STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

GRANT AGREEMENT BETWEEN STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

AGREEMENT NUMBER 4600007659 UNDER THE WATER SECURITY, CLEAN DRINKING WATER, COASTAL AND BEACH PROTECTION ACT OF 2002 (Water Code Section 79500 et seq.)

THIS GRANT AGREEMENT, entered into by and between State of California, acting by and through the Department of Water Resources, herein referred to as the "State" and the Los Angeles County Flood Control District, a public agency in the County of Los Angeles, State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as. follows:

1. PURPOSE OF GRANT: This Grant is made by State to Grantee to assist in financing projects associated with the Greater Los Angeles Region Integrated Regional Water Management Plan pursuant to Chapter 8 (commencing with Section 79560) of Division 26.5 of the California Water Code, hereinafter collectively referred to as "IRWM Program." Grant funds may be used only as provided in this Grant Agreement for Eligible Costs as included in Exhibit A, Work Plan.

2. TERM OF GRANT AGREEMENT: The term of this Grant Agreement begins on January 18, 2007 (effective date), and terminates on December 31, ~~2013~~2016, or when all of the Parties' obligations under this Grant Agreement have been fully satisfied, whichever occurs earlier.

3. SCHEDULE: Grantee shall diligently perform or cause to be performed all IRWM Program work as described in Exhibit A, Work Plan, in accordance with Exhibit B, Schedule.

4. GRANT AMOUNT: The maximum amount payable by State under this Grant Agreement shall not exceed $25,000,000.

5. GRANTEE'S COST: The reasonable total costs of the Program are estimated to be $173,443,823 which are summarized in Exhibit C, Budget. Grantee agrees to fund or ensure funding of the difference, if any, between the estimate of IRWM Program cost in its grant application and the Grant Amount specified in paragraph 4. Grantee cost share is estimated to be $144,043,823 with a required local match of $106,930,096.

6. ELIGIBLE COST: Grantee shall apply State Grant funds received only to Eligible Costs. Eligible Costs are the reasonable and necessary costs of engineering, design, legal fees, land and easement, preparation of environmental documentation, environmental mitigation, and project implementation. Reasonable administrative expenses may be included as project costs and will depend on the complexity of the project preparation, planning, coordination, construction, acquisitions, implementation, and maintenance. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the project including an appropriate pro-rata

allocation of overhead and administrative expenses that are regularly assigned to all such projects in accordance with the standard accounting practices of the Grantee.

Only work performed after the effective date of this Grant Agreement shall be eligible for reimbursement. Costs incurred after November 5, 2002, and prior to the effective date of this Grant Agreement are not eligible for reimbursement. However, such costs may be considered, at State's discretion, as part of Grantee's funding match, if such costs were otherwise reimbursable. Costs that are not reimbursable with grant funds include, but may not be limited to, the following:

- Costs incurred prior to November 5, 2002.
- Operation and maintenance costs, including post construction performance and monitoring costs.
- Purchase of equipment not an integral part of a project.
- Establishing a reserve fund.
- Purchase of water supply.
- Replacement of existing funding sources for ongoing programs.
- Support of existing agency requirements and mandates.
- Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies, or land purchased prior to the effective date of this Grant Agreement.
- Payment of principal or interest of existing indebtedness or any interest payments unless the debt is incurred after execution of this Grant Agreement, the State agrees in writing to the eligibility of the costs for reimbursement before the debt is incurred, and the purposes for which the debt is incurred are otherwise eligible costs.
- Overhead not directly related to Program costs.

7. GRANTEE RESPONSIBILITY: Grantee and its representatives, with the authority to act for Grantee, shall be responsible for work and for persons or entities engaged in work, including, but not limited to, subcontractors, suppliers, and providers of services. Grantee or its representatives shall provide regular inspections of any construction work in progress. Grantee and its representatives shall fulfill its obligations under the Grant Agreement and the IRWM Program, and shall be responsible to keep all work under control.

   Grantee shall be responsible for any and all disputes arising out of its contracts for work on the IRWM Program, including but not limited to bid disputes and payment disputes with Grantee's representatives, Local Project Sponsors, contractors and subcontractors. State will not mediate disputes between Grantee and any other entity concerning responsibility for performance of work.

8. LOCAL PROJECT SPONSOR RESPONSIBILITY: Grantee shall assign Local Project Sponsors to act on behalf of Grantee for the purposes of individual Project management, oversight, compliance, and operations and maintenance. Local Project Sponsors shall be assigned in accordance with the participating agencies identified in the Greater Los Angeles Region IRWM Plan. Grantee shall be considered a Local Project Sponsor for projects sponsored by Grantee. Local Project Sponsors shall also act on behalf of Grantee in the fulfillment of Grantee responsibilities where specifically provided in this Grant Agreement. Exhibit G identifies Local Project Sponsors.

9. RELATIONSHIP OF PARTIES: Grantee and Local Project Sponsors are solely responsible for design, construction, and operation and maintenance of Projects within the Greater Los Angeles

Region IRWM Program. Review or approval of plans, specifications, bid documents, or other construction documents by State is solely for the purpose of proper administration of grant funds by State and shall not be deemed to relieve or restrict responsibilities of Grantee and Local Project Sponsors under this Grant Agreement.

10. GRANTEE REPRESENTATIONS: Grantee accepts and agrees to comply with all terms, provisions, conditions, and commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by Grantee in the application, documents, amendments, and communications filed in support of its request for California Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 financing. Grantee warrants that all Local Project Sponsors will be contractually required to comply with this Grant Agreement for their respective project or projects. In the event that Grantee fails to secure an agreement with any of the Local Project Sponsors by September 2, 2008, the Grantee will not be held responsible for the associated local project sponsor activities under Section 7 of this Grant Agreement, and State may reduce the grant according to the portion of grant intended for the nonparticipating Local Project Sponsor(s). In addition, in the event the Grantee fails to secure an agreement with any of the Local Project Sponsor(s), the Grantee shall submit to the Department a revised grant agreement Scope of Work within four months of the failure to secure such an agreement.

    Grantee shall submit to the Department copies of all agreements with Local Project Sponsors within two months of the execution of such agreements.

11. IRWM PROGRAM PERFORMANCE AND ASSURANCES: Grantee agrees to faithfully and expeditiously perform or cause to be performed all IRWM Program work as described in the final plans and specifications under this Grant Agreement and implement the Program in accordance with applicable provisions of the law. In the event State finds it necessary to enforce this provision of this Grant Agreement in the manner provided by law, Grantee agrees to pay all costs incurred by State including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

12. REQUIREMENTS FOR DISBURSEMENT: Grantee shall, by September 2, 2008, meet all conditions precedent to the disbursement of money under this Grant Agreement, including Basic Conditions, paragraph 13. Failure by Grantee to comply by this date may, at the option of State, result in termination of the Grant Agreement under Exhibit D, Standard Conditions. For disbursements of funds for each project, Grantee shall continue to meet the Basic Conditions as well as the Conditions for Disbursement, paragraph 14.

13. BASIC CONDITIONS: State shall have no obligation to disburse money for a project under this Grant Agreement unless and until Grantee has satisfied for such project the State's requirements for disbursement in accordance with the California Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 which include:
    a) Adoption of an Integrated Regional Water Management Plan.
    b) Grantee demonstrates the designated Local Project Sponsors for each project are aware of and comply with the provisions of the Grant Agreement between State and Grantee.
    c) Grantee demonstrates the availability of sufficient funds to complete the project.
    d) Grantee demonstrates that it has complied with all applicable requirements of the California Environmental Quality Act and the National Environmental Policy Act by submitting copies of any environmental documents, including environmental impact reports, environmental

impact statements, negative declarations, mitigation agreements, and environmental permits as may be required prior to beginning construction/implementation.

e) For the term of this Grant Agreement, Grantee submits timely periodic progress reports as required by paragraph 21.

14. CONDITIONS FOR DISBURSEMENT: Prior to disbursement of funds, for each project, by State, Grantee shall submit to State:

a) Final plans and specifications certified by a California Registered Civil Engineer as to compliance with the approved project as defined in paragraph 1.

b) A written statement that all necessary permits, easements, rights-of-way, and approvals as may be required by other State, federal, and/or local agencies as specified in paragraph 24 have been obtained.

15. METHOD OF PAYMENT: After the disbursement requirements in paragraph 12 are met, State will disburse the whole or portions of the Grant commitment to Grantee, following receipt from Grantee of an invoice for costs incurred, and timely progress reports as required by paragraph 21.

Invoices submitted by Grantee shall include the following information:

a) Costs incurred for work performed in implementing the IRWM Program or program contracts during the period identified in the particular invoice.

b) Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for a project during the period identified in the particular invoice for the construction, operation, or maintenance of a project.

c) Any appropriate receipts and reports for costs incurred.

d) Invoices shall be submitted on forms provided by State and shall meet the following format requirements:

   i. Invoices must contain the date of the invoice, the time period covered by the invoice, and the total amount due.

   ii. Invoices must be itemized based on the categories specified in the Budget, Exhibit C. The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).

   iii. Each invoice shall clearly delineate those costs claimed for reimbursement from the State's grant amount, paragraph 4 and those costs that represent Grantee's and Local Project Sponsors' costs, as applicable, paragraph 5.

   iv. Original signature and date (in ink) of Grantee's Project Manager

Payment will be made no more than monthly, in arrears, upon receipt of an invoice bearing the Grant Agreement number. Submit the original and three (3) copies of the invoice form to the following address:

Department of Water Resources
Division of Planning and Local Assistance
Attention: IRWM Grant Analyst

Overnight/Hand Delivery Address:
901 P Street, Room 213 A
Sacramento CA 95814

Mailing Address:
P. O. Box 942836
Sacramento, CA 94236-0001

16. DISBURSEMENT: Following the review of each invoice, State will disburse to Grantee the amount approved, subject to the availability of funds through normal State processes. Funds will be disbursed by State in response to each approved invoice on a pro rata basis in accordance with the relative payment obligations of Grantee, paragraph 5, and State, paragraph 4, for the Total Cost, paragraph 5. Any and all money disbursed to Grantee under this Grant Agreement and any and all interest earned by Grantee on such money shall be used solely to pay Eligible Costs.

17. WITHHOLDING OF GRANT DISBURSEMENT BY STATE: If State determines that a project is not being constructed substantially in accordance with the provisions of this Grant Agreement, or that Grantee has failed in any other respect to comply substantially with the provisions of this Grant Agreement, and if Grantee does not remedy any such failure to State's satisfaction, State may withhold from Grantee all or any portion of the Grant Commitment and take any other action that it deems necessary to protect its interests.

18. WITHHOLDING THE BALANCE OF GRANT AMOUNT: Where a portion of the Grant Commitment has been disbursed to Grantee and State notifies Grantee of its decision to withhold the balance of the Grant Commitment pursuant to paragraph 17, the portion that has been disbursed shall thereafter be repaid immediately with interest, as directed by State. Refusal of Grantee to repay may, at the option of State, be considered a breach of contract and may be treated as default under paragraph 20.

19. WITHHOLDING THE ENTIRE GRANT AMOUNT: If State notifies Grantee of its decision to withhold the entire grant amount from Grantee pursuant to paragraph 17, this Grant Agreement shall terminate upon receipt of such notice by Grantee and shall no longer be binding on either party.

20. DEFAULT PROVISIONS: Grantee will be in default under this Grant Agreement if any of the following occur:
- Breach of this Grant Agreement, or any supplement or amendment to it, or any other agreement between Grantee and State evidencing or securing Grantee's obligations;
- Making any false warranty, representation, or statement with respect to this Grant Agreement;
- Failure to operate or maintain projects in accordance with this Grant Agreement; or
- Failure to make any remittance required by this Grant Agreement.

Should an event of default occur, State may do any or all of the following:
- Declare the Grant be immediately repaid, with interest, which shall be equal to State of California general obligation bond interest rate in effect at the time of the default;
- Terminate any obligation to make future payments to Grantee;
- Terminate the Grant Agreement; and
- Take any other action that it deems necessary to protect its interests.

21. SUBMISSION OF REPORTS: The submittal and approval of all reports is a requirement for the successful completion of this Grant Agreement. Reports shall meet generally accepted professional standards for technical reporting and shall be proofread for content, numerical accuracy, spelling, and grammar prior to submittal to State. All reports shall be submitted to the State's Project Manager, and shall be submitted in both electronic and hard copy forms. If requested, Grantee shall promptly provide any additional information deemed necessary by State for approval of reports. Reports shall be presented in the formats described in Exhibit E, Report Format. The submittal and approval of reports is a requirement for initial and continued

disbursement of State funds. Submittal of a Project Completion Report for each project listed on Exhibit A, Work Plan, is a requirement for the release of any funds retained for such project.

- Quarterly Reports: Beginning October 31, 2008, and for the duration of the Grant Agreement, Grantee shall submit to State a quarterly report which explains the status of each project described in the Work Plan, Exhibit A. Reports shall be submitted by the last day of January, April, July, and October for the preceding quarter. Progress reports shall summarize the work completed for each project during the reporting period. Quarterly reports shall include, for each project, a statement of progress compared to the schedule contained in Exhibit B, Schedule, and a comparison of actual costs to date to the budget contained in Exhibit C, Budget.
- Project Completion Reports: Grantee shall prepare and submit to State a separate Project Completion Report for each project included in Exhibit A, Work Plan. Grantee shall submit a Project Completion Report within ninety (90) calendar days of completion of all tasks associated with a project. Each Project Completion Report shall include a description of actual work done, a final schedule showing actual progress versus planned progress, and copies of any final documents or reports generated or utilized during a project. The Project Completion Report shall also include, if applicable, certification of final project by a registered civil engineer, consistent with Standard Condition D-14 of this Grant Agreement.
- Grant Completion Report: Upon completion of all projects included in Exhibit A, Work Plan, Grantee shall submit to State a Grant Completion Report. The Grant Completion Report shall be submitted within ninety (90) calendar days of submitting the Project Completion Report for the final project to be completed under the Grant Agreement. The Grant Completion Report shall include a brief description of each project completed and how they will further the goals of the IRWM Plan; identify any changes to the IRWM Plan, as a result of project implementation; and an updated IRWM Plan, if applicable.
- Post Performance Reports: Grantee shall submit a Post Performance Report for each project. Post Performance Reports shall be submitted to State within ninety (90) calendar days after the first operational year of a project has elapsed. In subsequent operational years, all Post Performance Reports for projects completed under this Grant Agreement shall be submitted concurrently, and no later than February 28th of each year. This record keeping and reporting process shall be repeated, for each project, annually for a total of 10 years after the completed project begins operation.

