

- **Board of Directors**  
**Engineering, Operations and Real Property Committee**

July 10, 2001 Board Meeting

---

9-1

---

**Subject**

---

Authorize \$2.425 million for the complete conversion of all pump-motor units to turbine-generators at the Hiram W. Wadsworth Pumping Plant (Appn. 15360)

---

**Description**

---

Originally, the hydraulic facilities at Diamond Valley Lake (DVL) were designed to direct normal water deliveries from the reservoir into the San Diego Canal via the pumping plant forebay. However, Metropolitan has the opportunity to generate electrical power when water is withdrawn from the reservoir by converting the pumps to turbine generators. Once converted, the units would be capable of operation in either a pumping mode or a power-generation mode.

Four of the twelve pumps were converted to turbine generators in May 2001, enabling Metropolitan to generate up to approximately 13 megawatts of electrical power from the hydraulic energy created when water is withdrawn from the reservoir, without affecting Metropolitan's ability to pump water. These four converted pumps allow power generation in a manual operation mode.

This Board action will authorize conversion of the remaining eight pumps to turbine generators, as well as upgrade all turbine generators to a fully automated operation.

The initial conversion of the first four pumps began in November 2000, when the Board approved an initial appropriation to fund preliminary engineering, environmental documentation, and processing of the required application to the Federal Energy Regulatory Commission (FERC). FERC approved Metropolitan's application for licensing exemption in February 2001. One month later, the Board approved a second appropriation to fund the conversion of four units for operation in a manual mode. This conversion was authorized in order for Metropolitan to remain eligible to receive financial incentives from the California Energy Commission (CEC) for electrical energy produced and sold during the first five years of operation of new projects. Metropolitan completed the conversion of four units by May 30, 2001, providing a generating capacity of up to approximately 13 megawatts (MW) of electrical power. Metropolitan is now eligible to receive an award from the CEC of up to approximately \$1.2 million.

Conversion of the remaining eight units and automation of all twelve will require modifications to existing equipment. The required changes will involve the operating system software, motor speed control equipment, power metering equipment, electrical protection systems, integration into Metropolitan's SCADA system, and other minor equipment changes. This conversion also requires modifications to the system harmonic filtering equipment. The extent of supplementary or modified harmonic filtering must be assessed as additional converted units are placed on-line in a power-generating mode.

The initial project feasibility study indicated the ultimate project cost to range from \$4 to \$5 million, with a capital cost payback within 5 to 8 years of operation. Based upon actual experience and initial conversion costs, staff lowered its capital cost estimate to range from \$3 to \$4 million. Approval of the following recommendation will authorize the appropriation of \$2.425 million to finance the complete conversion of all units by July 1, 2002. This will include the automation of the four previously converted units. Once all twelve units are converted, the facility capacity will be up to approximately 40 MW of electrical power.

Metropolitan's Capital Investment Plan (CIP) Evaluation Team reviewed and approved this project.

See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for Addendum No. 6 to the Final Environmental Impact Report for the DVL, [Attachment 3](#) for the Location Map.

## **Actions and Milestones**

---

- November 2000 – Board authorization for feasibility study, preliminary engineering, and environmental documentation
- March 2001 – Board authorization for the initial conversion of four units, award of an agreement to Alstom Power Conversion, Inc. (Alstom), and all agreements necessary to obtain financial incentives and sell hydroelectric power
- July 2002 – Complete the conversion of eight remaining units and achieve fully automated operation, integrated with Metropolitan’s SCADA system

## **Policy**

---

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation

### **CEQA**

---

Metropolitan’s Board of Directors certified the Final Environmental Impact Report (FEIR) for the DVL project (formerly the Eastside Reservoir Project) in October 1991, and, subsequently, the Supplemental Environmental Impact Report, and Addendum Nos. 1, 2, 3, 4, and 5 to the FEIR. In June 2001, Addendum No. 6 to the FEIR for the DVL was prepared to document the proposed conversion of all pump-motor units to turbine-generators at the Hiram W. Wadsworth Pumping Plant to increase its generating capacity to 39.6 megawatts ([Attachment 2](#)).

The California Environmental Quality Act (CEQA) requires the preparation of an addendum to a previously certified EIR if changes or additions are necessary but none of the conditions described in Section 15162 of the State CEQA Guidelines calling for the preparation of a Subsequent EIR have occurred (Section 15164 of the State CEQA Guidelines). The proposed modifications to the DVL project also do not meet any of the conditions requiring the preparation of a Supplement to an EIR (State CEQA Guidelines, Section 15163). Instead, the proposed modifications require only minor changes or additions to the evaluation in the certified FEIR to make it adequate under CEQA. None of the proposed modifications are anticipated to result in significant adverse impacts beyond those impacts already disclosed in the original FEIR and subsequent environmental documentation.

The CEQA determination is: Consider the information contained in Addendum No. 6 with the FEIR, the Supplemental Environmental Impact Report, and Addendum Nos. 1, 2, 3, 4, and 5 to the FEIR and find that there is no substantial evidence that the proposed modifications to the DVL project will create any new significant impacts; and certify Addendum No. 6.

## **Board Options/Fiscal Impacts**

---

### **Option #1**

Adopt the CEQA determination and appropriate \$2.425 million to finance the conversion of eight pump-motor units at DVL to automated turbine generators. Upgrade four previously converted units from manual to automatic operation. Authorize the Chief Executive Officer to amend the consulting agreement with Alstom to a total amount up to \$800,000 for this purpose.

**Fiscal Impact:** \$2.425 million of budgeted CIP funds under existing Appropriation 15360. Future reduction or offset of energy costs to Metropolitan and future potential incentive award from the CEC of up to approximately \$1.2 million.

### **Option #2**

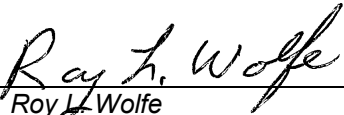

Defer action. Do not convert eight pump-motor units at DVL to automated turbine generators. Do not upgrade four previously converted units from manual to automatic operation. Do not amend consulting agreement with Alstom.

