DUPLICATE ORIGINAL

AGREEMENT BETWEEN THE COUNTY OF INYO AND CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER CONCERNING OPERATION AND FUNDING OF THE LOWER OWENS RIVER PROJECT

RECITALS

1. In 1991, the City of Los Angeles Department of Water and Power ("LADWP") and the County of Inyo ("County") entered into the *Agreement Between the County of Inyo and the City of Los Angeles and its Department of Water and Power on a Long Term Groundwater Management Plan for Owens Valley and Inyo County* ("Water Agreement"). The impacts of the Water Agreement were addressed in an environmental impact report that also addressed the impacts of LADWP's groundwater pumping operations in the Owens Valley from 1970 to 1990 ("1991 EIR").

2. The Water Agreement provides for, among other things, the implementation of the Lower Owens River Project ("LORP"), which includes the rewatering of a portion of the Owens River ("Riverine Area"), the maintenance of certain off-river lakes and ponds ("Off River Lakes and Ponds"), establishment of a waterfowl habitat area in the Blackrock area ("Blackrock Waterfowl Area"), enhancement of habitat in the Owens River delta area ("Delta Area"), and a pump station. The 1991 EIR further identified the LORP as an LADWP compensatory mitigation measure for impacts related to LADWP's groundwater pumping from 1970 to 1990 that were difficult to quantify or mitigate directly. Neither the Water Agreement nor the 1991 EIR nor any other document identifies the LORP as a mitigation measure for any activity undertaken by the County. The Water Agreement and the 1991 EIR provided that the impacts of the LORP would be addressed in a separate environmental impact report.

3. Section XII of the Water Agreement provides that: (1) the County will fund one-half of the LORP initial construction costs (up to a maximum of $3.75 million—less any funds contributed to cover the initial construction costs by the State of California or other non-LADWP sources); (2) LADWP will fund the remaining initial construction costs of the LORP; and (3) LADWP and the County will jointly fund and operate the LORP after it has been implemented (except for the costs of operating and maintaining the pump station, which will be funded by LADWP).

4. In 1997, LADWP and the County entered into a settlement agreement called a Memorandum of Understanding ("MOU") with the California Department of Fish and Game, the California State Lands Commission, the Sierra Club, and the Owens Valley Committee. The purpose of the MOU was to resolve challenges to the legal adequacy of the 1991 EIR, and the implementation of the LORP. The MOU specifies the amount of baseflow to be maintained in the river, the release of higher seasonal habitat flows, and delineated a schedule for establishing the baseflow in the river.

5. In 2004, LADWP and the County each adopted an Environmental Impact Report that addressed the LORP ("Final LORP EIR").

6. The schedule in the MOU for establishing baseflows in the LORP was not met. On August 8, 2005, the Inyo County Superior Court, in case number S1CVCV01-29768, issued an order ("Court Order") that required LADWP to pay $5,000.00 per day, commencing on September 5, 2005, into an escrow account established by LADWP and the County until LADWP established a permanent baseflow of approximately 40 cfs in the LORP. Under the Court Order, the proceeds of the escrow account are only to be used to pay the costs of: (1) the Special Master (appointed as part of the Court Order); (2) the County's share of the post-implementation costs of the LORP; (3) the cost of monitoring habitat indicator species for a five-year period at the direction of the California Department of Fish and Game in an amount not to exceed $100,000.00; and (4) the costs of the escrow account.

7. On September 16, 2005, the County and LADWP entered into a settlement agreement ("LORP Funding Agreement") whereby LADWP agreed to provide $5,242,965.00 (with adjustments) to the County. With regard to the County's obligation to fund $3.75 million of the LORP implementation costs, the LORP Funding Agreement provides that LADWP will provide a credit to the County in the amount of $2,989,932.00. The LORP Funding Agreement also acknowledges that the provision of this credit, in combination with the County's previous application of $360,000.00 obtained from the U.S. Bureau of Reclamation, $250,000.00 obtained from the U.S. Department of Housing and Urban Development, and $150,068.00 obtained from the EPA to LORP initial construction costs, fully discharged the County's obligation for the payment of $3.75 million for the LORP initial construction costs.

8. With regard to the County's obligation to fund a portion of the LORP post-implementation costs, the LORP Funding Agreement provides as follows: (1) the difference between $5,242,965.00 and the $2,989,932.00 that will be applied to the LORP initial construction costs (a difference of $2,253,033.00), will be a credit held in trust by LADWP (this "Post Implementation Credit" will be used to partially fund the County's obligation to pay one-half of the LORP post-implementation costs); (2) each year, the then remaining amount of this Post Implementation Credit will be reduced by the County's share of the LORP post-implementation costs until the $2,253,033.00 credit has been reduced to zero; (3) each year, the then remaining unexpended portion of the $2,253,033.00 will be annually adjusted upward or downward in accordance with the Los Angeles-Anaheim-Riverside All Urban Consumers Price Index ("CPI") or its successor; (4) the annual CPI adjustment will take place prior to deduction of a credit for County's annual share of the LORP post-implementation costs; and (5) the CPI adjustment will commence when LADWP has established a permanent baseflow of approximately 40 cfs in the LORP.

9. The LORP Funding Agreement also provides that the escrow account, required to be established by the Court Order, will be established in the Inyo County Treasury as a trust account and that the interest earned on the fund balance will remain in the account ("Trust Account"). The LORP Funding Agreement also provides that only after the $2,253,033.00 Post Implementation Credit (adjusted as described above) has been reduced to zero, will the County begin to pay its share of the LORP post-implementation costs from the trust account established by the Court Order.

10. On July 11, 2007, the parties to the MOU entered into a Stipulation and Order, ("Stipulation and Order"). The Stipulation and Order resolves issues involving compliance with the Court Order. In the Stipulation and Order, the parties agree that as of July 11, 2007, LADWP had established a permanent baseflow of approximately 40 cfs in the LORP. The Stipulation and Order also provides for monitoring and reporting of the baseflow flows throughout the LORP.

11. With the entry of the Stipulation and Order on July 11, 2007, LADWP ceased making payments of $5,000.00 per day into the Trust Account established pursuant to the Court Order because, as of that date, LADWP had established a permanent baseflow of approximately 40 cfs in the LORP. On July 11, 2007, there was $3,368,017.17 in the Trust Account.

12. On April 28, 2008, Ecosystem Sciences, Inc. released a final LORP Monitoring, Adaptive Management and Reporting Plan ("LORP Adaptive Management Plan").

13. Section II. A. of the MOU provides that the "MOU Consultant" (Ecosystem Sciences, Inc.) is required to prepare a plan for the LORP and that "DWP and the County will direct and assist Consultants in the preparation and implementation of the LORP ecosystem management plan ("LORP Plan"). As provided below, the future involvement of the MOU Consultant in the LORP will be determined by LADWP and the County.

AGREEMENT

In consideration of the recitals above and the following covenants and provisions, LADWP and the County (hereinafter collectively referred to as "Parties," and individually referred to as a "Party") agree as follows:

I. IMPLEMENTATION PERIOD

A. All construction, channel modification, planning, and development work, including the completion of all required final LORP plans and other related pre-implementation work performed by Ecosystem Sciences, Inc.; the preparation of the EIR on the project; and any other necessary work for initial operation of the project (including channel modifications downstream of the Intake that have been made to correct a flow impedance problem) are to be considered as costs of implementing the LORP.

B. LADWP will pay all costs of implementing the LORP that are not funded by sources other than LADWP. As provided in the LORP Funding Agreement, LADWP will pay the County's $3.75 million share of the LORP implementation costs.

II. POST-IMPLEMENTATION PERIOD

A. COMMENCEMENT OF POST-IMPLEMENTATION FUNDING OBLIGATIONS

The commitments of LADWP and the County to jointly fund and operate the post-implementation costs and activities of the LORP commenced on July 11, 2007. In this agreement, the Parties define their responsibilities for jointly funding and conducting post-implementation activities required to be undertaken during the 15-year period following July 11, 2007 (until July 11, 2022). After July 11, 2022, the required flows will continue to be maintained and the flow compliance monitoring required by the Stipulation and Order will continue to be conducted; however, the Parties will decide what level of operations, maintenance, habitat monitoring, and adaptive management will be conducted. The Parties do not intend by this agreement to redefine or reinterpret any provision of the MOU; however, by Section P of this agreement, the Parties intend to modify Section A.2 of the LORP Funding Agreement dated September 16, 2005.

B. POST-IMPLEMENTATION COSTS AND ACTIVITIES THAT ARE THE SOLE RESPONSIBILITY OF LADWP

Unless otherwise agreed to by the Parties, LADWP will have the sole responsibility for planning, operating, and/or conducting the following activities and for all costs arising from such activities.

1. All operation and maintenance costs of the LORP pump station, including hydrologic monitoring and data collection and reporting costs, the maintenance of all roads used exclusively to provide access to these facilities, all pipelines, electrical transmission lines, release structures (excluding the delta release control structure called the Langemann gate), dikes, dams, flow measuring devices and ponds associated with the facilities.

2. On July 9, 2009, the Standing Committee designated four permanent flow monitoring stations in the river (three of the permanent monitoring stations consist of a single station, and the fourth station located at the pumping station consists of three monitoring stations). The two temporary monitoring stations located at Mazourka and Reinhackle will be replaced with permanent monitoring stations. LADWP will design and construct these permanent flow measuring stations.

3. All costs of monitoring, inspecting, maintaining and repairing LADWP roads identified on Exhibit A; however, if, as a result of activities attributable to the LORP (including seasonal habitat flows), a road requires major renovation, capital improvement, or unanticipated repair, such work and the funding for such work will be included in an annual work plan as provided in Section II.F.

4. As provided in Mitigation measure V-2 of the LORP FEIR, for the first seven years of the LORP, LADWP will provide funding up to $50,000 per year for monitoring and control of noxious weeds within the LORP area, and $150,000 per year for monitoring and control of noxious weeds outside the LORP area that could serve as a seed source for the LORP area (LADWP began making payments of $200,000.00 for these purposes in fiscal year 2005-2006; therefore, LADWP's obligation to provide such funding terminates after it has provided such funding for the 2011-2012 fiscal year). Prior to providing such funding for the 2009-2010 fiscal year, and prior to providing such funding for each remaining fiscal year, LADWP shall adjust the amount of the payment upward or downward in accordance with the April Los Angeles-Anaheim-Riverside All Urban Consumers Price Index or its successor; however, as a result of the adjustment, the amount of the annual payment shall not be reduced to less than $200,000.00.

5. Unless otherwise agreed by the Parties, the intentional introduction into the LORP area by LADWP (or the introduction into the LORP area with the express consent of LADWP) of any individual (or individuals) plant or animal with special status under state or federal law, including threatened, endangered, candidate, or rare species, and the monitoring and/or management of any such introduced species.

6. All costs associated with the management and monitoring of livestock grazing and utilization in the project area.

7. The cost of any water supplied to any component or element of the LORP.

8. All costs associated with the implementation of mitigation measures and with the restoration or repair of facilities or property that were damaged or deteriorated as a result of LORP construction activities during project implementation and/or other activities associated with project implementation (including the correction of initial design defects).

9. The payment of a Non-Compliance Payment assessed pursuant to the Stipulation and Order dated July 11, 2007; however, LADWP shall not be responsible for the portion of such a payment that is attributable to an action or inaction by the County (see Section II.C.4. of this agreement.)

10. The costs of LADWP's personnel in the planning and development of work programs and budgets (including determinations of the need for adaptive management measures) or in any subsequent modifications thereof.

C. POST-IMPLEMENTATION COSTS AND ACTIVITIES THAT ARE THE SOLE RESPONSIBILITY OF THE COUNTY

Unless otherwise agreed by the Parties, the County will have the sole responsibility for planning, operating, constructing, and maintaining the following activities (should

any such activities be planned, constructed and maintained) and for all costs arising from such activities.

1. The development of a recreational use plan for the portion of the Owens River within the project area. (Should any such plan be developed, the implementation of the plan or of any component of the plan will require approval by LADWP before it is implemented.)

2. The development of any campgrounds along the Owens River within the project area. (Should any such campground be proposed for development, the campground will require the approval of LADWP before it is implemented.)

3. Except as provided in Section II.B.1, the costs of monitoring, inspecting, maintaining and repairing the County maintained roads identified on Exhibit A; however, if, as a result of activities attributable to the LORP (including seasonal habitat flows), a road requires major renovation, capital improvement, or unanticipated repair, such work and the funding for such work will be included in an annual work plan as provided in Section II.F. During the release of a seasonal habitat flow, the County will monitor the culverts and bridges at the point where the County roads shown on Exhibit A cross the river (the purpose of the monitoring will be to determine whether the seasonal habitat flow has or may damage the road, bridge, or culvert and whether debris plugs have or may form), and the County will remove any debris plugs as necessary to minimize flooding of, or damage to, the roads. If the County does not have the equipment necessary to remove such debris plugs, LADWP, if it has available equipment, will assist in removing such plugs.

4. The payment of any portion of a Non-Compliance Payment assessed pursuant to the Stipulation and Order that is attributable to an action or inaction by the County. For the purposes of this section, the failure to agree to an annual work plan and/or budget by a Party shall not be deemed an action or inaction.

5. The costs of County personnel in the planning and development of work programs and budgets (including determinations of the need for adaptive management measures) or in any subsequent modifications thereof.

D. POST-IMPLEMENTATION COSTS AND ACTIVITIES THAT ARE THE JOINT RESPONSIBILITY OF LADWP AND THE COUNTY

The following activities shall be addressed in each annual work plan and budget prepared by the Parties. (Annual work plans and budgets are described in Section 2.2.1 of the Final LORP EIR and in Section II.F of this agreement.)

1. The costs associated with operating and maintaining the flow measuring stations and the costs of hydrologic monitoring and data reporting associated with the physical features of the LORP. As provided in Section F.2 of the July 11, 2007 Stipulation and Order, ten flow monitoring stations must be maintained and operated until at least July 11, 2009, and at least four permanent monitoring

stations must be maintained and operated after that date. On July 9, 2009, the Standing Committee designated the four permanent monitoring stations that will be operated and maintained after July 11, 2009. The four permanent flow measuring stations are shown on Exhibit B.