22. MONITORING REQUIREMENTS: Grantee shall ensure that all groundwater projects and projects that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Part 2.76 (commencing with Section 10780) of Division 6 of the Water Code) and, where applicable, that projects that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the surface water ambient monitoring program carried out by the State Water Resources Control Board. Exhibit H, Statewide Monitoring, provides guidance on such monitoring requirements.

23. OPERATION AND MAINTENANCE OF PROJECT: For the useful life of the projects and in consideration of the Grant made by State, Grantee agrees to ensure or cause to be performed the commencement and continued operation of the projects, and shall ensure or cause the projects to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The Grantee shall ensure that all

operations and maintenance costs of the facilities and structures are contractually assumed by the appropriate Local Project Sponsors for their respective projects; State shall not be liable for any cost of such maintenance, management, or operation. Grantee or Local Project Sponsors may be excused from operations and maintenance only upon the written approval of the State's Project Manager. For purposes of this Grant Agreement, "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses. "Maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal of Grantee to ensure operation and maintenance of the projects in accordance with this provision may, at the option of State, be considered a breach of this Grant Agreement and may be treated as default under paragraph 20.

24. PERMITS, LICENSES, APPROVALS, AND LEGAL OBLIGATIONS: Grantee and Local Project Sponsors shall be responsible for ensuring any and all permits, licenses, and approvals required for performing their obligations under this Grant Agreement are obtained, and shall comply with the California Environmental Quality Act (California Public Resources Code Section 21000 *et seq.*) and other applicable federal, State and local laws, rules, and regulations, guidelines, and requirements for each project described in Exhibit A, Work Plan, prior to disbursement of funds under this Grant Agreement.

25. LABOR COMPLIANCE PROGRAM PROVISION: Grantee agrees to comply with all applicable California Labor Code requirements, including prevailing wage provisions. Grantee must, independently or through a third party, adopt and enforce a Department of Industrial Relations-certified Labor Compliance Program (LCP) meeting the requirements of Labor Code Section 1771.5 for projects funded by:

Proposition 50 (Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002; Cal. Water Code sections 79500 et seq.);

Grantee's failure to comply with LCP requirements is a substantial breach of this Agreement. At the State's request, grantee must promptly submit written evidence of grantee's compliance with LCP requirements.

26. NOTIFICATION OF STATE: For each project, Grantee shall promptly notify, in writing, State of the following items:
   a) Events or proposed changes that could affect the scope, budget, or work performed under this Grant Agreement. Grantee agrees that no substantial change in the scope of a project will be undertaken until written notice of the proposed change has been provided to State and State has given written approval for such change.
   b) Any public or media event publicizing the accomplishments and/or results of this Grant Agreement and provide the opportunity for attendance and participation by State's representatives. Grantee shall make such notification at least fourteen (14) calendar days prior to the event.
   c) Completion of work on a project.
   d) Final inspection of a project by a Registered Civil Engineer, as determined and required by State, and in accordance with Standard Condition D-14, and provide State the opportunity to participate in the inspection. Grantee shall make such notification at least fourteen (14) calendar days prior to the final inspection.

27. PROJECT MANAGERS: Either party may change its Project Manager upon written notice to the other party.

- State's Project Manager: State's Project Manager shall be the Chief, Division of Planning and Local Assistance, Department of Water Resources. State's Project Manager shall be State's representative and shall have the authority to make determinations and findings with respect to each controversy arising under or in connection with the interpretation, performance, or payment for work performed under the Grant Agreement.
- Grantee's Project Manager shall be:
  Mr. Frank Kuo
  Capital Project Manager
  Los Angeles County Flood Control District
  County of Los Angeles Department of Public Works
  900 S. Fremont Avenue
  Alhambra, CA 91803
  Grantee's Project Manager shall be the Grantee's representative for the administration of the Grant Agreement and shall have full authority to act on behalf of the Grantee, including authority to execute all payment requests.

28. NOTICES: Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this Grant Agreement shall be in writing. Notices may be sent by any of the following means: (i) by delivery in person; (ii) by certified U.S. mail, return receipt requested, postage prepaid; (iii) by "overnight" delivery service; provided that next-business-day delivery is requested by the sender; or (iv) by facsimile transmission, followed submittal of a hard copy. Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery or receipt). Notices sent by certified mail will be deemed effective given seven (7) calendar days after the date deposited with the U. S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent by facsimile will be effective on the date of successful transmission, which is documented in writing. Notices shall be sent to the following addresses. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below:

State of California
Department of Water Resources
Division of Planning and Local Assistance
Attention: Chief, Division of Planning and Local Assistance
Conjunctive Water Management Branch
Post Office Box 942836
Sacramento, California 94236-0001

Mr. Frank Kuo
Capital Project Manager
Los Angeles County Flood Control District
County of Los Angeles Department of Public Works
900 S. Fremont Avenue
Alhambra, CA 91803

29. INCORPORATION OF STANDARD CONDITIONS AND GRANTEE COMMITMENTS: The following exhibits are attached and made a part of this Grant Agreement by this reference:
Exhibit A – Work Plan
Exhibit B – Schedule
Exhibit C – Budget
Exhibit D – Standard Conditions
Exhibit E – Report Format
Exhibit F – Grantee Resolution
Exhibit G – Local Project Sponsors
Exhibit H – Statewide Monitoring

APPROVED AS TO FORM:
RAYMOND G. FORTNER, JR.
County Counsel
By _____
Deputy

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOUCES

Mark W. Cowin
Deputy Director
Regional Planning and Water Management

Date 7/18/08

sdl 7/14/08
Approved as to Legal Form and Sufficiency

David Sandino
Chief Counsel, Office of Chief Counsel

Date 7/17/08

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT

Dean D. Efstathiou
Acting Director of Public Works

Date 7/10/08

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.
County Counsel

By _____
Deputy

Attachment 2
Amendment 3

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District
This replaces the entire Project 1 Work Plan in the Agreement

Summary

This work plan provides an overview for the design of the Southeast Water Reliability Project (SWRP) by the Central Basin Municipal Water District (Central Basin).

The project consists of:

1. Design and management of Phase 1A, Phase 1B, Phase 1C, and Phase 2

Phase 1A - Design of approximately 3.9 miles of buried 30-inch diameter steel pipeline. The design includes approximately 0.7 miles of 12-inch diameter ductile iron pipeline. The design includes supporting 684 linear feet of 30-inch welded steel pipe from the Beverly Boulevard bridge at the Rio Hondo River and approximately 1,027 linear feet of 30-inch inside diameter welded steel pipeline inside a 48-inch diameter steel casing being installed with appropriate tunneling methods at two crossings: the intersection of Beverly Boulevard and Rosemead Boulevard and the intersection of West Lincoln Avenue and Montebello Boulevard. The project will pass through portions of the Cities of Montebello and Pico Rivera.

- Phase 1A will add 4.9 miles to the SWRP project.

Phase 1B & Phase 1C – Design for the construction of an 8-inch pipeline as follows:

- 1 mile in length, that would be installed by County Public Works and serve the irrigation needs of the San Gabriel River and Rio Hondo Spreading Grounds (which are owned and operated by County Public Works) as well as the City of Pico Rivera's library and parks on Mines Avenue.
- 1 mile in length that will connect the Mines Avenue line to main system.
- Phase 1B and Phase 1C will add another two miles to the SWRP project.

Phase 2 – Design of approximately 4.5 miles of transmission pipeline that will run from the City of Montebello to the City of Vernon. Phase 2 would complete Central Basin's recycled water transmission system by connecting the existing Rio Hondo and Century area pipelines across the northern portion of the service area. This "loop" will increase available flow and pressure in many areas of the entire distribution system that are currently not adequately served as well as provide recycled water to new customers in the Cities of Pico Rivera, Montebello, Vernon, Los Angeles, County Unincorporated East Los Angeles, Upper San Gabriel Valley Municipal Water District and San Gabriel Valley Municipal Water District.

Task 1 - Project Administration
This task is ongoing throughout the entire project as shown in the schedule at the end of this work plan. At this time, administration consists of project outreach, funding authorizations and approvals, and preparation of budgets and work plans until the project is ready to be implemented.

Task Required Resources
- CBMWD Management and Staff
- Engineering Consultants

Task 2 - Facilities Design & Engineering
Finalize project designs for both SWRP Phase 1 and SWRP Phase 2.

Task Required Resources:
- CBMWD Management and Staff
- HDR Engineering (Design Consultant)
- Pacifica Services (Engineering Consultant)
- CBMWD Legal Counsel

Deliverables:
- Final Design Documents
- CEQA Documents

Task 3 - Legal
Legal tasks include easements and rights of way for pipeline construction that are expected to be completed prior to construction in early 2009.

Task Required Resources:
- CBMWD Management and Staff
- Pacifica Services (Engineering Consultant)
- CBMWD Legal Counsel

Task 4 - Reporting
Reporting consists of regular quarterly reports on project status to the U.S. Bureau of Reclamation and the California Department of Water Resources via Los Angeles County Flood Control District

Task Required Resources:
- CBMWD Management and Staff
- HDR Engineering

Deliverables:
- Quarterly Progress Reports
- Final Project Completion Report

JWPCP Marshland Enhancement

Project Description

This project will enhance and maintain the vegetation and wildlife habitat value of the 17-acre freshwater marshland, referred to as the JWPCP Marshland; located in the northwest corner of the Sanitation Districts of Los Angeles County (LACSD) property in Carson, California. The JWPCP is part of a larger system of wastewater treatment and reclamation plants operated by LACSD, called the Joint Outfall System (JOS). The JWPCP marshland is an isolated remnant of a formerly extensive, natural freshwater wetland complex known as Bixby Slough, resulting from the construction of the Wilmington Drain in the mid-1970s to provide flood protection to a 14-square mile drainage area of Bixby Slough. However, a pump and gravity flow system was installed from Wilmington Drain to provide water to the JWPCP marshland. The pump facility is maintained by the Los Angeles County Department of Public Works (LACDPW), while maintenance of the marshland area itself is the responsibility of LACSD.

The project is being performed as a mitigation measure for upgrades to the JWPCP to reach full secondary treatment as documented in the Joint Outfall System (JOS) 2010 Master Facility Plan Environmental Impact Report (EIR) (Attachment 8, Reference 2-1). The process to enhance the marshland started with the preparation of the Marshland Management Plan (MMP) (Attachment 8, Reference 2-2). The four goals identified in the MMP were:

- Hydrology - sustain the hydrologic conditions necessary to maintain and enhance the freshwater marsh and riparian forest habitats in the marshland.
- Vegetation - maintain vegetation health and enhance the diversity, quality, and amount of native vegetation habitats in the marshland.
- Wildlife - maintain and enhance wildlife habitat values in the marshland.
- Public Use - Continue to control public access to the marshland and maintain and enhance its aesthetic quality and functions.

The MMP was a conceptual plan. In 2004, LACSD hired a consultant, WRA, Inc. (WRA), to develop a project that could be constructed to satisfy the goals of the MMP. The WRA contract scope includes the preparation of preliminary designs, plans and specifications for bidding out the job, and for preparing various reports along the way (hydrologic study, biological review, monitoring plan, final project report). The public use goal was enlarged to include an education and viewing area as part of the project.

WRA prepared several preliminary plans for LACSD and a conceptual design was selected for the site. The conceptual design emphasizes a centralized hydraulic flow pathway, thereby reaching more of the marshland and providing for more wetlands and riparian areas than were present originally. It also introduced ponds, meadowlands, and uplands that were not present originally. An education and viewing area was included to the north of the marshland on a formerly unused land area.

While WRA prepared the final plans and specifications, a small bid package to clear non-native vegetation from the site was prepared. Native vegetation that would not support the new hydrologic design was included in these removal plans. The actual work to remove non-natives and some natives was completed in early 2006.

The plans and specifications for all of the remaining work, including grading, revegetation, and construction of the education and viewing area, were completed in March 2006. The bid package was advertised in April 2006 and bids were received in May 2006. LACSD received two bids, the lowest of which was $2.8 million. This exceeded the engineer's estimate of $1.8 million, so both bids were rejected. The plans and specifications were revised to divide the remaining portion of the project into three parts for bid, consisting of plant collection, construction, and landscaping. The plant collection work was bid out in September 2006 and awarded in October 2006. Both the construction and landscaping portions of the job were bid out in January 2007 and awarded in February 2007. Construction work began in April 2007 and landscaping work began in September 2007.

LACSD anticipates that, in addition to the main goal of restoring and enhancing 17 acres of marshland in an urban setting, other benefits of the project will include:

1. The introduction of education and recreation opportunities at the marshland;
2. Removal of constituents from dry weather runoff in Wilmington Drain (the source of water for the marshland);
3. Flood protection;
4. Aquifer replenishment;
5. Demonstration of the use of recycled products; and
6. Use of a vegetated swale for storm water control.

Currently, the marshland is not open to the public. However, with the addition of an education and viewing area with educational placards and three viewing sites, local school children, club members, and residents will be able to enjoy the site.

Wilmington Drain is a 303 (d)-listed waterway, requiring total maximum daily loads (TMDL) for ammonia, copper, lead, and coliform. Other constituents that may be found in the drain water include arsenic, cadmium, chromium, nickel, selenium, zinc, biological oxygen demand (BOD), total nitrogen, total phosphorus, suspended solids, and volatile organic compounds. The natural marshland processes will help remove these constituents, with an expected removal rate of 20 percent for compounds detected above their detection limit.

An additional 8.8 af of water storage planned for the marshland due to the addition of ponds will contribute to the flood protection of downstream facilities, including the JWPCP. Infiltration and aquifer recharge can occur in the marshland because of its soft bottom, as opposed to the concrete-lined Wilmington Drain. Recycled materials will be used to construct the pavilions, boardwalks, benches, and trash receptacles that will be placed in the education and viewing area. Finally, a vegetated swale will be constructed in the parking lot for the education and viewing area to demonstrate its use to control storm water runoff.

Locally, the site will benefit visitors to the site, which are expected to include school children, club members from bird watching groups, and local residents. By helping to remove constituents from the Wilmington Drain, visitors to the downstream Machado Lake will also benefit from the marshland. Regionally, this marshland is important because of how much of the local wetlands have been lost to development and degradation.