**Fiscal Impact:** No immediate impact and no future expenditures; however, up to \$1.475 million appropriated funds for the project to date. Future reduction or offset of energy costs to Metropolitan and future potential incentive award from the CEC of up to approximately \$1.2 million. Continued manual operation of the four converted units is expected to result in a higher labor cost.

**Staff Recommendation**

---

Option #1

 Roy L. Wolfe Manager, Corporate Resources	6/25/2001 Date
 Ronald R. Oster Chief Executive Officer	6/29/2001 Date

**Attachment 1—Financial Statement**

**Attachment 2—FEIR Addendum No. 6**

**Attachment 3—Location Map**

BLA #1038

**FINANCIAL STATEMENT**

Authorize \$2.425 million for the complete conversion of all pump-motor units to turbine-generators at the Hiram W. Wadsworth Pumping Plant (Appn. 15360)

	<b>CUMULATIVE THROUGH BOARD ACTION NO. 2 (Mar. 2001)</b>	<b>BOARD ACTION NO. 3 (Jul. 2001)</b>
Labor:		
Engineering and Water System Operations Staff	\$ 500,000	\$ 900,000
<hr/>		
<b>Subtotal Labor</b>	<b>\$ 500,000</b>	<b>\$ 900,000</b>
Incidental Expenses	20,000	75,000
Contracts	775,000	1,575,000
Potential Budget for Harmonic Filtering Equipment		1,000,000
Remaining Budget	180,000	350,000
<hr/>		
<b>Total</b>	<b>\$ 1,475,000</b>	<b>\$ 3,900,000</b>

**FUNDING REQUEST**

<b>Program Name:</b>	Diamond Valley Lake Hiram W. Wadsworth Pumping Plant Hydroelectric Pump-Motor Unit Conversion		
<b>Source of Funds:</b>	Construction Funds (possibly General Obligation, Revenue Bonds, Pay-As-You-Go)		
<b>Appropriation No.:</b>	15360	<b>Board Action No.:</b>	3
<b>Requested Amount:</b>	\$ 2,425,000	<b>Capital Program No.:</b>	15360-E
<b>Total Appropriated Amount:</b>	\$ 3,900,000	<b>Capital Program Page No.:</b>	E-47
<b>Total Program Estimate:</b>	\$ 4,500,000	<b>Program Goal:</b>	O-Other

EASTSIDE RESERVOIR PROJECT  
FINAL ENVIRONMENTAL IMPACT REPORT

ADDENDUM NO. 6

FOR IMPLEMENTATION OF SMALL CONDUIT HYDROELECTRIC GENERATION  
AT DIAMOND VALLEY LAKE

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

JUNE 2001

Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, California 90054-0153  
Ms. Laura J. Simonek  
(213) 217-6242

State Clearinghouse Number: 89081422

MWD Report Number: 1173

EASTSIDE RESERVOIR PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

ADDENDUM NO. 6

TABLE OF CONTENTS

Section

---

1.0 INTRODUCTION

- 1.1 Summary of the Eastside Reservoir Project
- 1.2 Background and Purpose of Addendum No. 6
- 1.3 Description of Proposed Project Modifications
- 1.4 CEQA Issues and Procedures
- 1.5 Summary and Comparison of Impacts

2.0 INITIAL STUDY RESULTS AND SUPPORTING DISCUSSION

- 2.1 Overview
- 2.2 Environmental Impacts
- 2.3 Environmental Parameters Determined to Have No New or Changed Impacts

3.0 OTHER ENVIRONMENTAL CONSIDERATIONS

- 3.1 Unavoidable Adverse Impacts
- 3.2 Growth Inducing Impacts
- 3.3 Cumulative Impacts

4.0 LIST OF PREPARERS

5.0 REFERENCES

APPENDIX A INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

APPENDIX B SUPPORTING DISCUSSION FOR INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

**EASTSIDE RESERVOIR PROJECT FINAL ENVIRONMENTAL IMPACT REPORT  
ADDENDUM NO. 6**

**LIST OF FIGURES**

**Section**

**No.**

- 1.1 Metropolitan Water District Member Agencies and Location of Diamond Valley Lake
- 1.1 Location of Pumping Plant
- 1.3 Pumping Plant Section View and Proposed Modifications

