6.2, Goals: “...maintain and/or establish these off-river lakes and ponds to sustain diverse habitat for fisheries, ...consistent with the needs of the ‘habitat indicator species’ for the off-river lakes and ponds.” Since off-river lakes and ponds will be continuous with the river, and since any non-native fish will presumably be able to migrate, meeting the needs of both non-native and native fish in off-river lakes and ponds has not been adequately addressed.

LAND MANAGEMENT

16-156 8-2, 8.2, ¶ 2, Flow Management: The MOU (II.C.3) states “Diverse natural habitats will be created and maintained through flow and land management...” LADWP discussed in detail flow management but omitted any discussion of land management. The lack of Off-River Lakes and Ponds land management is a violation of the MOU. The lack of a land management plan prevents the assessment of its potential for success. Although the DEIR/EIS states (8.2, ¶3), “off-channel [river] lakes and ponds are characterized by dense stands of tules along the perimeters, with depths of 6-12 feet” there are no plans for active management of cattails and bulrushes. LADWP admits that there is an “increasing problem of cattail and bulrush marsh around the perimeter of the lakes” and that it “is currently adversely affecting access to the lake for recreational fishing.” When LADWP suggests “this impact is not considered a part of the LORP, but instead is a management issue associated with ongoing practices of LADWP”, they

16-156 are being disingenuous and are directly violating the MOU as stated. In order to create and maintain diverse natural habitats the land management plan must include tule control. The fact that the tules are out of control before the LORP is being implemented is moot. In order to fulfill the MOU requirement tule control is mandatory. It does not matter that some tules were already there. They must be controlled in order to comply with the MOU.

TULE MANAGEMENT

16-157 2-58, 2.6.3, ¶4: Why are there no plans for active management of cattails and bulrushes at off-river lakes and ponds? What is to prevent them from filling in the edges, hampering access, as happens at Buckley Ponds near Bishop? It is not clear which lakes and ponds have the stated 6-12 foot depths. What is the deepest part of each lake and pond? Which lakes and ponds could be filled with tules providing no open water? While water depth prevents tules in the center of the deeper lakes and ponds it certainly does not provide the diverse natural habitats that are required by the MOU. The lack of tule management will condemn the off-river lakes and ponds to become low-grade habitat for only a small number of bird species. This is in direct violation of the MOU, (p. 9) which requires "*diverse natural habitats...be created.*"

16-158 In order for tule management to be successful, a well-developed plan of controlled burns should be implemented. Burns should occur between November and February. By March, birds are beginning to set up territories, build nests, and some species have already begun to lay eggs. Some migrants are still passing through in November but by December the few lingerers are in such small numbers that burning would not present a danger. Controlled burning is required to insure that cattails and bulrushes do not overtake the habitat and so is supported but only under the most careful planning.

MOSQUITO MANAGEMENT

16-159 The mosquito problem is a Class II Impact, that is, while significant it can be mitigated. Why is there no management plan in this chapter that would mitigate the problem? The plan should include the steps that will be taken to control mosquitoes in Off-River Lakes and Ponds and should incorporate the introduction of Mosquito fish into the lakes and ponds as well as the installation of bat boxes around the lakes and ponds.

SALT CEDAR MANAGEMENT

16-160 Why is there no management plan regarding the control of invasive saltcedar? Without adequate saltcedar control there will not be healthy functioning ecosystems, the main goal of the LORP. Funding Option #2 should cover the costs of the full implementation of the LORP including mitigation measure V-2, control of saltcedar in the LORP areas.

NOXIOUS WEED MANAGEMENT

16-161 Why is there no management plan regarding the control of noxious weeds? Current noxious weed control programs are designed and funded for current habitats. The LORP will create new habitats that will be susceptible to invasive noxious weeds. For successful implementation, the LORP should include a specific program for control of noxious weeds within the LORP area. If not, the DEIR/EIS should provide evidence that habitat goals of the LORP can be achieved without a fully funded noxious weed control program specifically designed for the LORP areas.

GRAZING MANAGEMENT

16-162 Why is there no management plan regarding the impact of grazing on natural habitats in the Off-River Lakes and Ponds? LADWP has denied access to lessee grazing management plans. It is difficult to impossible to assess potential damage to Off-River Lakes and Ponds due to grazing without assess to the management plan. Adjacent land managers such as the USFS and BLM provide free and open access to grazing documents in order to facilitate full public review and so should LADWP.

RECREATION PLAN

16-163 There are no recreation plans for this area. A “possible” future recreation plan is irresponsible. A good faith effort must be made to schedule one immediately in order to ensure protection for the LORP from significant impacts that can be reasonably expected. The time to design a recreation plan is before the recreationists do damage. What is going to be done to meet the needs of the public for trash and toilet facilities, parking areas, etc.?

6. MONITORING AND ADAPTIVE MANAGEMENT

THE IMPORTANCE OF MONITORING AND ADAPTIVE MANAGEMENT AND INAPPROPRIATE LIMITATIONS ON THEIR IMPLEMENTATION

Throughout the LORP DEIR/EIS the importance of a monitoring program and adaptive management is stressed. Three examples of this type of statement are provided below:

In the Executive Summary (p. S-1) it states, *“As provided in the MOU, the LORP will be adaptively managed. This means that, subject to funding limitations and consistency with the MOU, project management will be modified if ongoing monitoring and analysis reveal that such modification is necessary to ensure the successful implementation of the project and the attainment of the project goals.”*

16-164 Section 2.1.4, Approach to Ecosystem Management (p. 2-3), states, *“The LORP will be implemented with an adaptive management approach, characterized by Ecosystem Sciences in the LORP Plan as ‘learn as you go and make changes as needed.’ The LORP Plan acknowledges that this approach is experimental in nature and that failures may occur. However, the LORP Plan also specifies objectives to guide management decisions and ensure progress toward final goals. Under the proposed project, the effects of altered river flows, changed flooding patterns in wetland areas, and modified land management practices will be monitored on an ongoing basis to determine if the desired goals are being achieved, and if not, the implementation of adaptive management actions will be considered to the extent consistent with the MOU and subject to the funding limitations in Section 2.2.2. LADWP will rely on the monitoring program to detect potential adverse changes.”*

Section 2.2.3, Monitoring and Adaptive Management Program (p.2-10), states, *“An underlying principle of the LORP is adaptive management. The LORP plan provides that as restorative actions are implemented, the effects will be monitored closely to assess how nature and its processes respond to the actions. Under the project, adaptive management measures will be considered for implementation if they will better achieve the LORP goals. A decision to implement adaptive management measures will be predicated upon established objectives and decision criteria, as well as funding availability.”*

Monitoring and adaptive management are also prominently mentioned in the MOU. The preparation of a Monitoring and Reporting Plan as part of the LORP Ecosystem Management Plan is required in MOU Section II.A.2.e, Section II.E, and MOU Attachment A pages 7 and 11. Section II.E of the MOU requires the establishment of a monitoring and reporting plan and the use of adaptive management where necessary. It states (p. 18) that should the monitoring information *“reveal that adaptive modifications to the LORP management are necessary to ensure the successful implementation of the project, or the attainment of the LORP goals, such adaptive modifications will be made.”*

16-165 The statement that these modifications *“will be made”* is not qualified in the MOU as *“subject to funding limitations”* as is done in the three statements quoted above and in numerous other places in the LORP DEIR/EIS. Nor does the MOU state anywhere that these modifications *“will be considered”* as is stated on DEIR/EIS pages 2-3 and 2-10. The MOU says simply and plainly that where necessary they *“will be made.”* These DEIR/EIS statements about considering implementing adaptive management *“subject to funding limitations”* appear to be inappropriate limitations on actually implementing adaptive management as required by the MOU and should be removed from the DEIR/EIS.

16-166 It is troubling that these statements regarding funding limitations appear in the above DEIR/EIS sections that otherwise address the vital importance of monitoring and adaptive management to the successful implementation of the LORP. It is also very troubling to find in other sections of the DEIR/EIS

additional proposed actions which lead one to believe that the monitoring and adaptive management components of the plan will be given short shrift.. These include the:

- passive management approach (see our comments regarding the statement on p. 2-3, Section 2.1.4),
- “do nothing” policy in the event of a disagreement between LADWP and Inyo County over the need to implement an adaptive management measure (see our comments regarding p. 2-4 last paragraph, Section 2.2.1), and
- funding and staffing limitations (see several comments on Section 2.2.2).

Our specific comments regarding these various deficiencies in the DEIR/EIS will be provided in the following sections.

We conclude our general comments on this issue by emphasizing that the LORP is the most important mitigation identified in the 1991 EIR to offset the environmental damage caused by LADWP’s groundwater pumping. The project is large and complex. It is intended to enhance and expand existing riparian vegetation for the benefit of wildlife and improve recreational opportunities for the public in addition to other benefits. What will actually happen when water is re-introduced is highly speculative. It will be years before it is known what many of the consequences will be. Hence, in our opinion the monitoring and adaptive management elements of the plan are critically important to the eventual success of the project. Our opinion only reiterates what is stated in the draft document (see the passages quoted above and also p. 2-73, 2.10.1 ¶1). If monitoring and adaptive management are not properly employed then the whole basis for successful implementation of the project is seriously compromised.

PASSIVE MANAGEMENT APPROACH

2-3, Section 2.1.4 Approach to Ecosystem Restoration – general comments: Both the Agreement and the MOU contain provisions and statements which imply that to some extent an active management approach was envisioned to insure that LORP objectives would be attained. For example, Agreement Section XII, Lower Owens River, requires plans for water management, fisheries management, channel maintenance, tule and other plant control, and fish stocking. According to MOU Section II.B.1 within each of the four physical elements of the LORP one goal is to “*create and maintain through flow and land management, to the extent feasible, diverse natural habitats consistent with the needs of the habitat indicator species*” [emphasis ours].

However, what is meant by land management here was not defined in the MOU. Our organizations understood this to include several management options that were under discussion when the MOU was being negotiated, these included:

- control of tules through burning or mechanical means, possibly used to open up the channel prior to initiating flows or later if flow management was not enough to keep tules from dominating to the extent it could prevent reaching LORP goals;
- control of weeds, such as saltcedar, through eradication efforts to prevent them from compromising project goals;
- removal of beaver and beaver dams;
- construction of dykes or berms in the Delta and Blackrock areas to direct flow or contain flow for the benefit of the habitat indicator species and to create new habitats; and
- construction of riparian fencing and development of grazing management strategies that would protect the developing riparian habitats.

Several items in the LORP Action Plan work program (MOU, Attachment A) reinforced that understanding; these include items II.C.2 (Address beaver concerns, dams, and influence on hydrology),

II.C.4 (Address tule and muck management concerns), III.C.3 (Determine water control techniques), III.C.4 (Identify habitat improvement opportunities), and III.C.10 (Consider practical measures to minimize and control the abundance and extent of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP).

Nevertheless, in Section 2.1.4 of the DEIR/EIS, in what appears to be a statement of the overall management philosophy, a more passive approach is proposed. In the first paragraph, it is stated, that the LORP will be implemented "*with little intervention or manipulation*" through the "*proposed flows and land management actions.*" Whereas, the goals for the LORP as stated in the Agreement and the MOU are manifold, it appears that the plans to achieve those goals, particularly in the important river corridor and Delta areas, will be limited primarily to manipulations of water flows within prescribed limits and implementation of new grazing management to protect the developing riparian areas.

Elsewhere in the DEIR/EIS several rationales are presented in support of limited adaptive management. Funding limitations are cited for lack of tule management (p. 2-29), saltcedar management (p.2-29), riparian vegetation management (p. 2-29) and beaver dam removal (p. 2-27). Unsupported interpretations of the MOU are used to reject use of physical modifications to direct water flows in the Delta (p. 2-32). Findings contained in Technical Memoranda are cited, but not discussed, to support no actions to physically remove bottom sediments or muck (p. 2-28), remove tules (p. 2-29), or modify channels to provide connections between the river channel and off-river ponds (p. 2-28).

16-168

Despite the lofty objectives for the project the actual specific plans described in the DEIR/EIS are often very limited in their scope by this philosophy, as the following examples regarding the Riverine-Riparian System demonstrate:

- removal of stream obstructions except for the first two miles of channel below the Intake is limited to only the most significant obstacles (Section 2.3.6);
- removal of beaver dams is restricted to those dams significantly obstructing flows and is constrained by funding limitations (Section 2.3.7);
- fisheries management is not contemplated beyond what occurs naturally by re-introducing water into the river (Section 2.3.8);
- physical modifications of channels will not be performed to maintain communication between the river and off-river ponds and lakes (Section 2.3.8);
- removal of tules is contemplated only in rare instances due to funding limitations and the belief that shade from new trees will inhibit tule growth (Section 2.3.9)
saltcedar management is not planned and current removal programs are largely dependent on outside funding (Section 2.3.9);
- riparian vegetation management, at least initially, will be solely through flow alterations and if additional more aggressive adaptive management is required those measures will be dependent on funding limitations (Section 2.3.9).

In the case of the Delta Habitat Area all efforts to enhance existing riparian and wetland vegetation and create new habitat will be by manipulation of flows into the Delta within a very narrow and minimal range specified by the MOU. In fact, a statement is made on page 2-32, ¶4, "*As called for in the MOU and developed by Ecosystem Sciences, the restoration of the Delta Habitat Area will not include any physical modifications within the Delta, such as modifying existing channels, creating new channels, constructing berms, or otherwise modifying the topography to increase water spreading or ponding in the Delta.*" As explained above, this is not what we think is called for in the MOU, but it is called for by the management philosophy of using little intervention or manipulation that is presented in DEIR/EIS Section 2.1.4.

In contrast, more active management intervention is planned for the Blackrock Waterfowl Habitat Area, where in this case, the MOU apparently is interpreted to allow the modification of ditches and levees to permit year-to-year and seasonal manipulation of water regimes to periodically flood different areas (Section 2.1.4, ¶2).

16-168 In conclusion, contrary to statements in the DEIR/EIS (see p. 2-32, ¶4), there is nothing in the MOU which prohibits active intervention. We believe that it will be more likely rather than not that a more proactive approach will be necessary if the project goals are to be achieved. Adaptive management plans should be a prominent part of the overall DEIR/EIS and the discussion of them should not be relegated to the small print of a set of tables nor their implementation made contingent on the availability of outside funding. After all, the entire river environment has been dramatically altered and degraded by years of human activities, and the regime created after implementation of the LORP will still be a highly artificial one, far different from natural conditions. Therefore, while the creation of self-sustaining habitats that do not require active intervention is a worthy ultimate goal, the MOU states they should be "*as self-sustaining as possible*" (Section II.B.1). Given the flow limitations in the MOU, the artificial flow regime that will be established, and past impacts to the system (including drying of the channel for many decades and introduction of exotic species such as beaver, saltcedar and perennial pepperweed), it may not always be possible for the habitats to be completely self-sustaining and still meet the MOU goals. We believe that the "*self-sustaining as possible*" MOU provision means as self-sustaining as possible while still meeting the habitat goals for the project.

16-169 It seems likely that active adaptive management intervention beyond altering flow regimes may be necessary, particularly in the early phases of the project, in order to get processes going in the right direction or reverse negative trends. Indeed, monitoring and adaptive management may be the most important functions to ensure project success. Examples of adaptive measures which may likely be necessary include the following active interventions: suppression of invasive plants such as tules, perennial pepperweed and saltcedar which if uncontrolled could prevent reaching LORP goals; opening of blocked channels to spread water out of the main channel into the floodplain (see our comments on Section 4.3); creation of berms in the Delta to prevent flooding in undesirable areas or direct the limited water into desirable areas; planting and reintroduction of desirable plants and animal species; and removal of non-native species such as saltcedar and beaver. Actually, despite the overall management philosophy of using little intervention or manipulation articulated in this and other sections of the DEIR/EIS, most of these examples of active intervention are included in the DEIR/EIS adaptive management program (Section 2.10, p. 2-82, 2-88, 2-93, 2-95).

"DO NOTHING" DISPUTE RESOLUTION POLICY

16-170 **2-4, Section 2.2.1 Roles and Responsibilities of Involved Agencies – general comments:** According to this section, LADWP and Inyo County will implement the LORP through a joint effort. To the extent that funding is available, the County and LADWP will conduct the monitoring associated with the LORP, provide analysis of the technical data, and prepare an annual report that includes monitoring data, analysis and recommendations on the need for adaptive management actions.

The Inyo/Los Angeles Technical Group will review the annual report including monitoring data and adaptive management recommendations to determine if modifications are needed. The Technical Group will also, in December of each year, adopt an annual work program describing LORP work to be performed (including adaptive management) the following year.

In the event there is disagreement over the need to implement adaptive management measures or over content of the work program, the disagreement will be submitted to the Inyo County/Los Angeles

Standing Committee for resolution. If that fails the disagreement will be submitted to the governing boards of each entity for resolution. If the governing boards fail to reach agreement, the measure will not be adopted.

This dispute resolution approach means that one of the Parties can block a proposed action with impunity resulting in stalemate. As a result, it is possible that an adaptive measure needed in order to achieve a goal of the LORP might never be carried out. This is completely unacceptable. There are reasonably foreseeable measures needed such as salt cedar control, tule control, and beaver control that LADWP has made no real commitment to and without which the project may fail. Later annual work plans can be denied simply because LADWP does not agree with Inyo County. Recent years experience has shown little success in cooperation between LADWP and Inyo County, but a Dispute Resolution process in the Agreement and access to the courts has made possible the chance of resolution

This approach to dispute resolution in the DEIR/EIS is at variance with those mandated in the Agreement and the MOU. Under the terms of these earlier agreements, if no consensus can be reached through meetings, or mediation/arbitration, a dispute or claim can be taken to the Superior Court for a decision. Since the LORP was developed as a direct consequence of the Agreement and MOU, it seems appropriate that any disagreement arising about the administration of the LORP be handled in a similar fashion by permitting access to the courts for resolution if all else fails. However, clear performance standards should be established for achieving MOU goals. In turn, monitoring and adaptive management can be designed with science-based mechanisms and clearly defined trigger points for management actions to keep disagreements out of dispute resolution and the courts. A plan clearly defined in such a way would prevent MOU goals from being obstructed or derailed by simple disagreements.

FUNDING LIMITATIONS

2-5, Section 2.2.2 Costs and Funding Sources – general comments: It is noted that in the discussion of monitoring and adaptive management (p. S-1, 2-3) the performance of these functions is always conditioned on the availability of sufficient funding. A more complete discussion of the perceived funding shortfalls is found in the referenced Section 2.2.2 of the DEIR/EIS. According to this accounting, under the Agreement Inyo County will reimburse LADWP for implementation costs of the project up to a maximum of \$3.75 million. Implementation costs include construction of the pump station, modification of the Intake structure, various other construction costs, consulting fees, etc. Depending on whether a 50 cfs or 150 cfs pump station is built, estimated implementation costs are \$10 or \$13 million, respectively.

Post-implementation costs consisting of costs for operation and maintenance (excluding the pump station) and project monitoring for a 15-year period following the implementation phase is to be shared on an equal basis by Inyo County and LADWP under the Agreement. It is estimated 15 years of post-implementation operations and maintenance costs will be \$4.1 million and 15 years of monitoring will be \$2.6 million. These estimates do not include costs of implementing any adaptive management measures, which may be determined to be necessary. Nor do they include the costs to implement mitigation measures for impacts caused by the LORP.

According to the document, the source of all Inyo County's funding for its share of the project costs have come from grants by Federal agencies, primarily the EPA which currently total \$5,916,333. The scenario presented assumes these funds will be utilized for the County's share of implementation costs (\$3.75 million) and post implementation operations and maintenance costs (\$2.05 million), leaving only approximately \$120,000 for monitoring. And, because LADWP apparently intends, under Funding

Option One, to only match Inyo County's currently funded contribution, a total of only \$240,000 will be available for monitoring functions for a 15-year period. This represents a \$2,360,000 shortfall in funds estimated to be required for this vital activity.

In response to the potential shortfall in post-implementation funding LADWP has identified two alternative courses of action. Under Funding Option One LADWP would provide funds only to match the \$2.17 million currently available to the County for post-implementation operations, maintenance and monitoring. That would provide \$4.34 million. Under this scenario not all monitoring and adaptive management activities identified in the LORP would be implemented and it is possible not all project goals would be achieved.

Under Funding Option Two (p. 2-8, 2-9) "LADWP would fund *some or all*" of Inyo County's shortfall and *would seek recovery from the County for the share of the County's costs that are funded by LADWP. Under this alternative, all monitoring and adaptive management activities that are identified as part of the LORP will be implemented, even if LADWP is unable to recover all or part of (the) shortfall from the County.*"

16-171 An essential element of the LORP as defined in the MOU is to monitor what happens as the system develops and to use adaptive management if monitoring reveals that *adaptive modifications to the LORP management are necessary to ensure the successful implementation of the project, or the attainment of the LORP goals*" (MOU p.18). If monitoring and adaptive management are not properly employed, as appears likely under Funding Option One, then the whole basis for successful implementation of the project is seriously compromised. The Agreement does not require Inyo County to provide its share of the post-implementation costs up front, before the project begins. Inyo County has already acquired enough grant money to cover the majority of the estimated post-implementation costs. The County has time to acquire more funding before it is needed. Funding Option One sets an unnecessary and inadequate cap on the City's contribution, it may result in failure to achieve the LORP mitigation goals, and it may cause the project to have significant environmental impacts that otherwise might be avoidable. For these reasons Funding Option One must be completely rejected.

16-172 Inyo County and LADWP by signing the Agreement and MOU have committed themselves to the LORP. Furthermore, LADWP has committed to implement the LORP as a mitigation measure in the 1991 EIR. Nothing in those documents predicates completion of the project, or any part of the project, based on acquiring adequate outside funding. In the past three fiscal years LADWP has averaged \$132.2 million per year in net operating income from water services with an average of 38% of the water supply imported via the Los Angeles Aqueduct system (LADWP 2002a; LORP DEIR/EIS Table 10-6). Due to drought conditions over this period, the percentage of aqueduct water is fairly low compared to the 10-year average (1991-2001) of 52% (LORP DEIR/EIS Table 10-6). Additionally, in the same three-year period LADWP averaged \$477.2 million per year in net operating income from energy services (LADWP 2002b). The combined water and energy services total more than half a billion dollars per year in net operating income for LADWP. Any assertion of funding problems or "funding limitations" on their part is preposterous given the funding levels discussed in the DEIR/EIS.