This project and the Wilmington Drain project are connected since they both impact the Wilmington Drain. Geographically, the JWPCP Marshland Enhancement Project is upstream of the Wilmington Drain project. The JWPCP Marshland Enhancement Project, in addition to its

primary goal of enhancing the habitats of the marshland, will also remove contaminants from the Wilmington Drain flow, particularly during dry weather. The Wilmington Drain project is designed to help remove contaminants from the drainage flow just before it empties into Machado Lake in the County of Los Angeles' Harbor Park. Together, these and other projects will help the water of Wilmington Drain to meet the required TMDL for ammonia, copper, lead, and coliform.

Work Items through May 1, 2007

The following sections discuss work items that are either: 1) complete as of application submittal; or 2) will be completed by May 1, 2007. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. If the submittal was completed prior to application submission, the submittal is included with the application. Otherwise, if the submittal will occur after application submission, the submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs

LACSD staff, including managerial, engineering, field, and clerical personnel, will perform project administration activities. These activities include the following tasks:

- Meet with LACSD consultant, WRA (ongoing)
- Review project submittals (ongoing)
- Develop a contract agenda item for the CBMWD's Board of Directors (completed)
- Provide for advertisement of the contract (completed)
- Distribute bid invitations and issue instructions to potential bidders (completed)
- Conduct site job walk (completed)
- Evaluate bids and select the lowest cost responsible and qualified bidder (completed)
- Check that bonding requirements have been met (completed)
- Let contracts and obtain procurement of services (completed)
- Give Notice to Proceed after all requirements have been met (completed for clearing and grubbing, plant collection, and marshland and education and viewing area construction)
- Administer and track project finances (ongoing)
- Control project records and document distribution (ongoing)
- Handle basic administration, planning, meetings, actions, and recordkeeping (ongoing)
- Identify project stakeholders and their various roles and needs (ongoing)
- Manage risk assessment plan (ongoing)

(b) Land Purchase / Easement

No costs were budgeted for this line item because, in 1965, LACSD purchased the land where the marshland resides.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

Stakeholder outreach has accompanied the project planning. For the past years, presentations have been made and suggestions solicited from the JWPCP Citizen's Advisory Committee

(CAC). This group meets quarterly, and presentations have been made at least once a year to update the Citizen's Advisory Committee (CAC) on the project's progress. The project was also presented to the Dominguez Channel/Los Angeles Harbor Drainage Watershed Permittee group as an outreach measure. LACSD plans to continue providing regular updates to the CAC and to continue outreach efforts with local groups and cities.

Planning efforts have included the performance of several studies pertinent to the project. They are (see Attachment 8, References 2-3, 2-4, & 2-5):

- Hydrological Analysis and Evaluation of the Pump Station and Outlet Weir for the JWPCP Marshland Enhancement Project (Attachment 8, Reference 2-5)
- Significant Native and Non-Native Vegetation Present Within the JWPCP Marshland (Attachment 8, Reference 2-3)
- Wildlife Habitat Assessment - JWPCP Marshland Enhancement Project (Attachment 8, Reference 2-4)

Project Planning Submittals	
Hydrological Analysis and Evaluation of the Pump Station and Outlet Weir for the JWPCP Marshland Enhancement Project	Jul 2004
Significant Native and Non-Native Vegetation Present Within the JWPCP Marshland	Mar 2004
Wildlife Habitat Assessment—JWPCP Marshland Enhancement Project	Aug 2005

Design / Engineering

The Final (100%) Design for the JWPCP Marshland Enhancement Project was completed in March 2006 (see Appendix 5-2). Previously, a Preliminary (30%) Design, 50% Design, and 90% Design were completed. Final design and construction documents were completed as part of the Final Design effort and were advertised in April 2006. Two bids were received in May 2006, but were rejected. Revised final design and construction documents were then completed so that the project could be bid out in three parts. The first part for plant collection was awarded October 2006, while the second and third parts, construction and landscaping respectively, were awarded in February 2007. WRA prepared the preliminary, final, and revised designs, including the final plans and LACSD prepared the final specifications with technical assistance from WRA. All engineering, such as calculations for the bridges and their footings, were performed by Noble, a subcontractor of WRA. WRA and LACSD also prepared the final cost estimate.

Design Submittals	
Marshland Final construction documents	Dec 2005
Education and Viewing Area Final construction documents	Mar 2006
Revised Plant Collection, Marshland and Education and Viewing Area Construction, and Marshland and Education and Viewing Area Landscaping Final construction documents	Dec 2006

Environmental Documentation

The project requires compliance with CEQA as part of the environmental review process. The CEQA requirement was fulfilled with a Negative Declaration. The Draft Negative Declaration

was released on May 20, 2005, and comments were received through July 1, 2005. The Final Negative Declaration was approved on July 27, 2005, by the LACSD Board of Directors (see Appendix 5-2).

Environmental Documentation Submittals	
Negative Declaration	Jul 2005

Permits

The project has a number of permits required for the project implementation. These permits have been acquired in concurrence with the project design. The California Department of Fish and Game (CDFG) Streambed Alteration Agreement requires that a Storm Water Pollution Prevention Plan be prepared and followed during the project. Survival requirements, by species, are 80% for the first year and 100% thereafter. The riparian and emergent wetlands are required to attain a 75% cover after 3 years and 90% cover after 5 years. Reports on plant survival and vegetative cover must be submitted to the CDFG yearly for 5 years. Prior to construction or site preparation activities, nesting bird surveys must be performed if such activities begin between March 1 and September 1. Activities within the wetted portion of a stream must be limited to the period of May 1 to October 15, and may be conducted when the stream is not actively flowing outside of these dates. See Appendix 5-2 for the permits.

Permitting Submittals	Purpose	Approval Date
USACE 404 Permit	Filling in waters of the U.S.	Nov 2005
CDFG Streambed Alteration Agreement	Altering streambed flow pathway	Nov 2005
RWQCB 401 Water Quality Certification	Potential impacts to waters of the U.S.	Nov 2005

(d) Construction / Implementation

Construction will be performed by general contractors selected through the low-bid process. The work will be done under four contracts. The first contract, for clearing and grubbing, has been awarded and completed. The second contract, for plant collection and propagation, has been awarded and work is in progress. The third contract, for construction of the marshland and education and viewing area, has been awarded and work is in progress. The fourth contract, for landscaping of the marshland and education and viewing area, has been awarded. All work will be completed in early 2008. The tasks that have been defined include the following:

- Clearing and Grubbing: Non-native brush was removed. Non-native trees and native trees that would not support the new site hydrology were cut down and removed. California tule, a native wetlands plant, was protected in place and not disturbed.
- Plant Collection: Cuttings from native species, including willows and mulefat, were collected from the site for propagation in a nursery; cuttings from other native species, such as tule, were collected at nearby sites for propagation in a nursery.
- Mobilization: Mobilization includes moving the required equipment and materials on to the site in preparation of the work scope.

- Site Preparation: Since the trees were originally just cut down, this task includes the removal of all tree root balls and any other trash and facility removal.
- Earthwork: Earthwork includes stripping and stockpiling various types of topsoil, all required excavation and grading, hauling excess material off site, preparing the various subgrades, placing the three types of topsoil (upland, wetland, and meadow), and installing drainage structures.
- Erosion Control & Hydro-seeding: Erosion control, consisting of silt fences and hydro-seeding will be done to ensure that the soil does not get washed away by rain after the earthwork is completed but before the native vegetation is installed. Hydro-seeding is also being done to establish the meadowlands.
- Trees and Shrubs: Trees, shrubs, and ground cover will be installed as part of this subtask. Approximately 600 trees of various sizes will be planted throughout the marshland and education and viewing area. Nearly 1,400 shrubs will be planted. Approximately 800 containers of ground cover will be planted in the project area.
- Emergent Marsh Plants: Various size containers of emergent marsh plants will be put in place. The total number of plants to be put in place is nearly 13,000.
- Seasonal Wetland Plants: Seasonal wetland plants will also be planted. This subtask involves planting over 7,000 seasonal wetland plants.
- Habitat Structures: Habitat structures consisting of 4 bat boxes and 1 kestral nesting platform will be put in place as part of this subtask.
- Vehicular Paving Surfaces: Road base will be compacted for the areas of the driveway and parking. Pavement will be placed over the road base. Curbs, edge restraints, car stops, and handicapped parking signs and paint will be added.
- Pedestrian Paving Surfaces: Pavement will be placed at the entrance, the main path, the teaching area, and wildlife viewing areas No. 1, 2, and 3.
- Boardwalks & Bridges: Bridges, including footings and handrails, will be installed for access to wildlife viewing areas No. 1 and 2. Boardwalks to wildlife viewing areas No. 1, 2, and 3 will be installed.
- Pedestrian Access Control: Pedestrian access control consisting of wood rail fence, wood bollards with chain, and black wrought-iron fencing will be installed.
- Site Furnishings & Signs: Benches, trash receptacles, and pedestrian and vehicular access control signs will be installed.
- Educational Displays: Three educational displays regarding marshland plants and wildlife, and recycling, will be put in place.
- Shade Pavilions: Two shade pavilions, one at the educational area and one at wildlife viewing area No. 1 will be constructed.
- Water Control Structures: This includes replacing the outlet slide gate and installing a trash rack.
- Utilities: The one task under this subheading is the electrical connection for the irrigation controller.
- Irrigation System: Two types of irrigation systems, drip and spray, will be installed to ensure that all new vegetation gets established. An automatic controller will also be installed.

Construction Submittals	
Notice to Proceed—Clearing and Grubbing	Dec 2005

Notice to Proceed—Plant Collection	Feb 2007
Notice to Proceed—Marshland and Education and Viewing Area Construction	Apr 2007
Notice to Proceed—Marshland and Education and Viewing Area Landscaping	Sep 2007

(e) Environmental Compliance / Mitigation / Enhancement

Environmental compliance consisted of preparation of a Negative Declaration that was approved by the LACSD Board of Directors on July 27, 2005. Only two comments were received during the comment period, and responses were provided in the final Negative Declaration. No mitigation was required since the project itself was a mitigation measure and because replacement ratios of 2:1 or greater had been specified for both habitat and vegetative impacts that would occur during the project period.

Construction management activities include both engineering oversight and the presence of an on site inspector during the majority, if not all, of the field work. Engineering oversight will be provided by LACSD. An LACSD inspector will be on site or available at all times. WRA personnel will also be on call to perform specialized inspections, such as inspecting vegetative materials. Construction administration/ management activities, which began in April 2007, include the following:

- Manage pre-construction meeting
- Check qualifications of construction management team
- Evaluate qualifications of special inspection where applicable
- Establish construction milestones and evaluate liquidated damages
- Define the project scope of work and distinguish out of scope work
- Issue addendums to contract documents
- Review contractor badge and security system
- Work with contractor for acceptance of baseline construction schedule
- Process requests for information (RFIs)
- Check that work is performed according to contract documents
- Check that equipment is supplied according to approved submittals
- Track work tasks and deliverables on the project's critical path
- Interpret information from project management software tools
- Perform or review progress updates and reports
- Issue changes in work as appropriate
- Document change orders with justification and forward for legal review
- Track work completion for payments
- Track extra work claims and credit
- Keep track of work performed on "time and materials" basis
- Identify any ongoing operational constraints
- Keep track of plant security issues
- Keep track of construction mitigation issues
- Keep track of health and safety issues

- Verify and intermediate, mechanical, and contract completion milestones

WRA will prepare a final report summarizing the project activities and field construction operations. This final report will also include a pictorial summary of the progress of the project from the first site inspections to completion following all construction. The final report will be prepared by June 2008.

(g) Other Costs

A PAEP (including the MP and QAPP) will be prepared upon signature of grant award documents, which is expected in April 2008, and will be completed in April 2008. A Labor Compliance Plan was prepared in December 2007.

Other Submittals	
Project Assessment and Evaluation Plan	Apr 2008
▪ Monitoring Plan	Apr 2008
▪ Quality Assurance Project Plan	Apr 2008
Labor Compliance Plan	Dec 2007

Work Items to Complete after May 1, 2007
The following sections discuss work items that will be completed after May 1, 2007. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. The submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs

LACSD staff, including managerial, engineering, field, and clerical personnel, will perform project administration activities. These activities include the following tasks:

- Meet with LACSD consultant, WRA (ongoing)
- Review project submittals (ongoing)
- Administer and track project finances (ongoing)
- Maintain contract escrow bid documents (winter 2006 through spring 2008)
- Control project records and document distribution (ongoing)
- Handle basic administration, planning, meetings, actions, and recordkeeping (ongoing)
- Identify project stakeholders and their various roles and needs (ongoing)
- Ensure and maintain proper labor practices and wage rates (winter 2006 through spring 2008)
- Administer project quality control plan (winter 2006 through spring 2008)
- Manage risk assessment plan (ongoing)

(d) Construction / Implementation

Construction will be performed by general contractors selected through the low-bid process. The work will be done under four contracts, the first of which included clearing and grubbing. The second contract includes collection and propagation of native plants that will be planted as part of the landscaping contract. The third contract included mobilization, site preparation, earthwork, water control structures, habitat structures, vehicular and pedestrian paving surfaces, boardwalks and bridges, pedestrian access control, site furnishings and signs, educational displays, shade pavilions, and erosion control and hydro-seeding. The fourth contract includes mobilization, utilities, irrigation system, trees and shrubs, emergent marsh and seasonal wetland plants and a second round of hydro-seeding. All work for first contract was completed before May 2007. Work for the second and third contracts started before May 2007. The work for the second contract is expected to be completed in April 2008. The work for the third contract was completed in October 2007. The work for the fourth contract is expected to be completed in May 2008. The tasks that have been defined include the following:

- Clearing and Grubbing: Non-native brush was removed. Non-native trees and native trees that would not support the new site hydrology were cut down and removed. California tule, a native wetlands plant, was protected in place and not disturbed.
- Plant Collection: Cuttings from native species, including willows and mulefat, were collected from the site for propagation in a nursery; cuttings from other native species, such as tule, were collected at nearby sites for propagation in a nursery.
- Mobilization: Mobilization includes moving the required equipment and materials on to the site in preparation of the work scope.