**Section 1.0**

**INTRODUCTION**

---



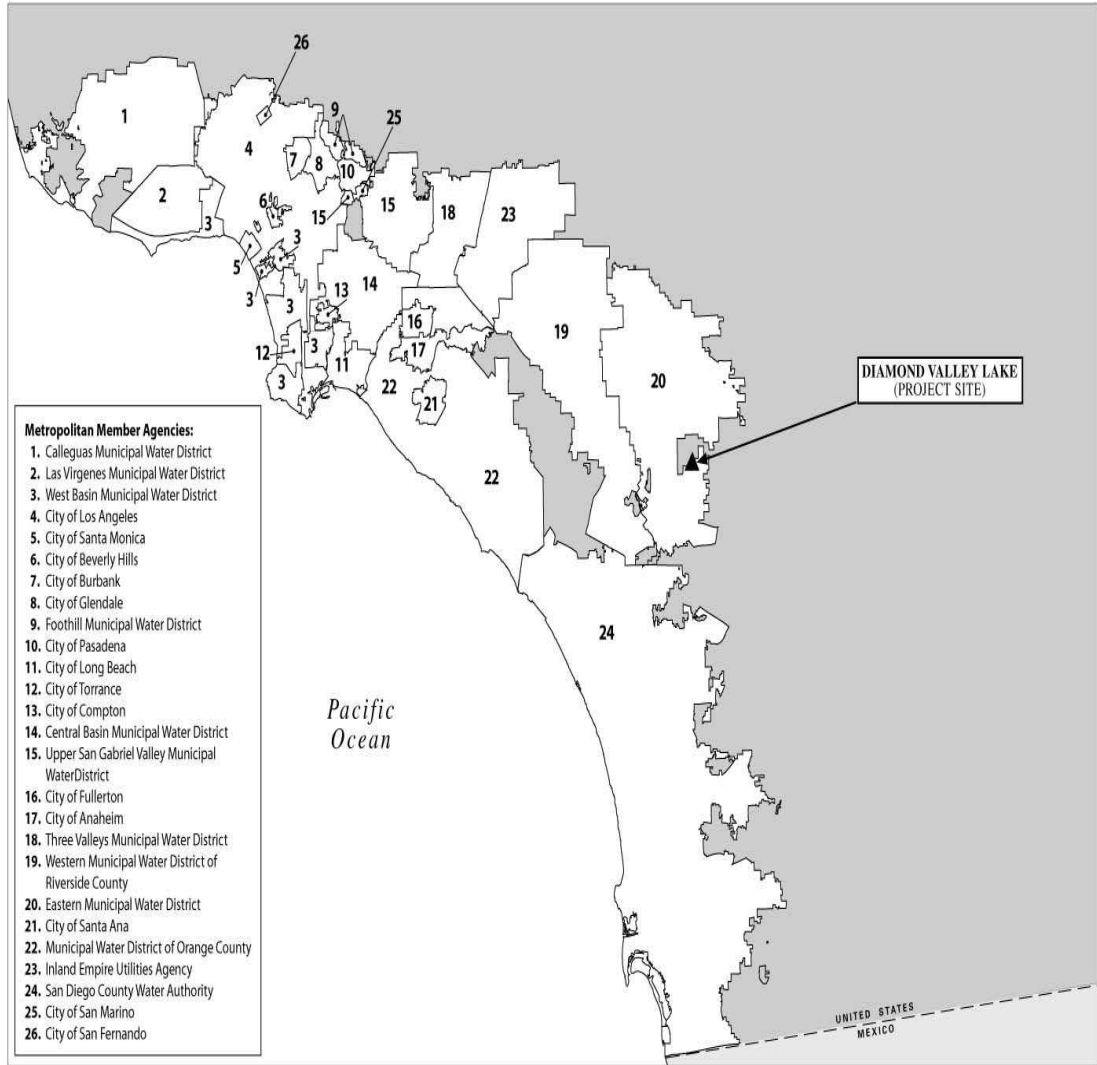
## 1.0 INTRODUCTION

### 1.1 SUMMARY OF THE EASTSIDE RESERVOIR PROJECT

In 1987, the Metropolitan Water District of Southern California (Metropolitan) initiated planning efforts for the Eastside Reservoir Project (ESRP) as part of a general review of Metropolitan's water distribution system, and to address the need to enhance management of water resources in order to meet current and projected demands for water through the year 2030. The ESRP Final Environmental Impact Report (FEIR) addressed the construction of a reservoir at one of three alternative locations (Domenigoni Valley, Potrero Creek, and Domenigoni Valley/Vail Lake) within western Riverside County. In October 1991, Metropolitan's Board of Directors certified the FEIR and approved the Domenigoni Valley alternative. Construction was initiated in 1993 with relocation of a portion of the San Diego Canal. The three earth-fill dams that would enclose the reservoir were completed in late 1999, and the ESRP was dedicated as Diamond Valley Lake in March 2000. Final construction contracts are ongoing and are expected to be completed in early 2002 with completion of the high water service road along the southern shoreline. Figure 1 shows the general location of Diamond Valley Lake with respect to the Metropolitan Water District service area.

The ESRP consists of an approximately 800,000 acre-foot reservoir and appurtenant facilities in the Domenigoni and Diamond valleys in western Riverside County, about five miles southwest of the city of Hemet (Figure 1). When filled, the reservoir will have a surface area of approximately 4,410 acres. The reservoir will receive water, when available, from the Colorado River Aqueduct and the State Water Project. The reservoir will provide water to Metropolitan's member agencies during drought, seasonal fluctuations in water supply, and emergencies when water is otherwise not available through the normal distribution system.

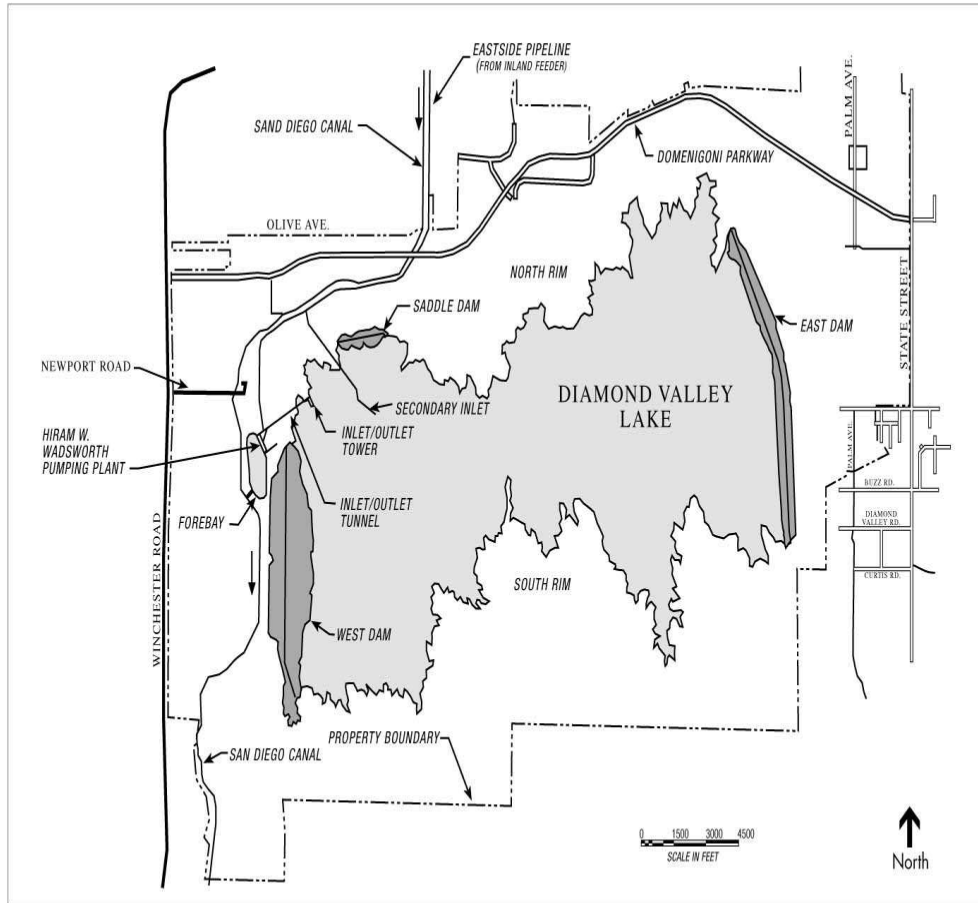
The ESRP has primarily involved the construction of three dams: the West Dam at the west end of Domenigoni Valley, the East Dam at the east end of Diamond Valley, and the Saddle Dam across a low point in the North Hills of Domenigoni Valley. Associated appurtenant facilities include a forebay, an inlet/outlet structure, a spillway and emergency outlet, a pump facility (Hiram W. Wadsworth Pumping Plant, formerly P-1), a supply pipeline (Eastside Pipeline), relocation of a portion of the San Diego Canal, realignment of Newport Road (Domenigoni Parkway), and an off-site pressure control facility. In addition, approximately 2,075 acres at the east and west ends of the reservoir site are planned to be developed as recreation areas, and approximately 9,000 acres around the reservoir and south to Lake Skinner were set aside for in-perpetuity conservation, thereby providing mitigation for sensitive biological resources that were, or had the potential to be, impacted by construction of the reservoir. Since 1993, the Southwestern Riverside County Multi-Species Reserve (Reserve) has expanded from 9,000 acres to nearly 13,000 acres. Figure 2 shows the layout of Diamond Valley Lake.