2. LADWP and the County will each be responsible for one-half the costs of a portion of the annual cost of maintaining ditches and Aqueduct spillgates, including the delta release control structure (a "Langemann Gate") and the LORP Spillgate Structure located near the Los Angeles Aqueduct Intake (which also includes the Lower Owens River release control structure; the release control structure is a Langemann Gate), shown on Exhibit C, that are above the pre-LORP annual average baseline cost of maintaining the ditches and spillgates during the ten fiscal years from 1996-1997 to 2005-2006. The pre-LORP baseline cost of maintaining the ditches and spillgates shown on Exhibit C is $56,863.00. When this pre-LORP baseline cost for maintaining ditches and spillgates was adjusted through November 2009, an adjusted baseline cost of $60,819.00 resulted. Each January, this adjusted baseline cost of maintaining the ditches and spillgates shall be annually adjusted upward or downward in accordance with the November Los Angeles-Anaheim-Riverside All Urban Consumers Price Index or its successor. If, in the future, there is a significant change in non-LORP-related uses supplied by a ditch or spillgate shown on Exhibit C, the Parties will renegotiate appropriate changes to this section.

3. The annual costs of habitat and water quality monitoring and associated data collection and reporting.

4. The costs of consultants, if any (including Ecosystems Sciences), who assist in LORP-related monitoring, data collection, data analysis, and/or reporting.

5. The costs of monitoring, treatment, and public education for mosquitoes (including the use of a helicopter for aerial spraying) arising from the various components of the LORP. (The County may use funds derived from its annual benefit assessment for mosquito control to fund its share of the cost of such work included in an annual work plan and budget.)

6. LADWP and the County will each be responsible for one-half the costs of a portion of the annual costs of maintaining the Blackrock Waterfowl Area spillgates, ditches, dikes, berms, ponds, and other features shown on Exhibit D that are above the annual average pre-LORP baseline cost of maintaining the ditches, spillgates, dikes, berms, and other features during the ten fiscal years between 1996-1997 and 2005-2006. The pre-LORP baseline cost of maintaining the Blackrock Waterfowl Area features shown on Exhibit D is $62,798.00. When this pre-LORP baseline cost for maintaining the Blackrock Waterfowl Area features was adjusted through November 2009, an adjusted baseline cost of $ $67,380.00 resulted. Each January, this adjusted baseline cost of maintaining Blackrock Waterfowl Area features shall be annually adjusted upward or downward in accordance with the November Los Angeles-Anaheim-Riverside All Urban Consumers Price Index or its

successor. If, in the future, there is a significant change in non-LORP-related uses supplied by the Blackrock Waterfowl Area features shown on Exhibit D, the parties will renegotiate appropriate changes to this section.

7. The costs of beaver control and beaver dam removal.

8. The costs of salt cedar control that are covered by the funding for salt cedar control provided pursuant to Section 6 of the Stipulation and Order entered on September 15, 2004 in the case of Sierra Club and Owens Valley Committee v. City of Los Angeles et al. (case number S1CVCV01-29768).

9. The costs associated with the preparation of an annual report as required by Section 2.10.4 of the Final LORP EIR and by Section L of the Stipulation and Order. (The report shall include data collected during the year, results of analysis, and recommendations for the need for adaptive management measures.)

10. Unless otherwise agreed by the Parties, the costs of permits or environmental assessments associated with the conducting any of the activities described in an approved annual work plan or in an approved amended annual work plan including, but not limited to, California Department of Fish and Game 1601 permits, Regional Water Quality Control Board 401 permits, United States Army Corp of Engineers 404 permits, and any California Environmental Quality Act compliance. (The implementation of some post-implementation activities may be subject to the ability to obtain permits to conduct the post-implementation activities.)

E. OTHER POST-IMPLEMENTATION WORK

Any post-implementation cost or activity that the Parties deem necessary that is not listed in II.D above may be included in an annual work program and budget described in Section II.F below. Such costs and activities include, but are not limited to, adaptive management measures, control of noxious weeds within the LORP area, replacement of capital improvements, and salt cedar control attributable to the LORP that is proposed to be conducted that will cost more than the funding available for salt cedar control pursuant to Section 6 of the Stipulation and Order entered on September 15, 2004 in the case of *Sierra Club and Owens Valley Committee v. City of Los Angeles et al.* (case number S1CVCV01-29768).

F. POST-IMPLEMENTATION WORK PLANS AND BUDGETS

1. With regard to annual work plans and budgets, Section 2.2.1 of the Final LORP EIR provides in pertinent part as follows:

> *Also, following the implementation of the LORP, in December of each year, the Technical Group will develop and adopt an annual work program describing the work to be performed in regard to the LORP (including the implementation of adaptive management*

measures) during the following fiscal year. Each work program will identify who will perform or oversee the work, a schedule for the performance of the work and a budget. Following adoption by the Technical Group, the work programs will be submitted to the County and LADWP governing boards for consideration of approval. Meetings of each governing board are open to the public. Before the work plans and accompanying budgets can be implemented, they will have to be approved by each governing board.

If the Technical Group is in disagreement over the need to implement an adaptive management measure or over the content of a work program, the disagreement will be submitted to the Inyo County/Los Angeles Standing Committee ("Standing Committee") for resolution. The Standing Committee was formed in 1982 and consists of both managers and elected and appointed officials from the County and LADWP. Its meetings are open to the public. If the Standing Committee is unable to resolve a disagreement, the disagreement will be submitted to the governing boards of each entity for resolution. If the governing boards are unable to agree on all, or any part, of a work program, the portion of the program in disagreement will not be implemented. Further, if the governing boards are in disagreement over the need to implement an adaptive management measure, the measure will not be implemented.

2. By approximately April 1, 2010, and by approximately the 1st of April of each following year, if the Technical Group is in agreement on an annual work plan and budget, then each Party shall submit to its governing board or to its designee a work plan and budget for any post-implementation cost or activity that is attributable to the LORP and that is planned to be conducted by the Parties during the year commencing the following July 1, together with a recommendation that the work plan and budget be approved. (A copy of the 2009-2010 Work Plan and Budget that has been approved by the Technical Group is attached as Exhibit E.) Each work plan shall include activities identified in Section II.D and may include activities described Section II.E. Each work plan and budget will identify the activities (including any adaptive management modifications deemed necessary) for each of the four LORP physical features (Riverine Area, Delta Area, Off River Lakes and Ponds, and the Blackrock Waterfowl Area) and any other components of the LORP.

3. Each work plan shall identify who will perform or oversee the work, activity or program (i.e., LADWP and/or the County and/or outside contractor), and shall include a schedule for the performance of the work, activity or program. For each item in the budget, the budget shall identify the work that will be conducted by each Party. Each work plan will divide the planned work using the procedure employed by the Parties in developing the 2009-2010 Work Plan and Budget. Each Party will bear its own costs for conducting its portion of the work described in the work plan. As may be applicable, the following principles shall

guide the assignment of labor rates in the preparation of a work plan and budget:

a. If the Parties agree that LADWP will conduct work for the reason that LADWP would prefer to conduct the work even though the County is willing to perform the work, the costs of such work will be shared by the Parties using the County's labor rates (or a contractor's labor rates--whichever is lower).

b. If the Parties agree that LADWP will conduct work because the County is unable to conduct it, the costs of such extra work will be shared by the Parties based upon LADWP's labor rates.

c. If the Parties agree that the County will conduct work for the reason that the County would prefer to conduct the work even though LADWP is willing to perform the work, the costs of such work will be shared by the Parties based upon LADWP's labor rates.

4. If the work plan and budget calls for services or work to be performed by a contractor, the work plan will identify which Party will be responsible for awarding and administering each such contract. Beginning with the 2010-2011 fiscal year, the County will award and administer any contract with Ecosystem Sciences, Inc., unless otherwise agreed by the Parties, for work agreed upon by the Parties involving the LORP (exclusive of a contract for the management and monitoring of livestock grazing and utilization in the LORP area).

5. In the event that the Technical Group is in disagreement over whether an item should be included in a work plan, over the amount of work performed on an item, over whether an item should be included in a budget, over the amount of an item to be included in a budget, or over another work plan-related item, the issue(s) in disagreement shall be submitted to the Standing Committee for resolution. If the Standing Committee resolves the disagreement, each Party will submit the recommended resolution to its governing board or to its designee, together with a recommendation that it be approved. If the Standing Committee cannot resolve a disagreement, the issues in disagreement will be submitted to the governing boards of each Party for resolution. Alternatively, before submitting the disagreement to the governing boards, the Standing Committee may agree to submit the disagreement to an impartial third party to review the issue or issues in disagreement and to issue a non-binding recommendation for resolution of the disagreement. If a third party recommendation is issued, and the disagreement is not resolved, the governing boards may consider the recommendation of the third party, but neither board is required to accept or implement the recommendation. If the governing bodies cannot resolve a disagreement, the activity or adaptive management measure in question will not be jointly conducted or funded; however, one Party may agree to conduct such an activity or implement an adaptive management measure at its own cost and to fund any increased costs (operation, maintenance, etc.) that result from the activity or measure in subsequent years. Concerning funding for activities

described in Sections II.D and II.E, Section 2.2.2.2 of the Final LORP EIR provides in pertinent part:

> *As required by law, decisions as to the availability of funding for the LORP will be made annually by the Inyo County Board of Supervisors and by the LADWP Board of Water and Power Commissioners. In the event that one or both governing boards determine that there are insufficient funds available to cover the entity's share of the costs of the LORP, each entity will evaluate the situation and will take such action as it deems appropriate under the then existing applicable law.*

6. To the extent that the County finds that funding is available, the County will first provide funding for activities included in annual LORP work plans and budgets that are essential to complying with applicable court orders and legal commitments. A list of such activities, in descending order of priority, follows:

   a. Work and activities required to maintain required flows in the river and required water supplies to the other components of the LORP.

   b. Maintenance and operational costs associated with flow compliance monitoring and reporting required by the Stipulation and Order.

   c. Habitat and water quality monitoring as described in the then current version of the LORP Adaptive Management Plan or required to comply with the requirements of Lahontan Region Water Quality Control Board.

   d. The preparation of an annual report as required by Section 2.10.4 of the Final LORP EIR and by Section L of the Stipulation and Order.

   e. Other work and activities including the implementation of adaptive management measures.

7. Once an annual work plan and budget have been approved, the County and LADWP shall each have the right to monitor and review the work and activities performed by the other Party to ensure compliance with the work plan and budget. Also, neither Party shall approve a change order or a modification of any contract that provides for work and services that are identified in the work plan as being jointly funded by the Parties unless the change order or modification has been approved by the Parties.

G. AMENDMENT OF WORK PLANS AND BUDGETS

1. In the event that the need to conduct post-implementation activity arises following the adoption of an annual work program and budget, the Technical Group shall develop an amended work program, a schedule, and an amended budget that identifies the work that will be conducted by each Party. The cost sharing for the work identified in the amended work plan shall be as provided in

Section F.3. The amended work plan and budget shall be submitted by each Party to its governing board or to its authorized designee together with a recommendation for approval.

2. In the event that the Technical Group is in disagreement over the amended work program or amended budget, the issues in disagreement shall be resolved as provided in Sections II.F.5 and II.F.6.

H. URGENT WORK

1. In the event of a situation where it is necessary to immediately conduct post-implementation work or an activity in order to protect public health or safety, to comply with the provisions of the Stipulation and Order, or to ensure the integrity or the efficient operation of the project, LADWP and/or Inyo County, will conduct the work (or cause the work to be conducted). The Inyo County Administrator and the Manager of the Los Angeles Aqueduct will meet within 48 hours from commencement of the work and attempt to agree on the need for the urgent work. As soon as practicable thereafter, the Parties will prepare a report that describes the work conducted, the cost of the work, and a recommendation as to the portion of the cost of the work to be funded by each agency. In the event that these individuals are in disagreement over the need for the urgent work or the apportionment of costs, if the other Party does not object, the other Party may continue to conduct such an activity at the risk of assuming the entire cost of the activity being conducted.

2. If there is no agreement on the urgency of the activity or the cost apportionment, the issue(s) in disagreement shall be submitted to the Standing Committee for resolution. If they cannot resolve a disagreement, the issues in disagreement will be submitted to the governing boards of each Party for resolution. If the governing bodies cannot resolve a disagreement, the issues in disagreement shall be resolved as provided in Sections II.F.5 and II.F.6.

I. POST-IMPLEMENTATION THIRD PARTY FUNDING

The Standing Committee may agree that the Parties will jointly seek funding from a third party for the post-implementation costs of the LORP. LADWP will not unreasonably withhold permission to the County for the use of Los Angeles-owned lands for a post-implementation project proposed to be funded by third-party funds as long as the proposed project is consistent with this agreement and the goals of the LORP. Any such jointly agreed upon third-party funds obtained will be expended as agreed by the Standing Committee. This provision for Standing Committee agreement on third-party funding does not preclude either Party from individually seeking funding from a third party to fund its share of the post-implementation costs of the LORP. However, unless the Parties otherwise agree upon an amendment to the work plan and budget, the receipt of funds from a third party by one Party will not affect the post-implementation funding commitment of the other Party. Moreover, it shall be the responsibility of the Party receiving the third-party funding to pay any costs and perform any compliance work related to the funding received.

J. ADJUSTMENTS AND PAYMENTS

1. Initial Adjustment of the Post Implementation Credit

   Within ten days of approval of this agreement by the governing boards of the Parties, LADWP shall adjust the Post Implementation Credit described in Recitals 7 and 8 by increasing it by 2.9 percent, an increase in accordance with the July 2007 Los Angeles-Anaheim-Riverside All Urban Consumers Price Index ("price index").