- Site Preparation: Since the trees were originally just cut down, this task includes the removal of all tree root balls and any other trash and facility removal.
- Earthwork: Earthwork includes stripping and stockpiling various types of topsoil, all required excavation and grading, hauling excess material off site, preparing the various subgrades, placing the three types of topsoil (upland, wetland, and meadow), and installing drainage structures.
- Erosion Control & Hydro-seeding: Erosion control, consisting of silt fences and hydro-seeding will be done to ensure that the soil does not get washed away by rain after the earthwork is completed but before the native vegetation is installed. Hydro-seeding is also being done to establish the meadowlands.
- Trees & Shrubs: Trees, shrubs, and ground cover will be installed as part of this subtask. Approximately 600 trees of various sizes will be planted throughout the marshland and education and viewing area. Nearly 1,400 shrubs will be planted. Approximately 800 containers of ground cover will be planted in the project area.
- Emergent Marsh Plants: Various size containers of emergent marsh plants will be put in place. The total number of plants to be put in place is nearly 13,000.
- Seasonal Wetland Plants: Seasonal wetland plants will also be planted. This subtask involves planting over 7,000 seasonal wetland plants.
- Habitat Structures: Habitat structures consisting of 4 bat boxes and 1 kestral nesting platform will be put in place as part of this subtask.
- Vehicular Paving Surfaces: Road base will be compacted for the areas of the driveway and parking. Resin pavement will be placed over the roadbase. Curbs, edge restraints, car stops, and handicapped parking signs and paint will be added.
- Pedestrian Paving Surfaces: Resin pavement will be placed at the entrance, the main path, the teaching area, and wildlife viewing areas No. 1, 2, and 3.
- Boardwalks & Bridges: Bridges, including footings and handrails, will be installed for access to wildlife viewing areas No. 1 and 2. Boardwalks to wildlife viewing areas No. 1, 2, and 3 will be installed.
- Pedestrian Access Control: Pedestrian access control consisting of wood rail fence, wood bollards with chain, and black wrought-iron fencing will be installed.
- Site Furnishings & Signs: Benches, trash receptacles, and pedestrian and vehicular access control signs will be installed.
- Educational Displays: Three educational displays regarding marshland plants and wildlife, and recycling, will be put in place.
- Shade Pavilions: Two shade pavilions, one at the educational area and one at wildlife viewing area No. 1 will be constructed.
- Water Control Structures: This includes replacing the outlet slide gate and installing a trash rack.
- Utilities: The one task under this subheading is the electrical connection for the irrigation controller.
- Irrigation System: Two types of irrigation systems, drip and spray, will be installed to ensure that all new vegetation gets established. An automatic controller will also be installed.

Construction Submittals	
Notice to Proceed—Clearing and Grubbing	Dec 2005
Notice to Proceed—Plant Collection	Feb 2007
Notice to Proceed—Marshland and Education and Viewing Area Construction	Apr 2007
Notice to Proceed—Marshland and Education and Viewing Area Landscaping	Sep 2007
Final Construction Summary Report	Jun 2008

Construction Submittals	
Notice to Proceed	Jul 2006
Notice of Completion	Nov 2007
Final Construction Summary Report	Jan 2008

(e) Environmental Compliance / Mitigation / Enhancement

Environmental compliance consisted of preparation of a Negative Declaration was approved by the LACSD Board of Directors on July 27, 2005 (Appendix 5-1). Only two comments were received during the comment period, and responses were provided in the final Negative Declaration. No mitigation was required since the project itself was a mitigation measure and because replacement ratios of 2:1 or greater had been specified for both habitat and vegetative impacts that would occur during the project.

LACSD did commit to several mitigation measures in the IS (Appendix 5-1) for CEQA. Nesting bird surveys were to be performed prior to construction starting between March 1 and September 1; however, the project was initially started in December, so no bird surveys were required. A qualified biologist was on site during critical parts of the construction and landscaping. Best management practices have been and will continue to be used to minimize storm water runoff from the site during the project. A construction traffic management plan was not required. Project-related traffic has been limited to off-peak commute hours.

(f) Construction Administration

Construction management activities include both engineering oversight and the presence of an on site inspector during the majority, if not all, of the field work. Engineering oversight will be provided by LACSD. An LACSD inspector will be on site or available at all times. WRA personnel will also be on call to perform specialized inspections, such as inspecting vegetative materials. Construction administration/ management activities, which began in the winter of 2006, include the following:

- Manage pre-construction meeting
- Check qualifications of construction management team
- Evaluate qualifications of special inspection where applicable
- Establish construction milestones and evaluate liquidated damages
- Define the project scope of work and distinguish out of scope work
- Issue addendums to contract documents
- Review contractor badge and security system
- Work with contractor for acceptance of baseline construction schedule

- Process requests for information (RFIs)
- Check that work is performed according to contract documents
- Check that equipment is supplied according to approved submittals
- Track work tasks and deliverables on the project's critical path
- Interpret information from project management software tools
- Perform or review progress updates and reports
- Issue changes in work as appropriate
- Document change orders with justification and forward for legal review
- Track work completion for payments
- Track extra work claims and credit
- Keep track of work performed on "time and materials" basis
- Identify any ongoing operational constraints
- Keep track of plant security issues
- Keep track of construction mitigation issues
- Keep track of health and safety issues
- Verify and intermediate, mechanical, and contract completion milestones

WRA will prepare a final report summarizing the project activities and field construction operations. This final report will also include a pictorial summary of the progress of the project from the first site inspections to completion following all construction. The final report will be prepared by June 2008.

Construction Administration Submittals	
Quarterly Construction Reports	Quarterly
Final Report	Jun 2008

Note: Submittal dates will be determined by Contractor schedule due following award of contract.

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 3: Large Landscape Conservation - Central Basin MWD – Old Project Name. Water Conservation/ Management & Education Program – Revised Project Name. ***This replaces the entire Project 3 Work Plan in the Agreement***

SUMMARY

The project objectives include installation of water conservation equipment, development of a notification and awareness (alert) program to manage potable water end use of Central Basin's water purveyor customers, and landscape retrofits and workshops.

The project objectives are broken up into four (4) components. They are:

1. Installation of Water Conservation Equipment[1]
2. Development of a Custom Online Notification and Awareness (Alert) Program
3. Drought Tolerant Demonstration Gardens and Landscape Classes
4. Administration, Management and Reporting.

Note 1: The costs associated with removal and installation of water conservation equipment is not included in the scope of work under this grant agreement, but is included here to illustrate the full scope of work being undertaken. Labor costs for this portion of the project will be covered by Department of Energy grant funds (under agreement with CBMWD), as local cost-share.

End users who participate in this program will receive water conservation equipment and will become part of the custom online alert program. The custom online alert program will be set up to send notifications related to regional water conditions such as drought and irrigation water use adjustments required by local governmental agencies to end users to save potable water. In addition, to conserving potable water, the objective of the new system is to help reduce demand during drought and to provide best practice conservation tools and educational tools to customers.

Along with the equipment and alert program, the project includes development of drought tolerant demonstration gardens in the Central Basin service area and hosting educational workshops on drought tolerant landscape.

The four (4) components are as described below.

COMPONENT 1 (0% Complete):

Installation of Water Conservation Equipment: The types of equipment chosen for this project are: water efficient clothes washers, dishwashers, toilets, large rotary nozzles, rotating nozzles and spray heads, zero water urinals and laminar flow restrictors. The goal is to install equipment at public, commercial and community based organization end users to decrease reliance on imported water sources, and conserve water resources by focusing on water resource management.

A qualified vendor will be obtained to provide plan development, marketing, audits and

retrofit installations. The vendor will be supplied an approved equipment list that will be used during audits. The vendor will determine the equipment needs and will be responsible for the enrollment of each customer into the program. The vendor will procure the equipment for each customer and provide backup for equipment purchases with invoicing. The vendor will be required to recycle equipment removed during retrofits.

The number and type of equipment installations for each retrofit will be customized on the basis of customer needs and identified during the water and energy audit process. Individual customer equipment needs are variable and the magnitude of customer enrollments remains to be determined by the vendor. The preliminary project goal is to enroll approximately 40 customers into the program. A re-evaluation of the preliminary goal of customer enrollments will be reevaluated by the vendor during the planning process.

An example of one (1) customer retrofit would be the installation of five (5) toilets, one (1) clothes washer and one (1) dish washer at a public non-profit organization.

TASKS

Task 1A - Customers, Site Locations:

Plan, Develop, and Administer Vendor Contract: Central Basin will seek assistance from a qualified vendor.

Planning and Development of Site Selection Criteria: The objective is to develop customer selection strategy. Selected public, commercial and community based organization end user customers will be required to participate with the notification and awareness (alert) program in order to qualify for equipment installations (Task 2A).

Selection of Customers and Customer Sites: After Central Basin approves the customer selection criteria, the vendor in collaboration with Central Basin, will develop a list of potential areas and target customers.

Enrollment of Customers: The vendor will meet with target customers identified through the selection process to present the project, project benefits, expectations and timeframe. The goal of this meeting will be to enroll public, commercial and community based organization end users to take part in the program. Individual customer equipment needs are variable and the magnitude of customer enrollments remains to be determined by the vendor.

The preliminary project goal is to enroll approximately 40 customers into the program. A re-evaluation of the preliminary goal of customer enrollments will be re-evaluated by the vendor during the planning process

Task 1B - Customer Site Survey, Analysis and Equipment Selection:

Perform Water Audits: Each target customer selected will have a water audit

performed. The number of audits preformed is proportional to the quantity of target customers provided by the vendor and the number of those customers that enroll in the program. The results from the audits will be used to determine individual customer equipment needs.

The preliminary project goal is to enroll approximately but not limited to 40 customers into the program. At the time that 40 customers have been qualified, the vendor and Central Basin staff will evaluate the remaining budget the service area needs and the cost of additional retrofit. This evaluation will to help to increase the number of additional participants.

The vendor will submit the audit reports to Central Basin for review, comments and approval.

List of Potential Equipment Needs and Retrofits: Based on the project objectives and requirements of customers, the vendor will prepare a list of appropriate and necessary equipment to be installed at customer sites. The vendor will submit a list of appropriate and necessary equipment to the Central Basin for review.

Task 1C - Activation, Commissioning, and Testing:

Retrofits, Removal and Installation: The vendor will use the water audits to procure the necessary equipment to use for retrofits. "Activation, commissioning and testing" the equipment means that the vendor will perform the initial start up and testing that any piece of equipment undergoes before the customer signs off that it is installed correctly and fully functional. Testing will also ensure that the equipment is following the scope of the project. Once the testing is complete the vendor will calculate the water use and time of use at all customer site locations. Prior to retrofit of equipment each customer will sign an enrollment form. Once installation is complete, each customer will sign a certification form stating the type and number of equipment installed.

Central Basin's initial milestone is to complete 40 sites. The last milestone will be to secure additional sites and to utilize all of the grant funds. Central Basin staff intends to do more than 40 retrofits as grant funds allow.

Deliverables

- Water Audits
- Enrollment and Certification Forms
- Summary Report of Installations Completed
- Customer Names and Equipment Received

COMPONENT 1 FUNDING

U.S. Department of Energy	$875,000
Department of Water Resources	$665,000
Central Basin Municipal Water District	$0
Component Total	$1,540,000

COMPONENT 2 (0% Complete):

Development of a Custom Online Notification and Awareness (Alert) Program: A notification and awareness (alert) program will be developed to aid in management of potable water end use. The new program will be capable of sending notifications or alerts related to regional water conditions such as drought and irrigation water use adjustments required by local governmental agencies to save water. Consumption can then be managed and the volume of water use can be adjusted or shifted as needed by customers.

The notification and awareness web-based program will be developed and be used as a mass public notification program for drought conditions, irrigation schedules and water use ordinances in customer areas. Links to water conservation and best management practice tools will be available via the web-based program to build better water conservation habits. Information on regional drought conditions will also be available so that customers are aware of any regional issues. The web-based awareness program will be developed and released to public agencies within Central Basin service area with active customers for their future use and further development.

TASKS

Task 2A - Custom Notification and Awareness (Alert) Program:

Program, Planning and Development: Central Basin staff will complete research to identify a web-based program structure that will best suit the needs of customers and agencies involved, and have the ability to achieve project objectives.

Plan, Develop, Administer Vendor Contract and/or Procure Equipment: Central Basin will seek assistance from a qualified vendor to develop a web-based program that will best suit the goals of the notification and awareness program. Central Basin will oversee all program planning and development.

Program Implementation and Conservation Practices Tools: The qualified vendor will submit the web-based program details to Central Basin for final approval. The vendor will then procure any necessary software and/or hardware to implement the new program. Once the program is established, Central Basin and the vendor will include links for customers to locate information on best conservation practices related to conservation of water along with requirements or ordinances in their area. Customers will be able to access information and tools to educate themselves with that information.

The vendor will submit weekly progress reports of programming and implementation to Central Basin for review, comments and approval.

Publish, Activate and Test: The vendor will publish the notification and awareness program web-wide and test functionality of any equipment. Testing will ensure that the equipment and program are functioning properly and that they both follow the scope of the project. Once the testing is complete the vendor will provide Central Basin training on its usage.

Deliverables

- Assessment of Program Requirements
- Procurement of Server or Host
- Custom Alert Program

COMPONENT 2 FUNDING

U.S. Department of Energy	$25,000
Department of Water Resources	$25,000
Central Basin Municipal Water District	$0
Component Total	$50,000

COMPONENT 3 (75% Complete):

Drought Tolerant Demonstration Gardens and Landscape Classes: This component of the project includes retrofitting gardens in the Central Basin service area and hosting educational workshops on native landscape designs.

TASKS

Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes:

The retrofit of five (5) locations will include removing water consuming landscaping and replacing it with permeable surfaces and drought tolerant plants. While the retrofit portion of this project will serve as a tangible example of a sustainable landscape design, the workshops will be designed to educate community members on the process of starting and maintaining a drought tolerant garden.

Approximately ten (10) Landscape Classes will be conducted over the period of the project in close cooperation with the agencies. Marketing and outreach will be necessary for both the gardens and classes.

While marketing and outreach efforts will continue to be ongoing, the educational elements of this program, Landscape Classes and Demonstration Gardens, will be scheduled and conducted strictly in coordination with cities and retail water agencies to benefit their residents and customers.

Deliverables

Marketing/Outreach
- Articles in local newspapers
- Presentation at City Council meetings
- Press Releases
- Public Service Announcement

Five (5) Demonstration Gardens
- Demonstration Garden project flyer & list of plants
- Permanent project and plant information signage at the gardens
- Demonstration Garden webpage

Ten (10) Landscape Classes
- Sign-in/Attendance sheets
- Class Instruction Information

COMPONENT 3 FUNDING

U.S. Department of Energy	$0
Department of Water Resources	$160,000
Central Basin Municipal Water District	$0
Component Total	$160,000

COMPONENT 4 (20% Complete):
Administration, Management and Reporting: There will be administration, management and reporting for all four (4) components of this scope of work.