16-173 LADWP has responsibility under the 1991 EIR and the MOU to implement the LORP as a mitigation project. To meet these responsibilities LADWP must commit itself to fully fund project costs, regardless of the County's present or future financial resources. We do understand that in developing feasible adaptive management measures that part of the MOU definition of feasible is *taking into account economic, environmental, legal, social and technological factors*" (MOU p. 3). In view of the present funding shortfall, Funding Option Two is the responsible approach, however, it should be restated to say LADWP would fund all of Inyo County's shortfall not *some or all of Inyo County's shortfall,*" as it does

16-173 | in the draft document (p. 2-8). With the “some or all” phrase in the policy, then the truth of the sentence following is in doubt. That sentence states (p. 2-9), “*Under this alternative, all monitoring and adaptive management activities that are identified as part of the LORP will be implemented, even if LADWP is unable to recover all or part of (the) shortfall from the County.*”

16-174 | For Inyo County’s part, it must commit itself to secure the additional funding required to carry out its obligations under the agreements it has signed. Funding options include finding other outside sources such as grants, utilizing inside County sources or by agreeing to a loan from LADWP. Furthermore, it should be pointed out that the post implementation cost estimates cover a 15-year period. There is nothing to prevent the Parties from utilizing existing funding for both operation, maintenance and

16-175 | monitoring during the early years of the post-implementation period, while pursuing additional monies for later years. Monitoring is too important to be accorded a lower priority for funding to operations and maintenance.

16-176 | The project should not be compromised by lack of funding. The DEIR/EIS should unequivocally state that the planned monitoring and adaptive measures will be carried out and what measures will be taken to ensure the required funding. It would be a travesty to start the project if essential components of the plan cannot or will not be fully carried out. This is particularly true relative to adaptive management. The lack of adequate funding for adaptive management is a very serious problem that is barely mentioned and is not fully addressed in the draft document.

16-177 | Finally, MOU Section E, Monitoring and Reporting Plan – Adaptive Management, specifies that a monitoring program will be described as part of the LORP and that in the event that “reported information reveal that adaptive modifications to the LORP management are necessary to ensure the successful implementation of the project, or attainment of the LORP goals, such adaptive management will be made.” These functions, therefore, are not optional, but are mandatory.

STAFFING LIMITATIONS

2-7, Section 2.2.2.4 Alternatives for Funding Post-Implementation Period Costs – general comments on staffing for monitoring functions: Under present plans LADWP staff would perform operation and maintenance functions and would be reimbursed by the County, whereas, monitoring responsibilities would be shared by LADWP and County staff.

16-178 | Firstly, it is troubling to read on page 2-8 that under the Funding Option One scenario monitoring activities of the County’s Water Department would be limited to the availability of existing department staff to undertake the activities to the extent of funding provided for the Water Department under the Agreement. Presumably, present staff will be expected to conduct the work of this major project in addition to their present duties under their present funding regime. This would appear to be difficult at best.

16-179 | Secondly, despite the funding shortfall discussed previously, on page 2-8 it is stated, “*LADWP and the County estimate that with the currently available funding and existing staff they could conduct all of the field monitoring identified in the monitoring tables associated with each element of the LORP (see Section 2-10).*” Any remote imagery required would be limited to that acquired periodically by LADWP for its lands in the Owens Valley or if excess operation and maintenance funds are available. Adaptive management would be limited to river flow alterations not requiring additional funding for their implementation. This discussion which appears to imply that adequate monitoring can be conducted with only 9.2% of required funding is just not credible.

The discussion regarding using existing staff for monitoring in the document needs clarification, as follows:

- What monitoring functions can reasonably be accomplished with present funding?
- If only field monitoring can be accomplished (as stated on p.2-8, second paragraph) by existing staff, how will data compilation, data analysis, development of adaptive management, and report writing be accomplished with the limited funds available under Funding Option One?
- What are the qualifications of existing staff to understand and conduct the hydrological and biological monitoring functions contemplated in the LORP?
- What are the qualifications of existing staff to make adaptive management decisions that affect the success of habitat restoration and accomplishment of project goals?
- Will outside expertise be desirable or necessary?

If people on the existing staffs at LADWP and Inyo County have the qualifications to conduct monitoring and make adaptive management decisions, it should be explained how much time they will be assigned to work on this new task, time that they will not have available to carry out their current tasks.

2.10 MONITORING AND ADAPTIVE MANAGEMENT

2-72, 2.10, ¶1, sentence 1: The statement about “*funding limitations*” is not consistent with Funding Option Two, identified in DEIR/EIS Section 2.2.2.4, and should be changed to reflect the fact there would be no such funding limitations under that option.

2-72, 2.10, ¶1, sentence 3: The statement that implementation of adaptive management measures will be considered is not consistent with the MOU Section II.E requirement that such measures “*will be made.*” The DEIR/EIS should make it clear that, under the conditions mentioned in this sentence, the only appropriate consideration is which adaptive measures to implement and how to implement them.

2-72, 2.10, ¶2: Only Funding Option One is discussed in this section. Another paragraph should be added to make it clear what the situation would be under Funding Option Two.

2-72 – 2-73, 2.10, ¶2, sentence 2: It states that all of the “*field monitoring*” could be conducted, but what about data compilation, data analysis, selection of adaptive measures, and report preparation? These are also essential tasks. Collecting the field data is only one part of having a monitoring and adaptive management program. These other tasks must be addressed.

2.10.1 Monitoring

2-73, 2.10.1 – proposed monitoring program does not conform to the requirements of the MOU: The text in Section 2.10.1 of the DEIR/EIS and the text in the Monitoring and Adaptive Management Plan chapter of the LORP Plan (Chapter 7) provide only very general introductory information, statements of purpose and approach, a description of the duration of the monitoring program, and identification of primary and secondary monitoring years. The DEIR/EIS and LORP Plan do not contain a monitoring plan or program as such, rather the four tables cited in ¶2 provide all of the specific descriptions of the proposed monitoring program. The information in these tables, in the text of Section 2.10.1, and in the LORP Plan (Chapter 7) does not conform to the requirements of the MOU, as explained below. A monitoring program must be included in the LORP DEIR/EIS that does conform to the MOU requirements.

MOU Section II.E (Monitoring and Reporting Plan - Adaptive Management) provides that the plan contain certain things. It states (p. 18), “*Monitoring sites and water flow gauging stations will be*

identified and a program for data collection, analysis, and reporting (which will identify pathways to allow feedback to indicate where adaptive modifications to management are necessary) will be described as part of this plan." In the LORP Action Plan (MOU, Attachment A) one element set forth is a Long-Term Monitoring and Reporting Program (p. 7). The Action Plan Work Program, part VI (Develop Long-Term Monitoring and Reporting Plan) includes the following tasks (p. 11) that directly relate to the MOU Section II.E monitoring requirements quoted above. The MOU (p. 7, Section II.A) provides that the LORP Plan will be prepared in accordance with the Action Plan. Contrary to this provision, the Action Plan part VI monitoring tasks A and B listed below are partially or wholly lacking in the final LORP Plan and the LORP Draft EIR/EIS:

"A. Select monitoring sites and establish protocols and intervals for data collection, analysis and reporting."

For the most part monitoring sites have not been identified and protocols for data collection, analysis and reporting have not been established. For example, rapid assessment surveys are mentioned as a monitoring method (p. 2-78, 2-84, 2-90, 2-94 and LORP Plan p. 70), but there is no description of what these surveys would consist of, where they would be done, what protocols would be used for data collection and analysis, and how the results would be reported. DEIR/EIS Section 2.10.1, ¶2, sentence 3, item 5 states that the monitoring program tables provide "a description of the proposed monitoring analysis and reporting to be conducted." In fact there is precious little in these tables describing the protocols for monitoring data analysis and reporting. Although the duration and frequency of each monitoring component is generally presented, there is little or nothing describing the data analysis and reporting other than statements that data will be analyzed or summarized and a report prepared. Additionally, nowhere do these tables have a description of the proposed data collection protocols. The proposed monitoring program is inadequate to meet the need to establish protocols for data collection, analysis and reporting that is required by the MOU (Section II.E and Attachment A, p.11, part VI.A).

"B. Select appropriate target species and habitat characteristics for monitoring."

The DEIR/EIS monitoring plan contains no plans to actually monitor any target species. Nor are there any plans to monitor any of the identified habitat indicator species, species that would appear to be obvious candidates for selection as monitoring target species. Additionally, there is no discussion of why target species were not selected for monitoring contrary to this provision of the Action Plan. Except for the fishery habitat surveys, the habitat characteristics that will be monitored have not been identified. There are some vague statements about measuring trends in habitat characteristics that relate to the "habitat indicator species," special status wildlife species, and plants of concern to Native Americans. But, there is no statement of what those habitat characteristics are and how they relate to the species of concern. The proposed monitoring program is inadequate to meet the need to select target species and habitat characteristics for monitoring that is required by the MOU (Section II.E and Attachment A, p.11, part VI.B).

2-73, 2.10.1– lack of baseline studies: In order to analyze habitat trends, the monitoring program should include pre-project baseline data collection and analysis, but it is not clear, particularly in the case of the vegetation and grazing surveys, if available data is sufficient for this purpose. According to the draft document certain baseline information has been obtained or will be prior to project startup, as follows:

- Water quality will be monitored prior to the first three seasonal habitat flows (p. 4-4)
- Hydraulic modeling analysis was conducted in 1993 to predict water surface elevation, velocities, and new floodplains for various flows (p. 4-8)
- Various studies are cited which provide existing water quality data (p. 4-17)

- Water quality changes due to beaver dam removal have been studied (p. 4-25)
- Vegetation along the river was studied by analysis of aerial photos in 1992 and was reportedly remapped in 2000 by White Horse Associates (p. 4-28)
- Certain studies are cited regarding status of game and native fish populations (p. 4-32)
- Certain studies are cited regarding status of wildlife and special status species (p. 4-42)
- Wetland vegetation in the Delta was studied periodically from 1944 to 2000 by means of photos (p. 6-8)
- At the beginning of LORP flows to the Delta the extent of water and vegetated wetlands will be mapped to describe the Delta baseline conditions (p. 6-15)
- Certain land elevation surveys and hydraulic modeling have been conducted in the Delta (p. 6-38)

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The monitoring program is deficient in not proposing that pre-project baseline data be collected at those sites to be monitored for riparian and wetland habitat development and grazing in all four LORP areas. The same is true in the case of recreational use. There is no baseline data documenting current, pre-project recreational use. No map of existing routes of travel to use as future reference when looking for impacts due to increased recreational use of various kinds. Also lacking is an analysis of areas now damaged through ORV use, fire, grazing, illegal dumps and litter, etc.

Why isn't a baseline survey of the river necessary to update maps which appear to date from the 1993 studies? Is baseline data on water levels at the off-river lakes and ponds available and isn't it necessary for monitoring project management? Is there a need for any baseline data at Blackrock since the area will be radically altered? We understand that certain baseline survey work was conducted this summer, but it does not appear to be mentioned in the DEIR/EIS. What is the status of that work? The DEIR/EIS should present data collection, analysis and reporting protocols and locations for baseline surveys as part of the monitoring plan to meet the requirements of the MOU (Section II.E and Attachment A, p.11, part VI.A).

2-73, 2.10.1, ¶1, sentence 2: It states that the purpose is to use adaptive management "*to create desirable habitat for habitat indicator species.*" But nowhere in the DEIR/EIS or in the LORP Plan is there any description of what the desirable habitats are for any of the identified habitat indicator species. The monitoring and adaptive management program must include a description of the desirable habitat characteristics that the project is trying to create and maintain.

16-187

2-73, 2.10.1, ¶1, sentence 3: There is little or no evidence in the DEIR/EIS or the LORP Plan to support the statement made here. There is no evidence in the monitoring and adaptive management program that desirable habitat characteristics have been identified, so how can the monitoring be "*designed to gauge*" them? There is no description in the monitoring program tables of what habitat characteristics would be measured that relate to the habitat indicator species, except for riverine fishery habitat surveys (p. 2-79). In several places (p. 2-78, 2-85, 2-91) the monitoring program tables simply state that the monitoring objective for habitat development related components will "*measure trends in habitat characteristics that relate to habitat indicator species, special status wildlife species, and plants of concern to Native Americans*", but there is no statement about what those characteristics are, which are desirable, how they will be measured, and how the data will be analyzed. These things must be included in order for the plan to comply with the requirements of MOU Section II.E and Attachment A, p.11, part VI.A.

16-188

The DEIR/EIS does not provide any information on how the monitoring data will be analyzed to determine the trends in habitat development. The LORP Plan (p. 71-72) contains a discussion of trend analysis, but fails to say anything specific or substantive related to the LORP monitoring data. How can the monitoring be designed "*to assess whether the system is favorably trending toward the project goal*" when there is no discussion in the DEIR/EIS how trends will be determined and little or no discussion of

16-188 the specific habitat parameters that will be measured? These things must be included in order for the plan to comply with the requirements of MOU Section II.E and Attachment A, p.11, part VI.A.

16-189 **2-73, 2.10.1, ¶1, sentence 6:** There should be some justification presented, other than Ecosystem Sciences belief, for using the fifteen year period. Why not 10 or 20 or 30? They should be able to articulate the criteria they used to determine that 15 years was the most appropriate period.

16-190 **2-73, 2.10.1, ¶1, sentence 7:** This sentence appears to imply that monitoring, other than for flow compliance, will end after a fifteen-year period. Is that the correct interpretation of what this sentence means? The DEIR/EIS should articulate a process by which a decision will be made regarding the monitoring program at the end of the fifteen-year period. In any case, there should be a discussion of criteria that will be used to determine any changes to the monitoring and adaptive management program at the end of the fifteen-year period. If the criteria that were used by Ecosystem Sciences to determine the fifteen-year period were articulated, then one could examine them to determine if the system was close to the state they thought it would be at the end of the period. Any decision to reduce or eliminate monitoring at the end of the period should be based on the state of the system and the latest trend analysis at that time. One issue it should address is what will happen if specific LORP habitat goals have not been met or if trends are in the wrong direction at the end of the period.

2.10.2 Adaptive Management

2-73, 2.10.2 – the proposed adaptive management program, with a few exceptions, does not have adequately defined monitoring triggers and does not conform to the requirements of the MOU:

16-191 The text in Section 2.10.2 of the DEIR/EIS and the text in the Monitoring and Adaptive Management Plan chapter of the LORP Plan (Chapter 7) provide only very general introductory information, statements of purpose and approach, and identification of stream flow and land use management as the most important management tools. The DEIR/EIS and LORP Plan do not contain an adaptive management plan or program as such, rather the four tables cited in ¶2 provide all of the specific descriptions of the proposed adaptive management program. The information in these tables, in the text of Section 2.10.2, and in the LORP Plan (Chapter 7) do not, with a few exceptions, provide adequately defined threshold levels derived from monitoring data that will trigger implementation, or even consideration of implementation, of particular adaptive management measures. These inadequacies do not allow the adaptive management program to identify where or at what point adaptive modifications to management will become necessary. This deficiency means that the adaptive management program does not conform to the requirements of the MOU, as explained below. An adaptive management program that provides real monitoring triggers with threshold levels must be included in the LORP.

16-192 MOU Section II.E (Monitoring and Reporting Plan - Adaptive Management) provides that the plan contain certain things. It states (p. 18), "*Monitoring sites and water flow gauging stations will be identified and a program for data collection, analysis, and reporting (which will identify pathways to allow feedback to indicate where adaptive modifications to management are necessary) will be described as part of this plan.*" The LORP Action Plan has similar provisions for monitoring to feedback to adaptive management; it states in part VI.D "*Perform adaptive management with monitoring results*" and in part VI. E "*Establish pathways to allow feedback from monitoring to adaptive management plans*" (MOU, Attachment A, p. 11).

These MOU provisions require that a connection be made between the monitoring program results and the adaptive management plan. DEIR/EIS Section 2.10.2, ¶2, sentence 2, item 4 states that the monitoring program table for each element of the LORP "*describes the general conditions (as observed through the monitoring program) that will trigger consideration of implementation of the measure.*" So,

16-192 the connection or feedback pathway between the monitoring and adaptive management programs is through these descriptions included as the “Monitoring Trigger” column in the adaptive management tables (Tables 2-19, 2-21, 2-23, 2-25).

16-193 The problem is, with a few exceptions for measures dealing with water quality and maintenance of baseflows, the descriptions of the monitoring trigger do not define threshold levels derived from monitoring data that will identify when it would trigger the management measure. The monitoring triggers are typically quite vague, using such phrases as “*not occurring to the extent expected*” and “*hindering achievement of habitat goals.*” Monitoring triggers should inform us when each adaptive measure would actually be implemented, most of those in the DEIR/EIS do not do so. The proposed adaptive management program is inadequate, these deficiencies need to be corrected in order to bring it into compliance with the provisions of MOU Section II.E and Attachment A, p.11, parts VI.D and E. See below some specific comments on the adaptive management tables.

16-194 **2-73, 2.10.2, ¶1, sentence 1-4:** This passage is the same as that quoted from 2.2.3, p. 2-10, above in our comments on “The Importance Of Monitoring And Adaptive Management And Inappropriate Limitations On Their Implementation.” Please refer to those comments regarding the use in this passage of the phrases “*will be considered*” and “*funding availability.*”

16-195 **2-73, 2.10.2, ¶1, sentence 4:** Sentence 4 also states, “*A decision to implement adaptive management measures will be predicated upon established objectives and decision criteria...*” This is a good idea, but the proposed monitoring and adaptive management plan does not generally present clear objectives and decision criteria in order to carry through on it. Decision criteria related to clear and specific objectives should be presented and discussed in the monitoring and adaptive management program and be used in considering when and how to implement an adaptive measure and which one to implement. Unfortunately, such decision criteria to guide these considerations are sorely lacking (see our comments following on Tables 2-18 through 2-25).

16-196 **2-73, 2.10.2, ¶1, last sentence:** This statement is not consistent with the obligation LADWP has to implement this project as a mitigation measure as part of the 1991 EIR and the MOU. Nor is it consistent with Funding Option Two, identified in DEIR/EIS Section 2.2.2.4. It should be changed to reflect the fact there would be no such funding limitations under that option.

2-73, 2.10.2, ¶3, sentence 1: This is a restatement of ¶1, sentence 4 in this same section. See comment above.

2-73, 2.10.2, ¶3, last sentence: This is essentially a restatement of the last sentence in ¶1 of this same section. See comment above.

2.10.3 Annual Report on Monitoring Results

16-197 **2-74, 2.10.3, ¶1, sentence 1:** The qualifier that monitoring will be conducted “*to the extent that funding is available*” is not consistent with the obligation LADWP has to implement this project as a mitigation measure as part of the 1991 EIR and the MOU. Nor is it necessary if Funding Option Two is adopted. It should be changed to reflect the fact there would be no such funding limitations under that option.

16-198 **2-74, 2.10.3, ¶2, sentence 2:** Please explain what “meet as necessary” and “modified within the framework of the adaptive management approach” mean. Under what conditions might it become necessary to meet for the purposes discussed here?

TABLES 2-18 – 2-25 MONITORING AND ADAPTIVE MANAGEMENT PROGRAMS

Tables 2-19, 2-21, 2-23, and 2-25, Adaptive Management Measures – inconsistency with Funding

Option Two: “Yes” entries in the “Implementation Dependent On Outside Funding” column in the adaptive management tables (Tables 2-19, 2-21, 2-23, 2-25) appear to be inconsistent with Funding Option Two, identified in DEIR/EIS Section 2.2.2.4, and should be changed to reflect the fact there would be no such funding limitations under that option.

Table 2-18 Riverine-Riparian System Monitoring Program

2-78 – 2-80, Habitat Monitoring (column 1): Regarding the monitoring efforts designed to track development of desirable riparian vegetation, undesirable weed species, habitat vital to habitat indicator species, fish, etc. covered in this section of the table, much more detailed information should be provided before a judgment can be made on the adequacy of the monitoring program, as follow:

- The number and spacing of monitoring sites to ensure that they are adequate to assess the entire length of the river;
- Documentation of baseline conditions against which future trends can be measured;
- Discussion of indicator species habitat requirements;

2-78, Understory development (row 3): Understory impacts as a result of current grazing are severe in riparian habitats in much of the LORP area. In many places there is no understory and there are no young willows or cottonwoods. Several habitat indicator species such as the yellow-breasted chat are dependent on habitats with trees and a dense understory in the riparian zone. Unless the diversity of habitat provided by understory growth significantly improves, the habitat goals for the river system will not be met. Monitoring for understory development as described will not be conducted unless the need for it is determined in some unspecified future time by unspecified means. Whether or not this important monitoring function is needed should not be deferred to some future decision. There should be a clear commitment to conduct this monitoring as the need for it is obvious. Protocols for data collection, analysis and reporting for this monitoring should also be included in the EIR/EIS.

2-79, fishery habitat surveys (row 3): Some important habitat characteristics are listed along with 7 habitat characteristics that will be measured, but no protocols are provided as to the seasonal timing of data collection, methods for data collection and analysis, or location of the transects. No discussion is provided of the habitat parameters preferred by each of the habitat indicator fish species. No feedback path to the adaptive management measures are indicated here or in the monitoring triggers in Table 2-19. These deficiencies need to be corrected in order to bring this into compliance with the provisions of MOU Section II.E and Attachment A, p.11, part VI.A.

The determination of species and numbers of fish present through netting or electric shock sampling is a standard monitoring procedure and would provide more worthwhile information. Why was this not included in the fishery habitat surveys? There are apparently no plans to establish habitats for native fish species, which require complete separation from non-native predator species. How would potentially suitable habitat for the native habitat indicator fish species be identified by the proposed monitoring program?

Table 2-19 Riverine-Riparian System Adaptive Management Measures

2-81, Modify releases during establishment of baseflows (row 1): As discussed here and in Section 2.3.5.2, water will be released at downstream spillgates to create refuges for fish based on four criteria: fish show signs of stress; water quality thresholds are succeeded; 6 months after commencement of Phase

16-203 2 releases; or when the 40 cfs baseflow has been achieved throughout the river. We believe that operation of the spill gates to create refuges for fish should be wholly contingent on the first two conditions and not on time and flow factors which are included in the last two conditions. What is the basis for ending the spillgate releases after a 6-month period or when a 40 cfs baseflow is achieved throughout the river, whichever occurs earlier, rather than when water quality improves or when fish stop exhibiting signs of stress?