SOURCE: Environmental Science Associates

Diamond Valley Lake / 201241 ■

**Figure 1**  
Metropolitan Water District Member Agencies and Location of Diamond Valley Lake



SOURCE: Metropolitan Water District

Diamond Valley Lake / 201241 ■

**Figure 2**  
Location of Pumping Plant

## 1.2 BACKGROUND AND PURPOSE OF ADDENDUM NO. 6

The Draft EIR for the ESRP was prepared and circulated for agency and public review in March 1991. Metropolitan's Board certified the Final EIR (FEIR) in October 1991 and approved construction of the Domenigoni Valley alternative. In March, 1993, Addendum No. 1 to the FEIR was prepared and adopted to address minor technical and alignment modifications to the Newport Road Relocation feature of the ESRP.

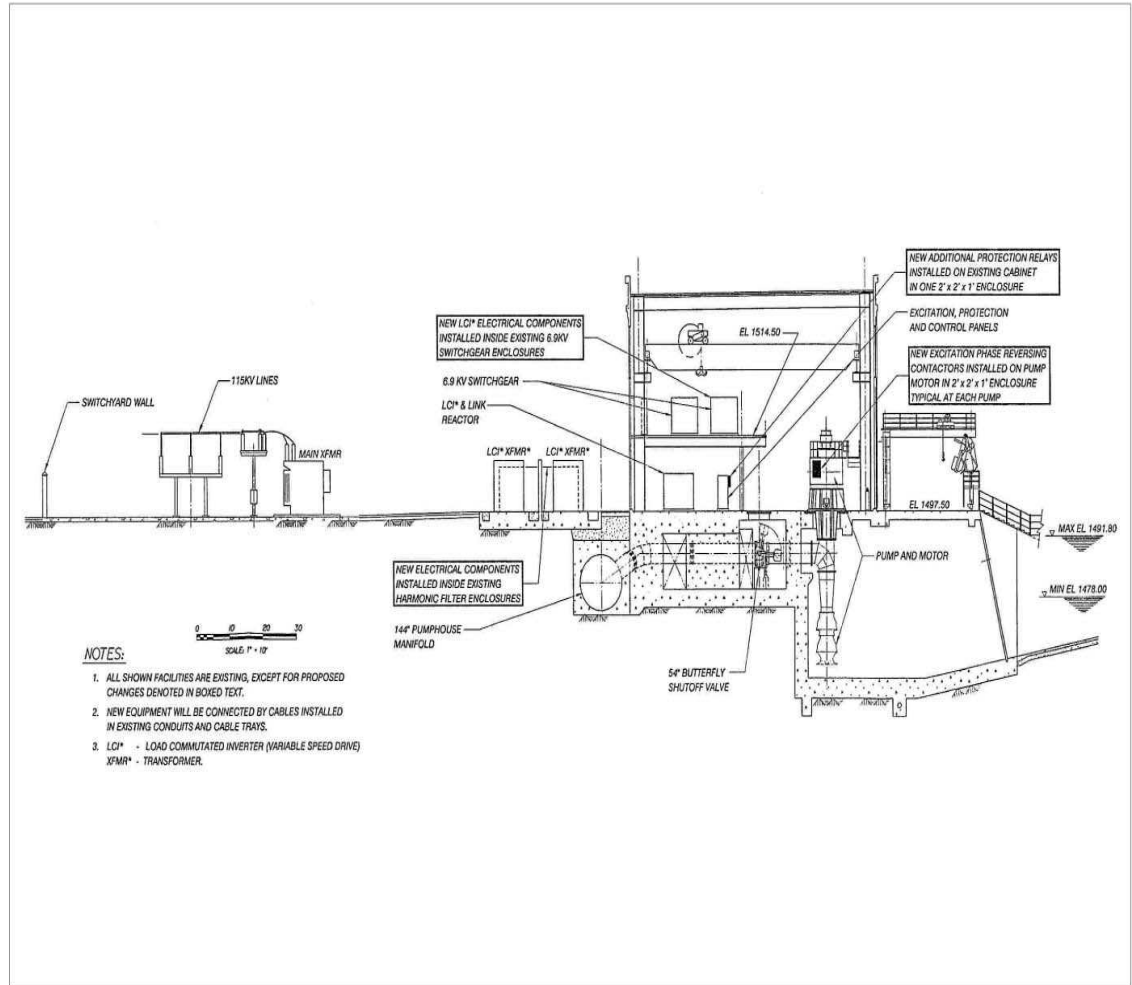
A Supplemental EIR (SEIR) was prepared and circulated for agency and public review in August 1993, addressing proposed modifications to the Eastside Pipeline feature of the ESRP. In December 1993, Metropolitan's Board certified the SEIR and approved realignment of the Eastside Pipeline and the addition of a secondary inlet to the reservoir.