TASKS
Task 4A - Administration, Management and Reporting:
Central Basin will administer and manage the grant contract, customers and the overall activities of the Project.

Reports and Other Deliverables will be provided by Central Basin in accordance with the award requirements.

Central Basin will submit the final report publication to the State of California Department of Water Resources, the U.S. Department of Energy, the Los Angeles County Flood Control District and post it on the Central Basin website.

Deliverables
- Quarterly Progress Reports
- Final Report

COMPONENT 4 FUNDING

U.S. Department of Energy	$150,000
Department of Water Resources	$50,000
Central Basin Municipal Water District	$0
Component Total	$200,000

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 4: Large Landscape Conservation – West Basin MWD (Revisions to the original work plan are indicated below)

Project Description

The project will have several components. The first component of the project is to target large landscape sites of 1 acre and greater. Centralized irrigation controllers will be provided with the goal of conserving 1 afy of water for each acre of land and to reduce urban runoff as a result. Through the installation and management of landscape weather-based irrigation controllers, an estimated 20 to 50 percent of irrigation water will be conserved, thus reducing imported water needs. Also, up to 70 percent of water runoff will be reduced at the site because less water will be applied to the landscape. There is also an Area of Special Biological Significance (ASBS) within this Region that the project will positively impact.

The program will also provide an accountability documentation trail that will show water reduction and urban runoff data. The project will include large landscapes and other areas that contribute to high water usage and runoff pollution. The targeted landscape sites will include large landscapes in schools, parks, multi-family greenbelts, business parks, facility landscapes, street medians, and residential sites over 1,500 square feet that are the top water users in the area.

The primary objectives of this project are to increase water supply reliability, improve water quality, conduct public educational classes and develop water efficient demonstration gardens to increase public awareness. By developing this integrated approach, the various stakeholders will work together to meet the objectives of the project.

This project includes a large landscape water management program utilizing centralized weather-based irrigation controllers and a computer management system that link back to the local and water regional agencies for end-use water management. The program is designed to allow the local users (parks, schools, cities, etc.) to work with a water management company, HydroEarth~~, that~~ that utilizes a water management system. Participants will be provided with centralized irrigation controllers and management tools. HydroEarth is an irrigation technology company that provides multi-faceted solutions to conserve water and protect the environment.

The second component of the project is to target the top residential water users in the region. A total of ~~1,350~~500 rebates will be provided to residential customers to help customers purchase and install "smarter" irrigation controllers. Each irrigation controller can range from $200 to $700.

Most of the residential weather-based irrigation controllers use built-in or on-site weather data.

The third component of the Project will be to develop and provide the residential

landscape classes for the residents and business owners. WBMWD has formed a partnership with the Surfrider Foundation to develop and offer "Ocean Friendly" Garden landscape classes. The Surfrider Foundation is an environmental organization dedicated to restoring and protecting coastal and marine ecosystems. The classes will be multi-faceted and provide information on various subjects including: weather-based irrigation controllers (rebates), native plants, garden designs, irrigation system "tune-ups" and also provide information on the State's water supply and water quality issues.

The fourth component of the project involves installation of demonstration gardens. These ~~10~~ 16 "Ocean Friendly" demonstration gardens will be implemented throughout the watersheds within WBMWD's service area. Through the classes, participants will learn about the demonstration gardens, which will encourage participants to develop their own "Ocean Friendly Garden." The gardens will provide "real-life" examples of the plants and irrigation systems that will be taught in the classes. The classes will provide a unique mechanism necessary to disseminate information regarding the program and to increase public awareness about the water supply and water quality issues. The classes will help gain public acceptance of the program to help ensure its success.

The fifth component of the project involves providing landscape surveys and a turf removal rebate program to customers within the WBMWD service area.

This project is identified in the WBMWD 2005 Urban Water Management Plans (Appendix 8, References 3-2) as part of its larger Conservation Program and in the 2006 Water Conservation Master Plan that identifies this project as meeting the long-term goals of water supply reliability through conservation measures. Finally, this project is part of the MWD Five-Year Conservation Strategy Plan (see Appendix 5-3). This plan was adopted in 2005 and the goal is to conserve 1.1 million acre-feet of water by 2025. This project will act as a pilot project for the region to determine the success of the project's components including reduced urban runoff, improved water quality, and decreased potable water supply usage. To date, 16 irrigation controllers have been installed in the WBMWD service area. Since this is a pilot program, it will require more funding in order for additional controllers to be installed. For the next fiscal year, this program will make up a majority of the District's conservation program budget.

Work Items through August 1, 2008

The following sections discuss work items that are either: 1) complete as of application submittal; or 2) will be completed by August 1, 2008.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion.

(a) Land Purchase / Easement

There are no land or right-of-way acquisitions necessary for this project because the centralized irrigation controllers that are installed will replace a site's current, inefficient watering system device. The existing programming system devices will be replaced with the "smart, weather-based" systems that retrieve weather data in order to water the

landscape with the appropriate amount based on the weather conditions.

(b) Planning / Design / Engineering / Environmental Documentation

Planning

As part of the IRWMP Process, WBMWD has presented its project to the sub-regional stakeholder groups and received positive feedback. All of the watershed coordinators will be contacted to work with WBMWD to help market and implement the program.

In 2006, WBMWD developed and adopted its Water Conservation Master Plan which contains a 5-Year Action Plan. As part of the development process, two stakeholder classes were held (March 6, 2006 and April 27, 2006) to receive input from cities, water agencies, environmental groups, residents and others interested parties. Stakeholders recommended conducting landscape projects as a way to conserve water and reduce runoff. Many of the stakeholders are helping promote the program via their communication channels. Included in the budget is funding for marketing and outreach efforts which will include materials for the classes, rebates and brochures for the centralized and residential irrigation controllers, and information about the demonstration gardens.

Design / Engineering

This project has been designed from the aspect of an implementation project and not a construction project in that sites will be identified for the demonstration gardens, classes and irrigation controllers. WBMWD has been working with several cities and its retail water agencies to begin identifying suitable sites for the installation of these "Smart" irrigation landscape controllers to conserve water and reduce dry-season runoff.

Environmental Documentation

The project does not require environmental documentation because it is not a construction project nor will it have any adverse environmental impacts.

Permit Acquisition

Permits are not required because the centralized irrigation controllers will simply replace existing irrigation controllers at project sites. Nor is there a need for a permit for the landscape classes or demonstration gardens. All components of the project will be coordinated with the site owners prior to implementation.

(c) Environmental Compliance / Mitigation / Enhancement

The project does not require any environmental compliance, mitigation, or enhancement because it does not require environmental documentation.

(d) Other Costs

A Project Assessment and Evaluation Plan (PAEP) will be prepared and completed by August 2008.

Other Submittals	
Project Assessment and Evaluation Plan	Aug 2008

Work Items to Complete after September 1, 2008

The following sections discuss work items that will be completed after September 1, 2008. The work items are divided into each of the nine primary budget tasks.

All work items will be documented by submittals to the State in the form of Quarterly and Annual reports.

1. Ocean-Friendly Garden Landscape Classes

The 40 "Ocean Friendly" landscape classes will be held over a 4-year period (project duration). The first year of implementation will have 5 classes within the WBMWD service area, with 15 in the second and third years and 5 in the last year of the project. Years 2 and 3 carry the bulk of the classes because there will be a start up period in the first year and then a tailing off period in the last year.

2. Ocean-Friendly Demonstration Gardens

There are a total of ~~10~~ 16 "Ocean Friendly" demonstration gardens that will be implemented throughout WBMWD's service area. There will be ~~2~~ 3-4 installed within each of WBMWD's Direction Division boundaries to ensure even coverage throughout the service area. The estimated cost for each garden is $35,300. We recognize that this may not be sufficient funding for each garden; however we will adjust the recipient sites to ensure that no more funding is needed for this task item. For example, there may be an instance where we have a recipient site that only requires half of the $35,300 and another site that may require more than $35,300. In these cases, we will adjust the funding accordingly within the $~~353,000~~621,988 total budget.

3. ~~Centralized~~ Irrigation Controllers

There are ~~1,117~~558 centralized irrigation controllers that will be installed evenly throughout WBMWD's service area. These will be installed over the 4 year period and is the largest task of this program. This task involves marketing to those sites that are the most eligible candidates to receive the free devices, coordinating with HydroEarth and the site owner to install the controller devices and all its components, and ensuring proper management of the system.

4. ~~Residential~~ Irrigation Controller Rebates

There are ~~1,350~~450 residential irrigation controller rebates that will be marketed in this program primarily through the 40 "Ocean Friendly" classes that will be conducted but also through WBMWD's other outreach events and website. Each rebate covers up to $235 of the cost of the controller. A resident may choose a model that exceeds this amount but each rebate will cover only up to $235. This total task amounts to $~~317,250~~105,750 over the 4 year period. In addition, West Basin will conduct

"exchange events" —in which a resident would exchange their old, inefficient irrigation controller which would be recycled, with a new weather-based irrigation controller (WBIC). West Basin anticipates distributing 500 WBICs at these events.

5. Landscape Surveys and Turf Removal Rebates

Task 5.1 This task includes providing for free landscape surveys to customers within our service area. This program is in high demand because people want to know how much water they can save by making changes within their landscape. This component will be jointly funded through Metropolitan Water District's rebate program and the DWR grant funds.

Task 5.2 This task is for a turf removal rebate program within the WBMWD service area. Metropolitan Water District currently provides $1 per square foot of turf removed and this task will add to this amount by another dollar, to make the rebate $2 per square foot of turf removed, 50/50 cost share. This increase in funding will ensure that more landscapes are converted and at a higher rate than if only one dollar was provided. The process to receive the $2 per square foot is managed by Metropolitan Water District and they ensure that the landscape is converted to a lower, water-use landscape post-removal through pre- and post-photos and an application form.

6. Marketing and Outreach

The marketing and outreach for this project includes marketing of the classes, demonstration gardens, centralized irrigation controllers, and residential irrigation controller rebates. The classes will be marketed through the distribution of flyers to residents, businesses and public facilities, on WBMWD's website and at other outreach events that WBMWD participates in. The demonstration gardens will be marketed through direct contact and coordination with WBMWD's 17 cities. For the centralized irrigation controllers, a letter will be sent to the highest water users within WBMWD's service area. Marketing of this task will also occur on the website and at other outreach events. For the residential irrigation controller rebates, the Landscape Surveys and the Turf Removal Incentive, marketing will occur at the classes that will be conducted, on the website and at other outreach events.

7. Run-off Devices

Two run-off devices will be installed at two separate locations within WBMWD's service area. The first run-off device will be located in the City of Malibu where the Area of Special Biological Significance is located and be installed in the first year of the project. The second site will be determined after the first device is installed and will need to be monitored prior to installation in the second year of the project. This task requires coordination with the two cities that will be recipients of the devices.

8. Database Management

This task involves managing the database of information for all components of the program including marketing and outreach efforts, attendance of residents at all 40 classes (50 people per class), recipients of the centralized irrigation controllers and the residential irrigation controller rebates, scheduling of all components including the

progress of each demonstration garden, output indicators, performance measures, runoff device data pre and post installation, project budget and schedule, and the vendors and partnerships utilized for this project.

9. PAEP

Staff will prepare a PAEP (Project Assessment and Evaluation Plan) in accordance with DWR guidance.

~~9.~~ 10. Administration

The project will be administered by WBMWD and the tasks will be in cooperation with several other organizations.

Organization	Administration Responsibilities
HydroEarth	• Responsible for providing WBMWD with quarterly reports on the number of centralized irrigation controllers installed and locations of the installations. • Providing water usage comparison reports for pre and post controller installations. • Conducting and monitoring pre and post runoff reduction analysis and creating reports of the results. • Testing design and reporting for drought, emergency and peaking capabilities.
Surfrider Foundation	• Coordinate with WBMWD on the recipient sites of the demonstration gardens. • Coordinate on the sites of the "Ocean Friendly" Garden landscape classes • Provide WBMWD with quarterly reports on the number of "Ocean Friendly" Garden landscape classes conducted and "Ocean Friendly" demonstration gardens developed.
South Bay Cities Council of Governments	• Help market the "Ocean Friendly" Garden landscape classes to the cities in the South Bay. • Take reservations for each of the scheduled classes. • Assist in locating the sites to conduct the classes.

WBMWD	• Manage implementation of irrigation controllers by HydroEarth Inc. • Check that work is performed according to contract documents. • Manage the location of the installations, the landscape classes and the demonstration gardens. • Track work tasks and deliverables on the project's path. • Perform or review progress updates and reports. • Track work completion for payments. • Keep track of work performed on a "time and materials" basis. • Provide quarterly and annual reports showing activity conducted and program results to DWR.

Project Administration Submittals	
Quarterly and Annual Progress Reports	Quarterly and Annually

~~10.~~11. Planning-Site Selection

This task involves the coordination of WBMWD staff with their partners (Surfrider Foundation, HydroEarth and the South Bay Cities Council of Governments). All of these organizations will work with WBMWD to identify the sites to conduct the 40 classes, to install the demonstration gardens and to install the centralized irrigation controllers. Agreements with all three of these organizations will be secured prior to implementation of their tasks.

12. Contingency

Contingency funds will be made available for components of the project with unanticipated costs.

Las Virgenes Creek Restoration Project

Project Overview

The primary goal of the project is to restore the natural function of this concrete-lined section of Las Virgenes Creek. This will be accomplished by re-establishing the existing flood control facility in an environmentally harmonious and sensitive fashion. 450 feet of concrete liner will be removed, and the channel will be planted with native vegetation. The project is part of a larger creek restoration and rehabilitation vision developed by the City of Calabasas and its staff in conjunction with regional stakeholders and local community groups.

A critical secondary goal is to provide an opportunity for the community and for visitors to the area to view a naturally functioning stream and to sensitize them to the importance of habitat restoration. The project implements environmentally sensitive flood management based on a naturally functioning, sustainable stream, which anchors a healthy habitat for both wildlife and humans.

The project will establish direct connectivity between the two existing riparian communities to the north and south of the current concreted segment, afford better cover for wildlife and promote increased movement of animals up and down the creek corridor. Restoration will also enhance the greenery and views in the area.

Project Management

City of Calabasas Public Works Department will manage the work plan and administer the Department of Water Resources grant. Alex Farassati, Environmental Services Supervisor, will serve as the project manager. Todd Evans, Associate Engineer, will serve as the construction manager. Throughout the project, City of Calabasas will utilize the expertise of Sydney Temple, Design Engineer with Questa Engineering Corp., to oversee and inspect the work in progress.