16-204 **2-81, Release higher quality water from spillgates during the first three releases of seasonal habitat flows (row 3):** As discussed here and in Section 2.3.5.4, after the first 3 seasonal habitat flow releases, water quality monitoring will be discontinued. This seems imprudent given that only the first seasonal habitat release is guaranteed to be a 200 cfs release. If the second and third year of the project have less than average predicted runoff in the valley, the seasonal habitat flow releases during those years will be less than 200 cfs, or may not occur at all if runoff is predicted to be 50% of normal or less (Chart 2-1). Because the DEIR/EIS states that it is uncertain how long degraded water quality effects will last, especially those due to periodic disturbances by the higher seasonal habitat flows (4.4.3.1, Impact Conclusions, paragraph 1), it would be prudent to continue water quality monitoring during the seasonal habitat flow releases for as many years as it takes to see a trend toward stabilization of water quality during several 200 cfs releases. If this was done, operation of the three spill gates to create refuges for fish would be wholly contingent on water quality and fish conditions, and not on time as stated in the third condition. This could avoid potential impacts. What is the basis for ending the spillgate releases one month after the commencement of the seasonal habitat flow, rather than when water quality improves or when fish stop exhibiting signs of stress?

16-205 **2-82, Modify the magnitude of seasonal habitat flows (row 1):** Under purpose, column 3, the meaning of the statement "*Conserve water if habitat goals won't be compromised*" should be explained along with the impact this might have on the implementation of this adaptive management measure. Conservation of water is NOT a goal of the project. The habitat goals referred to in the purpose statement are not identified. Additionally, the vegetation goals discussed in column 4, Monitoring Trigger, are also not defined. Habitat characteristics that will be monitored are not identified. No clear monitoring data thresholds that would trigger use of this measure are defined. Does this trigger statement imply that it will be at least five years before this measure would be considered?

16-206 The measure described in column 2 includes release of water from spillgates to augment the flow released at the River Intake. This of course is allowed by the MOU and may be necessary to achieve the purposes describe therein (MOU p. 12-13, Section II.C.1.b.ii). There is nothing in the Monitoring Trigger statement that indicates what would trigger implementation of this measure. Seven objectives for the seasonal habitat flow are listed on MOU page 13. These are physical parameters that could and should be monitored. If these objectives are not being met with releases from the River Intake due to channel losses, losses that are certain to occur, then implementation of this measure should be triggered. It should not take years of measuring habitat characteristics and recruitment and survivorship of riparian plants to determine that the seasonal habitat flows at the lower end of the river are not being effective because of channel losses. This can more readily be determined by monitoring where the flows are leaving the existing channel, whether streambanks and floodplains are getting recharged, etc.

16-207 **2-82, Modify the duration of seasonal habitat flows (row 2):** Under purpose, column 3, the meaning of the statement "*Conserve water if habitat goals won't be compromised*" should be explained along with the impact this might have on the implementation of this adaptive management measure. Conservation of water is NOT a goal of the project. The habitat goals referred to in the purpose statement are not

16-207 identified. No clear monitoring data thresholds that would trigger use of this measure are defined. Does this trigger statement imply that it will be at least five years before this measure would be considered?

16-208 Discussion of this measure should include the objectives that were expected to be achieved by the original duration in the project description, i.e. the reasons why the durations shown on Chart 2-2 were selected in order to meet the objectives set forth in the MOU for the seasonal habitat flows (MOU p. 13, Section II.C.1.b.ii). Threshold levels for those objectives should be set so that failure to reach those thresholds would trigger implementation of the measure. As discussed above for the previous measure dealing with flow magnitude, monitoring of physical parameters such as recharge of streambanks and floodplains may more quickly determine the need for longer duration flows than the proposed monitoring of riparian plant recruitment and survivorship. Actually, the monitoring program for this area, presented in Table 2-18, does not mention such monitoring at all.

16-209 **2-82, Plant native vegetation species, Disperse native plant seeds, Control exotic plants, Remove tules, Modify beaver and beaver dam control activities (rows 4-8):** Since the discussions in the DEIR/EIS seem to imply these more “active measures” are not contemplated or considered unnecessary in most cases (p. 2-27, 2-29), an explanation is needed to more thoroughly explain under what circumstances these measures will be undertaken? The monitoring triggers for these four measures are vague, using such phrases as “*not occurring to the extent expected*” and “*hindering achievement of habitat goals.*” What monitoring data thresholds would actually trigger use of each of these measures?

16-210 **2-83, Modify utilization rates and timing within riparian and upland pastures and install grazing exclosures:** Trend monitoring for land management purposes will involve quantitative and qualitative approaches. There is no discussion of monitoring techniques (sampling transects) or what will trigger the placement of livestock and rare plant exclosure fencing if needed to eliminate livestock from critical areas. In addition, an explanation of how percentages of forage utilization will be measured is needed.

Tables 2-20 – 2-25

16-211 **2-84, General comments on monitoring program and adaptive management measures for Delta Habitat Area, Blackrock Waterfowl Habitat Area and Off-River Lakes and Ponds:** Comments in the Riverine-Riparian System section (Tables 2-18 and 2-19) regarding deficiencies related to habitat and grazing monitoring and triggering mechanisms for “more active” adaptive management measures also apply to the other three major LORP areas presented in Tables 2-20 – 2-25 and will not be repeated.

Tables 2-21 Delta Area Adaptive Management Measures

16-212 **2-88, rows 1-6:** Again, the plan envisions that flow manipulations and land management are to be the management tools of choice in this area (p. 2-32), however, more “active” adaptive measures including berm construction and excavation to direct or contain flows, planting of native vegetation species, dispersing of seed, control of exotic species, removal of tules, and beaver control are listed here as measures. In view of the fact that these measures are down played in the body of the document, under what circumstances will they be undertaken? The monitoring triggers for these six measures are vague, using such phrases as “*not occurring to the extent expected*” and “*hindering achievement of habitat goals.*” What monitoring data thresholds would actually trigger use of each of these measures?

Table 2-23 Blackrock Waterfowl Habitat Area Adaptive Management Measures

16-213 **2-93, rows 2-4:** Why are more “active” measures such as controlled burning, control of exotic plants, removal of beaver and their dams prominent adaptive management tools for use in this area and not in the

16-213 | previous two (Tables 2-19, 2-21)? The monitoring triggers for these three measures are vague. What monitoring data thresholds would actually trigger use of each of these measures?

Table 2-25 Off-River lakes and Ponds & Grazing Adaptive Management Measures

16-214 | **2-95, row 2:** Control of exotic plants is again contemplated as an adaptive management measure. The monitoring trigger for this measure is vague. What monitoring data thresholds would actually trigger use of this measure?

7. NOXIOUS WEED MANAGEMENT

GENERAL COMMENTS

Although the LORP DEIR/EIS recognizes some of the problems associated with the spread of noxious weeds, such as saltcedar (*Tamarix ramosissima*) and perennial pepperweed (*Lepidium latifolium*), it fails to provide a solution to their continued proliferation in the Owens River corridor as a result of the LORP. The DEIR/EIS offers only piecemeal control programs without guaranteed funding, fails to address cumulative long-term impacts of weed proliferation, and fails to acknowledge that unfunded mitigation is inadequate.

16-215

The effective control of invasive, exotic plant species is crucial if the LORP is ever to be considered a success. In riparian areas of the southwestern U.S. where saltcedar has outcompeted native plants, entire ecosystems have been eliminated, fire frequency has increased, and species diversity has declined. Saltcedar presents a serious problem in the Owens Valley, and the LORP must realistically address this problem. If the LORP is truly to be "*among the most environmentally significant river habitat restorations ever undertaken in the United States*," as stated in the Lower Owens River Project Journal (LADWP 2002c), then it must include provisions for guaranteed funding for control of salt-cedar. Without adequate saltcedar control there will not be healthy functioning riparian ecosystems, the main goal of the LORP. The environmental degradation associated with further weed infestations will only become more extreme and more expensive to control the longer they are ignored.

EXECUTIVE SUMMARY

16-216

S-5, item 4: "*There is no feasible mitigation measure to avoid this impact [increase of saltcedar] in the future due to funding limitations.*" As CEQA lead agency, LADWP is required to implement a mitigation measure that has a reasonable chance of success. In this case, the LORP is a mitigation measure identified in the 1991 EIR and unchecked increase in saltcedar is likely to result in project goals not being attained. Cost cannot automatically eliminate alternatives or mitigation measures. LADWP is currently spending \$200-\$300 million at Owens Lake for dust mitigation. LADWP is currently spending \$12 million per square mile for growing salt grass at Owens Lake as dust mitigation. An immediate and reasonably scaled effort at an ongoing saltcedar control program for the LORP is a minor fraction of the cost LADWP has currently agreed to at Owens Lake. There shouldn't be a double standard.

16-217

S-7, Table S-2 Summary of Alternatives to Reduce Impacts, Column 1 Significant Impact of the Proposed Project (Class I), Increase in saltcedar: Saltcedar will persist and spread to new areas, but no alternative shows a mitigation funding commitment to reasonably control saltcedar over time at a level comparable to LADWP's current efforts to control dust at Owens Lake, which are in the range of \$200-\$300 million and \$12 million per mile. Reasonable control of saltcedar over time, which is critical for the LORP, itself a mitigation, can occur at a minute fraction of the cost of LADWP's current efforts on dust control at Owens Lake. Cost is an unacceptable factor in not proposing the above alternative.

Table S-1, Summary of Impacts and Mitigation Lower Owens River Project (Option 1 - 150 cfs Pump Station)

16-218

S-11, Mitigation Measures, Saltcedar Mitigation Measure V-2: "*...there is a high probability that funding limitations will prevent their implementation*": As CEQA lead agency the LADWP is required to offer the LORP (a mitigation project itself) as a project that has a reasonable chance for success. Uncontrolled spread and growth of saltcedar will make project goals of a "*...healthy, functioning Lower Owens River riverine-riparian ecosystem...*" unattainable. Cost cannot automatically eliminate

16-218 alternatives or mitigation measures. LADWP is currently spending \$200-\$300 million at Owens Lake for dust mitigation. LADWP is currently spending \$12 million per square mile for growing salt grass at Owens Lake as dust mitigation. An immediate and reasonably scaled effort to create an ongoing saltcedar control program for the LORP is a minor fraction of cost the LADWP has currently agreed to at Owens Lake. There shouldn't be a double standard.

10.4 PEPPERWEED, SALTCEDAR, AND OTHER NOXIOUS WEEDS

10.4.1 Infestation by Perennial Pepperweed and Other Noxious Weeds

16-219 **10-4, 10.4.1:** The LORP will likely create thousands of acres of new potential habitat for invasive noxious weeds such as perennial pepperweed and saltcedar. It is unrealistic and erroneous to expect current noxious weed control programs in Inyo County to adequately control new infestations within the LORP. It has been reported that Inyo County is currently unable to respond to all new noxious weed infestations in a timely manner. The LORP should include funding for a noxious weed control program to monitor and manage weed populations specifically within the LORP areas.

Mitigation for perennial pepperweed and other noxious weed infestation is ambiguous due to stated lack of funding for Inyo/Mono Agricultural Department and stated uncertainty of funding for LORP monitoring programs. Hence, if noxious weed control programs remain unfunded, the potential increase in noxious weeds along the river should be a significant, unmitigable impact. The DEIR/EIS should:

- Provide results of Inyo County's current perennial pepperweed control program.
- Provide Eastern Sierra Weed Management Area's Strategic Management Plan showing sufficient funding for increased weed control in LORP areas.
- Provide specific information on who is responsible for monitoring and controlling noxious weeds in specific areas of the LORP. The lack of a specific plan for controlling noxious weeds constitutes deferred mitigation, which is not allowed under CEQA.

10.4.2 Infestation by Saltcedar

16-220 **10-6, 10.4.2:** The DEIR/EIS's own lengthy description of saltcedar and its negative impacts to riverine ecosystems is a compelling argument for why saltcedar must be controlled in the LORP areas. The LORP DEIR/EIS states:

- Saltcedar is a non-native invasive weed spreading rapidly in the Owens Valley.
- Saltcedar colonizes moist areas.
- Saltcedar displaces native plants.
- Saltcedar reduces water availability to native plants by its high water usage.
- Saltcedar produces huge quantities of seeds and individual plants are hard to kill.
- Saltcedar provides poor or unsuitable habitat for most wildlife.

It is stated that, "*with the implementation of the LORP, this (Inyo County saltcedar control) program will be directed not only to saltcedar stands presently in existence but also to new growth resulting from the LORP.*" Impacts of the LORP need to be addressed in the LORP DEIR/EIS, and should not be deferred to a separate pre-existing program with unsecured funding. All of the LORP areas and habitat goals are at risk if saltcedar is not controlled. Control of saltcedar population size and growth is a feasible goal. The LORP DEIR/EIS should:

- Provide citations showing land management practices in "*other regional restoration projects*" that have reduced saltcedar populations and rate of infestation.
- Provide estimates of costs of a noxious weed control program specifically for the LORP.

16-220

- Provide an analysis of off-site impacts of saltcedar and other noxious weed infestations on surrounding natural ecosystems on non-LORP lands.

10-7: "...unmitigable impact (Class I) because...will not have sufficient funds..." As CEQA lead agency the LADWP is required to offer the LORP (a mitigation project itself) as a project that has a reasonable chance for success. Uncontrolled spread and growth of saltcedar will make project goals of a "...healthy, functioning lower Owens river riverine-riparian ecosystem..." unattainable. Cost cannot automatically eliminate alternatives or mitigation measures. LADWP is currently spending \$200-\$300 million at Owens Lake for dust mitigation. LADWP is currently spending \$12 million per square mile for growing salt grass at Owens Lake as dust mitigation. An immediate and reason-ably scaled effort at an ongoing saltcedar control program for the LORP is a minor fraction of the cost the LADWP has currently agreed to at Owens Lake. There shouldn't be a double standard.

16-221

11.3 EVALUATION OF CEQA ALTERNATIVES

11.3.6 Increase in Saltcedar (Class I Impact)

11-11, 11.3.6: The conclusion that saltcedar control is infeasible even with mitigation is erroneous. To achieve the habitat goals of the LORP, it is essential to establish and fully fund a specific noxious weed control program for the LORP areas. Such programs have successfully controlled saltcedar in Inyo County and elsewhere (e.g., Barrows 1993). As the agency responsible for implementing the LORP, LADWP should fully fund a noxious weed control program.

11-11, 11.3.6: The impact of increase in saltcedar is described in the Executive Summary as follows (p. S-5), "*The rewatering of the river would create new wetted channel areas, including areas that are barren and could cause saltcedar infestation in these and other areas. The supplying of water to the Delta and the Blackrock areas could create additional areas for the colonization of saltcedar. There is no feasible mitigation measure to avoid this impact in the future due to funding limitations.*"

Saltcedar and other deleterious invasive plants are likely to spread after water is re-introduced to the Owens River upon implementation of the LORP. It is likely the unchecked spread of these plants could prevent, to varying degrees, attainment of LORP goals by limiting growth of desirable species such as willows and cottonwoods, limiting creation of new habitat for other plant and animal species, resulting in excessive transpiration rates, and blocking channels, among others adverse consequences. Preventing this from happening is most certainly feasible and alternatives exist to reduce the impacts. The most obvious alternative is to alter the project description so that adequate funding is provided to monitor saltcedar and other noxious plant growth as the project proceeds. When the spread of these plants becomes a problem, then fund control of them by physical or chemical means.

16-222

Present funding shortfalls are discussed in Section 2.2.2 of the DEIR/EIS and in our comments on Monitoring and Adaptive Management. The scenario presented in the DEIR/EIS suggests that present funding will only suffice for LORP implementation and that portion of post-implementation costs covering operation and maintenance leaving only \$240,000 of a required \$2.6 million for monitoring and no monies for any adaptive management which may be needed. Firstly, there are no provisions of the Agreement or the MOU which allow vital aspects of the LORP to be eliminated because of monetary considerations, including the required monitoring and adaptive management (MOU Section II.E) and control of deleterious species (MOU Section II.B.4). By signing the Agreement and MOU there is an implied commitment to fund the project. Secondly, the post-implementation cost estimates are based on a 15-year period. Nothing prevents use of available post-implementation funds for both

operations/maintenance and saltcedar monitoring/control early on in the project while efforts continue to secure additional funding for the later years.

16-222

The DEIR/EIS must seriously describe and consider an alternative that would fully fund all post-implementation costs including the costs to monitor spread of saltcedar and to implement a saltcedar control program in the LORP project area when necessary. Any discussion of this not being feasible due to funding limitations must take into consideration the responsibility of LADWP to implement the LORP and the financial ability of LADWP to fund such an alternative.

8. FISH AND WILDLIFE

GENERAL COMMENTS

16-223 This document acknowledges bird and fish populations in the LORP area, but we were surprised that other classes and phyla are left out of discussion throughout the document. Protozoan populations might be a useful way to monitor water quality in some areas. Will any freshwater animals besides fish be noted or monitored? What native reptiles and amphibians live in the LORP area? How would their populations be affected? Would there be any management or monitoring of native mammals (e.g., bats, voles, badgers, etc.)?

16-224 No mention is made that Owens Lake is part of the United States Shorebird Conservation Plan or that it is a Nationally Significant Important Bird Area as designated by the National Audubon Society due to its use by nesting Snowy Plovers (see comments below under Threatened and Endangered Species) and hundreds of thousands of migrating shorebirds.

16-225 We are concerned that the proposed flows to the Delta will be adequate to meet the needs of the habitat indicator species found in the Delta. The DEIR/EIS analysis of the water supply being proposed for the delta does not concentrate on the needs of the indicator species it is meant to benefit. The emphasis is placed on meeting the needs of vegetation rather than wildlife and this is in violation of the MOU and the goal for the delta to “*create and maintain habitats consistent with the needs of habitat indicator species.*”

16-226 The MOU (II,B) specifically includes “*2. Compliance with state and federal laws ... that protect Threatened and Endangered Species.*” Good intentions do not replace good management plans and nowhere in the LORP are detailed plans regarding Threatened and Endangered Species. The treatment of Threatened and Endangered species is inconsistent throughout the DEIR/EIS. There is a thumbnail sketch (4-32, 4.6.1) on the Owens pupfish (1 page), Owens tui chub (1 page), Owens Speckled Dace (1/3 page), and Owens Sucker (1/2 page) but no such level of information is included in the DEIR/EIS for the birds or plants that are also endangered and threatened. While the treatment of T&E fish species received far more attention than that of birds or plants no Threatened and Endangered species received the comprehensive coverage their status requires. We are concerned that despite the fact that the MOU states

16-227 “*The goal of the LORP is the establishment of a healthy, functioning Lower Owens River riverine-riparian ecosystem, and the establishment of healthy functioning ecosystems in the other elements of the LORP, for the benefit of biodiversity and threatened and endangered species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities*” no monitoring for biodiversity or Threatened and Endangered species is planned. Without adequate monitoring, the mitigation measures cannot be effective and this is a violation of CEQA.

16-228 Additionally, our organizations’ verbal acquiescence to deferring preparation of a US Fish and Wildlife Service sanctioned HCP in the LORP area was based partly on representations made by LADWP and Ecosystem Sciences that their intention in the MOU was not preparation of a “capital” HCP, i.e. the USFWS process, but a “small” HCP, i.e. without the approval of USFWS. Unfortunately, we did not receive in writing what exactly that meant, but we certainly did not understand it to mean that the LORP DEIR/EIS would so thoroughly ignore management and monitoring of Threatened and Endangered Species.

16-229 We are concerned about the lack of monitoring and adaptive management strategies for Threatened and Endangered Species. The DEIR/EIS also contains no monitoring to measure biodiversity within the LORP. Biodiversity, as defined in the MOU, is “*the variety and relative abundance of plant and animal species associated within a given area.*” The variables for each species must be monitored in order to

16-229 assure the attainment of the LORP goals. Without specific steps identified for each species, adequate analysis regarding compliance with the MOU is impossible.

16-230 We are also concerned about monitoring trigger (2) in determining the adjustment of baseflow (2-35, 2.4.2.2.). Fifteen-year intervals are far too long because a crucial amount of habitat could be lost in this timeframe and the impact on wildlife would be significant.

16-231 The MOU (II,A,2,c) states “*The Action Plan includes the development of the following plans that will be integrated to comprise the overall LORP Plan...Habitat Conservation Plan...*” The MOU parties agreed that the HCPs would be time-consuming and could further delay implementation of the project if the HCP was tied to the project. We expect that LADWP will work with USFWS and CDFG to complete the HCPs as quickly as possible for all LADWP lands in the Owens Valley as stated in the DEIR/EIS (2-60). It would be worthwhile to hazard a tentative date for release of the Habitat Conservation Plan here; it is an essential part of the MOU and the LORP (see also p. 2-19) even if it has been excluded from this report for efficiency’s sake.

16-232 The MOU (II,C:1, 2, 3, and 4,) states “*Diverse natural habitats will be created and maintained through flow and land management, to the extent feasible, consistent with the needs of the ‘habitat indicator species’...*” Neither the Project Description (2-19, 2.3.4) nor the section devoted to habitat indicator species in each unit, Riverine-Riparian System (4-2), Delta (6-11), Blackrock Waterfowl Habitat Area (7-20), or Off-River Lakes and Ponds (Chapter 8.0) included any information identifying the needs of the habitat indicator species. These species were chosen because their habitat usage differs. Some species require large trees, some require dense understory, some require open water with little vegetation while others require open water with dense vegetation, some require tree cavities, and some require marsh vegetation. The DEIR/EIS (2-72, Table 2-18) states that Project Objectives are “*to [d]evelop native riparian and wetlands habitats important to the ‘habitat indicator species’ and special status species*” but nowhere is there a description of the habitat components or characteristics that indicator or special status species require. If the habitats that are important to these species are not described how is LADWP going to determine that appropriate habitats have been developed and they meet the needs of these species? The monitoring plans must be comprehensive enough to determine whether the LORP is making progress towards the goals of the LORP for habitat indicator species. We have not seen the detail necessary in monitoring strategies and are concerned that the project as described may have little to no chance for success.

16-233 **14-1, 14.0, Other Federal Impact Considerations:** No mention was made by the EPA of the Migratory Bird Treaty Act and implementing treaties (1918 and subsequent statutes) that insures legal security to migratory birds moving between Canada and Mexico. It protects migratory birds, birds in danger of extinction, ...and their environment (P.L. 86-732). The loss of the brine pool transition, part of a Nationally Significant Important Bird Area, is in violation of the MBTA and implementing treaties.

THREATENED AND ENDANGERED SPECIES

Birds

16-234 **General Comments:** Threatened & Endangered bird species use the area during spring and fall migration and these species need to be addressed: Swainson’s Hawk (*Buteo swainsoni*), Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*), Willow Flycatcher (*Empidonax traillii*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and historically Least Bell’s Vireo (*Vireo bellii pusillus*). If willows develop dense clumps around the lakes and ponds and large cottonwoods develop all of these species could become breeders in the LORP. Three records of the vireo occurred in the Owens Valley in

the fall of 2002, indicating that colonists from the now-recovering populations to the south may be investigating the area for possible breeding sites. A century ago they used to be regular breeders along the Owens River.