2. Debits and Payments

   a. Except for $22,652.00 in costs for adaptive management measures that will be conducted during 2009-2010 that were not conducted in previous years, the County's share of the costs of the 2009-2010 work plan and budget ($243,524.00) shall be the amount of the County's financial obligations for the June 11, 2007 to June 30, 2008 period and for the 2008-2009 fiscal year.

   b. Within 30 days after approval of this agreement by the governing bodies of the Parties, LADWP shall take the following actions in the following order:

      i. To cover the County's obligation for July 11, 2007 to June 30, 2008 period, LADWP shall reduce the Post Implementation Credit by $243,524.00.

      ii. Increase the remaining balance of the Post Implementation Credit by 5.7% based upon the July 2008 price index.

      iii. To cover the County's obligation for 2008-2009 fiscal year, LADWP shall reduce the Post Implementation Credit by the amount of $243,524.00.

      iv. Reduce the remaining balance of the Post Implementation Credit by 1.3% based upon the April 2009 price index.

      v. Reduce the remaining balance by the amount of $266,176.00, reflecting the County's share of the costs for the 2009-2010 work plan and budget, including adaptive management.

   c. Commencing on July 10, 2010, and effective as of July 10 of each following year for as long as a credit remains in the Post Implement Credit, LADWP shall adjust the amount of the credit upward or downward in accordance with the previous April's price index.

d. On each July 21 following July 21, 2009 through July 21, 2021 (or on the next business day thereafter if a July 21 is not a business day) for as long as sufficient funds remain in the Post Implementation Credit, LADWP shall annually reduce the credit by the County's cost obligation identified in that year's annual work plan and budget approved pursuant to Section II.F.

e. Once the balance in the Post Implementation Credit has been reduced to an amount that is insufficient to cover the amount of the required debit, LADWP will reduce the Post Implementation Credit to zero, and the County will make a payment to LADWP from the Trust Account in the amount of the difference. Thereafter, on or before July 21 of each year through July 21, 2021, the County shall make an annual payment to LADWP from the Trust Account in the amount of the County's cost obligation identified in an annual work plan and budget approved pursuant to Section II.F.

f. If, on or before November 1, 2021, the amount remaining in the Trust Account is insufficient to cover a required payment to LADWP, the County shall pay the remaining balance in the Trust Account to LADWP and shall make a supplemental payment in the amount of the difference to LADWP; on or before November 1 of each year through November 1, 2021, the County shall make an annual payment to LADWP in the amount of the County's share of any post-implementation cost or activity (including adaptive management measures) identified in an annual work plan and budget approved pursuant to Section II.F.

g. If an amendment to a work plan and budget is agreed upon as provided in Section II.G or if a modification of a work plan and budget to conduct urgent work is agreed upon as provided in Section II.H, within 60 days of the agreement, either the Post Implementation Credit, and/or the Trust Account will be debited in the amount of the County's share of the increased costs or the County will make a payment to LADWP in the amount of the County's share of the increased costs.

h. Each year, at the election of the County, the County may reimburse itself from the Trust Account for LORP-related, non-reimbursed costs incurred by the County for activities or work performed by the County under an annual work plan and budget approved pursuant to Section II.F.

3. Annual Accounting Reports

a. Beginning on October 31, 2009 and on or before each October 31 thereafter through October 31, 2022, an annual accounting report that describes the work performed pursuant to the previous year's approved work plan, and the costs incurred by each Party in performing such work shall be submitted to the governing board of each Party or the Party's designee. The accounting report will identify the difference, if any, between the actual costs incurred by each Party and the actual work performed by each Party as compared to the costs and work for that Party that were identified in that year's approved

work plan and budget. The costs will be documented by timesheets and other appropriate documentation. It is recognized that actual costs incurred by the Parties will likely be different than the amounts budgeted in the approved work plan(s). The accounting must be approved by the governing board of each Party or by the Party's designee.

b. Except as provided in Section II.J.3.c below, if a Party fully performs the share of the work allocated to it in an annual work plan (as may be modified) and if the Party has fully funded its share of contract costs (as may be modified by change order) as identified in an annual budget, that party is in compliance with this agreement, and there shall be no reconciliation of hours or costs even if an annual accounting report or an audit shows that the Party expended more or less time in performing the work than was estimated in the annual work and/or budget. However, the results of any annual accounting report, audit, or other information maybe used to guide the development of future years' annual work plans.

c. If an annual accounting report shows that the amount paid by a Party for contract services and/or contract work was less than the amount budgeted for the contract services and/or contract work, to reconcile the change with the approved budget, the accounting report will specify whether a payment should be made by LADWP to the County or whether a debit from the Post Implementation Credit and/or Trust Account or whether the County should make a payment to LADWP. (There is no need to reconcile increased contract costs since the work plan will be modified if, pursuant to Section F.8, there is an agreed upon contract change order that increases the cost of the contract.)

d. At any time within three years after submission of the accounting, either Party shall have the right to conduct an audit of the expenditures itemized in the accounting by providing 30 days calendar notice to the other Party. The Party being audited shall provide the other Party with an office to conduct this audit along with all requested documents and information at no cost to the other Party. The Party conducting the audit shall bear the costs of conducting the audit. The Party conducting the audit shall promptly conduct and complete it and shall notify the other Party in writing of any expenditure that it believes is improper. The Party being audited shall promptly respond to any claim of an improper expenditure in writing. If the County and LADWP are in disagreement over whether an expenditure was improper, the matter will be submitted to the Standing Committee for resolution. If the Standing Committee is in agreement, the Parties will submit a proposed resolution of the matter, if any, to the governing boards of each entity or their designees. If the Standing Committee cannot agree, the issue(s) in dispute will resolved as provided in Section II.K.

K. DISPUTE RESOLUTION

1. Any dispute arising under this agreement that cannot be resolved by the Parties, except those disputes that are subject to dispute resolution under Sections II.F.5 and II.F.6, may be submitted to dispute resolution under Section XXVI of the Water Agreement. The Parties agree that because any dispute arising out of this agreement that has not been resolved by the Parties has already been considered by the Technical Group and the Standing Committee, dispute resolution under Section XXVI of the Water Agreement will commence by submitting the matter to mediation/temporary arbitration as described in Section XXVI.C of the Water Agreement.

2. Such mediation/temporary arbitration must be commenced by providing the Standing Committee with a written notice within 45 days of a failure by the governing boards of the Parties to resolve a dispute. A failure to submit the notice within the 45-day period shall be a waiver of the right to dispute an issue. The written notice shall describe the dispute and the disputing Party's argument in favor of its position. The other Party shall submit its argument in favor of its position to the other Party and to the mediators within 30 days of the submission of the initiating Party's notice. If, within 45 days of the submission of the responding Party's argument, the dispute has not been resolved, the mediators shall submit written findings to the Standing Committee. If a Party disagrees with the findings of the mediators, the dispute may be submitted to a Superior Court Judge as provided in Section XXVI.D of the Water Agreement.

L. NO FINANCIAL SET OFF

In the event that LADWP believes that this agreement has given rise to an obligation of the County that the County has not paid, in the absence of a final judgment from a court of competent jurisdiction that expressly allows LADWP to set off such an obligation of the County against any funding required to be provided or credited by LADWP to the County under the Water Agreement or under the LORP Funding Agreement, LADWP shall not reduce the amount of any payment to the County called for by the Water Agreement.

M. AMENDMENTS

This agreement may only be amended by written agreement of LADWP and the County. After the completion of the 2010-2011 fiscal year, the Parties will consider whether any of the other provisions of this agreement should be amended to better reflect the Parties' experience during the first five years of this agreement.

N. AMENDMENT OF SECTION A.2 OF THE LORP FUNDING AGREEMENT

The last sentence of the third paragraph of Section A.2 (page 5) of the LORP Funding Agreement between the County and LADWP provides that the County will only be required to pay its share of the LORP post-implementation costs from the Trust Account after the Post Implementation Credit has been fully expended.

Section II.J.2.h above provides that each year, at the election of the County, the County may reimburse itself from the Trust Account for LORP-related, non-reimbursed costs incurred by the County for activities or work performed by the County under an annual work plan and budget approved pursuant to Section II.F. In order to make the provisions of the LORP Funding Agreement and this agreement consistent, the last sentence of the third paragraph of Section A.2 (page 5) of the LORP Funding Agreement is amended to read as follows (amendments are shown in italics):

> Only after the credit has been fully expended will be the County be required to pay *to LADWP* its share of the LORP post-implementation costs from the trust account established pursuant to section B below; *however, before the credit has been fully expended, the County may reimburse itself from the trust account for LOR- related, non-reimbursed costs incurred by the County for activities or work performed by the County that the County conducts under an annual work plan and budget that has been approved by the County and LADWP.*

O. CONSULTATION WITH THE CALIFORNIA DEPARTMENT OF FISH AND GAME ON SEASONAL HABITAT FLOWS

1. The 1997 Memorandum of Understanding between the City of Los Angeles Department of Water and Power, County of Inyo, California Department of Fish and Game ("DFG"), California State Lands Commission, Sierra Club, and the Owens Valley Committee, Section II.C.1.b.ii, addresses a seasonal habitat flow in the riverine riparian system. The section states:

> *A seasonal habitat flow. It is currently estimated that in the years when the runoff in the Owens River watershed is forecasted to be average or above average, the amount of planned seasonal habitat flows will be approximately 200 cfs, unless the Parties agree upon an alternative habitat flow with higher unplanned flows when runoff exceeds the capacity of the Los Angeles Aqueduct. (The runoff forecast for each year will be DWP's runoff year forecast for the Owens River Basin, which is based upon the results of its annual April 1 snow survey of the watershed.) 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 amount of the annual habitat flow will be set by the Standing Committee, subject to any applicable court orders concerning the discharge of water onto the bed of Owens Lake and in consultation with DFG, and be based on the Lower Owens River Riverine-Riparian Ecosystem element of the LORP Plan, which will recommend the amount, duration and timing of flows necessary to achieve the goals for the system under varying hydrologic scenarios.*

2. In order to address the requirement that the amount of annual habitat flow will be set by the Standing Committee in consultation with DFG, including the amount, duration, timing, and ramping of water releases to the river, the following process will be followed.

   a. Soon after the first of April each year, LADWP will develop its annual runoff year forecast for the Owens River Basin. The runoff year forecast will be developed as described in Section 2.3.5.3 of the LORP EIR. within 21 days of the release of runoff year forecast, LADWP and the County will transmit a recommendation or separate recommendations concerning the amount, duration, timing, and ramping of the seasonal habitat flow, along with LADWP's annual runoff year forecast for the Owens River Basin, to DFG. DFG will be requested to, within ten business days from receipt of the recommendation, provide their concurrence with the recommendations or provide their own recommendation as to the amount, duration, timing, and ramping of the seasonal habitat flow along with the scientific basis for its differing recommendation.

   b. The Standing Committee will meet before the release of each seasonal habitat flow to consider setting the amount, duration, timing, and ramping of seasonal habitat flow. An action item entitled "Setting the Seasonal Habitat Flow" will be placed on the agenda of that Standing Committee meeting during which the LORP seasonal habitat flows will be considered. The Standing Committee will provide an opportunity for DFG to make a presentation at the meeting concerning its recommendations. Following the presentation, the Standing Committee will act on setting the seasonal habitat flow.

P. CONSULTATION WITH THE CALIFORNIA DEPARTMENT OF FISH AND GAME ON THE AMOUNT OF FLOODED AREA IN THE BLACKROCK WATERFOWL HABITAT AREA

1. Section II. C.4 of the 1997 Memorandum of Understanding between the City of Los Angeles Department of Water and Power, County of Inyo, California Department of Fish and Game, California State Lands Commission, Sierra Club, and the Owens Valley Committee, addresses the "1500 Acre Blackrock Waterfowl Habitat Area." The section states:

   Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River Watershed is forecasted to be average or above. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the

forecasted runoff in the watershed. (The runoff forecast for each year will be DWP's runoff year forecast for the Owens River Basin, which is based upon the results of its annual April 1 snow survey of the watershed.) Even in the driest years, available water will be used in the most efficient manner to maintain the habitat. The Wildlife and Wetlands Management Plan element of the LORP Plan will recommend the water supply to be made available under various runoff conditions and will recommend how to best use the available water in dry years. The amount of acreage to be flooded in years when the runoff is forecasted to be less than average will be set by the Standing Committee based upon the recommendations of the Wildlife and Wetlands Management Plan and in consultation with DFG."

2. In order to address the requirement that when runoff is forecasted to be less than average, the amount of acreage to be flooded will be set by the Standing Committee in consultation with DFG the following process will be followed.

   a. Soon after the first of April each year, LADWP will develop its annual runoff year forecast for the Owens River Basin. The runoff year forecast will be developed as described in Section 2.3.5.3 of the LORP EIR. In the event the runoff forecast equals or exceeds "normal runoff" as defined in Section 2.3.5.3 of the 2004 Final LORP EIR, no further action is required.

   b. If the runoff forecast is for less than the normal runoff, the year will be considered a Dry Year, and consultation with the Department of Fish and Game ("DFG") will occur on the development of a Dry Year Blackrock Management Plan. In a Dry Year, by approximately the second or third week in April, LADWP and the County will transmit the recommendation concerning the amount of acreage to be flooded, along with LADWP's annual runoff year forecast for the Owens River Basin to DFG. DFG will be requested to, within ten business days from receipt of the recommendation, provide their concurrence with the recommendation or provide their own recommendation as to the amount of acreage to be flooded, along with the scientific basis for its differing recommendation.

   c. In dry years when DFG has a differing recommendation, a report on the difference will be provided to the Standing Committee and a Standing Committee meeting will be scheduled. An action item entitled "Establishment of Dry Year Blackrock Management Plan" will be placed on the Standing Committee agenda. The Standing Committee will provide an opportunity for DFG to make a presentation at the meeting concerning its recommendations. Following any such presentation by DFG, the Standing Committee will consider adoption of a Dry Year Blackrock Management Plan.

Q. LONG TERM 1600 AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF FISH AND GAME

Section II.I.2 of the MOU requires a long-term agreement with DFG under Section 1601of California Fish and Game Code "that covers any such activities that are described and addressed in the LORP EIR." LADWP is seeking this agreement with DFG and began discussions with DFG and the County on draft of the agreement in September 2008. DFG released a copy of LADWP's 1600 application to the parties to the MOU in June 2009. LADWP shall consult with the County prior to entering into the agreement (and visa versa if the County is required to enter into its own 1600 agreement).

R. COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The Final LORP Monitoring, Adaptive Management and Reporting Plan, prepared by Ecosystem Sciences Inc. and dated April 28, 2008, made a change to the project description contained in the LORP EIR by adding augmentation of seasonal habitat flows as an adaptive management measure. LADWP has prepared and released to the parties to the MOU an addendum to the Final LORP EIR that addresses this change.