City of Calabasas will submit to the DWR quarterly reports detailing its progress in completing the various tasks outlined in this work plan, as well as such other written reports as the DWR may reasonably request in writing. The City and its subcontractors shall permit the Department of Water Resources to review and inspect project activities at all reasonable times during the performance period of this agreement.

Project Tasks

Task 1: Project Management and Administration

Provide all technical and administrative services as needed through completion of the contract. Select appropriate technical consultants and other subcontractors; draft and administer contracts with them; and provide project and financial oversight, scheduling and coordination. Conduct public outreach to educate the public about the purpose of this project in particular and creek restoration in general.

Organize groundbreaking ceremony with the participation of stakeholders, elected officials, funding agencies, and residents. Monitor, supervise and review all work performed. Coordinate

budgeting and scheduling to assure that the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws and regulations.

Prepare and submit quarterly status reports to the Department of Water Resources, describing activities undertaken and accomplishments of each task during the quarter, milestones achieved, and any problems encountered in the performance of the work under the contract. The description of activities and accomplishments of each task shall be in sufficient detail to justify payment of invoices and shall be computed as percent of task completed in calculating invoice amounts.

Task No. 2: Project Design and Bidding

Based on comments from stakeholders and regulatory agencies, refine and develop a final concept plan and final specifications and prepare bid packets. Implement CEQA mitigation measures prior to start of construction. Put the project out to bid, provide plans and specs to contractors willing to bid the project. Award the contract through City Council action. Organize pre-construction meeting with the contractor and subcontractors.

Task 3: Construction Management and Inspection Services

Provide day-to-day management of construction activities and ensure that the project is implemented in accordance with approved project plans, specifications and all permits. Services shall include monitoring of construction progress, preparation of daily and periodic progress reports, resolving construction issues, evaluation of construction schedules, resolving any delays in construction, providing technical assistance to resolve change order requests, conducting field meetings with the construction contractor, and reviewing contractor progress payment requests. Survey services shall be provided to ensure the project is constructed to the grades and alignments shown on the approved project plans.

Task 4. Project Construction

Construct creek project in accordance with final plans and specifications. Review and approve final operation and maintenance manual. Prepare as-built drawings upon completion of the project. The construction will have the following phases:

- Mobilization
- Clear and grubbing
- Earthwork
- Rock Toe Revetment
- Rock Weirs
- Willow Trench Staking
- Rootwards
- Bio-D Block
- Hydroseeding
- Erosion Control Blankets-Terrace
- Erosion Control Blankets-Slopes
- Irrigation
- Planting

Task 5: Education Panels and Public Education

Prepare appropriate texts and artwork for educational panels. Obtain bids for fabrication and installation of panels.

Task 6. Final Project Report and Monitoring

Prepare a draft final report that summarizes project accomplishments and submit to Department of Water Resources for review and comment. The report shall include the following:

a. A brief introduction section including a statement of purpose the scope of the project and a brief description of the approach and techniques used in the project.

b. Any additional information that is deemed appropriate by the City.

c. An analysis of whether the purposes of the project have been met. Include information collected in accordance with the project monitoring and reporting plan, including a determination of the effectiveness of the best management practices or management measures implemented as part of the project in preventing or reducing non-point source pollution.

Malibu Creek Watershed Urban Water Conservation and Runoff Reduction Project

Project Description:

This project combines and integrates a project developed by the City of Westlake Village to reduce urban runoff and conserve water on City-owned public lands, with a project developed by the Las Virgenes Municipal Water District to reduce urban runoff and conserve water on residential parcels in the Malibu Creek Watershed. The combined project addresses urban runoff from both residential and City-owned lands in the City of Westlake and residential properties in the Malibu Creek watershed, reducing administrative duplication and providing homeowners in the City of Westlake a potential opportunity to tie into the City's centralized irrigation controller system. This approach could serve as a model for the other cities in the watershed, and reduce runoff caused by homeowner inattentiveness to irrigation scheduling. Benefits include water supply (reducing over-irrigation and water imports from the State Water Project / Bay Delta), water quality (reducing urban runoff into Malibu Creek and its tributary streams), habitat (reducing nutrient loads to streams listed for algae and eutrophication impairment), and recreation (reducing the potential for beach closures due to a seasonal lagoon breaching adjacent to Surfrider Beach in Malibu).

Each project is described below, followed by a description of how the projects will be integrated.

City of Westlake Village Project Details:

The City of Westlake Village (City), in partnership with Las Virgenes Municipal Water District (LVMWD), will be replacing irrigation controllers citywide to reduce water demand and runoff to Westlake Lake and Malibu Creek. Through the use of new technology, evapotranspiration (ET) controllers, the City's consumption of reclaimed irrigation water will be able to monitor local weather on a daily basis and automatically adjusts the controller irrigation schedule based on plant watering needs.

The City is planning on a phased implementation plan over the next few years. The phasing method is designed to build the system in a very specific, methodical order that will maintain the operation of the existing irrigation system while sections of the system are upgraded and adjusted to maximize efficiency.

The last phase of the plan will be the replacement of the battery operated units. The battery operated units are powered by a solar array imbedded in the lid of the irrigation controller box. This battery unit is also capable of being remotely controlled by the central station.

The order of installation will generally be as follows:

1. Central Control Station;
2. Controllers with high water use;
3. Controllers that serve new landscape projects;
4. Remaining controllers in the City System; and
5. Battery operated controllers will be installed as the last phase.

LVMWD Project Details:

The Las Virgenes Municipal Water District (LVMWD) project consists of both indoor and outdoor conservation projects. Both projects are a continuation of projects initially co-funded via District and Prop. 13 funds. However, the Prop. 50 phase of these projects will enjoy a higher benefit / cost ratio by taking advantage of information systems and administrative procedures already in place and enabled by the earlier grant.

Indoor conservation. Toilet flushing and clothes washing are the two largest indoor water uses in the LVMWD service area. For this reason, since the 1990's the District's indoor conservation program has focused on replacing inefficient toilets and washers with high efficiency devices. Despite substantial success in the single family residential market, the District has had limited success in the multi-family and condominium / homeowner association (HOA) sectors because the residential rebate does not cover installation costs. To address this financial disincentive, the District secured supplementary Prop. 13 funding to increase the rebate amount from $60 per retrofit to $150 per retrofit, and conducted an active outreach effort to HOAs and multifamily residences (MFRs) to alert them to the increased rebate and the need to reduce water imports into the Malibu Creek watershed and treated wastewater flows into Malibu Creek. The project met its objective of 500 HECW retrofits, and exceeded its objective of 500 HOA/MFR retrofits by 280% (1,400 retrofits). The project also provided an unexpected opportunity to simultaneously retrofit 866 showers with low-flow showerheads and 1480 faucet aerators at a large apartment complex, resulting in additional water savings. This indoor conservation project yield lifetime water reduced imported water by 540 acre-feet. Because this water is used indoors and then treated at the Tapia treatment plant, the project also reduced the volume of treated wastewater entering Malibu Creek by the same amount, helping to restore native flows in the creek.

Prop. 50 funding is sought to continue this successful program, using the proven outreach and implementation model already in place. 100 percent of the requested funds are for materials (i.e. water efficient water fixtures).

Urban Runoff Reduction / Outdoor conservation. As for the indoor conservation element, this project seeks funding to continue a successful grant co-funded project that will run out of funds this year. The outdoor conservation element uses existing information systems developed under the previous Prop. 13 funded effort to identify residential parcels with persistent, substantial irrigation runoff in proximity to stormdrains that drain to Malibu Creek. Once identified, residents are offered water efficient equipment rebates (including installation labor reimbursements) and free on-site assistance to upgrade and fine-tune their irrigation systems to eliminate runoff from their properties. Equipment reimbursements range from rebates for new weather based irrigation controllers (WBICs) and drip irrigation systems to reimbursements for labor and materials to repair degraded irrigation systems. Both water use and runoff are monitored at each participating address to verify the elimination of runoff.

The earlier Prop. 13 funded project developed the Geographic and Customer Water Use Information Systems necessary to locate residential parcels with persistent high runoff. This Prop. 50 request is solely to fund irrigation system improvements at identified parcels.

Project Integration:

Concept integration. The central concept underlying both the LVMWD and City of Westlake projects is that existing water conservation programs can be tailored and enhanced to target those water uses that result in the largest sources of dry weather urban runoff. In this way, multiple benefits are realized and maximized to decrease dependency on imported State Water Project water, improve water quality in regional coastal streams, increase the region's progress

towards compliance with bacteria and nutrient Total Maximum Daily Loads (TMDLs), and reduce the volume of non-native flows in Malibu Creek and Malibu Lagoon.

Project integration. LVMWD and City of Westlake Village staff have worked together to integrate four "stand alone" projects - toilet rebates, washer rebates, and residential and City irrigation improvement projects - to achieve the above multiple benefit objectives, and to coordinate and implement the projects cooperatively to ensure minimal duplication of effort. Some examples:

- Water supply benefits developed once for both projects from a common set of water savings calculations.
- Project mapping for both projects using the LVMWD Geographic Information System and digitized aerial photography.
- Planning a single centralized weather based irrigation controller for both public and residential customers, operated by the City of Westlake.
- Collaborative grant administration and reporting built into the project, saving the time and expense of both project proponent and DWR staff to write and review quarterly reports.

Scope of Work:

The Project scope of work includes 11 primary tasks (note tasks indicated by asterisk * are not applicable to this project, as discussed in the individual task descriptions):

1. Project Administration
2. Planning / Design / Engineering / Environmental Documentation
   - 2.1. Project Planning *(Financial Plan, Stakeholder Outreach, Studies)*
   - 2.2. Design / Engineering
   - 2.3. Environmental Documentation*
   - 2.4. Permit Acquisition*
3. Construction / Implementation
4. Environmental Compliance / Mitigation / Enhancement
5. Construction Administration

A description of each task as well as task deliverables to the State are included in the following sections.

Task 1: Project Administration

Work to be performed under this task will consist of quarterly progress reports, request for proposals, product/proposal selection, letting of the installation contract, periodic staff reports to the City Council and project completion, and general project management tasks such as irrigation system installation status reports, meetings and installation supervision.

Task 2: Land / Right-of-Way Acquisition

Land acquisition is not a part of this project. Units to be installed at residential locations will be requested and installed by the homeowner under LVMWD oversight. The citywide irrigation controller replacement will occur within the City of Westlake Village right-of-way.

Task 3: Planning / Design / Engineering / Environmental Documentation

Task 3.1: Project Planning

The City's Landscape Maintenance Assessment District, and City General Fund have secured funds for City of Westlake Village portion of the project under the Capital Improvement section. The Las Virgenes Municipal Water District has included funds for the project cost-share in its FY 06-07 preliminary operating budget, financed from water sales. Documents attached to identify and verify sources.

Task 3.2: Design / Engineering

The Preliminary Design was completed in January 2006 and included project siting, citywide facility layout, and a cost estimate. No design engineering was required for the LVMWD project element, as it consists solely of rebates for homeowner installed retrofits.

Final Design

Final design, construction documents, and Project Assessment and Evaluation Plan (PAEP) will be completed prior to grant award.

Environmental Documentation

The project does not require any environmental documentation.

Permit Acquisition

The project does not require any permit for the project implementation.

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 7: Morris Dam Water Supply (Revisions to the original work plan are indicated below)

Project Description

Water supply for the region comes from native runoff from the San Gabriel Mountains and imported water supplied mostly from the CALFED Bay-Delta area. The demand for water exceeds the local water supply that is captured behind three dams along the San Gabriel River, which are owned and operated by the LACFCD. Morris Dam, which is the furthest south of these three dams on the river supply system, currently must maintain a minimum pool of water to prevent damage from sediments to the outlet works of the dam. This minimum pool restricts the amount of native water supply that can be captured by the dam and later spread downstream for use in the Basin. The Morris Dam Water Supply Enhancement Project would allow physical modifications to Morris Dam to facilitate a lower operational reservoir pool behind the dam and enable the capture and conjunctive management of the additionally conserved water. The reservoir capacity will remain the same and only modifications to the ~~intake~~ dam structures and control system would be required to gain this benefit. This would help the LACFCD meet the needs of the Main San Gabriel Basin and in turn would reduce the burden on imported water sources that are required to supplement the Basin's needs.

Morris Dam enables the LACFCD to regulate storm flows and runoff to downstream spreading grounds. Currently, the LACFCD maintains a 9,720 acre-foot operational reservoir pool of water behind the dam (minimum pool) to protect the outlet valves from damage or operational failure due to river flows with high sediment loads. This Project will increase the effective reservoir capacity by 5,720 acre-feet by reducing the required minimum pool to 4,000 acre-feet while improving the reliability of the discharge system. As a result, 5,720 acre-feet more water can be captured at the dam for downstream groundwater recharge and extraction purposes.

The Project entails physical modifications to the Morris Dam Valves, lower outlet structures, ~~and~~ Control Systems, and the addition of new jet flow gate valves to facilitate a lower operational reservoir pool and the reliable conjunctive management of the resulting increased conserved native water. These modifications consist of ~~constructing a new inlet location to take water from the reservoir at a different location (higher elevation)~~ refurbishing ~~and~~or replacing the river outlet valves with a more robust type of valve that is not as susceptible to damage and operational failure if some sediment gets in the outflow. Modifications to the control system include the electrical upgrades needed to power the new valves electric motor operators and other systems, and intelligent controls so that the valves and gate will be able to control outflows to match capacity of water conservation systems downstream.

The project ~~consists of modifications to Morris Dam to~~ will allow greater flexibility in dam releases and enable greater amounts of local runoff from the San Gabriel River watershed to be conserved. The modifications include: ~~constructing a new inlet location on the dam's outlet works;~~ replacing the dam's outlet valves with those less susceptible to damage and mis-operation if some sediment gets in the water being released (the watershed tributary to the reservoir is by nature a highly erosive one). The new outlets will eliminate current gaps in outflow rates and will include the ability to make small releases.

Summary of scope changes: The project was planned as two phases, Phase I was the valve, control, and power system upgrades, and Phase II was originally planned as an intake structure modification. In 2010 the design for Phase II was modified. The existing lower outlets were rehabilitated and two new jet flow gate valves were added in lieu of the previous plan for a new inlet structure. The modifications were made in response to constructability concerns with the original Phase II design. The rehabilitated outlets and new jet flow gate valve are extremely tolerant of high sediment loads and can be confidently operated with a lower operational pool. Therefore, this modified Phase II design will achieve the same project benefits and water conservation goals as the original Phase II design. Project construction did not require dewatering of the reservoir.