Addendum No. 2 was prepared and adopted by Metropolitan in December 1996, for minor modifications to and relocation of the off-site pressure control structure (PCS, formerly PC-1). Addendum No. 3 was prepared and adopted in August 1997 to address the construction use of recently acquired land (214 acres of a 1,755-acre acquisition) immediately adjacent to existing West Dam construction areas. Addendum No. 4 was prepared and adopted in January 1999, for the realignment of a construction access road, "Road E", across another portion of the newly acquired land on the west side of the reservoir site. Addendum No. 5, for the addition of design details for reservoir boat launch areas, was prepared and adopted in May 1999.

Addendum No. 6 is now prepared to address the conversion of eight existing pump turbines in the Hiram W. Wadsworth Pumping Plant for electricity generation capacity. The proposed conversion of the existing turbine pumps will create an electricity generating capacity of 39.6 MW. This energy will be used primarily to power the existing facility. Excess energy created by the pumps will be marketed through the California Independent System Operator.

## 1.3 PROPOSED PROJECT

The proposed project modifications for small conduit hydroelectric generation consists of modifying eight existing pumps in the Hiram W. Wadsworth Pumping Plant (Wadsworth Plant) to operate in a reverse turbine-generating mode. When water is drafted from the reservoir, it will be diverted around the existing pressure control valves located in the Wadsworth Plant and through the converted turbine-generator units. This will provide the capability of generating up to 39.6 megawatts (MW) of energy during peak water delivery periods. Figure 3 shows the proposed modifications to existing pumping equipment in the pumping plant.



SOURCE: Metropolitan Water District

Diamond Valley Lake / 201241 ■

**Figure 3**  
Pumping Plant Section View and Proposed Modifications

The FEIR describes pumps proposed in the original design as being reverse-turbine and having the capacity of producing 17 MW of power under normal operating conditions. The reverse turbine pumps were not installed during original construction of the pumping plant and the facility subsequently, four pumps were modified to provide up to 13.2 MW of power. The proposed modifications address in Addendum No. 6 would similarly modify the remaining eight pumps to provide for a maximum generating capacity of 39.6 MW.

The Wadsworth Plant is an existing, operating facility used for pumping water into, and for drafting water out of, Diamond Valley Lake. The plant is adjacent to, but physically separate from, the reservoir and west dam. The Wadsworth Plant consists of a 75-foot by 585-foot building that houses the pumps, variable speed drives, motor control equipment, pressure control valves, maintenance facility, and an outdoor electrical station yard for switchgear, transformers, and related electrical components.

The conversion of the remaining eight units to reversible pump-turbine units requires only minor physical changes to the existing equipment. The principal changes will involve reconfiguration of the wiring of the motor speed control and motor exciter equipment, modifications to the power metering equipment, and modification to the electrical protection systems. The work will also involve software changes to the operation program to allow remote, automatic, unattended operation in the turbine mode as currently available in the pump mode. Most of the required modifications will occur within existing electrical cabinets.

The converted turbine-generator will also utilize the variable speed drives of the pumping units. This will enable power generation from any operational storage elevation of the reservoir. Water flow through the turbine-generating units will vary to match the water supply needs of Metropolitan's member agencies. Power generation will vary based on these water delivery requirements as well as on the fluctuating water surface elevation in the reservoir.

Power generated from these proposed modification, in excess of the facility load, would be used to help meet the regional electricity needs. Any excess power will be marketed through the California Independent System Operator.

Modifications to the remaining eight units for hydroelectric generation at Diamond Valley Lake will continue to meet the definition of a "Small conduit hydroelectric facility" as established under 18 CFR § 4.30 (b)(28)<sup>1</sup>, for it is a "proposed hydroelectric facility to be constructed, operated and

---

<sup>1</sup> Section 30(b) of the Federal Power Act (16 USC § 823a) was amended in 1978 to expand the maximum capacity of otherwise eligible small conduit hydroelectric projects from 15 to 40 MW if such project is "constructed, operated and maintained by a State or local government agency solely for water supply for municipal purposes."

maintained for the generation of electric power”, which will utilize for electric power generation the hydroelectric potential of a conduit located entirely on non-Federal lands, will have an installed generation capacity of 40 MW or less, will not be an integral part of a dam, and will discharge the water it uses for power generation into a conduit, the San Diego Canal.

#### 1.4 CEQA ISSUES AND PROCEDURES

Section 15164 of the State CEQA Guidelines allows the preparation of an Addendum to a previously certified EIR if changes or additions are necessary but none of the conditions described in Sections 15162 or 15163 calling for preparation of a Subsequent or Supplemental EIR have occurred. Conditions identified in Section 15162 that require preparation of a Subsequent EIR are as follows:

- The involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR; or
- New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete and shows any of the following: (a) new significant effects; (b) significant effects previously examined will be substantially more severe than shown in the EIR; (c) mitigation measures are found to be feasible and would substantially reduce one or more significant effects of the project but the project proponents decline to adopt the mitigation measures; or (d) mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment but the project proponents decline to adopt the mitigation measures or alternatives.