S. CONSULTATION WITH THE LORP ADVISORY COMMITTEE

1. The Final LORP Monitoring, Adaptive Management and Reporting Plan dated April 28, 2008 provides that a LORP Advisory Committee consisting of DFG, the Sierra Club, the Owens Valley Committee and LADWP lessees in the Owens Valley will be consulted at least twice in each monitoring year. Section 3.3 of the LORP Adaptive Management Plan (pages 3-6) provides that the first consultation will occur after the annual "rapid assessment survey" to inform the parties and alert them to issues or concerns that will need to be dealt with when making adaptive management decisions. The Advisory Committee will be provided with a communication on the issues and concerns derived from the annual rapid assessment survey, and the Advisory Committee will be invited to submit written comments on the need for adaptive management that are based upon the results of the survey.

2. Section 3.3 of the LORP Adaptive Management Plan (pages 3-6) also provides that a second consultation will occur once the "Scientific Team" has drafted its recommendations for adaptive management and compiled monitoring data and analyses. In accordance with Section L of the July 2007 Stipulation and Order, the Advisory Committee and the public will be provided with the draft of the annual LORP report, which will include "results of analysis and recommendations on the need for adaptive management actions" (described in Section 2.10.4 of the Final LORP EIR), at least 15 days in advance of a public meeting on the information contained in the report. The Advisory Committee

and the public will have the opportunity to offer comments on the draft report within a 15-day period following the public meeting. Following consideration of any comments submitted, the Technical Group will conduct a meeting as described in Section 2.10.4 of the Final LORP EIR.

T. TERM

The provisions of this agreement will terminate on July 11, 2022; however, for the purpose of allowing for an audit to be conducted pursuant to Section II.J.3.d, and to allow time for the reconciliation of any accounting disputes that may arise under Section II.J.3.d the Parties agree that the applicable provisions of the agreement will be extended as necessary for those limited purposes. The Parties will make a determination of the obligations for any ongoing operation and maintenance activities and associated funding at the time of the effective termination of this agreement.

U. NOTIFICATIONS

Any notification required by this Agreement shall be made as set forth below. A change in the recipient or a change of the address of a recipient will be provided in writing to the other Party.

To the County:

Inyo County Administrator
P.O. Drawer N
Independence, California 93526
Email: kcarunchio@inyocounty.us

Director, Inyo County Water Department
P.O. Box 337
Independence, California 93526
Email: bharrington@inyocounty.us

To LADWP:

Director of Water Operations
Box 51111
Room 1460
Los Angeles, California 90051-5700
Email: martin.adams@ladwp.com

Manager, Aqueduct Business Group
300 Mandich Street
Bishop, California 93514-3449
Email: gene.coufal@ladwp.com

IN WITNESS WHEREOF, the City of Los Angeles Department of Water and Power and the County of Inyo have caused this Lower Owens River Project Post Implementation Agreement to be executed by their duly authorized representatives.

City of Los Angeles Department of Water and Power

DEPARTMENT OF WATER AND POWER
THE CITY OF LOS ANGELES BY THE
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

Dated: 6/1/10

By: _____
Austin Beutner
General Manager

And: _____
Secretary

AUTHORIZED BY RES. 010 323
MAY 18 2010

County of Inyo

Dated: 06-15-2010

By: _____
Kevin D. Carunchio
Inyo County Administrator

APPROVED AS TO FORM AND LEGALITY
CARMEN A. TRUTANICH, CITY ATTORNEY

MAY 11 2010

BY _____
JULIE CONBOY RILEY
DEPUTY CITY ATTORNEY

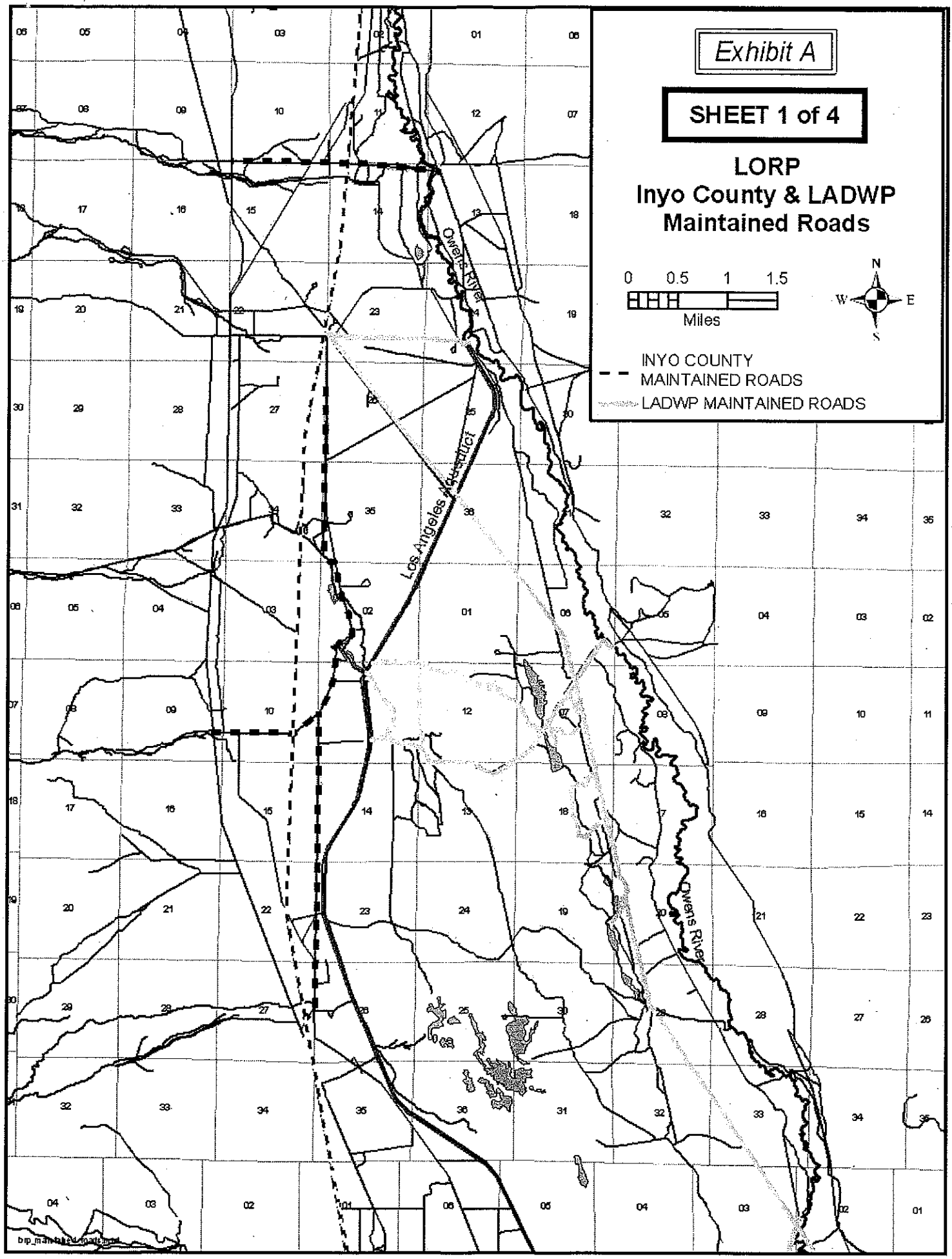
Exhibit A
SHEET 1 of 4
LORP
Inyo County & LADWP
Maintained Roads
0 0.5 1 1.5
Miles
N
W
E
S
INYO COUNTY
MAINTAINED ROADS
LADWP MAINTAINED ROADS
Owens River
Los Angeles Aqueduct
Owens River

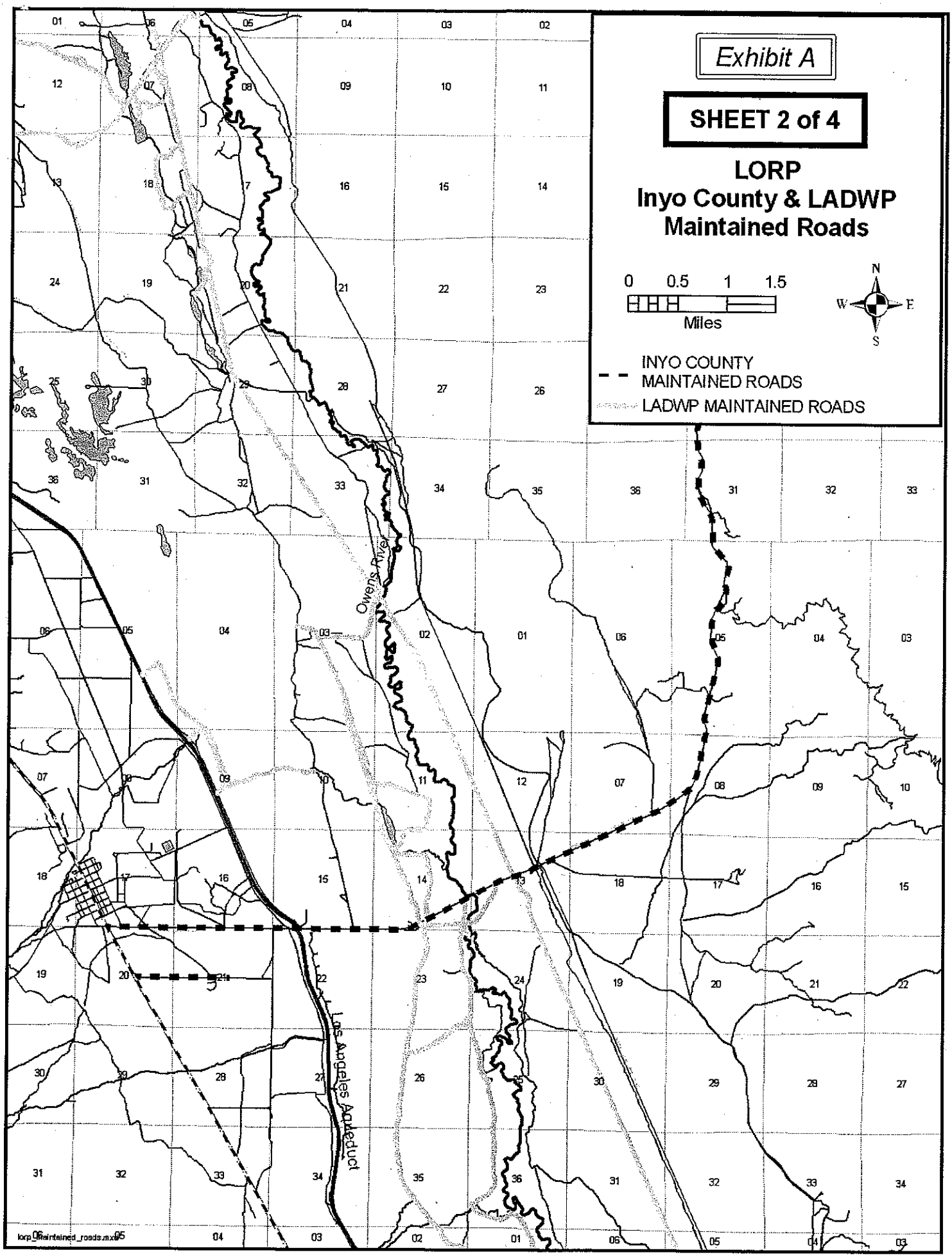
Exhibit A
SHEET 2 of 4
LORP
Inyo County & LADWP
Maintained Roads
0 0.5 1 1.5
Miles
N
W
E
S
INYO COUNTY
MAINTAINED ROADS
LADWP MAINTAINED ROADS
Owens River
Los Angeles Aqueduct
lorp_maintained_roads.mxd

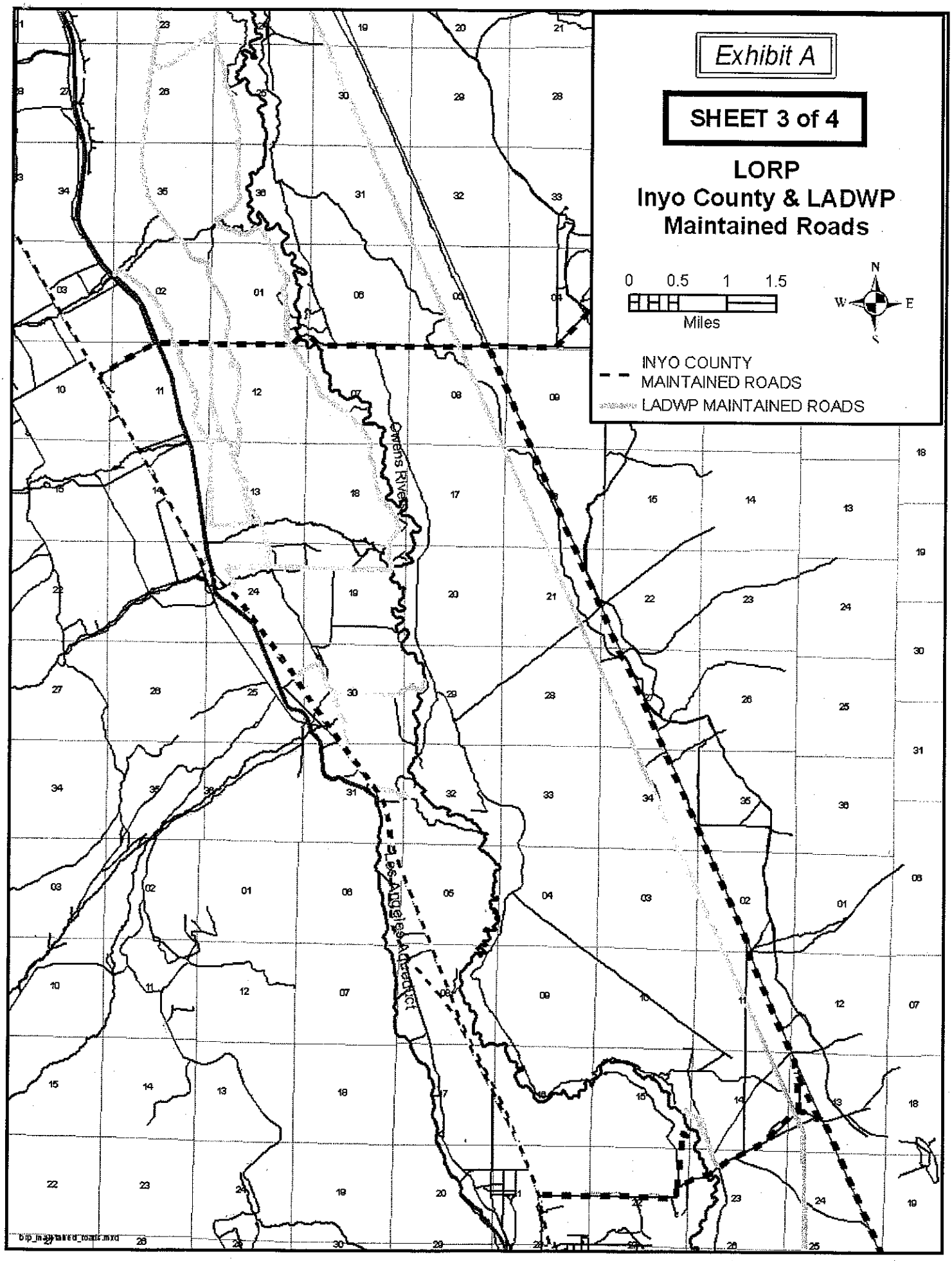
Exhibit A
SHEET 3 of 4
LORP
Inyo County & LADWP
Maintained Roads
0 0.5 1 1.5
Miles
N
W
E
S
INYO COUNTY
MAINTAINED ROADS
LADWP MAINTAINED ROADS
Owens River
Los Angeles Aqueduct
blp_maintained_roads.mxd