Scope of Work

The Project scope of work includes seven primary tasks:

a. Project Administration
b. Land / Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement
f. Construction Administration
g. Other

A description of each task as well as task deliverables to the State are included in the following sections.

(a) Project Administration

Project administration will be performed by the LACFCD Water Resources Division and Construction Division. The LACFCD will provide an onsite inspector for the duration of the construction project and will hold weekly construction meetings to discuss project submittals, items of concern, on-going work, anticipated work, schedule, quality control, and safety. Meeting minutes will be prepared and all changes necessary will be handled.

(b) Land / Right-of-Way Acquisition

No land or right-of-way acquisition is required for this project because the dam, reservoir, and spreading grounds are owned and operated by LACFCD.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

Stakeholder outreach and comments were solicited as part of the environmental documentation process. A reconnaissance level feasibility study [Morris Dam River Intake Modification Study] to evaluate possible modifications to the existing intake structure to mitigate operation problems associated with sediment build up at Morris Dam was finalized in April 2004. Preliminary concepts were analyzed and a proposed modification was recommended for further evaluation and design. This report outlined potential permit requirements and preliminary costs.

Project Planning Submittals	
Public Workshop Attendance Sheet	Nov 2006
Morris Dam River Intake Modification Study	April 2004

Design / Engineering

The Final Design for the rehabilitation of the valves, control house, and electrical upgrade of the dam was completed in August 2004. The 30% concept design for the modified intake structure was completed in April 2004. The complete final design for the project including rehabilitation of the valves, controls and intake structure modification will be complete by June 2008.

Black and Veatch prepared the preliminary and final design for the valve rehabilitation and the 30% concept plan for the intake structure modification. LACFCD Design Division will complete the final design of the intake structure modification. Submittal dates for each stage of design are identified in the table following the discussion. The design consists of the following subtasks:

- 10% Design
- 30% Design
- 60% Design
- 90 Percent Design
- Final Design

10% Design

The Preliminary Design for the Project was completed in 2000 and included project design memorandum, facility valve / gate inspection, architectural inspection, and

Control House inspection, schedule for completion and a preliminary cost estimate.

30% Design

The 30% Design includes Architectural Trip Memorandum, Electrical Inspection Trip memorandum, Issue Control House Architectural Concept and Letter Report of findings. These reports/memorandums were finalized in 2000. A separate reconnaissance level feasibility study (30% design) to evaluate possible modifications to the existing intake structure to mitigate operation problems associated with sediment build up at Morris Dam was finalized in April 2004. Preliminary concepts were analyzed and a proposed modification was recommended for further evaluation and design. This report outlined potential permit requirements and preliminary costs.

50% Design

A 50% Design package for the valve/control system and electrical upgrade portion of the project was submitted by Black and Veatch in 2001. This package refined the tasks performed during the 30% design memos and prepare draft details for District and State review. The 50% Design package for the intake structure modification was completed in October 2007 by District's design division and submitted for internal review and approval. An updated cost estimate will be prepared.

90% Design

The 90% Design for the valve/control system and electrical upgrade portion of the project included complete plans and specifications, address comments from the 50% design phase. The 90% design package for the intake structure modification was completed December 2007 by District's design division. This package was submitted for review and comment to the State.

Final Design

Final Design & Construction Documents for just the valve rehabilitation, electrical upgrade, and control system upgrade was finalized in August 2004. The final documents included plans, specifications, an engineer's opinion on project construction cost and calculations for the components of the projects and a Design Summary Report.

~~The intake structure modification design is providing the final component for this project and includes all necessary calculations, plans, specifications and design summary report. A bid package combining the two components is being developed and submitted for construction. In addition, an updated cost estimate including the final design costs for the intake structure modification has been developed.~~

Environmental Documentation

The project requires compliance with CEQA as part of the environmental review process and, based on an Initial Study checklist, CEQA requirements were fulfilled with a MND. The Initial Study was completed in September 2006 and the Draft MND was

distributed in October 2006 and comments will be received through November 2006. The Final MND will then be prepared and certified by the Los Angeles County Board of Supervisors in March 2007.

Environmental Documentation Submittals	
Initial Study Checklist	May 2006
Initial Study	September 2006
Draft MND	November 2007
Final MND	March 2007

Permit Acquisition

The project has a number of permits required for the project implementation and these permits will be acquired in concurrence with the project design. The project includes activities that, as defined in Section 1602 of the State's Fish and Game Code, potentially modify a lake and streambed. Activities include lowering the reservoir to the elevation of the intakes to the dam's outlet works, which are being modified to allow greater flexibility in dam releases, and moving away any sediment that has accumulated up against the outlet works and their intakes. The CDFG oversees compliance with the Fish and Game Code. A Streambed/ Lake Alteration Operation Letter from the State's Department of Fish and Game was obtained on June 21, 2007. The above activities are also regulated by Section 404 of the federal Clean Water Act, compliance with which is overseen by the Corps. A permit from the Corps is thus required and will be obtained. Issuance of federal permits requires compliance with NEPA. The project's activities are within the scope of the Corps' Nationwide Permit No. 3 (Maintenance of an Existing Flood Control Facilities). The Corps has already completed the necessary NEPA documents and Decision Notices for its Nationwide Permits. As a result, with the Corps' issuance of a Nationwide Permit for the project, the project will comply with NEPA. A Nationwide Permit 3 was issued on December 21, 2007. Before the Corps can issue its Section 404 permits, Section 401 of the federal Clean Water Act requires a water quality certification (401 WQC) from the State for the project. The State Water Resources Control Board (SWRCB), oversees the issuance of 401 WQCs. The State's RWQCB process the 401 WQC applications and make their recommendations to the SWRCB for 401 WQC conditions. A 401 WQC was obtained on August 24, 2007 for the proposed project.

~~The Department of Water Resources Division of Safety of Dams (DSOD) will be required to approve the final design on the intake modification plans. DSOD has approved the rehabilitation of the valves and control system modification in August~~

~~2005. The final approval of the intake structure modification is anticipated in June 2008.~~ Did not occur – see summary of scope changes, above)

Permitting Submittals	Purpose	Approval Date	Status
USACE 404 Permit	Construction in waterways	Dec 2007	Completed
CDFG Streambed Alteration Agreement	Construction in a streambed	Jun 2007	
RWQCB 401 Water Quality Certification	Complete Dewatering of Reservoir	Aug 2007	
~~DSOD Approval (intake structure modification)~~	~~Overview of Dam modification~~	~~June 2008~~	~~Final 100% Design of intake structure modification pending~~

(d) Construction

This task involves construction of the bid package by a general engineering contractor selected from an open competitive bid. The LACFCD anticipates to advertise for 60-days. Construction will be performed by a general engineering contractor that will be selected during a low-bid process; however contractors must show previous work experience in dealing with the type of work anticipated. A pre-bid meeting onsite will be held to outline the anticipated work and answer questions from prospective contractors. Once awarded, a 90 day move-in/staging period is anticipated.

~~The first year of c~~Construction will involve valve rehabilitation, the addition of two new jet flow gate valves, construction of a new control house and upgrade of the electrical infrastructure. ~~The project will involve fully dewatering the reservoir behind Morris Dam during the second year of construction and will require the relocation of fish from the reservoir to suitable downstream locations and institute best management practices to prevent impacts downstream from sediment-laden flows~~

The District will provide a full-time onsite inspector for the entire duration of the project and weekly contractor meetings will be held to discuss all work and any outstanding issues as they arise. The project is anticipated to be completed within 24 months.

Construction Submittals	
Notice to Proceed	Nov 2008
Notice of Completion	Nov 2010
Final Construction Summary Report	Nov 2010

(e) Environmental Compliance / Mitigation / Enhancement

Environmental compliance, mitigation, & enhancement activities will include benefits to habitat along the San Gabriel River, including increased recreational opportunities. A mitigation plan has not been defined but will be defined during completion of environmental documentation.

The impacts of the project will be of a temporary nature and will be fully mitigated. BMPs will be employed for water quality impacts. These BMPs will include desilting basins and check dams to minimize sediment-loading downstream of the dam during dewatering activities and protection measures to ensure minimal impacts to downstream resources. When the reservoir is lowered for outlet modification work, fish in the reservoir (most of which are non-native) will be removed and relocated to recreational areas approved by the CDFG. As is the current practice for releases from Morris Dam, the water released from the reservoir during its lowering will be directed to LACDPW numerous groundwater recharge facilities downstream, thus avoiding waste of the water to the ocean. These facilities include San Gabriel Canyon Spreading Grounds, Santa Fe Spreading Grounds, Peck Water Conservation Park, Rio Hondo Coastal Spreading Grounds, San Gabriel Coastal Spreading Grounds and the soft bottom reaches of the San Gabriel River itself.

The mitigation measures noted above will reduce the project's impacts to levels of non-significance. The MND documented the environmental impacts and the environmental benefits resulting from the project, discussed how the project's benefits from greater amounts conserved of local runoff equal, if not exceed, any temporary negative impacts of the project.

(f) Construction Administration

Construction management activities include resident engineering, inspection services, quality control, and general construction management duties. These activities will be performed by the LACFCD Construction, Flood Maintenance, and Water Resources Divisions. Engineering services during construction activities include technical support

by the design firm, Black and Veatch. These services may include pre-bid conference, design changes /requests for information associated with questions of the design and proposed design changes. Shop drawing review of architectural features including steel and concrete, mechanical valves and operators, and electrical power and control features. Site visits as needed will be performed by Black and Veatch to observe the progress of the contractor and ensure that the equipment and project are being constructed in conformance with the design.

Construction Administration Submittals	
Monthly Construction Reports	Quarterly

(g) Other

Monitoring, Assessment, and Performance Plans
A PAEP will be prepared upon notification of grant award.

Other Submittals	
Project Assessment and Performance Plans	Nov 2008

North Atwater Creek Restoration

Project Description

This project will construct water quality physical and structural improvements to an area adjacent the Los Angeles River. The project will restore the creek at the North Atwater Park for storm water runoff capture and treatment and provide habitat linkage to the Los Angeles River. This is part of an effort to restore and revitalize the Los Angeles River and its vicinity. Furthermore the project will restore the creek and treat runoff from a local storm drain with 62-acre drainage area. Figure 5-1 shows the schematic of the project.

Best Management Practices (BMPs) will be implemented to remove trash, oil, and sediment from entering the Los Angeles River. Also BMPs will be implemented at the adjacent stables and trails along the riverbank minimize bacteria waste from horses. This project will directly benefit the nearby economically disadvantaged communities of Atwater Village shown in Figure 5-2 by providing educational and recreational facilities.

Scope of Work

The Project scope of work includes seven primary tasks:

a. Project Administration
b. Land/Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement
f. Construction Administration
g. Other

The scope of work does not include land or right-of-way acquisition considerations because the project is located entirely within city property. Following is a description of each task as well as task deliverables to the State.

(a) Project Administration

Project administration tasks related to the project will be performed by City of Los Angeles staff, which includes managerial, engineering, field and clerical personnel. The project administration activities include the following tasks:

- Seek and coordinate City of Los Angeles and State funding for the project
- Coordinate the approval of the various stages of the project by the City of Los Angeles's Board of Public Works, and the City of Los Angeles Council
- Package construction contract proposal, advertise contract and solicit bids
- Evaluate bids, select contractor, and award bid
- Track overall project milestones, finance and budgets, and resource allocation
- Maintain project documentation
- Administer project quality control plan
- Prepare quarterly progress reports and deliverables to the State

- Oversee stakeholder participation through out project
- Coordinate maintenance training

Project Administration Submittals	
Quarterly Progress Reports	Quarterly

(b) Land/Right-of-Way Acquisition

This project is located entirely within City of Los Angeles property. No land acquisition is required.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

The planning phase of the North Atwater Project will include meetings with stakeholders and other city entities such as the LADPR and City of Los Angeles Council Districts 1, 4 and 13. Community groups that may be involved in this stakeholder process include the Friends of Atwater Village, Atwater Village Neighborhood Council, Atwater Griffith Park Chamber of Commerce and the Friends of Los Angeles Los Angeles River. This process also includes an environmental educational outreach program. Stakeholders meetings will be conducted quarterly throughout the duration of the project.

Also, the planning phase will study the preferred implementation of the project and will examine project implementation alternatives. Furthermore this will include additional on site studies.

Project Planning Submittals	
Preliminary Study	July 2006

Design / Engineering

Design Submittals	
10% Design and Cost Estimate	August 2008
50% Design	June 2009
90% Design	January 2010
Final Construction Documents	June 2010

The 10% Design will include:

- Surveys of the project site area and determining of staging of personnel and equipment
- Geotechnical report (soil boring test)
- Preliminary environmental report
- Complete hydraulic and hydrologic analysis to estimate flows and determine flow path
- Updated preliminary project schedule

- Conceptual site plans and design of access ways, walkways, parking lot, benches, rest areas, and restroom facilities
- Updated cost estimate
- Research permits required for the project

The 50% Design will include:
- Review issues and comments received at 10% design completion.
- Update cost estimation
- Environmental Documentation
- Building and Safety permits
- Survey Drawings
- Right of way maps and documentations
- Structural design and cost estimation for trash capturing system
- Pump sizing and flow calculation
- Landscape architectural layout of green areas, contour of the creek and wetlands
- Channel perimeter in-flow mitigation catch basin filters, improved utility access

The 90% design (pre-final) will include:
- Review issues and comments received at 50% design completion
- Update cost estimation
- Obtain Building and Safety permits
- Prepare survey drawings
- Right-of-way maps and documentations
- Update structural design and cost estimation for trash capturing system
- Environmental requirements have been incorporated
- Building and Safety and all other permit requirements have been incorporated in design
- Design calculations are correct and complete
- Research report numbers and expiration dates are properly shown in the plans

The 100% design (final) will include:
- Drawing details and sections
- Plans are completed and organized
- The locations and features of the structures, substructures, equipment, fixtures, piping, conduits, ducts, building members, building appurtenances and utilities are coordinated such that there are no physical conflicts that could prevent their installation or proper use.
- Ensure that there is adequate access to all equipment and fixtures that must be operated and maintained.
- Plan sheets and details are coordinated within and among design disciplines
- Plans and specifications are consistent and coordinated
- Project award is advertised for construction/implementation of project. The package consists of the complete, signed, and "As-Advertised" plans and specifications.