16-235

2-30, 2.3.11, Threatened and Endangered Species: There are other Threatened and Endangered Species besides the Owens pupfish and Owens tui chub found in the Lower Owens River Riverine-Riparian System. Why were these the only two mentioned in this section? This disparity between the treatment of fish and other wildlife is disturbing and reflects a fishing mentality rather than a biological understanding. All Threatened and Endangered Species are equally significant and their treatment should be equally thorough.

16-236

The Western Snowy Plover (*Charadrius alexandrinus nivosus*) is a Federally Threatened species (1993). The Federal status applies only to the Pacific coastal population but recent bird banding studies indicate that many interior birds co-mingle with coastal birds (Page, et al. 1986, Page, et al. 1995) in winter. This indicates that there is movement between coastal and interior populations and there is the possibility that some of the Snowy Plovers at Owens Lake may require protection.

16-237

2-62, 2.7.3, Wildlife Species, Proposed LORP Protection Measures: While it is commendable that the DEIR/EIS states that LADWP “proposes to protect T&E wildlife species in the LORP by: (1) avoiding direct adverse impact...; and (2) maintaining and creating suitable habitat...” this is too vague to insure that LADWP can be successful in its protection. Detailed plans need to be written for each threatened and endangered species found in the LORP that will benefit from review from biologists, botanists, ornithologists, mammalogists, etc. to insure that adequate guidelines are included. We are concerned that not enough thought has been put into protecting Threatened and Endangered species and Species of Special Concern. These management plans need to be completed before damage has been caused in order to avoid “direct adverse impacts” as stated in the DEIR/EIS.

16-238

11-10, 11.3.3, ¶ 2, Degradation of Brine Pool Transition Area Aquatic Habitats (Class I Impact): “Because the brine pool transition area is not a part of the LORP, such releases would violate the court injunction which prohibits Los Angeles from diverting waters out of its aqueduct system onto Owens Lake or in any way releasing any water to be deposited onto Owens Lake at any time except for the purpose of implementing the LORP.” The MOU map (MOU Figure 3) showing the location of the Delta Habitat Area identifies it as the “approximate area.” Therefore, the brine pool transition area is a part of the

16-239

LORP and the September 2000 modification of the Court Injunction allows release of water to this area to maintain, enhance and create new habitat. Maintaining existing flows would avoid the identified impact. Secondly, LADWP and the State could seek another modification to the Court Injunction to allow the continuation of existing flows and changes in timing of flows (necessary because of year-round release of water to the Delta under the LORP) to this area and thereby avoid the potential impacts. These are feasible and reasonable remedies for the potential degradation of the brine pool transition area.

16-240

Under no circumstances should this habitat be negatively impacted. It is protected by the Endangered Species Act and the Migratory Bird Treaty Act and implementing treaties. The Snowy Plover breeds in the transition area and the Peregrine Falcon and hundreds of thousands of shorebirds migrate through in spring and fall with some shorebirds remaining throughout the winter.

16-241

14-4, 14.6: Without effective saltcedar control, and managing for the underlying causes of its spread, the restoration of Southwestern Willow Flycatcher habitat will not be fully achieved. Investigators have noted that “in the case of saltcedar, water management and water quality are the key factors. Control programs that do not consider these factors in the design of a restoration program run the risk of further

reducing biological diversity of an area, and possibly eliminating nesting habitat for the Southwestern Willow Flycatcher" (Finch and Stoleson 2000).

16-241

14-4, 14.6, Southwestern Willow Flycatcher: The Willow Flycatcher is correctly noted as a rare spring and fall migrant, summer resident and possible breeder. Appendix D incorrectly lists it as an uncommon summer visitor. The DEIR/EIS incorrectly states that it occurs "*(late April through September).*" The species is a very late migrant and does not reach the State until almost mid May. Jon Dunn (pers. comm.), senior editor of National Geographic Guide to North American Birds and one of the nation's leading field ornithologists, said that in 40 years birding he has never seen one earlier than 11 May in California. With the present degraded habitat in the LORP the Willow Flycatcher is not a breeder at this time. If the habitat is enhanced it certainly is possible they could begin breeding there again as they presently breed in the willows along the Owens River just north of Bishop. Is LADWP willing to write a sensible management plan that will "*protect [this] T&E species in the LORP*" as stated in the DEIR/EIS?

14-4, 14.6, Southwestern Willow Flycatcher: No mention is made in this section regarding the negative impact cowbirds will have on the flycatchers when the habitat has recovered enough to entice them to breed. Western populations of Willow Flycatchers were once thought to suffer only about half the parasitism of eastern populations but Hanna (1928) found Willow Flycatchers to be among the most heavily parasitized species in southern California in the 1920s. From 1989-1997 in southern California, parasitized nests of *E. t. extimus* had a lower hatching rate (20%), fledging rate (11%) and nest success (14%) than unparasitized nests (Whitfield and Sogge 1999). In California, with cowbird trapping/removal occurring in 6 of 9 years, 14% of 72 parasitized nests fledged a cowbird, 1.4% fledged cowbird and flycatcher, and only 9.7% fledged a flycatcher. (Sedgwick 2000). The endangered Willow and Southwestern Willow Flycatchers are subjected to three threats: habitat destruction and degradation (Remsen 1978), overgrazing by livestock (Serena 1982) and cowbird parasitism (Sedgwick 2000). Outside of habitat alteration and loss, parasitism by Brown-headed Cowbirds may present the largest conservation problem for *E. t. extimus*, as this subspecies is heavily parasitized and in some areas parasitism may be a major cause of decline in California and Arizona (Harris et al. 1987, Harris 1991, Brown 1994, Whitfield and Sogge 1999) and elsewhere. LADWP has to shoulder much of the responsibility for all three problems, habitat loss, overgrazing, and cowbird parasitism, and the responsibility for providing the remedies that are needed.

16-242

It has been shown that cowbird control has resulted in the impressive recovery of the Least Bell's Vireo. Last year 430 Least Bell's Vireo, an endangered species, maintained territories in Prado Basin, Orange County. Before cowbird trapping they were almost extirpated from this area (McCaskie and Garrett. 2001).

Similar results have occurred in other sites in Orange and San Diego Counties. These increased nest success rates are not the result of enhancing the habitat or taking action against nest predators other than cowbirds. These accounts serve as an example on how to delist a Threatened or Endangered Species. Is LADWP willing to develop a new cowbird management plan that will enhance the riverine-riparian corridor they are trying to develop?

3-5, first sentence, Key NEPA Requirements: After "*..., the Endangered Species Act, ...*" add "*Migratory Bird Treaty Act and implementing treaties.*" Impacts to the brine pool transition involve species migrating between Canada and Mexico, both signatories to the MBTA. If the brine pool transition area is claimed to be outside of the LORP, contrary to LADWP maps included in the LORP, mitigation measures are still required as "*Mitigation measures must be identified even if they are outside the jurisdiction of the lead agency...(40 CFR 1502)*"

16-243

Fish

16-244 **General Comments:** The LORP fails to meet the goal of establishing “*healthy functioning ecosystems...for the benefit of ...threatened and endangered species...*” because it has no plans to benefit Owens pupfish and Owens tui chub, both native fishes and both endangered species. We encourage LADWP to rethink this decision as this is an exceptional opportunity to work with CDFG to insure the protection of endangered native species by reintroducing and managing them successfully thereby fulfilling one of the LORP’s goals. The EIR should disclose the 2002 Ecosystem Management Plan components and determine a timeframe for completion. What are the studies used or conducted that allowed Ecosystem Sciences to come to the conclusion that predatory game fish (bass, catfish, sunfish) can co-exist with native fish (pupfish, tui chub, dace and sucker)? It is our understanding that they cannot co-exist which requires a physical separation to allow the native fish to survive.

16-245 The DEIR/EIS discusses the high fish kill rate due to the degradation of water quality when the initial release regime for 40 cfs baseflow occurs. We understand that the high kill rate may not occur until 60 cfs is released. We also understand that if the flow rate was increased while the water temperature is very cold (December to February) the negative impacts would be seriously reduced. LADWP should consider alternative mitigation to lessen the impact to fish when initial flows are released. One consideration would be to have two seasonal habitat flows in the first year, the first in winter and the second one as planned in May/June. This would be a first year only option.

16-246 **4-32, 4.6.1, Background Information on Individual Species:** *The Owens pupfish (Cyprinodon radiosus) populations rapidly declined due to the introduction of non-native, predatory fish...and when native aquatic habitats were altered by groundwater pumping and water diversions from the Owens River and its tributaries.*” While LADWP is not responsible for the introduction of non-native fish they bear total responsibility for groundwater pumping and water diversions that helped push this species to the edge of extinction. The MOU (II,B) states “*the goal of the LORP is the establishment of healthy, functioning ecosystems ..., for the benefit of biodiversity and Threatened and Endangered Species...*” LADWP needs to make amends for their irresponsible water gathering practices by making every effort to enhance and maintain habitat that will insure the continued existence of the endangered Owens pupfish.

16-247 **8-2, Table 8-1, Fish in Off-River Lakes and Ponds:** All of the non-native fish listed in Table 8-1 will presumably have access to the Lower Owens River, other lakes and ponds, and possibly the Delta area. Consequently, a potentially negative impact is that a safe habitat for native fish, particularly the Owens pupfish, will be eliminated within the boundaries of the LORP. Why did LADWP fail to discuss this problem in the Potential Impacts section (8-4)?

16-248 **4-33, 4.6.1, Background Information on Individual Species:** “*The Owens tui chub (Gila bicolor snyderi) were historically distributed throughout the Owens River basin, including Owens Lake...The introduction of non-native fish species and water diversion for agricultural and municipal use have been the principal factors negatively affecting Owens tui chub.*” While LADWP is not responsible for the introduction of non-native fish they are totally responsible for water diversions that helped push this species to the edge of extinction. LADWP owes the endangered Owens tui chub and every effort should be made to work with USFWS and CDFG to determine the feasibility of enhancing habitat suitable for the chub within the LORP. The MOU (II,B) states “*the goal of the LORP is the establishment of healthy, functioning ecosystems ..., for the benefit of biodiversity and Threatened and Endangered Species...*” The Owens tui chub is part of a healthy, functioning ecosystem and it is endangered, in part because of LADWP’s water gathering practices. LADWP needs to make amends for their irresponsible water gathering practices by making every effort to enhance and maintain habitat that will insure the continued existence of the endangered Owens tui chub.

16-249 4-33, ¶2: Non-native fish (e.g., bass) significantly contributed to the decline of the Owens pupfish. Creation of habitat for native species implies that the species will be able to use the habitat, but bass will be allowed in off-river lakes and ponds and will therefore have access to most if not all stretches of the river. Given this situation, the benefit of new habitat for native species cannot be claimed.

16-250 6-15, 6.1.7, **Special Status Species:** “*The endangered Owens pupfish and Owens tui chub do not appear to occur in the Delta Habitat Area, although potentially suitable habitat may be present. Ecosystem Sciences estimated the potentially suitable habitat for these species to be 567 acres...*” Are all of these acres in the delta area or is this the total from the LORP?

Plants

The treatment of Threatened and Endangered species is inconsistent throughout the DEIR/EIS. The treatment of T&E fish species received far more attention than that of birds or plants.

16-251 2-62, 2.7.4, **Plant Species:** “*The Owens Valley checkerbloom (*Sidalcea covillei*) is a state endangered species endemic to the Owens Valley...*” The Owens Valley checkerbloom (*Sidalcea covillei*) is not only a state endangered species but it is endemic to the Owens Valley. It is in dire trouble because of the lowering of the water table and grazing. Both causes are the result of LADWPs land and water management policies. LADWP needs to make amends for their irresponsible water gathering practices by making every effort to enhance and maintain habitat that will insure the continued existence of the endangered Owens Valley checkerbloom.

16-252 2-62, 2.7.4, **Plant Species:** “*...Grazing will be prohibited in some exclosures during the flowering period of the species.*” This statement creates concern on two points. First, it implies that grazing will be allowed in some exclosures during the flowering period. If this is correct, it is unacceptable. All exclosures must be closed to grazing during the flowering period. The simple fact that the checkerbloom is a state endangered species found only in a few scattered populations dictates complete and total protection. There is plenty of grazing available away from the small, scattered checkerbloom populations. Second, grazing should be prohibited during the fruiting period as well as the flowering period, or else the results of flowering (i.e., seed production) will be undermined. Because one of the goals of the MOU is the protection of threatened and endangered species, LADWP needs to specify that they will protect this species and provide a detailed management plan that will insure LADWP’s success.

16-253 2-67, 2.8.2.2, **Blackrock Lease:** Blackrock Lease Exclosures should be in effect during the fruiting period as well as the flowing period so that seeds will have time to develop and disperse, otherwise the flowering period will not be productive.

16-254 Are these exclosures solely for the protection of plants or do they have another purpose?

SENSITIVE SPECIES

Birds

16-255 2-58, 2.6.2 **Goals:** Three of the native birds listed in the Project Description are also State Species of Special Concern. The Least Bittern (*Ixobrychus exilis*) is a known breeder at Billy Lake (Western Birds, 26:165) and could become a breeder in other parts of the LORP if their habitat needs are met. The Northern Harrier (*Circus cyaneus*) breeds in dense tules and is a known breeder at nearby Cartago Marsh (T. & J. Heindel, pers. data) and could also become a breeder in other parts of the LORP if their habitat

16-255 needs are met. The Osprey (*Pandion haliaetus*) is a migrant and could possibly become a breeder if the required elements were present (e.g., open water, fish supply, and trees with snags for nests and perches). Management plans should include provisions that address the needs of these sensitive species.

FISH

2.3.8 Fish Management: See comments on passive management in Monitoring and Adaptive Management Section.

16-256 **4-34, 4.6.1, Background Information on Individual Species:** *“The Owens speckled dace historically occupied springs and streams throughout the Owens Valley...and springs at Little Lake. Predation by non-native fishes and habitat alternation by impoundment and disruption of valley-floor spring discharge by groundwater pumping caused the Owens speckled dace to disappear from most of its historical range.”* While LADWP is not responsible for the introduction of non-native fish they bear complete responsibility for groundwater pumping that helped reduce the population significantly. The MOU (II,B) states *“the goal of the LORP is the establishment of healthy, functioning ecosystems ..., for the benefit of biodiversity and Threatened and Endangered Species...”* While the dace is not yet considered Threatened the line between Threatened and Species of Special Concern is frequently more a political fact than a biological one. The dace is part of a healthy, functioning ecosystem and it is trouble, in part because of LADWP’s irresponsible water gathering practices. LADWP needs to make amends by insuring every effort will be taken to enhance and maintain habitat that will insure the continued existence of the Owens speckled dace. They need to work with USFWS and CDFG to determine the feasibility of enhancing habitat suitable for the dace within the LORP.

16-257 **4-34, 4.6.1, Background Information on Individual Species:** *“Owens suckers were widely distributed throughout the Owens Basin...No known populations of Owens suckers are found in the LORP area.”* This is a California Species of Special Concern. Because this is the only fish native to the area that can successfully compete with introduced species LADWP should make every effort to work with USFWS and CDFG to determine the feasibility of enhancing habitat suitable for the sucker within the LORP. Off-River Lakes and Ponds may provide some suitable habitat. If they consume mosquitoes they could serve as a biological control to help with that mitigation. The MOU (II,B) states that *“the goal of the LORP is the establishment of healthy, functioning ecosystems ..., for the benefit of biodiversity and Threatened and Endangered Species...”* While the sucker is not yet considered Threatened, the line between that and Species of Special Concern is frequently more a political fact than a biological one. The sucker is part of a healthy, functioning ecosystem and it is trouble and therefore it deserves more attention than given in the DEIR/EIS.

16-258 **4-39, ¶4, River Intake to Mazourka Canyon Road, last sentence:** Owens speckled dace are unlikely to find suitable habitat (meaning habitat that they can use and presumably breed in) in this reach of the river as stated unless non-native predators are not present. Predators such as bass will be allowed in off-river lakes and ponds and will therefore have access to most if not all stretches of the river. Given this situation, the benefit of new habitat for dace should not be claimed.

4-40, North End of the Islands to Lone Pine Station Road: Again, habitat is not suitable for an organism unless the organism is able to use it; speckled dace are unlikely to be able to evade predatory non-native fish in this reach of the river. Also, p. 4-41 notes that productivity of the dace is relatively low at 40 cfs.

HABITAT INDICATOR SPECIES

16-259 **2-57 & 2-58, 2.6.2, Habitat Indicator Species:** The MOU (II,C,3) states “*management, to the extent feasible, [will be] consistent with the needs of the ‘habitat indicator species’ for the Off-River Lakes and Ponds.*” Habitat indicator species are listed in the Project Description (§ 2.6.2, p. 2-57). The DEIR/EIS includes no management plans for habitat indicator species except non-native game fish in the Off-River Lakes and Ponds. Management plans for Off-River Lakes and Ponds must include provisions that address the needs of habitat indicator species. Refer to detailed comments in the “General Comments” at the beginning of this section.

16-260 **2-58, 2.6.2, Native birds:** “*Rails*” should be more specific. Six species have been found in the county and four species have been found in the Owens Valley. The three that are impacted by the LORP are Virginia Rail (*Rallus limicola*), Sora (*Porzana carolina*), and American Coot (*Fulica americana*).

OTHER WILDLIFE

Cowbirds

16-261 **General Comments:** The MOU (II, B) states “*the goal of the LORP includes...4) Control of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP. These control measures will be implemented jointly with other responsible agency program.*” Cowbirds are recognized by many ornithologists as deleterious. They are present in the LORP and their control is required in order for the goals of the LORP to be accomplished.

16-262 **4-43, 4.7.1, ¶ 3, Existing Conditions:** In LADWP surveys conducted along the lower Owens River the Brown-headed Cowbird (*Molothrus ater*) was found to be one of the four most abundant species of birds present. The cowbird management plan cites only literature that supports *laissez-faire* management ignoring an equal and compelling amount of literature that supports cowbird removal programs. The intent of the LORP is to develop riparian habitat which will encourage Threatened and Endangered species, as well as others, to breed but there are no plans to remove “*one of the most abundant species of birds present*” even though this non-native species parasitizes native species. While cowbirds are not the only reason for nesting failures, other predation does occur, it has been proven that removing cowbirds enhances the success of many troubled species. Cowbird control has resulted in the impressive recovery of the Least Bell’s Vireo. Last year 430 Least Bell’s Vireo, an endangered species, maintained territories in Prado Basin, Orange County. Prior to cowbird trapping they were almost extirpated from this area (McCaskie and Garrett. 2001). Similar results have occurred in other sites in Orange and San Diego Counties. These increased nest success rates are not the result of enhancing the habitat or taking action against nest predators other than cowbirds. These examples serve as a standard on the method for delisting a Threatened or Endangered Species. Is LADWP willing to develop a new cowbird management plan that will enhance the riverine-riparian corridor they are trying to develop?

16-263 **4-45, 4.7.2:** The DEIR/EIS makes the false assumption that creating more habitat will be all that is needed to allow a population to increase for threatened species. It recognizes that fragmentation of a forest and degraded habitats are a problem and implies that when these conditions no longer exist the problem will be fixed. This assumption does not recognize that a narrow corridor of riparian habitat flowing through an arid, grazed desert can not be equated to the compact forest structure on which the eastern studies were based. Cowbirds travel approximately 2.1 – 12 km from feeding to breeding areas (Rothstein et al. 1984, Dufty 1985, Goguen and Mathews 1998). A narrow riparian ribbon provides no depth in which species can hide; all species that breed in the corridor are susceptible to predation at a higher rate than those same species who can breed deep in a forest.

11-20, 11.4.5, Cowbird Trapping Program: What data are available on local cowbird populations? Is

16-264 there a reference or are there references that could be cited here? Also, are there studies on individual bird species impacted by cowbird parasitism? A brief discussion of studies of species known to be parasitized by cowbirds and known to frequent the area would be useful in this context, even if those studies were not conducted locally.

16-265 **11-21, 11.4.5, ¶ 2, Feasibility, Impacts, and Effectiveness:** The DEIR/EIS states that cowbird trapping is not proposed because available data do not indicate a substantial increase in cowbirds in the last 30 years. What is the basis for this statement? What study was conducted in the LORP area, when, and by whom? What is the thinking behind the need to have cowbird trapping only if a substantial increase has occurred in the last 30 years? The records for cowbirds in the 1970s indicate a large number, not unlike records of today, and the population could be considered stable. LADWP's own surveys indicate Brown-headed Cowbird is one of the most abundant species present. Then they state that impacts on local populations are unknown. While that last statement may be true, what great leap of faith does it take to recognize that abundant numbers of a nest parasite will impact local populations in negative ways, some species more negatively impacted than others? There are photographs available of many species, including threatened species, feeding juvenile cowbirds in the Owens Valley as well as much anecdotal evidence of the detrimental impact of cowbirds on local breeders. The LORP needs to address the cowbird by providing a plan to control the negative impacts it will have on the species that will be breeding in the new habitat that the LORP is going to create. State trapping is not a long term solution but a stop gap measure needed to be taken to bring the problem under control until a more permanent solution can be worked out.

16-266 Goguen and Mathews (1999) have found that cowbirds may benefit from livestock because grazing, or the presence of livestock itself, facilitates foraging opportunities. Livestock may create cowbird feeding microhabitats, increase insect abundance, provide food in their manures, and may make food more visible by flushing insects when grazing. The presence of livestock tends to increase densities of cowbirds locally and can create gradients of parasitism pressure within a landscape. The strong bond between cowbirds and livestock has led to the use of livestock removal (i.e., rotation of livestock away from host breeding habitat) as a management technique to reduce parasitization of host nests. Other researchers have determined that the exclusion of livestock from sensitive habitats (e.g., riparian) is clearly important in creating and maintaining habitat structure for many bird species (Taylor 1986, Taylor and Littlefield 1986). Cowbird parasitism of Arizona Bell's Vireo (*Vireo bellii arizonae*) in a desert riparian landscape (Averill-Murray, et al. 1999) was lowered based on several factors, including the initiation of cowbird control the previous year and decreased forage availability for Brown-headed Cowbirds with the temporary cessation of a ranching operation nearby. These studies indicate the direction LADWP should take in cowbird management and riparian restoration in the LORP.

16-267 **11-21, 11.4.5, ¶ 3, Feasibility, Impacts, and Effectiveness:** "In addition, data from the Lone Pine (1970-1999) and Big Pine (1968-2000) BBS routes also indicate no significant trends in the number of brown-headed cowbirds detected..." This reflects a lack of understanding of BBS routes and a misinterpretation of the data provided by the surveys. The routes are 24.5 miles long and are not through riparian corridors where cowbirds would be found. Most of these two routes cover very little grazed habitat and, of course, cannot indicate cowbird population trends. To imply that they do is in error.