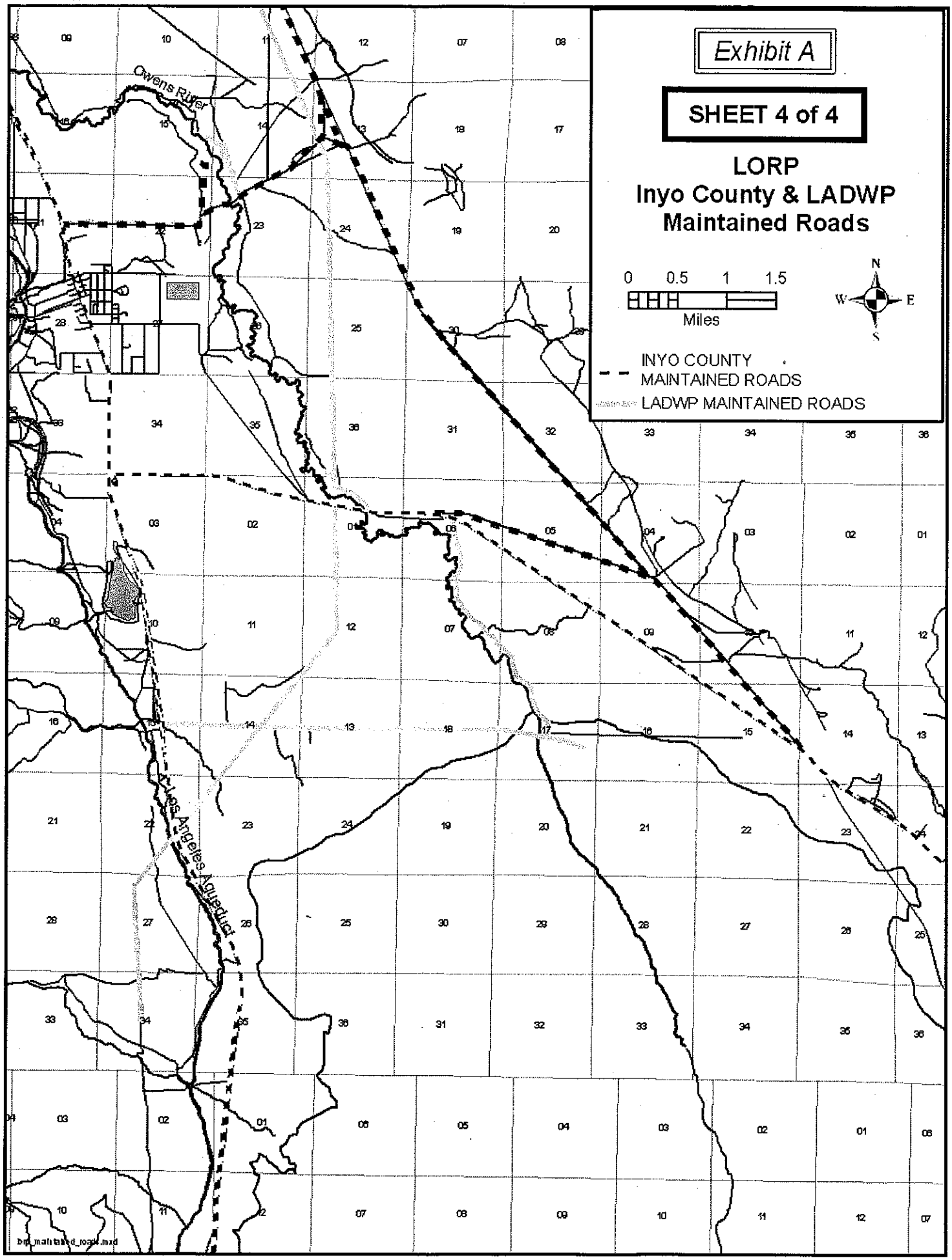
Exhibit A
SHEET 4 of 4
LORP
Inyo County & LADWP
Maintained Roads
0 0.5 1 1.5
Miles
N
W
E
S
INYO COUNTY
MAINTAINED ROADS
LADWP MAINTAINED ROADS
Owens River
Los Angeles Aqueduct
lorp_maintained_road.mxd

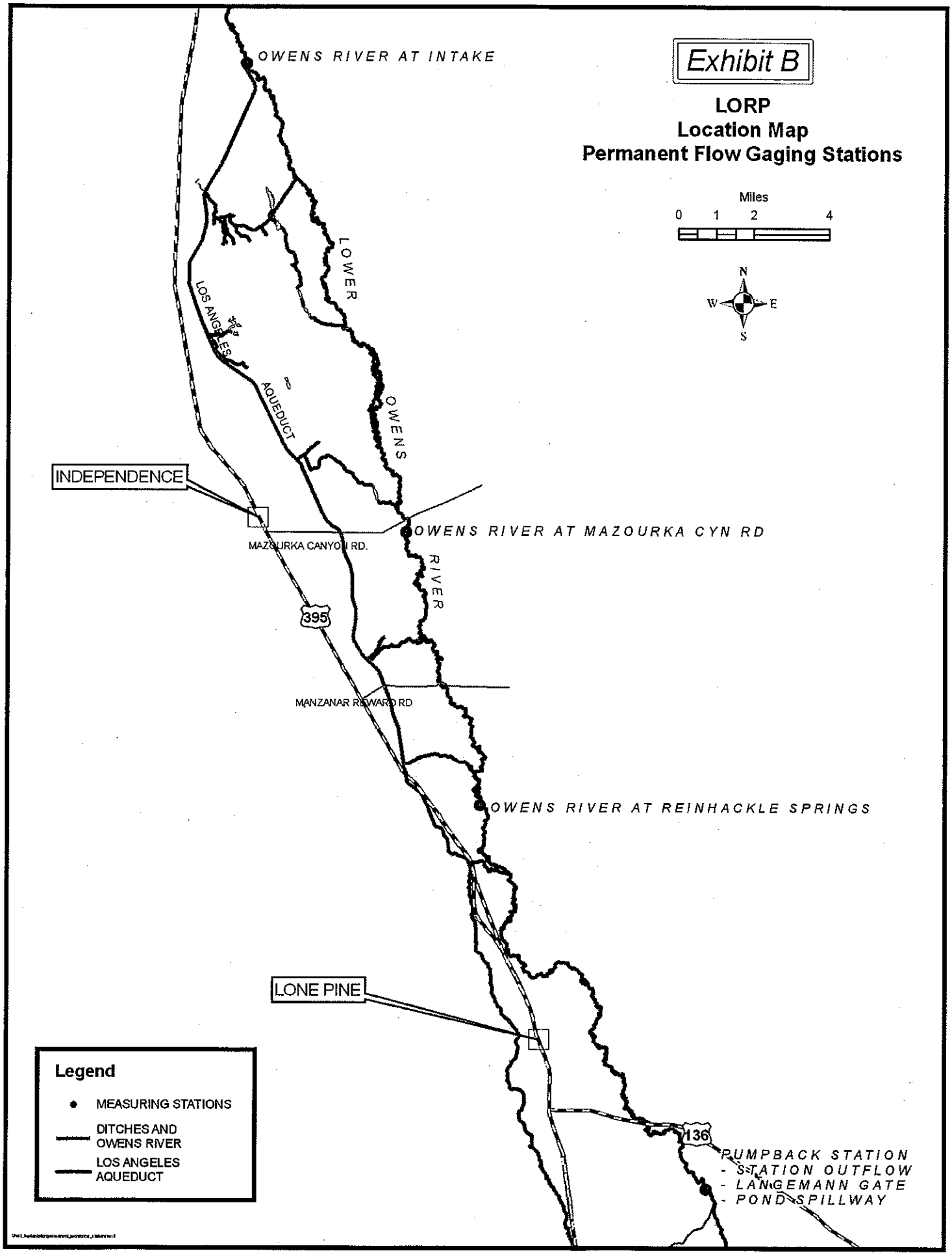
Exhibit B
LORP
Location Map
Permanent Flow Gaging Stations
Miles
0 1 2 4
N
W E
S
OWENS RIVER AT INTAKE
LOWER
OWENS
RIVER
LOS ANGELES
AQUEDUCT
INDEPENDENCE
MAZOURKA CANYON RD.
OWENS RIVER AT MAZOURKA CYN RD
395
MANZANAR REWARD RD
OWENS RIVER AT REINHACKLE SPRINGS
LONE PINE
136
PUMPBACK STATION
- STATION OUTFLOW
- LANGEMANN GATE
- POND SPILLWAY
Legend
MEASURING STATIONS
DITCHES AND OWENS RIVER
LOS ANGELES AQUEDUCT

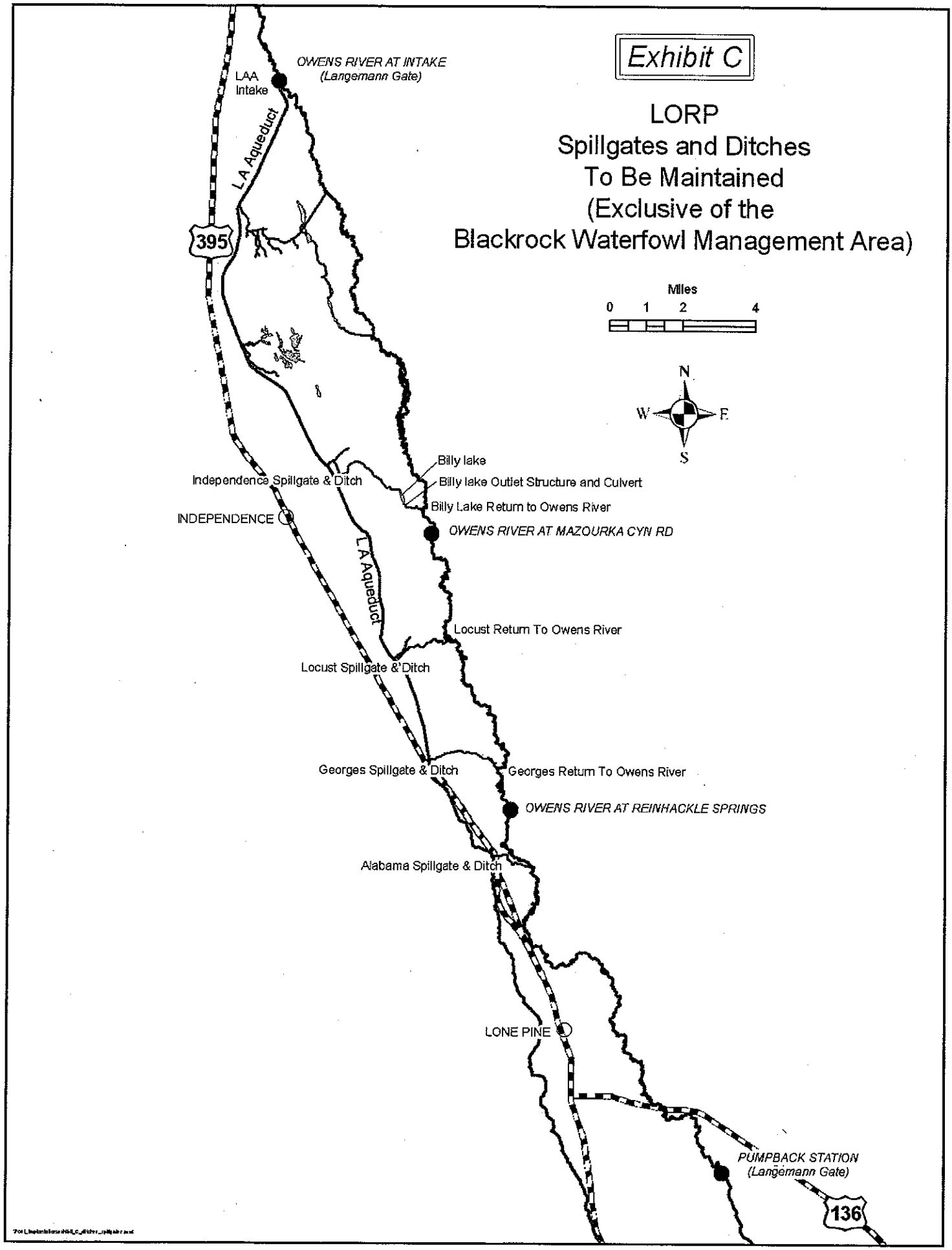
Exhibit C
LORP
Spillgates and Ditches
To Be Maintained
(Exclusive of the
Blackrock Waterfowl Management Area)
Miles
0 1 2 4
N
W E
S
OWENS RIVER AT INTAKE
(Langemann Gate)
LAA
Intake
L.A Aqueduct
395
Billy lake
Billy lake Outlet Structure and Culvert
Billy Lake Return to Owens River
Independence Spillgate & Ditch
INDEPENDENCE
OWENS RIVER AT MAZOURKA CYN RD
L.A Aqueduct
Locust Return To Owens River
Locust Spillgate &'Ditch
Georges Spillgate & Ditch
Georges Return To Owens River
OWENS RIVER AT REINHACKLE SPRINGS
Alabama Spillgate & Ditch
LONE PINE
PUMPBACK STATION
(Langemann Gate)
136