Based on the conclusions of the Initial Study and the supporting discussion (Appendix B) that has been prepared for these pump modifications, none of the conditions have been met requiring the preparation of a Subsequent EIR. Metropolitan has determined the following: that the proposed modifications to the ESRP will have no substantial new or changed environmental effects, that only minor technical changes or additions to the evaluation contained in the certified FEIR are necessary to make the FEIR adequate under CEQA, and that an Addendum to the FEIR is the appropriate CEQA document to disclose those changes.

---

This FEIR Addendum was prepared consistent with Section 15164 of the State CEQA Guidelines.

#### 1.5 SUMMARY AND COMPARISON OF IMPACTS

An Initial Study was prepared for this Addendum to identify environmental parameters that would potentially be affected by the proposed pump modifications at the Wadsworth Plant. The results of the Initial Study lead to the conclusion that the proposed modifications as described in Section 1.3 of this Addendum will result in impacts similar to the impacts disclosed in the FEIR for the ESRP. Specifically, for each of the environmental parameters described in the FEIR, the modifications to the pumping plant will result in no new or substantially changed impact. A detailed summary of the results of the Initial Study is presented in Section 2.0, Appendix A and Appendix B.



**Section 2.0**

**INITIAL STUDY RESULT AND SUPPORTING DISCUSSION**

---

## 2.0 INITIAL STUDY RESULT AND SUPPORTING DISCUSSION

### 2.1 OVERVIEW

The ESRP FEIR provides detailed discussions of the existing environmental setting, methods of impact evaluation, thresholds of significance, anticipated level of impacts, mitigation measures, and levels of significance after mitigation for the following environmental parameters:

- Physical Setting
- Hydrology
- Water Quality
- Biological Resources
- Cultural Resources
- Paleontologic Resources
- Traffic
- Air Quality and Meteorology
- Noise
- Land Use
- Aesthetics

Existing information contained in the FEIR and subsequent environmental clearance documents was used for the analyses contained in this Addendum and is incorporated by reference into this document. Unless necessary for the analysis of the pump modifications, existing information is not repeated in this document.

### 2.2 INITIAL STUDY

All new instrumentation and all physical changes to existing mechanical equipment would occur in a small area located within the existing grounds of Metropolitan's Hiram W. Wadsworth Pumping Plant, either within the pumping plant itself or in the immediately adjacent switch yard. No new construction of facilities, structures, or appurtenant features would be required for these modifications. All physical changes to the Wadsworth Plant would take place within an existing operations area, where no natural or cultural resources are present. No new construction or ground disturbance would be required. The limited nature of proposed instrumentation changes and modifications to existing mechanical equipment would result in no environmental impacts beyond normal operation of the pumping plant. The amount of electricity that would be produced by the project on an annual basis would, under most circumstances, serve to offset the energy requirements of operating the pumping plant to fill the reservoir, rather than to produce additional electricity for the wholesale market.

Implementation of the proposed modifications at the Wadsworth Plant would have no potential for adverse environmental impacts for any of the impact categories listed in Appendix G of the CEQA Guidelines. Appendix A of this document provides a completed checklist for the proposed project modifications. Appendix B provides supporting discussion on the conclusions of the Initial Study.

### 2.3 ENVIRONMENTAL PARAMETERS DETERMINED TO HAVE NO NEW OR CHANGED IMPACTS

Based on the Initial Study evaluation of the proposed project changes, no new environmental impacts and no changes to environmental impacts previously disclosed in the FEIR were identified for any of the parameters listed in the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Appendix B provides supporting discussion for the conclusions of the Initial Study.

**Section 3.0**

**OTHER ENVIRONMENTAL CONSIDERATIONS**

---

### 3.0 OTHER ENVIRONMENTAL CONSIDERATIONS

#### 3.1 UNAVOIDABLE ADVERSE IMPACTS

The FEIR identified those impacts from the ESRP that would be significant and adverse and which could not be mitigated to below a level of significance. The Environmental Checklist and Supporting Discussion conclude that the proposed modifications to pump equipment within the Wasdworth Plant will not result in any new significant impacts or substantial changes to significant, unavoidable, adverse impacts identified in the FEIR.

#### 3.2 GROWTH INDUCING IMPACTS

The FEIR determined that the reservoir would not result in growth inducing impacts because the Project is consistent with adopted regional projections and regional growth management plans. The original design assessed in the FEIR assumed that the pumps would be reverse-turbine units capable of generating 17 MW of power. The proposed modifications would provide a maximum capacity of 39.6 MW. Although the generating capacity is slightly increased, no changes to the function or purpose of the reservoir are anticipated. The power generated would be used primarily to operate the pumping facility. Excess energy generated during peak water delivery periods is not anticipated to be substantial. Nor would the electricity be reliable enough to support new development. Therefore, these minor project changes will not result in significant new, or substantially changed, growth-inducing impacts.

#### 3.3 CUMULATIVE IMPACTS

The FEIR evaluated the potential for impacts from the ESRP to contribute to cumulative impacts, when considered in conjunction with the impacts of other approved, planned, and reasonably foreseeable projects. Based on that analysis, it was determined that the Project would contribute to the following cumulative impacts.

- Loss of prime farmlands
- Long-term increase in water resource requirements in the region
- Short-term and long-term impacts to biological resources and special status species
- Loss of cultural and paleontologic resources
- Short-term construction related air quality impacts
- Short-term and long-term impacts to land use
- Short-term and long-term impacts to aesthetics

The ESRP was determined to not contribute to cumulative adverse impacts related to water quality and noise. The pump station modifications will not contribute to significant new or substantially changed cumulative impacts for the environmental parameters.

**Section 4.0**

**LIST OF PREPARERS**

---

**4.0 LIST OF PREPARERS**

**METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

Laura J. Simonek

Wendy Picht

ENVIRONMENTAL SCIENCE ASSOCIATES

Wendy Lockwood

Thomas Barnes

**Section 5.0**  
**REFERENCES**

---



## 5.0 REFERENCES

Metropolitan Water District of Southern California, October 1991. Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, March 1993. Addendum No. 1 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, December 1993. Eastside Reservoir Project Supplemental Environmental Impact Report.