16-268 **11-21, 11.4.5, ¶ 4, Feasibility, Impacts, and Effectiveness:** "Many species are able to avoid reproductive losses from parasitism by abandoning parasitized nests and renesting, or by producing a successful nest at another time during the season (Smith et al., 2000)." While many species can perform as reported, many cannot and are condemned to raising the cowbird to the detriment of their own young. That fact that some species have that capability does not support the idea that all a species has to do is

16-268 renest to undo the damage done by the cowbird. The nesting time for each species is a genetic function that coordinates the need for extra food for hatchlings with the biological production of the food whether seeds, fruit, insects, or mammals. This cannot be altered just to avoid cowbirds and the benefits that avoidance would provide. Most cannot nest earlier because that time is scheduled for setting up territories, courtship, nest building, copulation, and finally egg laying and incubation. Many studies show that birds that lose nests, either through predation or parasitism, are far less successful in producing young. Young that are the result of renesting are far less successful in learning the skills and building the fat reserves necessary to survive winter.

11-21, 11.4.5, ¶ 5, Feasibility, Impacts, and Effectiveness: *“Cowbird control programs spanning multiple years indicate that, based on the number of birds trapped each year, cowbird removal has no impact on cowbird populations (Griffith and Griffith, 2000).”* This flies in the face of other articles that have reported opposite results. The Kirtland’s Warbler is found in only a small area of northern Lower Michigan (Mayfield 1992). The cowbird threat was first suspected in the 1920s (Leopold 1924) but not proven until 1950s. Adequate samples showed that the production of fledglings was reduced 40% when 55% of the nests were parasitized. In one sample of 29 nests, 70% were parasitized and only two fledgling warblers were successfully raised. (Walkinshaw 1972). The cowbird threatened extinction of the warbler by 1980 (Mayfield 1975). After a 60% decline in population between 1961 and 1971, emergency measures were instituted and cowbird trapping began in 1972. “Outstanding success resulted. [emphasis added] Parasitism dropped immediately to about 3% of warbler nests, virtually eliminating the cowbird problem (Kelly and DeCapita 1982).”

16-269 The Southwestern Willow Flycatcher made a comeback on the South Fork Kern River (Placer and Whitfield 1994). Formerly wide-ranging in the state, this subspecies lost over 90% of its habitat. “A less obvious threat to the casual observer, but one with dire consequences, [emphasis added] is the cowbird parasitism now afflicting flycatchers and other species that build open-cup nests” (Ibid.) In 1987 cowbirds parasitized 68% of the nests in the South Fork Kern River and in 1992 with only 27 pair left parasitism reached 80%. Cowbird trapping began there in 1993 and parasitism declined to 16% the following year at the South Fork Kern River.

Last year 430 Least Bell’s Vireo, an endangered species, maintained territories in Prado Basin, Orange County (McCaskie and Garrett 2001). Prior to cowbird trapping they were almost extirpated from this area. These increased nest success rates are not the result of enhancing the habitat or taking action against nest predators other than cowbirds. Similar results have occurred in other sites in Orange, and San Diego Counties. These examples serve as a standard on the method for delisting a Threatened or Endangered Species and should be recognized by LADWP as valuable guidelines.

16-270 The DEIR/EIS seems to indicate that LADWP has chosen to embrace a *laissez-faire* philosophy with cowbirds rather than insuring the breeding success of local species by designing a successful cowbird removal program. One goal of the LORP is to “*control deleterious species*” and another is “*the establishment of healthy, functioning ecosystems*”. Neither of these goals can be met without a successful cowbird trapping program.

16-271 **11-22, 11.4.5, ¶ 1, Feasibility, Impacts and Effectiveness:** *“...the improvements in both habitat quality and extent that are expected to occur with the LORP should benefit bird populations from the standpoint of decreasing the likelihood of both predation and cowbird parasitism.”* The studies on which this faulty logic is based were conducted in eastern deciduous forests comparing fragmented with unfragmented forests NOT a narrow ribbon of riverine-riparian corridor passing through an arid and grazed desert.

16-272 **12-24, 12.7, Cumulative Impacts Related to the Willow Flycatcher Recovery Plan:** The nine proposed actions needed to recover the Southwestern Willow Flycatcher are listed with one glaring omission. There is too much literature to support the negative impacts of the Brown-headed Cowbird for it to have been left off the list. The following paragraph states, *“The implementation of the above actions will be based on available funding.”* May we suggest that the Public Relations that LADWP would gain from being in the forefront as a conservation friendly agency would cost far less than the amount spent in one year on the formal PR budget.

Beaver

16-273 **2-27, 2.3.7, ¶ 1, Beaver Dam Removal and Beaver Control:** This section describes policy regarding beavers and beaver dams. Beaver and their construction activities have both positive and negative environmental effects as described in this section. As described in the DEIR/EIS plans to remove the animals and beaver dams will be conditioned on funding limitations (see our comments on funding in the Monitoring and Adaptive Management section). One of the objectives of the LORP is the establishment of new willows and cottonwoods. This new growth is not going to take place unless grazing and beavers are controlled. North Haiwee Reservoir, where the aqueduct flows into the reservoir, is a graphic illustration of what happens to riparian habitat with uncontrolled beaver populations. In the last couple of years many of the willows and cottonwoods have been downed by beaver and many more are being girdled and are dying. In addition, as beaver fell the trees, the river bank will lack shade and this will promote growth of undesirable tules. Beaver are non-native species, and in our opinion, on balance, their presence is detrimental. They should be controlled throughout the Owens River drainage.

16-274 **2-27, 2.3.7, ¶ 3, Beaver Dam Removal and Beaver Control:** The DEIR/EIS states that LADWP has ongoing beaver management on LADWP lands. If North Haiwee Reservoir is an example of the success they are having we suggest that the LORP is in serious trouble. Huge cottonwood trees are being taken down and the damage in the last two years is monumental. While the successful removal of beaver dams in 2002 is impressive, more should be done to remove the beaver themselves. Beaver should be removed from the LORP, and because of their ability to move up and down the river, a plan to either maintain the LORP as a beaver-free zone or remove beaver throughout the Owens Valley should be implemented.

16-275 **2-82, Table 2-19, Riverine-Riparian System Adaptive Management Measures:** It was disturbing to see *“Increase ongoing efforts to control beavers and/or to remove beaver dams”* as a management measure. LADWP needs to explain how removing beaver dams without removing beavers will meet the goals of the LORP. Change “and/or” to “and” which will have the positive results that are required by the goals of the LORP.

Elk

16-276 **2-65, 2.8.1, Manage Grazing Intensity in Upland Areas, ¶4:** Will elk crossing areas also allow safe and easily accessible passage for other wildlife?

Game And Native Fish

16-277 **2-57, 2.6.2, Goals:** The non-native game fish listed as habitat indicator species are not compatible with native fish also listed as habitat indicator species. Since off-river lakes and ponds will be continuous with the river, and since any non-native game fish will presumably be able to migrate, achieving the goals for both non-native and native fish may be difficult and the matter deserves a comprehensive plan in order to meet the goals as stated in the MOU.

16-278 | 4-33, ¶2: Non-native fish (e.g., bass) significantly contributed to the decline of the Owens pupfish. Creation of habitat for native species implies that the species will be able to use the habitat, but bass will be allowed in off-river lakes and ponds and will therefore have access to most if not all stretches of the river. Given this situation, the benefit of new habitat for native species cannot be claimed.

16-279 | 4-37, last ¶, first sentence: Does “*its long anal fin and deeply forked tail*” refer to the Channel catfish or the Brown bullhead?

16-280 | 4-38, **Fish Kills due to Initial Releases (Short-Term Impacts), ¶ 3:** This paragraph states that the potential adverse impacts to fish during the initial releases represents a significant and unmitigable Class I impact that could cause substantial fish kills during the initial years of the project until water quality conditions improve. The third sentence in this paragraph states “*To reduce the impacts of poor water quality during the initial flow years, LADWP would consider [emphasis added] implementing Mitigation Measure F-1 (see below) which involves releases of high quality water from spillgates for an extended period of time.*” In Mitigation Measure F-1, LADWP commits only to considering releasing higher quality water from spillgates beyond periods already identified. In another section LADWP agrees only to consider considering releasing higher quality water from spillgates beyond periods already mentioned. This language is unclear and ambiguous and commits LADWP to nothing in mitigating this Class I impact.

16-281 | 4-40, **2.5 miles south of Keeler Bridge to the Owens River Delta:** Will reduced flows to the Delta (see chapter 6) actually maintain year-round aquatic habitat in “*greater quantities than under current conditions*”? If so, will there be any areas that are “*isolated from non-native predatory fish*”? It’s not entirely clear how baseflows and pulse flows will create habitat in greater quantities if the overall amount of water to the Delta is reduced by such a large amount.

16-282 | 4-41, **Mitigation Measure F-1:** The mitigation measures described here, F-1 and F-2, are to mitigate potential adverse impacts to fish during the initial water releases in the LORP project which represent a significant and unmitigable Class I impact that could cause substantial fish kills downstream of Mazourka Canyon Road during the initial years of the project until water quality conditions improve (4.6.2 - paragraph 3). In F-1 the suggested mitigation for this Class I impact is that “*LADWP shall consider releasing higher quality water from spillgates beyond those periods already identified...if it appears that the supplemental water will adequately improve water quality conditions for fish*”. We believe strongly that it is not a mitigation measure for LADWP to simply say that they will consider an action. To be considered a mitigation measure and to be listed as such, this paragraph must be worded more strongly by eliminating the word “*consider*” and change the word “*releasing*” to “*release*” in the sentence cited above, and delete the last sentence of this paragraph. In addition, LADWP must commit to conducting water quality monitoring activities during seasonal habitat flow releases for more than the first three releases (see comment 2.3.5.4 above) or no data will be available for deciding if this mitigation is necessary. This mitigation measure should be included in the final EIR/EIS document as a necessary mitigation.

16-283 | How much will water quality conditions have to appear to be able to be improved before LADWP will consider releasing higher flows? What specific trigger points or criteria would LADWP use to make such a decision? How long would supplemental water be released? How much water would be released? All of this should be specified in mitigation measure descriptions.

16-284 | 8-2, **Table 8-1, Fish in Off-River Lakes and Ponds:** All of the non-native fish listed in Table 8-1 will presumably have access to the Lower Owens River, other lakes and ponds, and potentially the Delta area. Consequently, a potentially negative impact is that a safe habitat for native fish, particularly the Owens

16-284 pupfish, will be eliminated within the boundaries of the LORP. Why did LADWP fail to discuss this problem in the Potential Impacts section (8-4)?

16-285 **11-22, Native fish:** Given that the Blackrock area is the only area in the LORP that would not harbor predatory non-native fish and would not be accessible to non-native fish from the river, this alternative deserves serious consideration.

MISCELLANEOUS

16-286 **Mosquitoes:** Why is there no management plan to help control mosquitoes in the Off-River Lakes & Ponds? The mosquito problem is a Class II Impact, that is, while significant it can be mitigated. A mitigation plan should be included detailing the steps that will be taken. The installation of bat roosts should be included along with the introduction of mosquito fish for natural and self-sustaining controls.

16-287 **2-30, 2.3.11, Threatened And Endangered Species:** It would be worthwhile to hazard a tentative date for the Habitat Conservation Plan here; it is an essential part of the MOU and the LORP (see also p. 2-19) even if it has been excluded from this report for efficiency's sake.

16-288 **2-65, 2.8.1.1, Protect Continued Recreational Access to the River:** The DEIR/EIS states "*fences across the river will be designed to avoid interference with boats or other watercraft when feasible.*" Is LADWP going to post signs to the canoers, rafters, and tubers that a non-interfering fence wasn't feasible and that they are about to crash?

16-289 **4-43, 4.7.1, Existing Conditions:** Species not properly censused by the point count method were excluded from analyses even though they may breed there. The DEIR/EIS discussed the Red-shouldered Hawk and Wood Duck but omitted a whole suite of breeding birds. Why wasn't another method used to analyze these species and how the LORP may impact them? It makes absolutely no sense to ignore a species because they weren't recorded following a prescribed protocol. If they breed there they are a significant part of the avifauna and they cannot be ignored.

16-290 **4-43, 4.7.1, Existing Conditions:** The data collected on two different sections about 10 miles apart, each with 20 stops about 250 meters apart, were identical with exactly 600 birds for each transect. While this is possible mathematically it may be unknown in ornithological data collecting. Were the counts really estimates or was each individual bird tallied? It raises the question of how accurate and valid these surveys were.

16-291 **4-45, 4.7.2, Anticipated Beneficial Impacts, ¶ 5:** The list of habitat indicator avian species for the river omitted the Red-shouldered Hawk that was listed on 2-19.

16-292 **4-46, 4.7.2, 1st ¶:** The DEIR/EIS notes that "*Many of the habitat indicator species... rely on this [tule] type of habitat.*" Of the 18 species of habitat-indicator birds listed [not 17 as printed, see comment immediately above] fewer than 25% would ever be found in tules much less rely on them. The proliferation of tules (cattails and bulrushes) is a major area of concern. The DEIR/EIS acknowledges (4-46) that this habitat will increase from 293 acres to 1175 acres, an increase of 300% along the river. The DEIR/EIS states (4-45) that the re-watering of the lower Owens River is anticipated to increase the extent, diversity, and productivity of riparian wetland habitats along the river. How does a 300% increase in tules help increase diversity? The DEIR/EIS recognizes (4-46) that there is potential for tules to proliferate at the expense of open water habitat, which would be an adverse but not significant impact. Is this not counter to the stated goals to create habitat diversity? Extensive tules benefit very few wildlife species. The tule management program needs to be more detailed and more aggressive in controlling tule expansion.

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4-46, 4.7.2, last ¶, Effects of Increased Cattail and Bulrush Stands on Avian Diversity: “...amount of cattail and bulrush marsh to proliferate at the expense of open water habitat, which would be considered an adverse but not significant impact.” Diversity of species, structure, and age class is a goal of the LORP. It is a significant impact if all shallow open water in the river and delta converts to tules. Since the proliferation of tules is counter to the stated goal of the LORP, why is it not considered a significant impact? Real measures to monitor and deal with this impact in a good faith manner are required.

16-294

4-47, 4.7.3, Mitigation Measures, RW-1: Cattail/bulrush removal is scheduled between 1 Oct and 1 Mar to avoid conflict with nesting birds unless field survey crews determine there would be no effect on nesting birds. Certainly a crew trained to remove tules would be not qualified to determine if secretive species, such as Sora or Virginia Rails or Least Bitterns, are using the habitat under consideration for removal. What will comprise a field survey crew? Will a field ornithologist be included to make this determination?

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6-25, 6.3.1, Baseflow Impacts: “...expected to die and not regenerate naturally.” and “...13 acres of decadent riparian forest identified in 1999...will be replaced by water and marsh.” MOU goals for the delta say, “establish and maintain new habitat consisting of riparian areas and ponds ...” Cattle and beaver don’t allow germination and growth of riparian habitat in the Delta. Mitigations such as tree planting “self-sustaining as possible” are required to offset any losses.

APPENDIX D Bird Species of the LORP Project Area

16-296

The list of birds is in serious need of rework. It is incomplete and the taxonomic order shows no relation to accepted convention. The American Ornithologists’ Union committee on taxonomy and nomenclature publishes the accepted list of birds with common and scientific names and placed in the proper taxonomic order. This is the guide for all scientific publications and should have been followed in the DEIR/EIS. The variation found in the DEIR/EIS makes it infinitely more difficult to determine if a species is included. For example, the genus *Contopus* is listed in an incorrect order and then after four more genera another *Contopus* is listed again and still out of order. It took double checking the DEIR/EIS list against the AOU list to determine what was listed and what was missing. Incorrect common names were used, incorrect scientific names were used, and species were missing. The reference that should have been used is The A.O.U. Check-list of North American Birds (1998) and supplements published biennially in the journal Auk.

9. LAND MANAGEMENT PLAN

GENERAL COMMENTS

16-297 The MOU (section II B, p. 8) describes its primary goal as ". . . *the establishment of a healthy, functioning Lower Owens River riverine-riparian ecosystem, and the establishment of healthy, functioning ecosystems in the other physical features of the LORP, for the benefit of biodiversity and Threatened and Endangered Species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities*" (emphasis added). That goal includes (section IIB5, p. 9) "[m]anagement of livestock grazing and recreational **use consistent with the other goals of the LORP.**" Grazing and recreational use within the LORP should be consistent with LORP goals, and not obstructive to biodiversity or to habitat use by Threatened and Endangered Species or other species in the project area. Successful range management in the Great Basin and Southwest shows that exclusion of cattle from riparian areas for 5 to 10 years allows riparian habitat regeneration to the point where an informed site by site decision can be made as to whether or not cattle can co-exist with riparian habitat and if so at what level of use. An alternative calling for a 5 to 10 year rest throughout the length of the river riparian pastures (all 62 miles) except for water gaps should be included in the DEIR/EIS.

16-298 An essential aspect of achieving those goals is the development of an adequate Land Management Plan (MOU Section II.A.2). The MOU Action Plan corroborates this concept, noting that the Land Management Plan should "[r]esolve recreation activities, commercial uses, and conservation goals for sustainable use" (Elements section, p. 11 item 5E) and that "[t]he goal of the management plan will be to promote biodiversity and a healthy ecosystem, while allowing for the continuation of sustainable uses of the land" (Action Plan Work Program, item V, p. 6).

Presumably, as part of the LORP, the Land Management Plan is to be "implemented as described in this EIR/EIS" (DEIR/EIS p. 2-3). However, the Land Management Plan as described is inadequate and inconsistent with MOU goals of promoting biodiversity and sustainability.

NO DESCRIPTION OF BASELINE CONDITIONS

16-299 An adequate Land Management Plan, particularly one that depends on monitoring and adaptive management, should describe pre-existing conditions so that presumptive land managers can note changes and respond according to specific guidelines. Without such information it would be difficult, if not impossible, to determine how well the LORP is meeting MOU goals. The Land Management Plan presented here, however, fails to provide the most basic and essential information about existing conditions in the LORP area. Examples of this failure include:

Inadequate description of existing plants, wildlife, and sensitive areas

To promote biodiversity, it's essential to know what species use the LORP, what their habitat needs are, when those needs exist, and where those needs conflict with existing uses.

16-300 This document partially describes bird and fish populations in the LORP area, but ~~we were surprised that~~ other classes and phyla are left out of discussion throughout the document. What native reptiles, amphibians, and mammals (e.g., bats, badgers) live in the LORP area? Are there any non-avian habitat indicator species or native species that will be monitored, such as the Owens Valley vole (*Microtus californicus vallicola*)? What are the habitat requirements for such species, and how are those specific habitats affected by grazing, recreation, and other land uses? To maintain or promote biodiversity, it's

16-300 extremely important to assess the level of biodiversity that exists in the first place, regardless of whether a Habitat Conservation Plan will be developed later.

16-301 Sensitive seeps/springs and rare plant locations are indicated on maps in the LORP Ecosystem Management Plan (chapter 4, Maps 1-7), but this information is omitted from the DEIR/EIS (e.g., on p. 2-62 and 2-65). At the least, springs and seep locations should be listed by lease location and indicated on Appendix A maps.

16-302 **2-30, 2.3.11, Threatened and Endangered Species, 1st ¶:** There are other Threatened and Endangered Species besides the Owens pupfish and Owens tui chub found in the Lower Owens River Riverine-Riparian System. Why are these the only two mentioned in this section? Others that should be mentioned here are the American Peregrine Falcon (*Falco peregrinus anatum*), Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*), Willow Flycatcher (*Empidonax traillii*), Southwest Willow Flycatcher (*Empidonax traillii extimus*), Bank Swallow (*Riparia riparia*), and Least Bell's Vireo (*Vireo bellii pusillus*). Why were birds and the Owens Valley vole left out of this section?

16-303 **4-43, 4.7.1, Wildlife, Including Special Status Species, Existing Conditions:** Species not properly censused by the point count method were excluded from analyses even though they may breed there. The DEIR/EIS discussed the Red-shouldered Hawk and Wood Duck but omitted a whole suite of breeding birds. Why wasn't another method used to analyze these species and how the LORP may impact them? It makes absolutely no sense to ignore a species because they weren't recorded following a prescribed protocol. If they breed there they are a significant part of the avifauna and they cannot be ignored.

16-304 **4-45, 4.7.2, Wildlife, Including Special Status Species, Potential Impacts, 7th ¶:** The habitat indicator avian species for the river list omitted the Red-shouldered Hawk listed on 2-19.

16-305 **9-3, 9.2.2, Potential Impacts--Wetlands, Wildlife, and Rare Plants:** When discussing the status of sensitive plant species, the DEIR/EIS should refer to the latest information of the California Native Plant Society (CNPS) Inventory, now in its sixth edition published in 2001 (rather than the 1994 edition), and should include definitions of CNPS categories, such as 1B, meaning a plant is rare, threatened or endangered in California and elsewhere. Inyo County star-tulip (*Calochortus excavatus*) has no state or federal status. It is incorrectly stated that Owens Valley checkerbloom (*Sidalcea covillei*) has no state status immediately after the sentence correctly stating that it is state listed as an endangered species. It has state status but no federal status. It is also listed by CNPS as 1B. Please note that List 1B plants are eligible for state listing. Furthermore, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA (CNPS 2001).

16-306 **14-4, 14.6, Endangered Species Act:** Willow Flycatcher is noted as a rare spring and fall migrant, summer resident and possible breeder. Appendix D lists it as an uncommon summer visitor. Appendix D is incorrect. The DEIR/EIS states that it is here from late April. That is incorrect. The species is a very late migrant and does not reach the State until almost mid May. Jon Dunn (pers. comm.), senior editor of National Geographic Guide to North American Birds and one of the nation's leading field ornithologists, said that in 40 years birding he has never seen one earlier than 11 May in California. With the present degraded habitat in the LORP it is not expected that the Willow Flycatcher would breed there. If the habitat is enhanced it certainly is possible they could begin breeding there again as they breed in the willows along the Owens River just north of Bishop. The surveys were not conducted during the time when Willow Flycatcher is known to migrate through the Owens Valley. Is LADWP willing to finance the study and research that needs to be done on this species before a sensible management plan can be written?

D-1 to D-7, APPENDIX D, Bird Species of the LORP Project Area: The list of birds is in serious need of rework. It is incomplete and the taxonomic order shows no relation to accepted convention. The American Ornithologists' Union committee on taxonomy and nomenclature publishes the accepted list of birds with the common and scientific names and in the proper taxonomic order. This is the guide for all scientific publications and should be followed by all EIR/EIS documents. The variation found in the DEIR/EIS makes it infinitely more difficult to determine if a species is included. For example, the genus *Contopus* is listed in an incorrect order and then after four more genera another *Contopus* is listed again and still out of order. Incorrect common names were used, incorrect scientific names were used, and species were missing. Please follow conventions used in The A.O.U. Check-list of North American Birds, 7th edition (1998) and supplements published biennially in the journal Auk.