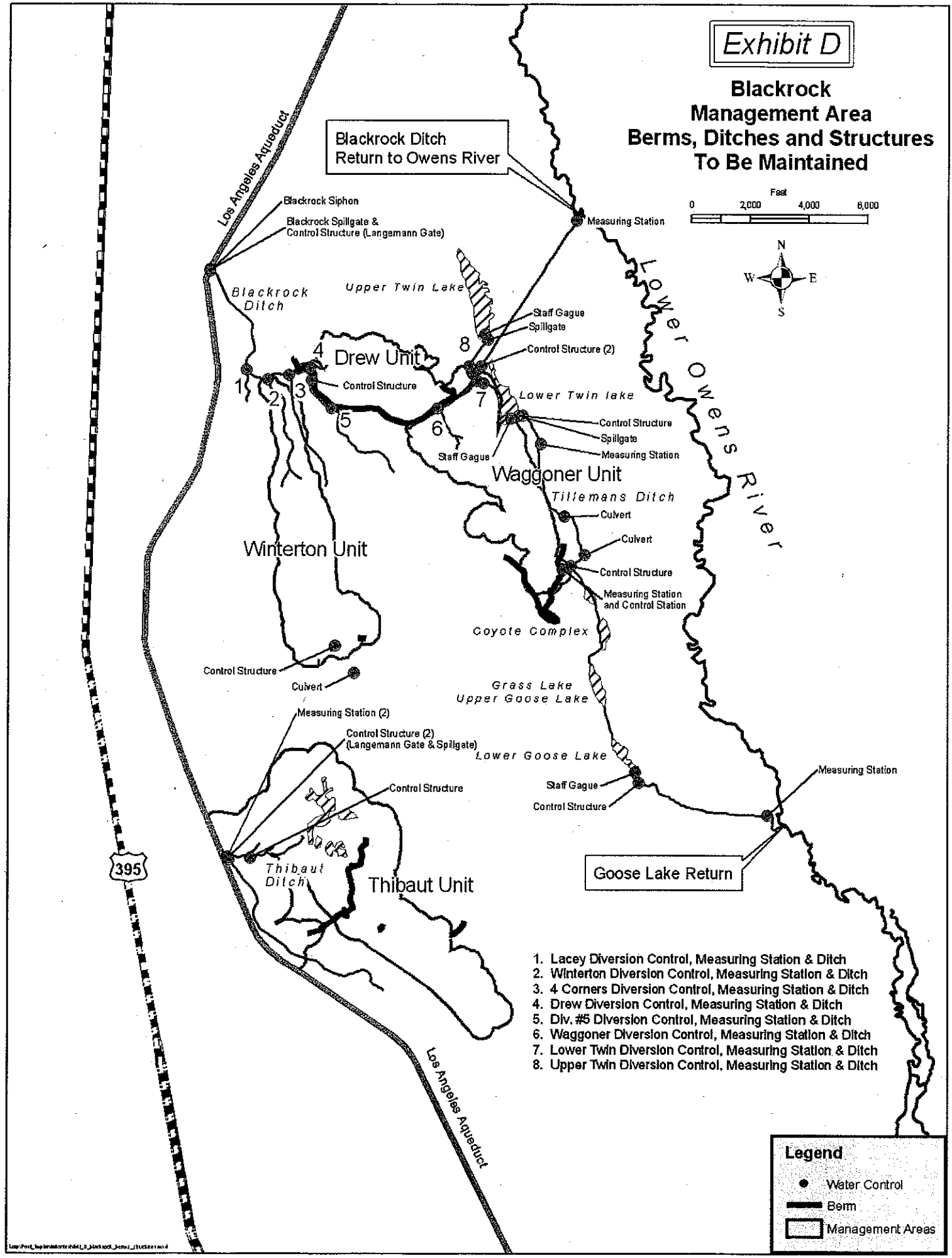
Exhibit D
Blackrock
Management Area
Berms, Ditches and Structures
To Be Maintained
Feet
0
2,000
4,000
6,000
N
W
E
S
Blackrock Ditch
Return to Owens River
Los Angeles Aqueduct
Blackrock Siphon
Blackrock Spillgate &
Control Structure (Langemann Gate)
Measuring Station
Blackrock
Ditch
Upper Twin Lake
Staff Gague
Spillgate
Control Structure (2)
4
Drew Unit
8
1
2
3
Control Structure
7
Lower Twin lake
5
6
Control Structure
Spillgate
Measuring Station
Staff Gague
Waggoner Unit
Tillemans Ditch
Culvert
Culvert
Winterton Unit
Control Structure
Measuring Station
and Control Station
Coyote Complex
Control Structure
Culvert
Grass Lake
Upper Goose Lake
Measuring Station (2)
Control Structure (2)
(Langemann Gate & Spillgate)
Lower Goose Lake
Measuring Station
Staff Gague
Control Structure
Control Structure
Thibaut
Ditch
Thibaut Unit
395
Goose Lake Return
Lower Owens River
Los Angeles Aqueduct
1. Lacey Diversion Control, Measuring Station & Ditch
2. Winterton Diversion Control, Measuring Station & Ditch
3. 4 Corners Diversion Control, Measuring Station & Ditch
4. Drew Diversion Control, Measuring Station & Ditch
5. Div. #5 Diversion Control, Measuring Station & Ditch
6. Waggoner Diversion Control, Measuring Station & Ditch
7. Lower Twin Diversion Control, Measuring Station & Ditch
8. Upper Twin Diversion Control, Measuring Station & Ditch
Legend
Water Control
Berm
Management Areas

Exhibit E

2009-2010 Fiscal Year

Lower Owens River Project

Workplan and Budget

FINAL
Prepared by Inyo County Water Department
and
Los Angeles Department of Water and Power
March 30, 2009

2009 – 2010 Fiscal Year Lower Owens River Project Workplan

This 2009-2010 Fiscal Year (July 1 to June 30) Lower Owens River Project Workplan was jointly prepared by staff of the Inyo County Water Department and the Los Angeles Department of Water and Power. This workplan was adopted by the Inyo County/Los Angeles Technical Group on March 30, 2008. The Technical Group recommends that the 2009-2010 Fiscal Year Lower Owens River Project Workplan be approved by the Inyo County Board of Supervisors and the City of Los Angeles Board of Water and Power of Commissioners.

Introduction

The Final Environmental Impact Report for the Lower Owens River Project Section 2.2.1 provides that in December of each year, the Long-Term Water Agreement (LTWA) Technical Group will develop and adopt an annual work program for the Lower Owen River Project (LORP) describing work regarding the LORP to be performed in the following fiscal year, including implementation of adaptive management measures. Each work program will identify who will perform or oversee tasks, a schedule, and a budget. Following adoption by the Technical Group, the work programs will be submitted to the County and LADWP governing board for approval. Before a work plan and budget can be implemented, it must be approved by each governing board. This document is the work plan for fiscal year July 2009 – June 2010.

The objectives of this work plan are to maintain compliance with the July 11, 2007 Superior Court Stipulation and Order in case no. S1CVCV01-29768, conduct monitoring necessary to achieve the LORP goals described in the 1998 Memorandum of Understanding, maintain infrastructure necessary to the operation of the LORP, and implement adaptive management measures. The following priorities are observed in this workplan:

1. Work and activities required to maintain required flows in the river and required water supplies to other LORP components.
2. Maintenance associated with flow compliance monitoring and reporting associated with the above referenced Stipulation and Order.
3. Habitat and water quality monitoring described in the *LORP Monitoring and Adaptive Management Plan* (ESI 2008), or required to comply with the requirements of the Lahontan Regional Water Quality Control Board.
4. The preparation of the LORP Annual Report as required by Section 2.10.4 of the LORP Final EIR and by Section L of the above referenced Stipulation and Order.
5. Other work or activities including the implementation of adaptive management measures.

Section 1 of this workplan covers maintenance, monitoring, mosquito abatement, weed management, salt cedar control, and operations. Section 2 of this workplan addresses adaptive management measures. Weed management and Saltcedar control activities are tasked and funded under separate agreements and not described in this work plan.

2009 – 2010 Fiscal Year Lower Owens River Project Workplan

Summary 2009- 2010 fiscal year Monitoring and Adaptive Management Budget.

Category	Total
Hydrologic monitoring	$255,953
Biologic and Water Quality	$77,989
Maintenance	$239,187
Mosquito Abatement	$127,000*
Adaptive Management	$45,304
Total	**$745,433**

* includes $67,000 contingency for aerial applications

The budget amount reflects the additional costs above equal sharing of work by the parties and does not include the costs of Inyo and LA staff times where they offset.

2009 – 2010 Fiscal Year Lower Owens River Project Workplan

Section 1. Maintenance and Monitoring Tasks

The maintenance and monitoring portion of this work plan consists of seven categories of tasks: maintenance, hydrologic monitoring, biological/water quality monitoring, range monitoring, mosquito abatement, weed management, and salt cedar control .

Maintenance. Maintenance activities consist of cleaning sediment accumulations and other obstructions from water measurement facilities, cleaning sediment and aquatic vegetation from ditches, mowing ditch margins, fence repair, and adjustments to flow control structures. Estimates of the level of effort necessary for maintenance were based on the level of effort that was required during 2008 – 2009.

Hydrologic Monitoring. Hydrologic monitoring consists of monitoring, analyzing, and reporting river baseflows and seasonal habitat flows, the flooded extent of the Blackrock Waterfowl Management Area (BWMA), the levels of the Off-River Lakes and Ponds, and baseflows, pulse flows, and seasonal habitat flows to the Delta. Estimates of the level of effort required for hydrologic monitoring were based on the level of effort required during 2008 – 2009, with the exception that it was assumed that the number of measuring stations in the river corridor would be reduced to four, and that the temporary flow measurement stations in the delta will be discontinued. This assumption is based on the Standing Committee taking action on the permanent monitoring stations early in the 2009-2010 fiscal year.

Currently, the flooded acreage of the BWMA is being measured by walking the perimeter of the flooded area on foot with GPS every two weeks. Based on the measured flooded area, flows have been adjusted to maintain a fixed acreage. Two problems have arisen: (1) because the flows have been adjusted constantly, no relation has been apparent between water inputs and flooded acres, and (2) walking the perimeter of the flooded area has proven prohibitively costly due to the man-hours required. Discussion on changing the method of determining the flooded extent by, developing a relationship between applied water and flooded acreage by holding the inflow rate constant and allowing the flooded area to equilibrate to an approximately fixed acreage are ongoing. Under this proposed monitoring method, the acreage will be measured on foot twice per quarter (approximately every six weeks) with intermediate assessments of flooded acreage by using remote sensing. If this monitoring is utilized, the budget for hydrologic monitoring will be reduced by $72,524.

Biological/Water Quality Monitoring. Biological and water quality monitoring is related to the tasks indicated in the Table 4.01 of the LORP Monitoring and Adaptive Management Plan (MAMP). Note that baseflow compliance, BWMA flooded extent, and Off-River Lakes and Ponds flooded extent are considered under Hydrologic Monitoring above. It is assumed that most monitoring will be jointly conducted by Inyo and LA and that the hours of each agency spend during 09-10, will offset one another. Range trend work will be planned, budgeted, and conducted by LADWP and is not included in this work plan. Fish condition monitoring is incorporated into the budget for water quality measurements. Ecosystem Sciences Incorporated, the MOU Consultant, will be involved with the Rapid Assessment Surveys, Baseflow Water Quality, Seasonal Habitat Flow, Seasonal Habitat Flooding Extent, Seasonal Flow Water

Quality, Avian Census', Landscape Vegetation Mapping, and the Annual Report Preparation including adaptive management recommendations.

Range Monitoring. Range monitoring is related to the tasks described in section 4.6 of the MAMP. Three types of monitoring will take place that are directly related to the management of livestock grazing: irrigated pasture condition scoring, utilization and range trend. Irrigated pasture condition scoring is a tool used by managers to systematically track the condition of irrigated pastures. Utilization monitoring tracks the amount of biomass removed from non-irrigated fields and Range trend tracks the long-term effect of grazing and grazing management prescriptions on the grazing resource. Additionally, annual field inspections and evaluations will be conducted. Range monitoring will be conducted by LADWP and is not a shared cost, and therefore not budgeted in this work plan.

Mosquito Abatement. For the fiscal year 2009–2010, the Owens Valley Mosquito Abatement Program (OVMAP) plans to continue a comprehensive Integrated Mosquito Management Plan (IMMP) when addressing the new and developing sources within the LORP in accordance with its mission of protecting public health. This IMMP consists of an expansion of currently used materials and methods for the surveillance and control of mosquitoes across the OVMAP boundary as well as contingency planning for late season flushing flows. This budget anticipates field surveillance of potential larval habitat for mosquito production, larviciding, pupaciding, adult mosquito surveillance with light traps, mosquito borne disease surveillance, and treatment for adult mosquitoes.

The budgeted amount of $127,000 includes a contingency of $67,000 in the event that supplementary aerial treatments are necessary. The use of this contingency required concurrence by both the Inyo County Chief Administrative Officer and LADWP's Aqueduct Manager.

Weed Control. The Inyo/Mono Counties Agricultural Commissioner's Office receives funding from LADWP to control and eradicate several different invasive weed species both within the LORP boundaries, and in areas within the watershed that that may serve as a seed source that could impact the LORP area. These invasive weed species include: *Lepidium latifolium, Acroptilon repens, Cirsium arvense, Centaurea solstitialis, Centaurea maculosa,* and *Carderia draba*. These populations are managed using integrated pest management methods, including mechanical, chemical and biological controls. Currently, there are 98 separate sites, on LADWP lands, spread over an area of 29,755 gross acres that Agricultural Commissioner's Office manages. Of these sites, 12 are within the LORP boundaries.