Metropolitan Water District of Southern California, December 1996. Addendum No. 2 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, December 1996. Addendum No. 2 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, August 1997. Addendum No. 3 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, December 1998. Addendum No. 4 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, August 2000. Addendum No. 5 to the Eastside Reservoir Project Final Environmental Impact Report.

Metropolitan Water District of Southern California, August 2000. Draft Application for Exemption for Small Conduit Hydroelectric Facility, Diamond Valley Lake Small Conduit Hydroelectric Project.

**APPENDIX A**

**INITIAL STUDY AND ENVIRONMENTAL CHECKLIST**

---

## INITIAL STUDY CHECKLIST

The following Environmental Checklist and discussion of potential environmental effects were completed in accordance with Section 15063(d)(3) of the CEQA Guidelines to determine if the project may have any significant effect on the environment.

A brief explanation is provided for all determinations. A "No Impact" or "Less than Significant Impact" determination is made when the project would not have any impact or would not have a significant effect on the environment for that issue area based on a project-specific analysis.

### CEQA ENVIRONMENTAL CHECKLIST FORM AND INITIAL STUDY

- 1. Project Title:** Small Conduit Hydroelectric Generation at Diamond Valley Lake
- 2. Lead Agency Name and Address:** Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, California 90054-0153
- 3. Contact Person and Phone Number:** Laura J. Simonek, (213) 217-6242
- 4. Project Location:** Diamond Valley Lake, Riverside County
- 5. Project Sponsor's Name and Address:** Metropolitan Water District of Southern California,  
P.O. Box 54153  
Los Angeles, California 90054-0153
- 6. General Plan Designation:** Agriculture.
- 7. Zoning:** Agriculture.
- 8. Description of Project:** The proposed action represents minor technical modifications to Metropolitan's Hiram W. Wadsworth Pumping Plant at Diamond Valley Lake, to implement small-conduit hydroelectric power generation. Refer to Section 1.0 for a detailed description and location of the proposed modifications to the adopted reservoir project.
- 9. Surrounding Land Uses and Setting:** Residential, agricultural, recreational, industrial, and utility uses.
- 10. Other agencies whose approval is required:** None

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                    | <input type="checkbox"/> Agriculture Resources              | <input type="checkbox"/> Air Quality          |
| <input type="checkbox"/> Biological Resources          | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology / Soils      |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality          | <input type="checkbox"/> Land Use / Planning  |
| <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services<br>Traffic    | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation /     |
| <input type="checkbox"/> Utilities / Service Systems   | <input type="checkbox"/> Mandatory Findings of Significance |   |

EVALUATION OF ENVIRONMENTAL IMPACTS:

Issues (and Supporting Information Sources):

<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
---------------------------------------	--	-------------------------------------	------------------

**I. AESTHETICS -- Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**II. AGRICULTURE RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. **Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):

<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	---	--	-----------------------------

**III. AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**

- a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):

<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	---	--	-----------------------------

**III. AIR QUALITY -- (cont.):**

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- d) Expose sensitive receptors to substantial pollutant concentrations?
- e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):

<i>Potentially Significant</i> <u>Impact</u>	<i>Less Than Significant With Mitigation</i> <u>Incorporation</u>	<i>Less Than Significant</i> <u>Impact</u>	<i>No</i> <u>Impact</u>
---	--	---	----------------------------

**IV. BIOLOGICAL RESOURCES -- Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
<b>V. CULTURAL RESOURCES -- Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>VI. GEOLOGY AND SOILS -- Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, (1994) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	--	---	--	-----------------------------

**VI. GEOLOGY AND SOILS -- (cont.):**

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

**VII. HAZARDS AND HAZARDOUS MATERIALS -  
- Would the project:**

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):

	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):

	<i>Less Than Significant With Mitigation</i>	<i>Less Than Significant</i>	<i>No</i>
<i>Potentially Significant</i>	<i>Impact</i>	<i>Incorporation</i>	<i>Impact</i>

**VIII. HYDROLOGY AND WATER QUALITY --  
Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there should be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**IX. LAND USE AND PLANNING -- Would the project:**

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	--	---	--	-----------------------------

**IX. LAND USE AND PLANNING -- (cont.):**

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):

	<i>Less Than Significant With Mitigation</i>	<i>Less Than Significant</i>	<i>No</i>
<i>Potentially Significant</i>	<i>Impact</i>	<i>Impact</i>	<i>Impact</i>

**X. MINERAL RESOURCES -- Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XI. NOISE -- Would the project result in:**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

*Less Than*

Issues (and Supporting Information Sources):

<i>Potentially Significant <u>Impact</u></i>	<i>Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	---	--	-----------------------------

**XII. POPULATION AND HOUSING -- Would the project:**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XIII. PUBLIC SERVICES --**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: |                          |                          |                          |                                     |
| Fire protection?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Police protection?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Schools?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Parks?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other public facilities?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):

<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
---	--	---	----------------------

**XIV. RECREATION --**

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Issues (and Supporting Information Sources):

<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
---	--	---	----------------------

**XV. TRANSPORTATION / TRAFFIC -- Would the project:**

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Issues (and Supporting Information Sources):	<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVI. UTILITIES AND SERVICE SYSTEMS --  
Would the project:**

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Issues (and Supporting Information Sources):

	<i>Less Than Significant With Mitigation</i>	<i>Less Than Significant</i>	<i>No</i>
<i>Potentially Significant</i>	<i>Incorporation</i>	<i>Impact</i>	<i>Impact</i>
	<u>Impact</u>	<u>Impact</u>	<u>Impact</u>

**XVI. UTILITIES AND SERVICE SYSTEMS --  
(cont.):**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XVII. MANDATORY FINDINGS OF  
SIGNIFICANCE**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):

<i>Potentially Significant <u>Impact</u></i>	<i>Less Than Significant With Mitigation <u>Incorporation</u></i>	<i>Less Than Significant <u>Impact</u></i>	<i>No <u>Impact</u></i>
--	---	--	-----------------------------