Inadequate description of baseline rangeland conditions

The DEIR/EIS should describe the basic condition of rangelands in the project area; otherwise, it will be impossible to determine when changes occur and how those changes will affect LORP and MOU goals. For example, p. 9-1, ¶2 lists four assessment classes for mesic and arid pastures that range from zero to one hundred percent of production potential, then notes that rangeland conditions range "from Class 4 to Class 1." It is not surprising that rangeland conditions on the leases range from Class 4 to Class 1, given that these categories encompass from 0 to 100 percent of potential, or the entire range. It would be more helpful to describe how much rangeland falls into each category. What proportion of rangeland was producing 75 percent or more of its potential? What proportion or fraction was producing less than 25 percent of its potential? What are current trends in rangeland? Are trends of range condition mostly upward, downward, or stable? What trends exist on different leases? What percentages of rangeland fall into upward, downward, or stable trends? How is a "significant change" defined? All of this information should be included in the Land Management Plan and DEIR/DEIS.

9-3, 9.2.1, Biological Resources--Existing and Future Anticipated Conditions: "...riparian and aquatic habitats of the Lower Owens River (mostly degraded due to lack of flows)..." This is half true. But where riparian habitat is found in the lower reaches of the river it is heavily impacted by livestock. There is little or no establishment of willow and cottonwood and little or no understory. Add "and grazing impacts" after "flows" in "(...lack of flows)".

9-3, 9.2.1, Biological Resources--Existing and Future Anticipated Conditions: "...increased flows to the Delta Habitat Area are also expected to increase wetland and riparian habitats..." The DEIR/EIS describes lower annual volume and baseflows to the Delta--not increased flows--and riparian forest vegetation that will stay the same or decline (see p. 6-25).

Inadequate description of existing recreational uses and conditions

There are no baseline recreational use figures provided in the Land Management Plan for the LORP area, no description of types of uses, percentages of recreational users in each category, or peak use days or seasons. No baseline map of motor vehicle routes has been provided, nor any analysis of how recreational use might affect MOU goals such as promotion of biodiversity, enhancement of habitat for Threatened and Endangered Species, enhancement of habitat for wildlife, or sustainable use. Without a baseline, there will be no way to evaluate changes or objectively monitor the effects of increased use in the LORP area. Increase in recreational use is a certainty in California, where the population is expected to increase to 45 million by 2020. The Owens Valley is only 3 hours away from the Los Angeles Basin with its millions of people.

POOR MONITORING AND ADAPTIVE MANAGEMENT DESCRIPTION AND MEASURES

16-312 The Land Management Plan fails to discuss what information will trigger adaptive management responses and how. For example, in protecting sensitive resources and rare plants from grazing, the plan proposes adopting "*appropriate management strategies*" (p. 2-62, ¶4) in some cases or installing fences around sensitive seeps/springs and rare plant populations "*if deemed necessary*" (p. 2-65). There is no monitoring of plant or animal species in grazing areas, aside from monitoring of "herbaceous forage," which presumably includes mostly species that are attractive to cattle. There are no specific monitoring and adaptive management measures to ensure that recreation, grazing, and other uses do not directly prevent achievement of the MOU goals of sustainability, biodiversity, enhancement of habitat for Threatened and Endangered Species, and "*management of livestock grazing and recreational use consistent with the other goals of the LORP.*" (Action Plan Work Program, part V, p. 6)

Grazing monitoring and adaptive management

16-313 It's not clear whether grazing utilization criteria have been created to promote MOU goals, or simply to promote grazing goals. On page 2-71, the DEIR/EIS mentions two assumptions in setting LORP grazing utilization criteria. The first assumption is that "*...key vegetation species, when grazed appropriately, will improve in vigor and improvement,*" but the plan fails to describe what species those are and whether those species are useful primarily for grazing purposes or if they are also species that help promote biodiversity or provide habitat for habitat indicator species in the LORP area. Which key vegetation species will enhance which management indicator species? Which key vegetation species will be managed for livestock? The second assumption is that "*... if proper amounts of vegetation remain after the grazing season, the soil is adequately protected from erosion,*" but fails to mention whether species composition of the remaining vegetation is important. This may be an important consideration, but since the DEIR/EIS fails to provide any baseline information on current range condition and trend we are unable to evaluate this. Further monitoring and adaptive management principles on p. 2-71 compound these errors of omission:

- 16-314 • "*Monitor utilization of herbaceous forage on benchmark riparian sites. Monitoring riparian pasture utilization will be done by the lessee and LADWP.*" Will herbaceous forage be monitored for changes in species composition? It should be, if biodiversity is truly a goal. If biodiversity decreases because livestock favors certain plant species over others, will there be any adaptive management response? How often will measurements be taken? Will woody forage or any non-forage species be monitored for utilization or damage? They should be. Woody species are necessary habitat for avian and other species in the LORP area, including some habitat indicator species. Noxious non-native species can increase in response to a livestock preference for more palatable native plants (Belsky and Gelbard 2000), and biodiversity can plummet as other species that are dependent on native plants suffer. Without monitoring these factors and without a specific adaptive management plan with triggers based on such measures there is no way to determine whether biodiversity and sustainability goals are being achieved and no way to work toward those goals.

16-315 Self-monitoring complicates matters: lessees are not necessarily experts on what plant species promote diverse habitats consistent with the needs of the habitat indicator species, one of the fundamental goals of the project (MOU p.9, Section II.B.1). This concern is exacerbated by the lack of any description in the DEIR/EIS of the habitat needs of the habitat indicator species listed in the MOU and of any protocols for monitoring data collection, analysis and reporting as required by the MOU (Action Plan p. 11, part VI.A). Given that some lessees have not been supportive of the LORP habitat goals and there are no established monitoring protocols, how will LADWP assure the public that proper self-monitoring will be done? Where, exactly, are benchmark riparian sites?

16-316 "Utilization" standards are mentioned in sections 2.8.1.1 and in 9.1.2, but no explanation is given for how utilization percentages are calculated or how and when utilization cage sites (as described in LORP Ecosystem Management Plan) will be selected. For example, if "40 percent of the herbaceous forage is utilized," it is not clear whether that percentage refers to the volume of foliage, the surface area of foliage, the number of plants, or the amount of ground surface covered by foliage. It is also not clear whether that means that some plant species might be grazed at a 100 percent level (i.e., 100 percent utilization for preferred forage plants, which might also be plants that are vital food or habitat for other species) while other species potentially less useful to wildlife are only grazed minimally. The plan also fails to describe how often vegetation will be monitored to determine rate of utilization and if woody vegetation will ever be monitored. Finally, the plan would greatly benefit from citations of any documents that might be available to the public that clarify these methods. The 2002 LORP Ecosystem Management Plan provides more information than the DEIR/EIS, but neither document provides enough to allow adequate evaluation.

16-317 • "Use annual photo points to document changes in riparian habitats." It would help to know when photos will be taken to document changes in riparian habitats. In fall? In spring? In summer? What will constitute a significant change, how will it be determined, and who will determine when a significant change occurs? What actions will be taken in response to that change? Again, the document should provide protocols for monitoring data collection, analysis and reporting as required by the MOU (Action Plan p. 11, part VI.A). And again, self-monitoring is questionable if the lessee has little familiarity with or investment in LORP goals.

Other problems with grazing monitoring include:

16-318 **2-65, 2.8.1.1, General Land Management Approaches and 9-1 to 9-2, 9.1.1, Existing Conditions, trend monitoring and transects:** Locations (UTM or Lat/Long coordinates) of the following should be provided:

- Permanent sampling transects
- Permanent transects
- Livestock exclosures
- Rare plant exclosures
- Photo points
- Utilization cages

16-319 **2-78, Table 2-18, Riverine-Riparian System Monitoring Program, Understory development (row 3):**

Understory impacts as a result of current grazing are severe in riparian habitats in much of the LORP area. In many places there is no understory and there are no young willows or cottonwoods. Several habitat indicator species such as the yellow-breasted chat are dependent on habitats with trees and a dense understory in the riparian zone. Unless the diversity of habitat provided by understory growth significantly improves, the habitat goals for the river system will not be met. Monitoring for understory development as described will not be conducted unless the need for it is determined in some unspecified future time by unspecified means. Whether or not this important monitoring function is needed should not be deferred to some future decision. There should be a clear commitment to conduct this monitoring as the need for it is obvious. Protocols for data collection, analysis and reporting for this monitoring should also be included in the DEIR/EIS.

16-320 **9-2, 9.1.2, Rangelands, Potential Impacts:** The plan does not specify under what conditions utilization will be adjusted up or down. For example, if the trend for a certain piece of rangeland is upward, but the

16-320| rangeland is Class 4 (producing less than 25 percent of potential), will "allowable utilization" be ratcheted up?

Recreational monitoring and adaptive management

There are no plans described for monitoring recreational uses. The DEIR/EIS mentions on p. 2-65 that "[i]f, in the future, vehicular traffic is damaging the floodplain and inhibiting the attainment of MOU goals, restrictive action may be taken," but no means of reaching this decision is provided; no monitoring methods suggested; no triggers for restrictive action specified; no details on intended restrictions provided. Likewise, section 10.1 provides no plan for recreational management beyond "current land and recreation management practices for City of Los Angeles-owned land" (p. 10-2).

This is an egregious oversight. The MOU requires that the LORP Land Management Plan "Resolve recreation activities, commercial uses, and conservation goals for sustainable use" (Action Plan p. 11, part V.E). Current land and recreation management practices for City of Los Angeles-owned land are already insufficient. Current management resources for LA-owned land appear to be stretched to the limit. There are no LADWP patrols for recreational compliance and education (e.g., camping and fire compliance, appropriate vehicle use) in an area as large as many state parks and National Monuments. It is reasonable to expect current damaging activities to continue to be done by those who know that no one is watching.

16-321|

The vast majority of the local public greatly enjoys and appreciates access to LADWP land, but there are people who use LADWP land to shoot bottles and bowling balls, abandon refrigerators and house pets, create new roads, light bonfires, burn tires, dump construction materials, harass wildlife, harass livestock, and dirt ski. LADWP does not encourage such activities, but does not have the staff or enforcement to stop them. Such use causes significant damage even now, especially in terms of fugitive dust, soil erosion, and impacts on native wildlife and vegetation, and is obviously contrary to the MOU goal of sustainable use for the LORP. and to the MOU goal that recreation management be consistent with the other goals of the LORP.

Taken in combination with an expected population increase in California to 45 million by 2020, and a proportional increase in recreation, the lack of any new monitoring or adaptive management plan for recreation signals a significant impediment to the achievement of LORP MOU goals.

INADEQUATE NON-NATIVE PLANT MANAGEMENT

A stated goal of the Memorandum of Understanding (p. 9, section IIB4) is "[c]ontrol of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP." Non-native plants are suspected of being one of the main contributors to listing of Threatened and Endangered species in the United States (Wilcove et al., 1998). Livestock use is known to increase non-native plant invasion because livestock preferentially graze native plants (thus selecting for non-native plants in grazing areas), transport seeds in their guts and coats, compact soil, and create areas of nitrogen-rich soil that favor some weed species. (Belsky and Gelbard, 2000). Recreational use likewise increases the spread of non-native plants through soil disturbance and seed transportation. The LORP includes both grazing and recreational use within its boundaries and should therefore incorporate some plan to control deleterious species and thereby promote (or at the least protect) biodiversity and sustainability, all stated goals of the MOU.

16-322|

According to the DEIR/EIS, however, "there are insufficient funds to develop and implement an effective invasive species control program as part of the LORP" (p. 10-5), a statement tantamount to declaring that

LADWP will not provide the LORP with sufficient funds to achieve MOU goals. This would breach LADWP's obligation to implement the LORP as a mitigation measure required by the 1991 EIR and the MOU.

16-322

If a full-scale noxious weed control program is impossible due to lack of funding, an alternative option should be presented that introduces, at the very minimum, educational programs directed at recreational users and lessees to help reduce the flow of non-native seeds from one area to another via people, livestock, and automobiles. As it stands, a livestock and recreation plan without a noxious weed plan is contrary to MOU goals.

INADEQUATE COWBIRD MANAGEMENT

Goguen and Mathews (1999) have found that cowbirds may benefit from livestock because grazing, or the presence of livestock itself, facilitates foraging opportunities. Livestock may create cowbird feeding microhabitats, increase insect abundance, provide foods in their manures, and may make food more visible by flushing insects when grazing. The presence of livestock tends to increase densities of cowbirds locally and can create gradients of parasitism pressure within a landscape. The strong bond between cowbirds and livestock has led to the use of livestock removal (i.e., rotation of livestock away from host breeding habitat) as a management technique to reduce parasitization of host nests. Other researchers have determined that the exclusion of livestock from sensitive habitats (e.g., riparian) is clearly important in creating and maintaining habitat structure for many bird species (Taylor 1986, Taylor and Littlefield 1986). Cowbird parasitism of Arizona Bell's Vireo (*Vireo bellii arizonae*) in a desert riparian landscape (Averill-Murray, et al. 1999) was lowered based on several factors, including the initiation of cowbird control the previous year and decreased forage availability for Brown-headed Cowbirds with the temporary cessation of a ranching operation nearby. These studies indicate the direction LADWP should take in cowbird management and riparian restoration in the LORP.

16-323

4-43, 4.7.1, Wildlife, Including Sensitive Species--Existing Conditions: In surveys conducted along the lower Owens River the Brown-headed Cowbird (*Molothrus ater*) was found to be one of the most abundant species of birds present. The cowbird management plan cites only literature that supports laissez-faire management, ignoring an equal and compelling amount of literature that supports cowbird removal programs. The intent of the LORP is to develop riparian habitat which will encourage Threatened and Endangered species, as well as others, to breed but there are no plans to remove "one of the most abundant species of birds present" even though this non-native species parasitizes native species. While cowbirds are not the only reason for nesting failures, and other predation does occur, it has been proven that removing cowbirds enhances the success of many troubled species. It has been shown (North American Birds 55:483) that cowbird control has resulted in the impressive recovery of the Least Bell's Vireo. Last year 430 Least Bell's Vireo, an endangered species, maintained territories in Prado Basin, Orange County. Prior to cowbird trapping they were almost extirpated from this area. Similar results have occurred in other sites in Orange and San Diego Counties. These increased nest success rates are not the result of enhancing the habitat or taking action against nest predators other than cowbirds. These examples serve as a manual on how to delist a Threatened or Endangered Species. Is LADWP willing to develop a new cowbird management plan that will enhance the riverine-riparian corridor they are trying to develop?

16-324

11-21, 11.4.5, Evaluation of NEPA Alternatives, Cowbird Trapping Program: The DEIR/EIS states that cowbird trapping is not proposed because available data do not indicate a substantial increase in cowbirds in the last 30 years. What is the basis for this statement? What study was conducted in the LORP area, when, and by whom? What is the thinking behind the need to have cowbird trapping only if a substantial increase has occurred in the last 30 years? The records for cowbirds in the 1970s indicate a

16-325

16-325 large number, not unlike records from today, and the population could be considered stable. LADWP's own surveys indicate Brown-headed Cowbird is one of the most abundant species present. Then they state that impacts on local populations are unknown. While that last statement may be true, what leap of faith does it take to recognize that abundant numbers of a nest parasite will impact local populations in negative ways depending on the species? There are photographs of many species, including threatened species, feeding juvenile Brown-headed Cowbirds in the Owens Valley as well as much anecdotal evidence of the detrimental impact of cowbirds on local breeders. The LORP needs to address the cowbird by providing a plan to control the negative impacts it will have on the species that will be breeding in the new habitat. State trapping is not a long term solution. Some stop gap measures need to be taken to bring problems under control until more permanent solution can be worked out.

16-326 **11-22, 11.4.5, Evaluation of NEPA Alternatives, Cowbird Trapping Program:** It is noted that predation, not cowbird parasitism, is usually the main cause of nest failure. It was found (North American Birds 55:483) that last year 430 Least Bell's Vireo, an endangered species, maintained territories in Prado Basin, Orange County. Prior to cowbird trapping they were almost extirpated. Similar results have occurred in other sites in Orange and San Diego Counties. These increased nest success rates are not the result of enhancing the habitat or taking action against nest predators other than cowbirds. These examples serve as a manual on how to delist a Threatened or Endangered Species.

NO MONITORING OR PREVENTIVE MEASURES FOR NEW ZEALAND MUD SNAILS

16-327 The New Zealand mud snail, a species that outcompetes native aquatic invertebrates and thus reduces food available to species that forage on those invertebrates, has now colonized the upper Owens River and the Bishop Creek Canal, among other places (Becker 2002). Snails can be easily transported by livestock and fishermen, and thus have the potential to spread to the Delta Habitat Area, Blackrock, off river lakes and ponds, and other parts of the LORP area. Their spread is directly contrary to MOU goals of benefiting Threatened and Endangered species and biodiversity. In spite of this possibility, the snail is not mentioned in this document. The EIR/EIS should present a monitoring and prevention plan for the New Zealand Mud Snail or a plan for coordinating with others to impede the spread of the snail throughout the LORP. At the least, a plan should be presented for educating recreational users in Los Angeles and the Owens Valley, particularly fishermen, about methods for preventing the spread of the New Zealand Mud Snail, how to recognize the snail, and whom to contact if they find the snail in new areas of the LORP.

LACK OF PUBLIC ACCESS TO INFORMATION

16-328 Public review and comment is an essential part of the EIR/EIS process, and technical memoranda cited by the DEIR/EIS should be available to the public. These documents were prepared pursuant to the preparation of this DEIR/EIS and on December 2, 2002, Mark Bagley of the Sierra Club requested access to the "*Grazing Management Plans for Blackrock, Thibaut, Island and Delta, Twin Lakes, and Lone Pine leases (five plans, 1999)*" cited on page 2-2 of the DEIR/EIS. This request was denied by LADWP in a letter dated December 9, 2002 (Walsh, 2002). Lack of adequate information in the DEIR/EIS about fundamental baseline data regarding trends and conditions in lease areas and denial of requests for more information makes it difficult or impossible to evaluate statements regarding mitigation or grazing impacts in or on p. S-25 and section 9.2.3, Mitigation Measures: Rangelands, Mitigation LM-1; p. S-27 and 9.2.1 Description of Impact by Issue Area: Rangelands; p. S-27 Description of Impact by Issue Area: Biological Resources, and other grazing management considerations in chapter nine.

INDIVIDUAL LEASES

- 16-329 **9-2, Land Management Plan, Rangelands, general comment:** There is no mention here of salt and supplement placement. Salt and supplements should be placed at least 1/4 mile from natural water sources as the BLM, the adjacent land manager, requires.
- 16-330 **2-62, 2.7.4, Plant species:** Grazing should be prohibited during the fruiting period of the Owens Valley checkerbloom, or else the results of the flowering (i.e. seed production) will be undermined.
- 16-331 **2-66, 2.8.2.1, Land Management Plan, Description of Specific Management Actions on Individual Leases, Twin Lakes Lease:** Why is there no five- or ten- year non-use provision in this lease, especially in the riparian pasture? Is the upper AUM range 2,313 or 2,113? Impacts to nesting bird species (ground and understory nesters) are not addressed.
- 16-332 **2-67, 2.8.2.2, Land Management Plan, Description of Specific Management Actions on Individual Leases, Blackrock Lease:** Why is there no five- or ten- year non-use provision in this lease, especially in the riparian pasture? Why is the lease for 8 months instead of 7 months like Twin Lakes? Impacts to nesting bird species (ground and understory nesters) are not addressed. Blackrock lease exclosures should be in effect during the fruiting period as well as the flowering period so that seeds will have time to develop and disperse, otherwise the flowering period will not be productive,
- 16-333 **2-68, 2.8.2.3, Land Management Plan, Description of Specific Management Actions on Individual Leases, Thibaut Lease, last ¶:** What happens after ten years of prohibited grazing within the Riparian Exclosure? What measures will be taken? What changes in policy would or would not take place depending on results?
- 16-334 **2-69, 2.8.2.4, Land Management Plan, Description of Specific Management Actions on Individual Leases, Islands Lease:** Why are the riparian areas within the River Pasture not fenced (approximately 3 miles)? Why is there no rest of any length as at Thibaut? Why aren't there plans to create multiple pastures for rotation in the "Island Bosque" to enhance riparian values (willows) which are present, but highlined and with little understory due to grazing? This would help achieve the goals of the LORP for riverine-riparian habitat in the largest riparian area in the LORP area.
- 16-335 **2-69, 2.8.2.5, Land Management Plan, Description of Specific Management Actions on Individual Leases, Delta Lease:** Why is there no rest on this lease of any length? Why is no management for drift on state lands discussed? How long has the lessee illegally grazed on the state lands? What was the total cost to the state?
- 16-336 **9-4, 9.2.2, Biological Resources, Potential Impacts--Wetlands, Wildlife, and Rare Plants, ¶1:** If benefits include "*increased plant production and cover in riparian areas,*" which riparian areas will this occur in? Why are zero acres proposed to be fenced for seasonal restriction in the Island and Lone Pine Leases? The River Pasture is not fenced and represents the most extensive riparian area in the LORP, albeit a less than healthy one. Recruitment and maintenance of any understory is not occurring. Few young willow and cottonwood are found. Management should be for enhancement of riparian trees (mixed species) as well as understory in order to meet LORP goals and to ensure that the future USFWS Habitat Conservation Plan opportunities are not precluded, for example the enhancement of habitat for Yellow-billed Cuckoo, Least Bell's Vireo and Willow Flycatcher. The beneficial impacts (Class IV) described cannot be assumed to occur throughout the leases and actually may not occur in substantially large areas.

10. WATER SUPPLY IMPACT AND GROWTH INDUCING EFFECTS

SECTION 10.7 GENERAL COMMENTS - GROUNDWATER PUMPING SCENARIOS

It is well known that many of those interested in the well being and future of the Owens Valley have been very concerned with LADWP's insistence on constructing a 150 cfs capacity pumpback station as a part of LORP. This concern stems from the fact that no one other than LADWP believes the small volume of additional water that this facility will allow to be captured justifies the approximately \$3 million in additional costs to build it and additional operations and maintenance costs. Given that LADWP's primary mission is to supply water to the City of Los Angeles, and recognizing the long history of conflict and acrimony over the adverse social, economic and environmental consequences of its water-gathering and export policies in the Owens Valley, it should be no surprise that we feel compelled to question the Department's claims regarding the purposes of the 150 cfs pump station.