Along with weed treatment activities, the Agricultural Commissioner's Office provides mapping and monitoring of these infestations from year to year. Information gathered includes net and gross acreage, species, location, and the date when the selected management activity was conducted. The Agricultural Commissioner's Office also provides outreach to the public that is specific to the weed issues threatening the LORP, through educational materials targeting recreationalists visiting the area, and responds to and interacts with the public regarding any new weed locations found within the LORP area. LORP weed control activities are funded through

agreements outside of the LORP Annual Work Plan, and are therefore not included in the budget presented here.

Saltcedar Control. The County Water Department's saltcedar control program will concentrate on the tributaries to the Lower Owens River channel. The purpose of working on the LORP is to reduce the likelihood of the creeks and streams spreading saltcedar throughout the Owens River re-watered channel. The current focus is to reduce the chance of infestation by treating areas in the river drainage basin. One permanent, one shared employee and six seasonal field assistants are expected to work on the control program during the treatment season (December-March). Monitoring and follow-up treatments by the Saltcedar Project Coordinator will occur during the balance of the year. LORP saltcedar control activities are funded through agreements outside of the LORP Annual Work Plan, and are therefore not included in the budget presented here.

Maintenance and Monitoring Tasks Budget

The attached spreadsheets provide the budgets for hydrologic monitoring, biologic/water quality monitoring, maintenance, and mosquito abatement. The following table summarizes the costs of the monitoring for the fiscal year July 1, 2009 through June 30, 2010 and specifies the costs incurred by Inyo County, Los Angeles and the cost of the MOU consultant.

Category	Inyo costs	LA costs	MOU Consultant	Total Cost
Hydrologic monitoring	$0	$255,953	$0	$255,953
Biologic and Water Quality	$6,779	$0	$71,210	$77,989
Maintenance and Operations	$0	$239,187	$0	$239,187
Mosquito control	$63,500	$63,500	$0	$127,000
Total	**$70,279**	**$558,640**	**$71,210**	**$700,129**

Generally, staff hours for the Inyo County and LADWP to conduct the biologic and water quality monitoring offset one another. There are 367 total people days necessary to complete the proposed biological and water quality monitoring, of which Inyo has 19 more people days allocated than LADWP. There is no offset for the Maintenance, Operations, or Hydrologic monitoring to be performed by LADWP. Additionally, LADWP has allocated 245 people days for Range Monitoring which is not a shared monitoring cost. Based on this budget, Inyo is required to compensate Los Angeles $279,786 for the differential in expenditures for Maintenance, Operations, and Hydrologic monitoring. This value is calculated by subtracting the dollars Inyo County will spend during the fiscal year from the amount spent by LADWP and dividing the difference in half and adding half of the cost of the MOU Consultant. If the alternative monitoring plan for the BWMA is approved, this cost would be reduced by $36,262 to $243,524. Inyo County's cost share of implementing the Adaptive Management Measures is an additional $22,652.

Section 2. Adaptive Management Measures

The Adaptive management recommendations made by the MOU consultant for inclusion in the LORP Annual Report to the Standing Committee have been copied in their entirety below. Recommendations for the Rapid Assessment Surveys, Water Quality, and Land Use are in progress at this time or will be incorporated in the upcoming field seasons monitoring efforts. The Workplan and Budget associated with the MOU consultant recommendations for the Blackrock Waterfowl Management Area are described in this section, and also above under the hydrologic monitoring section. The Workplan and Budget associated with the Delta Habitat Area follow below. Based on comments received on the River Flow recommendation from the LORP Annual Monitoring Report, Inyo County and LADWP believe that prior to the development of a workplan for that item, an MOU Group meeting must be held to discuss how to move forward.

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Table of Adaptive Management Recommendations. LORP Annual Report 2008.

Management Area	Recommendation and/or Action
Rapid Assessment Survey (RAS)	• **Report Composition:** Develop consistent documentation and reporting template that will enable better comparison between years of data collection. • **Data Organization and Management:** Future RAS efforts should include a categorical data element. Annual data collection needs to be integrated in order to better analyze changes from year to year. • **Noxious Weeds:** Perennial pepperweed was detected at four different sites and appear(s) to have spread from previous years. Locations should be verified and treated multiple times to prevent further expansion. • **Exotic Weeds:** 2008 RAS noted dense stands of smartweed encompassing much or all of the floodplain over a roughly 10 mile section of the river. This presents an opportunity for adaptive management. Control methods including physical, biological control, and chemical control. We recommend developing a study design of one or more methods of control to be used to treat selected sections of the infestation and monitor results. • **Woody Recruitment:** Woody recruitment appears to be occurring throughout the floodplain. Future data collection efforts should include categorical data documenting the number of new sprouts per location. • **Grazing Management Issues:** Supplemental feeding sites within the floodplain. Feeding/supplement areas are not permitted within the riparian and floodplain areas. Consultation with lessees and removal. • **Tamarisk:** Request more information and the spatial data on the specific locations where tamarisk eradication was performed. 2008 RAS documented 700 tamarisk points, but reporting issues confounded results. Using categorical data for tamarisk results would alleviate many reporting issues. Data confusion and tabulation makes it difficult to make adaptive management recommendations concerning tamarisk. • **Tamarisk Seedlings:** 2008 RAS seedling sites all need to be visited, verified and treated. • **Tamarisk Slash:** large slash piles should continue to be chipped, burned and/or removed from the streambanks. Pile new slash in appropriate areas, not on streambanks, where LADWP can dispose of them. • **Roads:** Data management and clarity of road abundance and impacts is needed. • **Trash:** removal and proper disposal of several large appliances dumped into the floodplain. • **Beaver:** No recommended action.
Water Quality	Recommend establishing a standard of 1.0 mg/l dissolved oxygen exhibiting a downward trend, as the threshold beyond which corrective action is taken.
River Flow	Adaptive management decisions on adjusting river flows to improve tule management and water quality should be based on careful analysis of various flow scenarios. Recommend a thorough analysis of possible flow changes using current river baseline conditions and high-resolution modeling to produce a detailed report for MOU parties on flow alternatives and scenarios.
Blackrock Waterfowl Management Area (BWMA	• Prepare Waggoner and Drew units for conversion. Burn non-forage, dense vegetation areas in Waggoner this winter. Temporarily fence Drew to graze off the forage rather than waste it by burning. Construct berms and two water control structures in Drew unit per plan specifications. • Initiate a partial draw down of the Winterton and Thibaut units as Waggoner and Drew are flooded beginning in the spring. Additional flooding can be performed at Thibaut, if acreage is needed. • Maintain the 28 acres of Thibaut ponds. • Develop a relationship between inflow and wetted area so that management is based on inflow with regular on-the-ground measurements of wetted area. • Manage wetted area with a continuous inflow so that natural, seasonal variations in water fluctuations will be emulated without extreme fluctuations. • Identify a method that is applicable to all the BWMA units for developing regression equations that relate wetted area to inflow volume by season. • During the dry phase in Thibaut, complete construction of the berm described in the project implementation plans at the southern end of the unit to confine flow and wetted perimeter.
Delta Habitat Area (DHA)	• Need to meet Brine Pool flow requirements of continuous minimum flow of 0.5cfs for one year. • Recommend evaluating the DHA to determine what changes may have occurred to vegetation resources (acreage and composition) prior to making any adaptive management decisions or modifications to seasonal pulse flows this spring, 2009.
Land Use	• No data tables that displayed all data collected were available to review. Ecosystem Sciences was not able to verify the conclusions reached for landuse compliance without examination of the data set. • Summarized data results reported for this year indicates that all irrigated pastures were monitored and all are in compliance. • Recommend that LADWP complete their transect placement in all pastures and fields and collect and report a complete set of utilization, irrigated pastures and range trend monitoring data for the 2009. • Recommend that all livestock grazing plans be reviewed and updated so they are compatible with the *LORP Monitoring, Adaptive Management and Reporting Plan.* • Lessee consultations as soon as possible. • Recommend that each grazing lease have its own monitoring sub-plan that includes the location of transects and utilization cages on each pasture and field. • Recommend that all fences necessary to manage grazing be completed as soon as possible – well before the end of 2009.

Modification of flow management and flooded area measurement in the BWMA

The 1997 MOU calls for "Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River watershed is forecast to be average or above average. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed." The relationship between Owens Valley runoff to flooded acreage is further described in Ecosystem Sciences August 2002 LORP Plan and Section 2.5.5 of the 2004 LORP EIR. Regulation of water delivery to maintain a set flooded acreage has proven difficult and the resulting relation between water supplied and flooded acreage has been erratic. Recognizing that the relationship between the amount of flooded acreage and water release to the habitat area is poorly known and will continue to be so, at least, until an adequate data base is developed, maintaining the required flooded acreage will be conducted according to a schedule fixing constant water delivery rates over fixed seasonal time periods. The purpose of this adaptive management measure is to develop an efficient method of monitoring and managing the Blackrock Waterfowl Management Area (BWMA), while still providing the desired benefits to wetlands and waterfowl. The adaptive management measure will be undertaken as an experiment to:

1. Determine the relationship between flooded acreage and water supplied for each BWMA unit, and to determine how that relationship changes seasonally.
2. Develop an efficient method of evaluating flooded acreage.
3. Develop a long-term protocol for managing the BWMA.

Seasonal water delivery flow rates will be set for each habitat area based on water use per acre flooded ratios developed from existing data. Using the available flooded acreage and water supplied data, an acre-foot per acre ratio of water used to acres flooded will be used to set flow rates. Flow will be set at the beginning of a season and held at that rate for the season. The length of each season is defined. At the midpoint and end of each seasonal time period the perimeter of the flooded acreage will be mapped to delineate the extent of flooding for the corresponding flow. This data will be used to establishing ratios for future seasonal flows.

The flooded acreage and flows will be based on the current runoff years forecast at the beginning of seasonal time period. Flooded acreage will be evaluated using GPS at the start/end of each season, and at each season's mid-point. Remote sensing will be investigated as a method for evaluating flooded acreage, using the GPS flooded perimeters for ground-truth and calibration. Accuracy of flow measurements will be assessed as the data accumulate.

Delta Habitat Area Flow Assessment

Background

Two separate management requirements exist for the Delta Habitat Area (DHA); a short-term requirement of providing a minimum flow of 0.5cfs to the Brine Pool for a full year following project implementation, and a long-term requirement of maintaining and enhancing the 2005 Delta acreage (1,160 ac). The Brine Pool requirements should be met in March 2009. Meeting the DHA habitat requirements are more problematic.

The long-term requirement of maintaining and enhancing the DHA requires further investigation. The only project objective that has been met is that an average annual flow of 6 to 9cfs passed the pumpback station to the DHA. In fact, data from the period of July 12th, 2007 to September 30th, 2008 indicates that an average annual flow of 11.6cfs flowed to the DHA. These data include the seasonal habitat flows and some additional high flows resulting from precipitation (natural variation) and pump station calibration and testing (which allowed river flows to bypass the station and flow into the DHA). If habitat flows are not included, the average annual flow passing the pumpback station to the DHA was 8.8 cfs.

LADWP's dust control project also affects the DHA. The dust control project brackets, or confines the DHA on both the east and west sides and, likely has raised shallow groundwater conditions which is effecting DHA water spreading and potentially infiltration rates. The prolonged effects of the seasonal habitat flows coupled with the above mentioned effects all have had an accumulated impact on the DHA.

The management of the DHA centers on providing the area an annual base flow of 6 to 9cfs, and supplementing that flow with four seasonal pulse flows designed to enhance habitat for waterfowl and encourage wetland development. Four pulse flows are scheduled to be implemented once the Brine Pool requirement is met in March 2009.

The important questions that require investigation relate to how the DHA has responded to a changed surrounding landscape (the dust control project) and a changed water regime since baseline conditions were measured. Dust control structures, levees and roads on the east and west side of the DHA have converted the area from an open ecosystem to a confined or closed ecosystem. Prior to this confinement, the DHA channels could naturally shift from time to time as vegetation developed and forced lateral movements thereby creating dynamic conditions for the enhancement of wetland areas and habitat.

During the seasonal habitat flow water broke out of the west channel at the upper end of the delta and flowed west along a dust control levee/cell and gravel area. Water coursed through a remnant channel to the west of the DHA. Prior to the seasonal habitat flow this remnant channel was dry. Rather than allow water to flow to the historic end point of the remnant channel it was diverted by a dust control project levee/road and flowed into a dust control cell. This water may have created additional wetland habitat had it been allowed to follow its historic course. It appears that this water did not enhance the DHA wetland or contribute to its maintenance, and may have had a deleterious effect on dust control measures.

Initial examination of remote imagery from the years 2000, 2005 and 2008 indicate that vegetation conditions in the DHA have changed. The amount of acreage (extent) and composition (species assemblage) change is not well quantified at this time. Yet, given the new physical conditions which will influence how water is transported through, beneath and around the DHA, and because the DHA's vegetation has changed since the initial planning and collection of baseline data, the use of the four pulse flows to enhance and maintain the wetlands need to be reevaluated; especially since there is some evidence that the wetlands are tending toward less diversity and more mono-culture.

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Planned Work

The Lower Owens River Project Monitoring, Adaptive Management, and Reporting Plan (Table 4.01) describes monitoring efforts to determine wetland habitat development and vegetation mapping be conducted in year 3 of the project. Due to concerns described above it has been proposed to accelerate that monitoring by one year conducting it during the 2009-2010 fiscal year. Ecosystem Sciences will evaluate the DHA to determine what changes may have occurred to vegetation resources (acreage and composition) in winter/spring 2009. LADWP acquired a September 2008 Quickbird Satellite Image of the DHA that allows for in-depth study of the vegetation resources of the area. Current and past satellite imagery coupled with ground-truthing of vegetation, flow data, shallow groundwater, and comparisons to baseline conditions will provide insight to DHA changes and allow for adaptive management decisions related to modification of seasonal pulse flows as necessary.

The following tasks will be conducted to evaluate DHA conditions and develop recommendations for the DHA:

1. Evaluation of land cover change. This task will use remote sensing, vegetation transects, and channel cross-section surveys to evaluate change from pre-LORP conditions.
2. Evaluation of hydrologic changes in the DHA. This task will use groundwater data and flow data to evaluate hydrologic changes in the DHA from pre-LORP and pre-dust abatement hydrologic conditions.
3. Evaluation of linkage between hydrologic changes and vegetation changes. The results of tasks 1 and 2 will be assessed to determine the effects of hydrologic changes on vegetation cover.
4. Recommendations for DHA management. Based on the linkages identified in task 3, the consultant will develop recommendations will be made aimed at managing DHA flows to better achieve the DHA goals of maintaining and enhancing delta habitats.