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

**Appendix B**

**SUPPORTING DISCUSSION FOR INITIAL STUDY AND ENVIRONMENTAL  
CHECKLIST**

---

## SUPPORTING DISCUSSION FOR INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

This section offers a brief explanation for all answers checked in the Initial Study and Environmental Checklist form regarding the proposed minor modifications to the previously approved Eastside Reservoir Project. The following documents were used in preparing this section in support of the Initial Study and Environmental Checklist:

- Metropolitan Water District of Southern California, October 1991. Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, March 1993. Addendum No. 1 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, December 1993. Eastside Reservoir Project Supplemental Environmental Impact Report.
- Metropolitan Water District of Southern California, December 1996. Addendum No. 2 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, December 1996. Addendum No. 2 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, August 1997. Addendum No. 3 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, December 1998. Addendum No. 4 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, August 2000. Addendum No. 5 to the Eastside Reservoir Project Final Environmental Impact Report.
- Metropolitan Water District of Southern California, August 2000. Draft Application for Exemption for Small Conduit Hydroelectric Facility, Diamond Valley Lake Small Conduit Hydroelectric Project.

No environmental impacts in the Initial Study and Environmental Checklist were judged to be "potentially significant" or "potentially significant unless mitigation was incorporated." None of the 16 environmental categories evaluated in the checklist would be impacted by the proposed project. Each environmental category is addressed further in this Addendum.

For those environmental categories that were not impacted by the proposed project modifications, no further discussion will be presented in Addendum No.6, although the Initial Study,

Environmental Checklist, and Supporting Discussion will become an appendix to the Addendum. This action reflects the intent of CEQA in preparing environmental documentation, such that, when the effects found in an Initial Study are clearly insignificant or unlikely to occur, the Initial Study can be attached to the environmental document as the basis for limiting the discussion on impacts (Section 15128 and 15143 of the State CEQA Guidelines).

As noted in Section 15164 of the State CEQA Guidelines, the Lead Agency can prepare an addendum if only minor technical changes or additions are necessary and if none of the conditions in Section 15162 calling for the preparation of a Subsequent EIR have occurred. Hence, Metropolitan provides this section as supporting documentation, along with Addendum No. 6, as substantial evidence in the preparation of a justification for Addendum No. 6.

#### I. Aesthetics

*No impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No changes will occur to the views or designs of the existing buildings. No new structures will be constructed.

#### II. Agricultural Resources

*No Impact.* The modifications to the pumps will allow for electricity generation. No effects to land uses, including agricultural uses are anticipated.

#### III. Air Quality

*No Impact.* The project modifications would provide electrical power primarily to supply Diamond Valley Lake operations. Since the electricity would be hydroelectric power, no air emissions will occur during operation. No air emissions during construction would be anticipated except for mobile emissions for one-time delivery of equipment and temporary worker commute. The scale of the work force and temporary nature of the work would not create an air emissions impact. Emissions from off-site electricity generation for reservoir operations at Diamond Valley Lake would be reduced when the facility is operational, potentially creating a beneficial impact to air quality in the region.

#### IV. Biological Resources

*No impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No changes will occur to the footprint of the existing buildings. No new structures will be constructed. Energy will be produced as a product of water transfer when the water supply is needed. No changes to wetlands or to Diamond Valley Lake would occur as a result of the electricity generating capabilities.

## V. Cultural Resources

*No impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No new structures will be constructed. No new ground-breaking will take place. The existing facilities are less than five years old.

## VI. Geology and Soils

*No impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No new structures will be constructed. No new ground-breaking will take place.

## VII. Hazards and Hazardous Materials

*No Impact.* The project modifications would not involve the use of hazardous materials not already being used at the Wadsworth Plant. Installation of equipment would follow applicable Metropolitan Water District worker safety requirements.

## VIII. Hydrology and Water Quality

*No Impact.* The proposed modifications would not alter the water storage and delivery system currently in place. All modifications would take place inside existing buildings. Since the existing pumps that supply the Diamond Valley Lake would be used to generate electricity the equipment would not impact water quality.

## IX. Land Use and Planning

*No Impact.* The modifications to the pumps will allow for electricity generation. No effects to land uses are anticipated. All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No new structures will be constructed.

## X. Mineral Resources

*No Impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No new structures will be constructed.

## XI. Noise

*No Impact.* The existing pumps are housed in the Wadsworth Plant. Noise impacts were addressed in the FEIR. The pump modifications would not alter the noise levels generated by the pumps in their existing configuration.

## XII. Population and Housing

*No Impact.* All modifications to the existing equipment will be conducted within the interior of the Wadsworth Plant. No new structures will be constructed. The project will require temporary workers for installation. No changes to population are anticipated.

#### XIII. Public Services

*No Impact.* The project would modify the existing operation of the Wadsworth Plant by establishing an increased electricity generating capacity. The modification would not impact water storage or delivery systems. Police, fire, and sewer services would not be impacted. Electricity would be generated primarily for the pumping plant, and excess electricity would be marketed to the California Independent System Operator. No parks or recreational facilities would be impacted.

#### XIV. Recreation

*No Impact.* Electricity would be generated only when water supply is needed. More water needed would subsequently generate more electricity. The capability would not alter Diamond Valley Lake operations. No impacts to the surface water recreation will occur.

#### XV. Transportation and Traffic

*No Impact.* Minimal traffic (essentially not noticeable within daily traffic fluctuations) would be generated during construction for one-time delivery of equipment and temporary worker commute. The scale of the work force and temporary nature of the work would not create an impact to the local traffic network.

#### XVI. Utilities and Services Systems

*No Impact.* The project would modify the existing operations of the Wadsworth Plant by implementing an increased electricity generating capacity. Electricity would be generated primarily to operate the existing pumping plant. Excess electricity would be marketed with the California Independent System Operator. Coordination with Southern California Edison or other local service provider or distributor would be required, although the amount of excess electricity to be marketed would not be substantial and no new distribution facilities would be required. No water or wastewater services would be altered by the project.