This section of the DEIR/EIS presents essentially the same information as in Section 12.5, Cumulative Impacts Related to the Pump Station Size, and Section 12.6, Cumulative Impacts to the Water Supply of the City of Los Angeles. It reviews information regarding the quantity of water that would be captured by a 50 and 150 cfs pump station, respectively, under the LORP. It reviews arguments presented by the EPA to the effect that since the larger capacity station cannot be justified economically for the purposes of the LORP, it may provide an incentive for increased groundwater pumping or a reduction in water supplied for Owens Valley uses. The larger capacity pump station would then be used to convey that additional water out of the Owens Valley to Los Angeles. Finally, LADWP's counter arguments are presented. The section reiterates LADWP's rejection of the EPA conclusions and states that LADWP's economic analysis justifies the larger pump station (however the specific analysis is not included). Various additional reasons are given as to why the 150 cfs pump station would not be used to increase water exports as a result of increased groundwater pumping. They include poor aquifer conditions near Owens Lake, MOU provisions limiting baseflow in the river to 40 cfs, provisions of the Long Term Water Agreement and the need for new project EIR analyses.

We repeat our comments for Sections 12.5. Despite LADWP's assurances we believe questions about the purposes of the larger capacity pump station remain, and we concur with the EPA conclusions absent further information. Various factors influence our thinking on this issue.

- Our own internal economic analysis, presented to LADWP in June 2002, does not support the larger pump station and confirms the economic evaluation done by the EPA. Our analysis was based on interest factors, cost and other figures supplied by LADWP, but we adjusted the seasonal habitat flows (released at the Intake) for an assumed 0.3 cfs/mi conveyance loss rate (slightly lower than the 0.33 cfs/mi minimum loss rate used in the DEIR/EIS). Assuming a 40-year life span of the station and use of the pump station for LADWP's stated purpose, the net return with a 0.3 cfs/mi loss rate would be negative.
- During discussions with LADWP representatives we have not been given assurances that the 150-cfs pump station will be used only for the purpose of conveying LORP water.
- LADWP has contracted with consultants Montgomery Watson to perform studies on the feasibility of groundwater pumping on the east side of Owens Valley.
- It would be possible to transport water from any potential well fields on the east side to the pump station by pipeline rather than using the river as a conduit (where losses will occur) so the 40 cfs baseline limitation will not be exceeded.

Therefore, to clarify this matter we recommend that the final EIR/EIS include LADWP's economic analysis which supports their contention the 150 cfs facility is economically justified solely for the purpose of conveying LORP water to the aqueduct or dust control project. A statement unequivocally

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saying that this is the only purpose of the 150 cfs station would also put all fears and conjecture on this matter to rest. A better solution would be a decision to build the 50 cfs pump station. With those additions to the Final EIR/EIS concerns regarding Impacts Associated with the LORP as a Whole and Cumulative Impacts could be properly evaluated. Only then can we conclude with assurance that there will be no significant growth inducing and indirect impacts, nor significant cumulative impacts.

SECTION 10.7 GENERAL COMMENTS - WATER SUPPLY FOR THE LORP

16-338 A corollary question concerns LADWP's intention regarding the water supplies for the LORP project. Will LADWP attempt to make up the estimated 16,000 ac/ft per year of water lost to the LORP from other Owens River watershed sources or not? In view of the ongoing significant adverse environmental impacts in the Owens Valley due to LADWP's water exports and lack of action on various mitigation projects called for in earlier agreements, any attempts to increase groundwater pumping to offset water lost to the LORP (15,433 ac/ft) or increase total water exports would only exacerbate impacts associated with the LORP as a whole and cumulative impacts.

As an introduction to our comments on this subject we quote below certain contradictory statements found in the DEIR/DEIS related to LADWP plans regarding the source of the water which will be used to implement the LORP, and the Department's intentions whether or not to find replacement water in the Owens River watershed for export to Los Angeles for municipal uses.

2.1.5 Relationship of the LORP to Groundwater Pumping and Surface Water Management in the Owens Valley: This section is quoted in full as follows, *"The LORP does not include the construction of new groundwater wells in the Owens Valley to supply the LORP, nor does the LORP include an increase in groundwater pumping in the Owens Valley as part of the project. Further, the LORP does not include any changes in surface water management practices in the Owens Valley except for those changes within the LORP area specifically in the project description that are necessary for the implementation of the LORP. As more fully described in Section 10, groundwater pumping and changes in surface water management practices in the Owens Valley are governed by the 1991 Inyo/Los Angeles Agreement."*

16-339 **10-14,10-5:** Table 10-5 indicates that the long term annual average water demand or total net new water consumption attributable to the LORP is estimated to be 15,433 ac/ft per year. Following the table the following is stated, *"Water for the LORP will be derived from river diversions. Existing groundwater pumping by LADWP in the Owens Valley will continue under the Inyo/Los Angeles Agreement. At this time, LADWP has no future plan to use groundwater to supply water to the LORP project element."*

10-15, 10.5.2 Summary of LADWP's Exports for Municipal Water Supply: In this section reference is made to the 2000 Urban Water Management Plan in which projections of long-term average annual deliveries from the Los Angeles Aqueduct for the next 20 years are made (321,000 ac/ft per year). It is stated, *"In the Plan, LADWP concluded that even with the need to supply 16,000 acre-feet to the LORP, adequate water supplies are available to serve the essential needs of the City of Los Angeles for the next 20 years."*

10-16, 10-5-3 Impacts on Exports from Owens Valley: It is stated, *"The average annual water consumption associated with the LORP, during steady state conditions, is estimated to be about 36,956 acre-feet per year. This water requirement represents a net increase of about 15,433 acre-feet per year over existing water uses in the valley that currently maintain elements of the LORP, including off-river lakes and ponds; wetlands and pasture in the Blackrock Waterfowl Area; and wetlands along the lower reach of the river. This amount of water is slightly less than the LORP water consumption projected by LADWP (i.e., 16,000 acre-ft per year) in its water supply projections for 2020. Hence the proposed*

project would not cause a reduction in the amount of water planned to be available to export from the Owens Valley for municipal uses in the Los Angeles basin and therefore, would not have an impact on water supply for municipal users."

10-17, 10.7 Growth Inducing Effects, Including Indirect Impacts : The second paragraph states, *"However, the LORP, including construction of a pump station, could cause LADWP to seek to increase its groundwater pumping in the Owens Valley and/or decrease the amount of water it currently supplies for water uses in the Owens Valley (water supplied for irrigation, stockwater, recreational uses or wildlife purposes). An increase in groundwater pumping resulting from the LORP could result in additional adverse impacts."*

16-339 The first two statements (Section 2.1.5 and 10-14,10-5) imply that there is no intention on the part of LADWP to supply water needed for the LORP by increasing groundwater pumping or reducing supplies for present uses in the Owens Valley. The water will come from the Aqueduct. However, contrary to the statement that this water is derived from surface water diversions, it should be noted that Aqueduct water also includes groundwater. The next two quotes (10-15, 10.5.2 and 10-16, 10-5-3) suggest that LADWP has planned for the loss of approximately 16,000 acre/ft per year and replacement water, if needed, will be obtained from other sources outside of the Owens Valley. In apparent contradiction, however, the final quote (10-17, 10.7) affirms LADWP's option to increase groundwater pumping or reduce supplies for Owens Valley uses if it so chooses.

We acknowledge that in the discussion that follows the final statement quoted above, many reasons are given why it is highly unlikely that LADWP would try to find replacement water within the Owens Valley watershed. However, because of the ambiguities in the text of the DEIR/EIS and for the reasons stated in the discussions above, we recommend the Final EIR/EIS dispense with the convoluted discussions and present a few simple statements to the effect that the pump station will be used only to capture water introduced into the river for the purposes of the LORP and that at no time now and in the future will increased groundwater pumping be considered other than what is permitted under provisions of the Inyo/LA Long Term Water Agreement. This will allow a finding that there are no significant growth inducing or indirect impacts nor significant cumulative impacts.

10.5 WATER SUPPLY IMPACT - SPECIFIC COMMENTS

10.5.1 Water Requirements and Losses Associated with the LORP

16-340 **10-9:** If there is an annual loss of up to 52,700 acre-feet in the river and spillgate channels during initial years, will LADWP need to supplement the City of Los Angeles water supply to make up the difference? If not, will these losses have an effect on in-valley water use? How? What are the anticipated short- and long-term impacts of the LORP on in-valley water use?

10-10 Last ¶, first sentence, typographic note: Change "encountered" to "encounter"

16-341 **10-12 first sentence at top of page, typographic note:** Change "...pump station would captured" to "...pump station would be captured"

10-14, Table 10-5 Water Requirements of the LORP: The total for the "Total LORP Consumptive Use" (Steady State Conditions) column is given as 36,958 acre-feet per year, but this is not the sum of the entries above it. The sum of this column is 33,718 acre-feet per year.

10-14, last ¶: It is stated that water for the LORP will be taken from Owens River diversions, and, one

sentence later, that there are no plans to use groundwater to supply water to the LORP in the future. This is misleading and incorrect for two reasons:

- 1) *The Owens River is already used as a conveyance to move groundwater to the aqueduct intake from wells, such as well #349 and wells at Laws, which lie upstream of the intake. The water in the river, and thus the water released to the LORP will be a mix of surface water and pumped groundwater. The language in the DEIR/EIS should be changed to make it clear that pumped groundwater will likely comprise some portion of the water to supply the LORP.*
- 2) The statement, "At this time, LADWP has no future plans to use groundwater to supply water to the LORP project elements" (underline - our emphasis) does not constrain LADWP from making such plans in the future. A sentence should be added pointing this out and noting that this allows the possibility of LORP-related increases in groundwater pumping with attendant risks of pumping impacts throughout the Owens Valley.

10.5.2 Summary of LADWP's Exports for Municipal Water Supply

10-15: It is stated that the LORP will consume 16,000 a.f./yr. of water above the amount already supplied to the "Early LORP". There is no statement regarding LADWP's intentions to recover the 16,000 a.f./yr. of new LORP consumption. What are LADWP's plans with regard to recovering or not recovering the 16,000 a.f./yr of new consumption? This question must be answered if discussion in the EIS of potential growth-induced impacts is to be credible.

LADWP periodically releases to the Technical Group summaries of its water use and pumping activities. One of the categories of use is entitled "E/M [Enhancement/ Mitigation] Water Uses and Pumping" (Table 2, Coufal 2002). Notwithstanding the fact that the LORP is clearly identified as "compensatory mitigation" in the 1991 EIR, water currently applied to the "Early LORP" is included in this total E/M consumption. Will the 16,000 a.f./yr. of water to be supplied to the LORP be added to the "E/M Water Uses" total?

In its proposed 2002-2003 Operations Plan LADWP includes a column labeled "Cumulative E/M Pumping vs. Use Imbalance" (Table 7, Coufal 2002b). This total shows the difference between the amount of water applied to E/M projects and the amount pumped from E/M wells. LADWP has repeatedly referred to this difference as a "deficit" in public meetings which suggests that LADWP believes it may be entitled under the Agreement to make up this deficit through increased groundwater extraction. What are LADWP's intentions with regard to recovering or not recovering this "deficit"? The EIS must make clear LADWP's intentions with regard to the E/M "deficit" at least to the extent this total includes water applied to the LORP if the analysis of potential growth induced impacts is to be credible.

10-18, ¶4: It would be extremely helpful if the EPA's analysis were included here, along with a more extensive and specific reply from LADWP. How much water would LADWP retrieve under both analyses? How much money would this save LADWP? How much additional power would LADWP be able to generate with the water obtained from seasonal habitat flows? How much would LADWP profit from that power? What "other factors" are involved? If seasonal habitat flows were required to fulfill the goals of the MOU, how would LADWP then recoup money spent on the pumpback station?

10-18, last ¶: Although increasing baseflows might require either an EIR or a negative declaration, the MOU does not necessarily preclude adding significant groundwater to the river flow for export. Although the MOU specifies a 40 cfs baseflow, that appears to be a restriction on minimum flow rather than maximum flow.

10.7.2 Groundwater Pumping Scenarios Analyzed

16-347 | **10-19, typographic notes:** Last line in (1): change “the raise” to “to raise” and in second-to-last sentence in “150 cfs pumpback station” ¶ delete comma between “pump” and “station”

10.7.3 Relationship between Future Groundwater Pumping and 1991 Agreement

16-348 | **10-20, second ¶:** Dispute resolution has not proved to be an effective measure for resolving disagreements between the County and Los Angeles. Disagreements between the County and Los Angeles have neither always prevented Los Angeles from taking a disputed action nor convinced Los Angeles to take an action required by legal agreement (e.g., many mitigation projects agreed to years ago are well behind schedule or have not even been planned yet). Legal agreements, although they have had a positive effect on relations between the County and the City, are no guarantee that an action will be taken or won't be taken. In other words, dispute resolution does not work well now, and it shouldn't be assumed that dispute resolution will work well in the future when it hasn't historically.

11. DIVERSION, PUMP STATION, POWER LINE, AND ROAD SURFACING

5.1 VEGETATION TYPES, INCLUDING WETLANDS

5.1.1 Existing Conditions

16-349 5-2, 2nd ¶ from bottom, second sentence: delete extra “s” in “seven”

5.1.2 Potential Impacts – Construction of Pump Station – Both Options

5-4, 1st ¶ below “Construction Period and Phases,” second sentence: change “and” to “an” in “and additional six months”

16-350 5-5: How quickly would vegetation be restored after construction? How would the method of restoration differ from current methods that have not yet worked (such as in the Five Bridges area)?

16-351 5-6: Filling an extant oxbow with sediment for dewatering is a questionable waste of wetland, regardless of whether the LORP will create more wetland at some point in the future. This is an avoidable impact.

16-352 5-8, 5-9, Note: Destruction of some wetland acreage will be necessary for this project; however, that destruction should not be dismissed or downplayed simply because new wetlands are being created in other areas. New wetlands are meant to be mitigation for old impacts that occurred from 1970-1990, not for destruction resulting from the LORP. There will be a gap between the destruction of old habitat and creation of new habitat, and new habitat will likely take some time to match the quality of the old habitat.

16-353 5-10, Habitat Impact Differences and Similarities: Are there guarantees available that, with the 50 cfs pumpback station option, only two of the four 25 cfs capacity pumps involved would be operated at any one time? If not, implications and potential impacts should be discussed in this chapter, the Delta chapter, and the impacts and alternatives chapters. Likewise, if the 150 cfs pumpback station is actually a 158-176 cfs capacity pumpback station (see page 2-45 of DEIR/EIS), implications should be discussed here, in the Delta chapter, and the impacts and alternatives chapters.

5.1.4 Mitigation Measures

16-354 5-12, 5.1.4: Research has shown that restoration goals can be more successfully achieved with the use of local native plant seeds and seedlings (Millar and Libby 1989). Seeds should be collected from surrounding areas that contain species from similar plant communities. Upfront costs may be higher but seedling establishment is significantly greater with the use of seedlings rather than direct seeding. Seedlings should be grown from locally collected seed and planted in the fall. Seedlings should be irrigated until established. Protection from herbivory and weed infestation should be provided. The DEIR/EIS should provide a specific restoration plan including species lists, weed control, irrigation plans, and a budget. There should also be a plan for permanent noxious weed control plan for diversions, the pump station, and power line areas.

16-355 5-13, Mitigation Measure P-2: Would LADWP implement this measure under any circumstances? If so, what are those circumstances?

16-356 5-14, 5.2.1, Potential Impacts-Pump Station (Both Options): Construction was anticipated to begin July 1, 2003. With the delays a new construction date must be stated. The DEIR/EIS acknowledges (5-14) that this site is a complex of upland, wetland, aquatic, and riparian habitats that provide high quality forage and

16-356 shelter for wildlife. That also means, although not stated, that wildlife may breed there. If conversion to a large forebay begins during the bird breeding season, steps should be taken to have a wildlife biologist search for incubating birds or nestlings. If any are found that would be impacted by construction, protective steps should be taken such as flagging or moving the nest if possible. As stated in the DEIR/EIS "*there is no evidence that this [Least Bittern] species of special concern occurs at the site*" but there is no evidence that it could not so it should be searched for prior to construction if the start date is during the breeding season.

5.3 AIR QUALITY

5.3.3 Mitigation Measures

16-357 5-18, AQ-2: Stabilization is not a current practice with LADWP sediment stockpiles in other areas, such as on the canals north and east of Bishop. How frequently would water application occur? How often would other stabilization methods be applied? How would this differ from current practices?

12. CUMULATIVE IMPACTS

GENERAL COMMENTS:

The DEIR/EIS notes that “[u]nder CEQA cumulative impacts are defined as two or more individual effects, that when considered together, are either considerable or compound other environmental impacts” (p. 12-1). Those cumulative impacts can result from changes in the environment due to the proposed project and other nearby related projects. The EIR must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable.

16-358 It's difficult to grasp the cumulative effects of lack of funding in this document, in part because there is no breakdown of how much money will be needed for monitoring and adaptive management, and in part because there is no comprehensive delineation of activities for which funding has been obtained and for which funding will not be available. (Tables in Section 2 and the last page of Section 10 attempt this, but do not go far enough.) It would be extremely useful to have a separate section that groups all project components with insufficient funding and that discusses these projects in terms of how much funding is needed and what the cumulative impact will be to the project if funding is not obtained. If certain LORP projects are not funded, what will be the combined or cumulative impact of not funding those projects with the impact of not completing other overdue non-LORP mitigation projects?

12.2 ENVIRONMENTAL IMPACTS OF THE LORP

16-359 **12-2, 12.2, item 4, Saltcedar:** Saltcedar infestation is categorized as a Class I impact (significant and unmitigatable). It is agreed that significant saltcedar infestation will occur as a result of the LORP; however, the apparent success of the Water Agreement Saltcedar Control Program belies the characterization of saltcedar expansion as unmitigatable. This is a relatively low-tech, high man-hour operation, utilizing cutting the saltcedar and treating with herbicide, and stacking the slash on the riverbank. The proven success of this technique could be utilized on a permanent basis by the already trained staff if sufficient funding were provided by LADWP. The operation is conducted by the Inyo County Water Department and utilizes restricted funds originating from LADWP. Significant dollars were provided for a three year period. There is an ongoing yearly maintenance amount of around \$50,000. This is insufficient for existing saltcedar control, never mind the expected spread of this noxious weed with the LORP. Grant funds have been obtained by the Water Department and were used to supplement this effort. The use of onetime funds such as grants cannot be counted on to support an ongoing program. Other techniques could be examined

The MOU provides that “*The goal of the LORP includes:4. Control of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP. These control measures will be implemented jointly with other responsible agency programs.*” (MOU pg. 8-9) This wording in the MOU certifies that control measures “will” occur. Defining saltcedar infestation as unmitigatable is an attempt to release LADWP from its obligation to undertake control of this weed species. Because the LORP is adding many acres of potential saltcedar, the funding should increase proportionately as the acreage increases.

12.4 POTENTIAL CUMULATIVE IMPACTS

16-360 **12-12, 12.4 ¶1 and Table 12-2:** What is the cumulative impact of lack of funding for monitoring? What would be the cumulative impact of lack of funding combined with the spread of noxious weeds, decreased flows to the Delta, and other previous mitigation projects in the valley that have not yet been completed?

16-360 In other words, how could these potentially minor impacts interact to create a major impact and how would LORP goals be affected?

12-12, 12.4, Owens Lake Dust Control Project (Including the North Sand Sheets Project): This project includes the North Sand Sheet element involving the two treatment zones (Zones 1 and 2) on either side of the Delta Habitat Area. According to the Mitigated Negative Declaration (MND), 2001 for the North Sand Sheet, this project involves a wide variety of significant adverse impacts including loss of aquatic and wetland habitats with deleterious effects on dependent shorebirds, particularly the snowy plover, increases of exotic species, precipitation of salts and toxic metals along the shore, and others (p. 12-17).

16-361 The DEIR/EIS states that the LORP will result in reduced water flows to the nearby Delta and brine pool transition areas which may result in similar loss of habitat, according to the North Sand Sheet MND,

"This is the only potential significant cumulative impact identified for the proposed LORP."

We agree that this constitutes a cumulative impact and we would point out that this only reinforces the need to set higher water flows of to the Delta and and to the brine pool transition area as described in other sections of these comments. We support the Alternative: 50 cfs Pump Station with Higher Baseflows and Modified Seasonal Habitat Flows Alternative as described in Section 11.3.2. This alternative would reduce or eliminate the potential LORP impact to the Delta. Under this alternative:

- Baseflows and pulse flows to the delta would be increased to an average annual flow of 9 cfs.
- The 50 cfs pump station would be constructed which would allow any seasonal habitat flow in excess of that capacity to pass to the delta.
- The seasonal habitat flow would be modified by providing supplemental water from spillgates to offset channel losses and ensure that the target seasonal habitat flows are achieved at the pump station.

16-362 Regarding the brine pool transition area, we believe that the legal arguments being used in the DEIR/EIS to limit flow to the Owens Lake Nationally Significant Important Bird Area (National Audubon Society, 2000) is incorrect. Since river water is currently flowing to Owens Lake through the brine pool transition area, and arrangements have been made through modification of the Court Injunction to allow water diversions to the lake for the purposes of the LORP, it is legally allowable to provide adequate water to the brine pool transition area. As discussed in earlier comments on this issue, this potential LORP impact could be avoided, thus reducing or eliminating the potential cumulative impacts of the project.

12.5 CUMULATIVE IMPACTS RELATED TO THE PUMP STATION SIZE

12-18, 12.5, General Comments: This section reiterates the consequences to the Delta depending on whether a 50 or 150 cfs pump station is constructed and placed in operation. It also reviews concerns expressed by the EPA and others concerning the real purpose of the larger capacity pump station. Because the larger pump station does not appear to be economically justified based on the limited additional water it will allow LADWP to recover from the LORP, it is feared the larger unit may be used to facilitate future increased water exports from the region.

16-363 EPA in its analysis indicated, *"the indirect and cumulative impacts that would result if LADWP constructs a 150-cfs pump station (increased groundwater pumping, and/or reduction in water supplied by LADWP for use in the Owens Valley) are a significant and legitimate concern"* (p. 12-20). The EPA, in a February 2002 letter to LADWP (EPA 2002), stated that *"LADWP's proposal for the larger pump station does not appear to be economically or environmentally justified."* Additionally, EPA concluded that, *"the excess, under utilized capacity (of the larger pump station) would provide strong incentive for LADWP to pump additional water from the Owens Valley."*

The section also reiterates LADWP's rejection of the EPA conclusions and states that LADWP's economic analysis justifies the larger pump station (however the specific analysis is not included). Various additional reasons are given as to why the 150 cfs pump station would not be used to increase water exports as a result of increased groundwater pumping. They include poor aquifer conditions near Owens Lake, MOU provisions limiting baseflow in the river to 40 cfs, provisions of the Agreement and the need for new project EIR analysis.