Deliverables

Ecosystem Sciences will produce a report that evaluates the following questions in relation to the DHA and the appropriate flows to maintain the required habitat conditions:

How has vegetation cover and composition changed since the LORP began?
How has the LORP changed the hydrology of the DHA?
How have dust control measures changed the hydrology of the DHA?
What is the relation between hydrologic change and land cover change in the DHA?

The report will also include adaptive management recommendations aimed at better achieving the LORP goals for the DHA.

Schedule

Work will be performed in the winter and early spring of 2009.

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2009 – 2010 Fiscal Year Adaptive Management Measures Workplan Budget

	Organization/Class	Days	Daily rate	Equipment rate	Total	LA Costs	ESI Costs
Adaptive Management measures							
Delta Habitat Area Assessment	LADWP Survey	20	477	45	$10,440.00	$10,440.00	
	ESI Principal	20	1032		$20,640.00		
	ESI Senior	15	680		$10,200.00		
	ESI Admin	2	512		$1,024.00		
	ESI Expenses				$3,000.00		$34,864.00
Adaptive Management Total					**$45,304.00**		

Ecosystem Sciences Tasks

Ecosystem Sciences Inc.	Field Time (days)	Analysis and Reporting (days)	Daily rate	Expenses	
River					
Rapid Assessment Survey					
Principle		1	1032		$1,032.00
Associate	10	5	680	150	$11,700.00
Base Flow Water Quality					
Principle			1032	150	
Associate	0	1	680	150	$680.00
Seasonal Habitat Flow					
Principle	6	2	1032	150	$9,156.00
Associate			680	150	
Indicator Species Habitat					
Principle			1032	150	
Associate	1	2	680	150	$2,190.00
Habitat Flow Flooding extent					
Principle	3	3	1032	150	$6,642.00
Associate	3	2	680	150	$3,850.00
Habitat Flow Water Quality					
Principle		1	1032	150	$1,032.00
Associate			680	150	
Landscape Veg Mapping					
Principle		5	1032	150	$5,160.00
Associate	5		680	150	$4,150.00
Subtotal					**$45,592.00**
Blackrock					
Indicator Species Habitat					
Principle			1032	150	
Associate	1	2	680	150	$2,190.00
Landscape Veg Mapping					
Principle		2	1032	150	$2,064.00
Associate	2		680	150	$1,660.00
Subtotal					**$5,914.00**
Delta					
Indicator Species Habitat					
Principle			1032	150	
Associate	1	1	680	150	$1,510.00
Landscape Vegetation Mapping					
Principle		1	1032	150	$1,032.00
Associate	1		680	150	$830.00
Subtotal					**$3,372.00**
Off-River Lakes and Ponds					
Landscape Vegetation Mapping					
Principle		1	1032	150	$1,032.00
Associate	1		680	150	$830.00
Subtotal					**$1,862.00**
Annual Report Preparation					
Annual Report					
Principle		10	1032	150	$10,320.00
Associate	5		680	150	$4,150.00
Subtotal					**$14,470.00**
				Total	**$71,210.00**

Expenses are per diem and milage*

Biologic and Water Quality Monitoring

Biologic and Water Quality	Organization/Class	Days	Inyo Days	LA Days				
River								
Rapid Assessment Survey	LA/WRS-B	9						
	LA/WRS-C	18						
	IC/RESASST	18						
	IC/LORP	9	27	27				
Base Flow Water Quality	IC/HYDROL	15	15	0				
Seasonal Habitat Flow	LA/WRS-B	10	10	15				
	LA/WRS-C	5						
	IC/HYDROL	10						
Indicator Species Habitat	LA/WRS-B	4	4	4				
	IC/VEGSCI	4						
Habitat Flow Flooding extent	LA/WRS-B	10	10	15				
	LA/WRS-C	5						
	IC/GIS	10						
Habitat Flow Water Quality	IC/HYDROL	15	15	0				
Landscape Veg Mapping	IC/VEGSCI	12	24	24				
	IC/GIS	12						
	LA/WRS-B	12						
	LA/GIS	12						
Avian Census	LA/WRS-B	18	18	18				
	IC/GIS	18						
Analysis and Reporting	LA/WRS-B	9	9	9				
	IC/LORP	5						
	IC/GIS	4						
Total Days			132	112				
Blackrock								
Rapid Assessment Survey	LA/WRS-B	1	3	3				
	LA/WRS-C	2						
	IC/RESASST	3						
Indicator Species Habitat	LA/WRS-B	4	4	4				
	IC/VEGSCI	4						
Landscape Veg Mapping	IC/VEGSCI	4	8	8				
	IC/GIS	4						
	LA/WRS-B	4						
	LA/GIS	4						
Avian Census	LA/WRS-B	16	16	16				
	IC/GIS	16						
Data Analysis and Reporting	LA/WRS-B	4	4	4				
	LA/WRS-C	2						
	IC/LORP	2						
Total Days			35	35				
Delta								
Rapid Assessment Survey	LA/WRS-B	1	1	1				
	IC/RESASST	1						
Indicator Species Habitat	LA/WRS-B	1	1	1				
	IC/VEGSCI	1						
Landscape Vegetation Mapping	IC/VEGSCI	3	6	6				
	IC/GIS	3						
	LA/WRS-B	3						
	LA/GIS	3						
Avian Census	LA/WRS-B	7	7	7				
	IC/GIS	7						
Analysis and Reporting	LA/WRS-B	2	1	2				
	IC/LORP	1						
Total Days			15	17				
Off-River Lakes and Ponds								
Rapid Assessment Survey	LA/WRS-B	2	2	2				
	IC/RESASST	2						
Landscape Vegetation Mapping	IC/VEGSCI	4	8	8				
	IC/GIS	4						
	LA/WRS-B	4						
	LA/GIS	4						
Analysis and Reporting	LA/WRS-B	1	1	1				
	IC/LORP	1						
Total Days			11	11				
Annual Report Preparation								
Report preparation	LA/WRS-B	10	10	10				
	IC/LORP	10						
Total Days			10	10	Excess IC hours	Daily Rate	Equip Rate	IC Expense
			193	174	19	$332.64	24.15	$6,779.01

Hydrologic Monitoring

Hydrologic Monitoring	2009-2010 Predicted Person days	Predicted Labor Cost from July 1, 2009 through June 30, 2010	Predicted Equipment Cost July 1, 2009 through June 30,	Total Predicted Cost July 1, 2009 through June 30, 2010
RIVER				
Base Flow Compliance Monitoring				
Hydrographer "B"	65	$20,536.63	$2,587.20	$23,124.03
Hydrographer "A"	2	$754.38	$90.51	$844.89
Senior Hydrographer	22	$8,177.84	$897.60	$9,075.44
Seasonal Habitat Flow Monitoring				
Hydrographer "B"	20	$6,191.53	$780.00	$6,971.53
Hydrographer "A"	4	$1,333.49	$160.00	$1,493.49
Senior Hydrographer	9	$3,097.67	$340.00	$3,437.67
Data analysis				
Hydrographer "B"	10	$3,238.65	$0.00	$3,238.65
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	42	$15,399.82	$0.00	$15,399.82
Reporting				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	19	$6,814.86	$0.00	$6,814.86
CE Associate 1	51	$17,911.98	$0.00	$17,911.98
CE Associate 3	15	$6,599.34	$0.00	$6,599.34
BLACK ROCK WATERFOWL AREA				
Flooded Extent Monitoring				
Hydrographer "B"	122	$38,646.00	$4,869.00	$43,515.00
Hydrographer "A"	19	$6,334.10	$760.00	$7,094.10
Senior Hydrographer	21	$7,653.06	$840.00	$8,493.06
Maintenance and Construction Helper	146	$39,887.00	$0.00	$39,887.00
Data analysis				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	31	$11,245.31	$0.00	$11,245.31
CE Associate 3	12	$5,434.75	$0.00	$5,434.75
Senior Draftsman	19	$6,929.76	$0.00	$6,929.76
GIS Analyst	20	$7,708.80	$0.00	$7,708.80
Reporting				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	17	$6,247.39	$0.00	$6,247.39
CE Associate 1	20	$7,024.30	$0.00	$7,024.30
CE Associate 3	7	$3,170.27	$0.00	$3,170.27
GIS Analyst	5	$1,927.20	$0.00	$1,927.20
OFF RIVER LAKES AND PONDS				
Lake Level Monitoring				
Hydrographer "B"	9	$2,721.36	$342.85	$3,064.41
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	4	$1,457.72	$160.00	$1,617.72
Data analysis				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	7	$2,498.96	$0.00	$2,498.96
Reporting				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	5	$1,874.22	$0.00	$1,874.22
CE Associate 1	5	$1,756.08	$0.00	$1,756.08
CE Associate 3	3	$1,552.79	$0.00	$1,552.79
DELTA				
Flow Monitoring				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	0	$0.00	$0.00	$0.00
Data analysis				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	0	$0.00	$0.00	$0.00
Reporting				
Hydrographer "B"	0	$0.00	$0.00	$0.00
Hydrographer "A"	0	$0.00	$0.00	$0.00
Senior Hydrographer	0	$0.00	$0.00	$0.00
CE Associate 1	0	$0.00	$0.00	$0.00
CE Associate 3	0	$0.00	$0.00	$0.00
			TOTAL =	$255,993.00

Adaptive Management							
Adaptive Management measures	Organization/Clas	Days	Daily rate	Equipment rate	Total	LA Costs	ESI Costs
Delta Habitat Area Assessment	LADWP Survey	20	477	45	$10,440.00	$10,440.00	
	ESI Principle	20	1032		$20,640.00		
	ESI Senior	15	680		$10,200.00		
	ESI Admin	2	512		$1,024.00		
	ESI Expenses				$3,000.00		$34,864.00
Task Subtotal					$45,304.00		

Operations and Maintenance

	Labor type	Hours	Labor Rate	Total Labo	Equipment Type	Hours	Rate	Total Equipment
River								
Measuring Stations Maintenance (4 Stations)	Power Shovel Operator		153.12	11417.8	Mower	263.2	75.76	4196.24
	Truck Driver/MCH				3 axel dump trucks			
	Operator				Gradall			
	Building Repair Man				Backhoe and trailer			
Spillgates and Ditches					3/4 ton 4x4 pick- up			
Intake Spillgate Maintenance (3 days per year)								
	Building Repair Man	27	37.53	1013.31	3/4 ton 4x4 pick- up	27	5.77	155.79
	2 - Truck Driver/MCH	54	33.14	1789.56	3/4 ton 4x4 pick- up	27	5.77	155.79
Intake								
Mowing (3 days per year)	Operator	27	40.74	1099.98	Mower	225	10.71	2409.75
	1 - Truck Driver/MCH	36	33.14	1193.04	1 - 3 axel dump trucks	72	15.38	1107.36
Cleaning (3 days per year)	Power Shovel Operator	27	43.29	1168.83	Gradall	27	25.64	692.28
	2 - Truck Driver/MCH	54	33.14	1789.56	2 - 3 axel dump trucks	72	15.38	1107.36
Blackrock Ditch								
Mowing (25 days per year)	Operator	225	40.74	9166.5	Mower	225	10.71	2409.75
	2 - Truck Driver/MCH	450	33.14	14913	2 - 3 axel dump trucks	450	15.38	6921
Cleaning (10 days per year)	Power Shovel Operator	90	43.29	3898.1	Gradall	90	25.64	2307.6
	2 - Truck Driver/MCH	270	33.14	8947.8	2 - 3 axel dump trucks	270	15.38	4152.6
Goose Lake to River Ditch								
Cleaning (5 days per year)	Operator	45	40.74	1833.3	Backhoe and trailer	45	14.66	659.7
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Thibout Spillgate and Ditch								
Cleaning (4 days per year)	Power Shovel Operator	36	43.29	1558.44	Gradall	36	25.64	923.04
	2 - Truck Driver/MCH	72	33.14	2386.08	2 - 3 axel dump trucks	72	15.38	1107.36
Independence Spillgate and Ditch								
Cleaning (4 days per year)	Operator	135	40.74	5499.9	Backhoe and trailer	135	14.66	1979.1
	2 - Truck Driver/MCH	270	33.14	8947.8	2 - 3 axel dump trucks	270	15.38	4152.6
Locust Spillgate and Ditch								
Cleaning (5 days per year)	Power Shovel Operator	45	43.29	1948.05	Gradall	45	25.64	1153.8
	Operator	45	40.74	1833.3	Backhoe and trailer	45	14.66	659.7
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Dean, Russell, Georges and Stevens								
Cleaning (20 days per year)	Operator	180	40.74	7333.2	Backhoe and trailer	180	14.66	2638.8
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Alabama Spillgate								
Cleaning (5 days per year)	Power Shovel Operator	54	43.29	2337.66	Gradall	54	25.64	1384.56
	3 - Truck Driver/MCH	162	33.14	5368.68	3 - 3 axel dump trucks	162	15.38	2491.56
Delta Spillgate Maintenance (3 days per year)								
	Building Repair Man	27	37.53	1013.31	3/4 ton 4x4 pick- up	27	5.77	155.79
	2 - Truck Driver/MCH	54	33.14	1789.56	3/4 ton 4x4 pick- up	27	5.77	155.79
LORP Operations								
Patrol and Flow Changes (260 days per year)	Aqueduct and Reservoir K	2080	33.14	68931.2	3/4 ton 4x4 pick- up	2080	5.77	12001.6
Maintenance								
Fence (10 days per year)	Building Repair Man	90	37.53	3377.7	3/4 ton 4x4 pick- up	90	5.77	519.3
	2 - Truck Driver/MCH	180	33.14	5965.2	3/4 ton 4x4 pick- up	90	5.77	519.3
				$160,993				$58,194
Total	$239,187							

Range Monitoring	
Task	**People Days**
Utilization	40
Irrigated Pasture Condition	5
Range Trend	160
Annual Field Inspections (see 2-59 of EIR)	20
Field Evaluations (see 2-59 of EIR)	5
Analysis and Reporting	15
Total	**245**