Despite LADWP's assurances, we believe questions about the purposes of the larger capacity pump station remain and we concur with the EPA conclusions absent further information. Various factors influence our thinking on this issue:

- Our own internal economic analysis, presented to LADWP in June 2002, does not support the larger pump station and confirms the economic evaluation done by EPA. Our analysis was based on interest factors, revenue, cost and other figures supplied by LADWP, but we adjusted the seasonal habitat flows (released at the Intake) for an assumed 0.3 cfs/mi conveyance loss rate (slightly lower than the 0.33 cfs/mile minimum loss rate used in the DEIR/EIS). Assuming a 40-year lifespan of the station and use of the pump station for LADWP's stated purpose, the net return with a 0.3 cfs/mile loss rate would be negative.
- During discussions with LADWP representatives we have not been given assurances that the 150-cfs pump station will be used only for the purpose of conveying LORP water to the aqueduct or dust control project.
- LADWP has contracted with consultants Montgomery-Watson to perform studies on the feasibility of ground water pumping on the east side of Owens Valley (p. 12-20).
- It would be possible for LADWP to transport water from any potential well fields on the east side to the pump station by pipeline rather than using the river as a conduit (where losses will occur) so the 40 cfs baseline limitation would not be exceeded.

Therefore, to clarify this matter we ask that the Final EIR/EIS include a section detailing LADWP's economic analysis which supports their contention the 150-cfs facility is economically justified solely for the purpose of conveying LORP water to the aqueduct or dust control project. Additionally, we ask that

EPA provide an updated or new economic analysis since their February 2002 evaluation, taking into account the LADWP analysis. As we noted earlier at p. I – 20, the Mou does not appear to allow the pumpback facility to convey water for use in the dust control project.

¶2: This paragraph presenting LADWP's opinion regarding the aquifer conditions is inaccurate. According to Danskin(1998), there are areas on the east side of the valley with high transmissivity and adequate potential for water extraction, with artificial recharge being necessary. The more southerly reaches near Lone Pine exhibit the fine grain materials, faulting and lower water quality that make a well field less likely, but even here Danskin says more study is necessary.

12.6 CUMULATIVE IMPACTS TO THE WATER SUPPLY OF THE CITY OF LOS ANGELES

General Comments: It would be valuable to have another section added: *Cumulative impacts to the water supply of Inyo County*. What are the cumulative impacts to the water supply available for in-valley use, and how will that affect mitigation projects in the valley? Why is that issue not addressed in a distinct section?

12.7 CUMULATIVE IMPACTS RELATED TO THE WILLOW FLYCATCHER RECOVERY PLAN

16-369 | **12-23:** "...the willow flycatcher Recovery Plan does not describe any specific 'reasonably foreseeable or probable projects,' which are the types of projects typically addressed in a CEQA and NEPA cumulative impact assessment." But the Recovery Plan (Executive Summary, Southwestern Willow Flycatcher Recovery Plan, Actions Needed, p. v) does state "*Specific actions include: changing management of surface and groundwater, ...and restoring flood cycle; reducing impacts of domestic livestock, ...managing exotic plant species; reducing brood parasitism by brown-headed cowbirds;...*" The list of proposed actions in the DEIR/EIS do not correlate with the list of Actions Needed in the Executive Summary of the USFWS April 2001 Recovery Plan that is cited as the source. Would LADWP please explain the discrepancy? Which of these specific actions does LADWP agree to and how are they going to implement them?

16-370 | **12-24, ¶ 4z:** "*The implementation of the above actions will be based on available funding.*" This is not acceptable and may violate the Endangered Species Act and the Migratory Bird Treaty Act.

16-371 | **12.25, sentence 1:** "*As the willow flycatcher population increases over time in the LORP project area, LADWP may consider these types of cooperative efforts with USFWS to protect the populations.*" Why would LADWP decide against cooperative efforts with USFWS to protect willow flycatcher populations?

16-372 | **12-25, 2.1.1:** Conserve and protect all existing breeding sites, "*...the enhancement of riparian habitats and modified grazing practices along the river will facilitate this action.*" What steps are planned for the modification of grazing practices along the river? Reviewers have been denied access to grazing management plans cited in the DEIR by LADWP. Because of this they do not have access to what the grazing practices were in the past and what is the current baseline condition and trend. We are unable to determine if the modifications are appropriate to the goals of the Recovery Plan.

16-373 | **12-25, 3.1.1.1:** Increase the amount and quality of riparian habitat, "*...These larger [flycatcher] populations are likely to experience reduced levels of cowbird parasitism by dispersing cowbird eggs over a larger number of nests.*" The LADWP has taken studies from forests in the eastern U.S. that show how degraded habitat and small patches are subject to greater parasitism rates than extensive forests that remain closed with limited edge effect. These studies cannot be compared to a narrow ribbon of riparian that flows through an arid, grazed desert. This is extremely misleading. More habitat may mean more Willow Flycatchers but it will also mean more Brown-headed Cowbirds, and the flycatchers will have nowhere in the narrow riparian corridor to raise their young unmolested.

13. CONSISTENCY WITH INYO COUNTY GENERAL PLAN

16-374 | **13-2, Policy ED-2.1:** Effects of the LORP that might be inconsistent with promoting tourism include: 1) harm to brine pool transition area and resulting harm to plovers— Birding in the Owens Valley is a large attraction for birding tourists, and plovers attract a large share of the attention. Eliminating or harming the brine pool transition plover habitat may negatively impact Inyo’s public relations and tourism reputation with birders. (This would also be inconsistent with the Natural Environment as Recreation Policy described on p. 13-6) 2) A leap in the mosquito population, combined with negative information about the West Nile virus, may also discourage tourism. These two issues should be noted in this section of the DEIR/EIS.

16-376 | **13-3, Soil conservation and sustainable agriculture:** 1) Transportation of muck and organic sediment from the river and 2) seasonal habitat flows to redistribute soil throughout the LORP (including the Delta) would be much more consistent with these two policies than sediment stockpiling, dewatering muck in a wetland area, and not allowing habitat flows to reach the Delta.

16-377 | **13-4, Soil erosion policy:** If recreation increases in the LORP area with no change in current management policies, there may be an impressive increase in fugitive dust from recreational vehicle use or wind-blown dust from devegetated (overused) areas, which is inconsistent with this policy.

16-378 | **13-4, Restoration of biodiversity:** Reducing flows to the brine pool transition area is extremely inconsistent with this policy. It’s also inconsistent to claim benefits of reducing flows to the brine pool (as on p. 13-2) without likewise acknowledging the harm to biodiversity in this section. In addition, if the LORP increases the non-native weed population without sufficient control policies and funding, the resulting effects on biological communities would be inconsistent with this policy.

16-379 | **13-6, Reducing PM-10:** A large increase in recreational vehicle use in the LORP area and a corresponding increase in fugitive dust would be inconsistent with this policy.

14. OTHER FEDERAL IMPACT CONSIDERATIONS

PROTECTION OF WETLANDS AND THE CLEAN WATER ACT

Notes and tables throughout the DEIR/EIS imply that increases in wetland acreage in the LORP outweigh any negative impacts of questionable plans such as the installation of a 150 cfs pumpback station.

Acreages of wetlands to be gained and lost are added, subtracted, and totaled as if different wetland types and qualities are equivalent and as if net gain is the only benefit that matters. Nowhere is this implication more overwhelming than in Table 14-1, Summary of Impacts to Wetlands, where acreage gained is expressed as a total of "3,111*," Delta Habitat Area impacts are excluded from calculations with the entry "*Loss cannot be quantified,*" and a note at the bottom of the table dismisses potential Delta losses by explaining that ". . . *the total wetlands in the Delta Habitat Area are less than 900 acres, and as such, any reduction would not significantly alter the overall wetland gains by the LORP.*"

However, a simple overall increase in the amount of wetlands is not necessarily consistent with the principle of wetlands protection expressed in Executive Order 11990, nor should an increase be the sole goal. First, created wetlands are not always as biologically productive as the wetlands they "replace" (see for example Mitsch & Gosselink 1993; Kusler, Mitsch, & Larson, 1994). Second, there is often a gap between the destruction of old habitat and the creation of new habitat, during which time organisms in the old habitat die or disappear. Third, there is often a geographic gap between old and new wetlands (as will happen in this case), which makes it difficult or impossible for (non-feathered) organisms to migrate to new wetlands, even if they have the ability to leave old wetlands during destruction. Fourth, there is often a change in the kind of wetland or a decrease in valuable habitat (as will happen with the destruction of the brine pool transition). Therefore, the question to ask in evaluating wetlands protection is not "what's the net acreage?" but "are we protecting as much original wetland habitat as possible and creating as much quality habitat as possible?"

The DEIR/EIS acknowledges this principle in passing in several places. Chapter 14, for example, quotes Executive Order 11990, "[e]ach agency shall provide leadership and shall take action to minimize the destruction, loss, or degradation of wetlands" (p. 14-3, 14.5, Wetlands Protection); notes that the primary purpose of the Clean Water Act is to "maintain and restore the chemical, physical, and biological integrity of waters of the United States" (p. 14-5, 14.71, Waters of the U.S. and Wetlands, emphasis ours); and acknowledges that to obtain a Section 404 permit, potential impacts to waters of the U.S. must be "avoided to the maximum extent possible" (p. 14-5, 14.7.1, emphasis ours). Unfortunately, this appears to be only lip service. Unnecessarily filling an oxbow area with dredge material (see chapter 5, section 5.1.2, p. 5-6) and—far worse—gambling with the status of the Delta and brine pool transition area are absolutely contrary to the expressed intent of all three federal regulations. Creating a net gain in wetlands does not excuse that inconsistency, nor should the LORP be claimed as mitigation for its own damage to existing aquatic and wetland habitats in the Delta and the brine pool transition area. The LORP is mitigation for another project (see the 1991 EIR). Alternative Option 2 (section 11.4.1), which provides for a 50 cfs pumpback station and 9 cfs baseflows, is the only option for the Delta described in this document that approaches compliance with federal water and wetlands regulations. Significant damage to the Delta and transition pools may occur even under that option, and other options are absolutely inconsistent with the principles of maintenance of the biological integrity of the waters of the United States, avoidance of damage to wetlands whenever possible, and minimization of damage if avoidance is not possible. Discussion of these problems is entirely neglected in chapter 14 of the DEIR/EIS.

16-381 Likewise, on a much smaller scale, dewatering of sediment in an oxbow area adjacent to the Lower Owens River (p. 5-6, section 5.1.2, Potential Impacts--Construction of Pump Station) is inconsistent with the Section 404 principle of avoidance of damage whenever possible. Environmental law professor James Blackburn explains this concept nicely: *"Avoidance is the first requirement of the MOA [1990 Memorandum of Agreement between EPA and the Army Corps of Engineers] and of the 404(b)(1) guidelines. 230.10(a) prohibits the issuance of a 404 permit if a practicable alternative exists that is less damaging to the environment. Further, 230.10(a)(3) establishes a presumption that practicable alternatives exist to non-water depend[e]nt activities and that these practicable alternatives are less environmentally damaging. Therefore, on its face, this requirement is clear and obvious. If there is another location that does not involve the filling of wetlands, then that site should be selected rather than the site proposed. Indeed, the regulations presume that such an alternative exists"* (p. 12, Blackburn 1991, emphasis added).

16-382 **14-3, 14.5, Wetlands Protection:** The Environmental Protection Agency should consider the impacts of noxious weeds such as saltcedar and perennial pepperweed to wetlands in the LORP area. The habitat goals of the LORP cannot be achieved without a fully funded noxious weed control program. Table 14-1, Summary of impacts to wetlands, should include noxious weed infestations.

ENDANGERED SPECIES ACT

16-383 In addition to actions that affect Endangered Species, actions that may affect a Threatened Species or contribute to its potential future status as an endangered species should be discussed in detail in section 14.6 of the DEIR/EIS, Endangered Species Act. Relevant species that the DEIR/EIS fails to discuss here include (but are not limited to) the Threatened Snowy Plover, which may be severely affected by impacts to the brine pool transition area (see below).

The Western Snowy Plover (*Charadrius alexandrinus nivosus*) is a Federally Threatened species (1993). The Federal status applies only to the Pacific coastal population but recent bird banding studies indicate that many interior birds co-mingle with coastal birds in winter (Page, et al. 1986, Page, et al. 1995). There is the possibility that when wintering interior birds migrate to their breeding sites that coastal birds might move with them.

16-384 The MOU (Section II.B.2, p. 9) specifically includes "2. *Compliance with state and federal laws ... that protect Threatened and Endangered Species.*" Good intentions do not replace good management plans, and nowhere in the LORP are there detailed plans regarding Threatened and Endangered Species. Without specific steps identified for each protected species, adequate analysis regarding compliance with the MOU is impossible. Additionally, our organizations' verbal acquiescence to deferring preparation of a US Fish and Wildlife Service sanctioned HCP in the LORP area was based partly on representations made by LADWP and Ecosystem Sciences that their intention in the MOU was not preparation of a "capital" HCP, i.e. the USFWS process, but a "small" HCP, i.e. without the approval of USFWS. Unfortunately, we did not receive in writing what exactly that meant, but we certainly did not understand it to mean that the LORP DEIR/EIS would so thoroughly ignore management and monitoring of Threatened and Endangered Species.

More specific comments on Threatened and Endangered species and the LORP DEIR/EIS appear below and also in our "FISH AND WILDLIFE" comments section.

Non-native plant management and Endangered Species

16-385 Non-native plants are suspected of being one of the main contributors to listing of Threatened and Endangered species in the United States (Wilcove et al., 1998). A stated goal of the Memorandum of Understanding (p. 9, section IIB4) is "[c]ontrol of deleterious species whose presence within the Planning Area interferes with the achievement of the goals of the LORP." Another stated goal is "[c]ompliance with state and federal laws ... that protect Threatened and Endangered Species." (p. 9, Section IIB2)

According to the DEIR/EIS, however, "*there are insufficient funds to develop and implement an effective invasive species control program as part of the LORP*" (p. 10-5), a statement tantamount to declaring that the LORP has insufficient funds to achieve MOU goals.

In order to adequately protect Endangered Species and to help prevent new species from becoming threatened or endangered, a full-scale noxious weed prevention and control program should be funded as part of the LORP. Even if a full-scale noxious weed control program were impossible due to lack of funding, an alternative option should be presented that introduces, at the very minimum, educational programs directed at LORP user groups to help reduce the flow of non-native seeds from one area to another via people, livestock, and automobiles.

Southwestern Willow Flycatcher

16-386 **14-4, 14.6, Endangered Species:** Without effective saltcedar control, and management for the underlying causes of its spread, the restoration of Southwestern Willow Flycatcher habitat will not be fully achieved. Investigators have noted "*in the case of saltcedar, water management and water quality are the key factors. Control programs that do not consider these factors in the design of a restoration program run the risk of further reducing biological diversity of an area, and possibly eliminating nesting habitat for the Southwestern Willow Flycatcher.*" (Finch and Stoleson 2000).

16-387 **14-4, 14.6, Endangered Species:** Willow Flycatcher is noted as a rare spring and fall migrant, summer resident and possible breeder. Appendix D lists it as an uncommon summer visitor. Appendix D is incorrect. The DEIR/EIS states that it is here from late April. That is incorrect. The species is a very late migrant and does not reach the State until almost mid May. Jon Dunn (pers. comm.), senior editor of National Geographic Guide to North American Birds and one of the nation's leading field ornithologists, said that in 40 years birding he has never seen one earlier than 11 May in California. With the present degraded habitat in the LORP it is not expected that the Willow Flycatcher would breed there. If the habitat is enhanced it certainly is possible they could begin breeding there again as they breed in the willows along the Owens River just north of Bishop. The surveys were not conducted during the time when Willow Flycatcher is known to migrate through the Owens Valley. Is LADWP willing to finance the study and research that needs to be done on this species before a sensible management plan can be written?

Snowy Plover

16-388 The coastal Western Snowy Plover is a federally listed Threatened Species. Interior birds move to the coast in winter (Page, et al. 1986, Page, et al. 1995) but further studies are needed to determine if some coastal birds return with interior birds to breed east of the Sierra. Actions proposed in the LORP DEIR/EIS may contribute to the eventual reevaluation of some interior breeding birds. Impacts to Snowy Plover populations should therefore be discussed throughout the DEIR/EIS in relation to impacts to the brine pool transition area, and should also specifically be discussed in sections 2.7 (Threatened and Endangered Species) and 14.6 (Endangered Species Act).

16-389 **1-8, Introduction, Purpose and Contents of an EIS, first full ¶, 4th sentence:** *“Hence, EPA’s focus... that the overall design and implementation of the LORP are consistent with federal laws and regulations.”* How does the “unmitigable impact” of drying up the brine pool transition zone abide by the International Migratory Bird Treaty? There are data (nesting records) that LADWP’s current practice of drying up the delta and transition to brine pool has left known nests and broods of nesting snowy plover without water and therefore certainly doomed (Hudson and Page, 2000). There are data showing the intense use of the transition to brine pool habitat by hundreds of thousands of migrating shorebirds moving back and forth from Canada and Central and South America each fall and spring (PRBO and local researchers).

16-390 **2-40, 2.4.3.1, Pump Station Components Shared by Option 1 and Option 2 and 5-12, 5.1.3, Potential Impacts - Power Line Construction - Both Options:** A new power line will be put out to the pumpback station. No mention is made of the ecological implications of this action. The most obvious is that the Common Raven (*Corvus corax*), a proven predator of Snowy Plover and other species, will use these poles for perches and nest supports. Well known and easily installed are the spike-like “perch preventers” that need to be added to the power line standards. LADWP should modify the power lines to reduce predation on the Federally Threatened Snowy Plover.

16-391 **3-5, Key NEPA Requirements and considerations, first sentence:** After “... *the Endangered Species Act, ...*” add “Migratory Bird Treaty Act and implementing treaties.” Impacts to the brine pool transition involve species from Canada and Mexico. *“Mitigation measures must be identified even if they are outside the jurisdiction of the lead agency...(40 CFR 1502)”*

11-10, 11.3.3, ¶ 2, Degradation of Brine Pool Transition Area Aquatic Habitats (Class I Impact): *“Because the brine pool transition area is not a part of the LORP, such releases would violate the court injunction which prohibits Los Angeles from diverting waters out of its aqueduct system onto Owens Lake or in any way releasing any water to be deposited onto Owens Lake at any time except for the purpose of implementing the LORP.”*

16-392 First, the premise of this DEIR/EIS statement is contradicted by DEIR/EIS Figures 6-1 through 6-11 that clearly show the brine pool transition area (or at least a portion of it) within the Delta Habitat Area boundary. The MOU map (MOU Figure 3) showing the location of the Delta Habitat Area identifies it as the “approximate area.” Therefore, the brine pool transition area is a part of the LORP and the September 2000 modification of the Court Injunction allows release of water to this area to maintain, enhance and create new habitat. Maintaining existing flows would avoid the identified impact. Secondly, LADWP and the State could seek another modification to the Court Injunction to allow the continuation of existing flows and changes in timing of flows (necessary because of year-round release of water to the Delta under the LORP) to this area and thereby avoid the potential impacts. These are feasible and reasonable remedies for the potential degradation of the brine pool transition area.

16-394 Under no circumstances should this habitat be negatively impacted. It is protected by the Endangered Species Act, the Migratory Bird Treaty Act, and implementing treaties. The Snowy Plover breeds in the transition area, and the Peregrine Falcon and hundreds of thousands of shorebirds migrate through in spring and fall with some shorebirds remaining throughout the winter.

(Please see "THREATENED AND ENDANGERED SPECIES" in our "FISH AND WILDLIFE" section for further comments relevant to the Endangered Species Act.)

MIGRATORY BIRD TREATY ACT

16-395

No mention was made by the EPA in Chapter 14 or elsewhere of the Migratory Bird Treaty Act and implementing treaties (1918 and subsequent statutes) that ensures legal security to migratory birds moving between Canada and Mexico. It protects migratory birds, birds in danger of extinction, and their environment (P.L. 86-732). The loss of the brine pool transition, part of a Nationally Significant Important Bird Area, is in violation of the MBTA.

OTHER ISSUES

16-396

14-1, 14.1 Relationship Between Short Term Uses of Resources and the Maintenance of Long Term Productivity: The infestation of saltcedar along the river, Blackrock Waterfowl Habitat Area, and in the Delta should be considered an impact to resources.

16-397

14-2, 14.3, Environmental Justice: Surveys will show that a majority of fishers and many hunters are working poor. Local communities such as Lone Pine and Big Pine have AFDC (Aid to Families with Dependent Children) percentages in schools of over 50%. These communities have a disproportionate number of working poor. This project will directly affect low-income citizens, and fish kills and wildlife impacts such as in the delta and brine pool transition must be avoided where possible or reduced by mitigation measures.

16-398

14-3, 14.4, Floodplain Management: Will flows to the Delta be high enough at any time (particularly with the 150 cfs station) for significant “*conveyance of sediments along the river channel and floodplain or deposition in the Delta*”?

OTHER FEDERAL IMPACT CONSIDERATIONS

16-399

14-7, 14.9, National Historic Preservation Act: The DEIR/EIS identified one structure that is eligible for inclusion on the National Register of Historic Places, the Intake. The Aqueduct Intake, along with the Aqueduct itself, is one of the most historically significant constructions in the Owens Valley, as the impact of the export of Owens Valley water and the story of its acquisition has had national repercussions. LADWP has been notably deficient in documentation and preservation of the properties owned by them in the Owens Valley. Indeed, the recent examples of the Steward Ranch house (donated by them to the Big Pine Fire Department for burning), the Reinhackle house, and the Partridge Ranch house (bulldozed and a mobile home put in its place) have pointed out the need for a comprehensive Historic Preservation plan for the LADWP properties in the Owens Valley. The implementation of the LORP includes modification of the Intake. Archival stable photographic documentation and measured drawings should be done *prior* to modification, perhaps through the Historic American Building Survey, as was done at Manzanar National Historic Site.

16-400

There are many areas of historic significance in the area of the Lower Owens River that were not identified. The mining towns of San Carlos and Bend City and their associated canals, ditches, rockdams and millraces should be analyzed for historical significance in regard to the proximity to the LORP and any channel clearing and access road construction. In particular, the mining town of Chrysopolis, its millsite, and the massive stone lined raceway need to be protected during any channel clearing and roadway construction. There are other historic agricultural ditches and canals, as well as sites such as the Ida Mill and the Union Mill adjacent to the river. These were not mentioned in the LORP DEIR/EIS.

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