Environmental Documentation

An Initial Study Environmental Checklist Form (see Attachment 5-7) was prepared concurrently with this grant application that indicates that this project will not have an environmental impact. This project is also exempt from the requirements of CEQA per Exemption Class 1(4) of the City of Los

Angeles's CEQA Guidelines, which provides that "installation of new equipment and /or industrial facilities involving negligible or no expansion of use is exempt from the requirements of CEQA if required for safety, health, the public convenience, or environmental control."

Environmental Documentation Submittals	
Initial Study Checklist	June 2009
Notice of Exemption	June 2010

Task 3.4 Permit Acquisition

The only permit required for this project by a non-City of Los Angeles agency relates to the modification that this project will have on the Los Angeles River. While USACE has jurisdiction over the Los Angeles River, it has an agreement with the Los Angeles County Flood Control District (LACFCD) to have any permits related to modifications of the channel to be handled by LACFCD. The project involves the construction of a water intake from the bottom of the Los Angeles River. Based on past interaction with the LACFCD, a permit for this purpose will be issued anticipated to be within a period of two months. The permit will be submitted for approval after completion of 50% Design.

It is anticipated that no permit will be required from the Los Angeles RWQCB regarding the discharge of the water from the stream to the Los Angeles River since the runoff is being taking from surface streets already draining into the river.

Permitting Submittals	Purpose	Approval Date	Status
LACFCD Permit	To access the Los Angeles River and construct water intake	April 2007	During Design

(d) Construction / Implementation

A qualified contractor will conduct the construction of this project. The completed construction contract documents will be advertised and bids will be solicited the lowest responsible qualified bidder will be selected to construct this project. The construction of this project will consist of the following elements:

Runoff Diversion and Pre-Treatment that will intercept and treat stormwater that drains from 62 acres of the surrounding neighborhood onto the site via a concrete apron. The neighborhood can be characterized primarily as urban residential, with a high degree of impervious surfaces. The unit will be designed to intercept dry weather runoff and effectively remove trash and bacteria.

Creek Restoration and Creation of the Wetland that may involve grading and slope stabilization. Once pretreated, all stormwater is passed on to the stream channel. The stream channel would be restored to a much wider meandering course that displays physical complexity through integration of flood plains, coarse materials in the channel, and appropriate native drought-tolerant riparian vegetation.

In the lower third of the stream, a landscaped bioinfiltration pond would intercept and retain significant amount of stormwater. Integrated into the bed of the facility would be an engineered soil mixture, an underdrain, and a liner. The system would filter water through the soil layer and then slowly release the treated water to the outlet.

Landscaping were known exotic and invasive plants from the project area and the neighboring properties would be removed and replaced by planting of native vegetation capable of naturalizing (especially in riparian areas) or reseeding from park into channel areas.

Equestrian Facility BMPs will address the horse-related pollution from the stables located adjacent to the project site. These may include, but not be limited to, installation of vegetated swales around the facility, absorption pits, manure disposal management, and re-routing of drainage. Owners of the private parcel adjacent to the site will be encouraged to install similar BMPs. Installation of BMPs at private parcels would be the responsibility of the private owners. Units will be investigated that can intercept water from the equestrian facility before it enters the proposed wetland, if the installation of non-structural BMPs at the facility are deemed inadequate to effectively prevent contaminated runoff from entering the site. The units chosen must be able to effectively deal with horse waste.

Implementation of project construction will commence once the contractor has been selected a Notice to Proceed has been issued. The construction will be deemed complete by City of Los Angeles staff upon the completion of the final Construction Inspection Checklist.

Construction Submittals	
Notice to Proceed	Dec 2010
Construction Inspection Checklist	Dec 2012

(e) Environmental Compliance / Mitigation/ Enhancement

A primary goal of this task is to ensure that construction activity is consistent with regulatory requirements. This project will require the preparation of a Storm Water Pollution Prevention Plan (SWPPP) for the duration of the construction. This will involve both the project administrator and the construction contractor to have proper SWPPP certified training, a thorough SWPP on site and its proper implementation. This includes details on planning, staging, storing, transporting, sorting and disposal of materials removed from the park area during construction complying with all RCRA and other environmental standards. Maximum effort will be made to identify and recycle all recyclables.

Efforts will be made as part of this project to maximize its habitat benefit. A meeting with USFWS at the project site to discuss the project and its relationship to any populations of listed species known or considered potentially present will be scheduled. The purpose of the meeting is to optimize the habitat benefit of the proposed project. No permit is required from USFWS.

Finally construction will be carried out between the hours of 7:00 a.m. and 3:30 p.m. to comply with the Mayors ordinance in order to mitigate the effects of noise, light traffic and other environmentally detrimental factors on the neighborhood.

(f) Construction Administration

Construction management and engineering services during construction activities included will be performed by the City of Los Angeles. These efforts include:

- Identify and set up cost tracking mechanisms with related work orders.
- Complete Bid and Award Process, provide notice to proceed construction, provide neighborhood notification of construction project including its funding, duration, goals and objectives of the project
- Track the quality of the construction project by conducting periodic inspections
- Coordinate construction activities with all stakeholders by holding periodic meetings, reviewing construction progress and providing timely feedback.
- Identify lead inspector from the Bureau of Contract Administration, establish regular communications with the person

- Provide periodic updates to stakeholders through e-mail, mailings, and neighborhood meetings
- Provide information for the quarterly reporting to the State
- Complete project, follow up with reports, auditing spare parts and provide training for operations/maintenance personnel
- Close out of construction contract

(g) Other

A PAEP, A PAEP will be prepared upon notification of grant award, which is expected in June 2008, and will be completed in June 2010. A MP and QAPP will be prepared prior to start of construction completion, which is expected in December 2012.

Other Submittals	
Project Assessment and Evaluation Plan	June 2010
Labor Compliance Plan	June 2010
Monitoring Plan	December 2010
Quality Assurance Project Plan	December 2010

Pacoima Wash Greenway Project

Project Description

The planned Pacoima Wash Greenway, is a 3-mile long corridor of natural open space that will protect the land and water resources of the watershed. One of the goals of the greenway is to treat storm runoff from neighborhoods stream channel-adjacent for treatment and infiltration in BMP's integrated into a series of parks along the Pacoima Wash channel.
This Greenway component will be done in close cooperation between the City of San Fernando and the Mountains Recreation and Conservation Authority (MRCA). As a first step, the MRCA has purchased the property on April 1, 2005. This project is the first in a series of acquisitions and improvements for the planned Pacoima Wash Greenway.

Scope of Work

The project scope of work includes 6 primary tasks:

a. Project Administration
b. Land / Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement
f. Construction Administration
g. Other

A description of each task and task deliverables to the State are included in the following sections.

(a) Direct Project Administration Costs

MRCA staff will perform project administration over the life of the project, estimated at 8 hours a week. The duties performed will include:

- Provide for advertisement of contract.
- Distribute bid invitation and issue instructions to potential bidders.
- Evaluate bids and select lowest responsible bidder.
- Check that bonding requirements have been met.
- Let contracts and obtain procurement of services.
- Issue Notice to Proceed after all requirements have been met.
- Administer project finances.
- Schedule and coordinate construction meetings.
- Documentation of meetings.
- Maintain contract escrow bid documents.
- Control project records and document distribution.
- Handle basic administration, planning, meetings, actions and record keeping.
- Identify and coordinate stakeholders and their various roles and needs.
- Provide additional support for construction administration.
- Ensure and maintain proper labor practices and wage rates.

(b) Land Purchase / Easement

Acquisition of the 8th Street Project site was completed on April 1, 2005. Therefore, no additional effort or cost to acquire land for the project is required.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

A Conceptual Hydrologic Layout was prepared to analyze and summarize existing hydrologic conditions and to perform preliminary surface runoff calculations for project area and proposed hydrologic scheme appropriate for size of proposed park. The goal of this study was to identify a balance between existing and future hydrologic function and design feature capabilities. The study has resulted in a hydrologic scheme with technical recommendations for BMPs. This study is relevant to this project because it provides mean of dealing with urban runoff in aesthetic natural environment that provides recreational opportunities for community members and habitat for wildlife. MRCA completed the Conceptual Hydrologic Layout on January 31, 2006.

Planning Submittals	
Conceptual Hydrologic Layout	Jan 2006
Community Survey Form, Response Summary & Survey Results	June 23,2006
June 23, 2005 Community Meeting Sign-In and Minutes	June 23, 2005
LAUSD/City of San Fernando Meeting Sign-in	June 18, 2006
Pacoima Beautiful Meeting Sign-in	April 20, 2005
June 8, 2004 Meeting Sign-in	June 8, 2004

Currently components of the planning process that are in progress are the following:

- An additional survey is being conducted to include an area of the project that was not initially surveyed.
- A second round of debris removal and brushing is currently under way on the site (May 30,2006).
- Design meetings are regularly scheduled to meet with consultants and other stakeholders.
- Collecting and distributing necessary information to complete design and planning efforts.
- Continue to present project design to varies stakeholder and professionals in related fields.

Future planning efforts underway are Construction documents, which the MRCA and BlueGreen will take through the permitting process, with both the cities and the counties. Once the CD's are approved a final coast estimate will be completed to ensure project is within budget.

Design/ Engineering

Survey and site analysis were conducted by Soloff Surveying and Consulting and were completed in June 2005. The preliminary grading plan was conducted by BlueGreen Consultants and was completed in May 5, 2006. The plan is designed to divert and reduce peak flows from adjacent residential areas through project site BMPs before entering Pacoima Wash. Planting palette has been identified and planting plan is in development stage and the effort is being conducted by BlueGreen Consultants. MRCA contracted BlueGreen Consultants to develop construction documents and design details for site and to prepare BMP's. Engineering services have been contracted through BlueGreen Consultants for design curb/inlet/catch basin, stormceptors and sediment traps and overflow channel from infiltration basin. Engineering consultants John M. Cruikshank will review preliminary design.

BMPs:

MRCA and BlueGreen Consultants have met with City of San Fernando's City Engineer to discuss and prioritize the proposed project BMP's. Construction documents are being developed based on approved conceptual plan. BMP's such as the vegetated bioswale that mimics a natural stream and links water capture points to infiltration areas are being designed in detail.

Design / Engineering Submittals	
Preliminary Design	**Jun 2006**
Construction Documents	**Dec 2006**

Environmental Documentation

The CEQA process for the Pacoima Wash 8th Street Park is complete and included preparation of an Initial Study (IS) and a Mitigated Negative Declaration (MND). The Initial Study was completed on April 15,2005 and the Draft MND was submitted for public comment on May 20, 2005. After the 45 day comment period, the State Clearinghouse review requirements were fulfilled on May 19, 2005 and the only comments received were from Caltrans regarding use of oversize-transport vehicles. No comments were received from any of the other reviewing agencies (Resources Agency, Regional Water Quality Control Board, State Parks, Native American Heritage Commission, Office of Historic Preservation, Dept of Fish and Game, Dept of Water Resources, CHP, State Water Resources Control Board). The Notice of Intent was filed with the Los Angeles County Clerk on May 20, 2005 and the MRCA Governing Board adopted the MND on June 1, 2005 following the public review period of 30 days. No comments were received.

Environmental Documentation Submittals	
Initial Study	**April 15, 2005**
Mitigated Negative Declaration	**June 1, 2005**

Permitting Process

The permitting process will be initiated with the completion of engineering and final design 100% complete construction documents and will be conducted by MRCA. MRCA conducted a preliminary meeting with City of San Fernando's City Engineer for pre-approval of proposed BMP's and for alignment with city maintenance capabilities and requirements. MRCA also held a meeting with Los Angeles County Public Works to present project and to better understand County standards for projects in their jurisdiction.

Expected completion date for engineering and permitting process is September 2008.

Permitting Submittals	**Purpose**	**Approval Date**	**Status**
City of San Fernando	B permit	Conceptual approval	In Progress
Los Angeles County Public Works	permit	Conceptual approval	Completed
Los Angeles County Public Works	Storm Water Management Plan		In Progress

(d) Construction / Implementation

Initial site improvements to remove debris and exotic plant species were conducted by Triple R Construction in December 2005 and a temporary fence was installed to delineate and secure property. Construction will be initiated once plan is complete and all proper permits are in place. Construction will be performed by a General Contractor that will be selected after public bid process. A construction contract will be exactitude and a notice to proceed will be granted after all documentation has been reviewed.

The construction processes is expected to take nine to twelve months before completion, this will include the storm water components. The project will include the construction of two "Placitas" equipped with grating and underground stormceptors necessary to enable the BMP capabilities of filtering out trash and sediment from residential runoff. A vegetated bio-swale stream will be constructed to further filter the water and to transport the runoff across the park to a sand media infiltration basin. A bridge will be constructed for pedestrian and emergency traffic over the bio-swale stream. Decomposed granite paths, stone and tile work and irrigation will be also be constructed throughout the park. Other park amenities to be included in construction are fencing, decorative benches, an arbor and plantings.

Project has been bid out with Notice of Intent to Award Bid sent out June 6, 2008.

Estimated construction completion expected December 2009.

(e) Environmental Compliance / Mitigation/ Enhancement

Per the adopted MND, should conditions potentially affecting cultural resources, noise and or air quality be encountered, the defined mitigation measures will be implemented. Additional once

construction documents are completed, a meeting will be held with County Department of Public Works , specifically the Flood control division to review project.
Should construction or any other related activity cause an increase in airborne dust and or sediment runoff, appropriate mitigation measures will be implemented to ensure that there is no transport of sediment and construction materials off the project site.

(f) Construction Administration

BlueGreen Consultants are under contract to provide construction administration to ensure construction does not deviate from approved design and MRCA staff will provide general administration of contractor and consultants. Typically, the chief landscape architect from MRCA and the chief of construction from MRCA are involved along with project manager from MRCA. The MRCA construction administration tasks that will be conducted include:
-Scheduling and management of a pre-construction meeting with contractor and all involved parties.
-Arranging for a site survey to be conducted and making this document available to contractor.
-Requesting and managing a construction schedule provided by contractor.
-Documenting, processing or forwarding change orders.
-Checking that work is performed according to contract documents.
-Tracking work tasks and deliverable on the project's path.
-Performing or review progress updates and reports.
-Tracking work completion for payments
-Keeping track of work performed on "time and materials" basis.
-Identifying any ongoing operational constraints.
-Keeping track of site security issues.
-Keeping track of construction mitigation issues.
-Keeping track of health and safety issues.
-Verifying any intermediate, mechanical and contract completion milestones.
-Tracking extra work claims and credit.
-Weekly construction management meetings to begin starting July 2, 2008.

(g) Other

Monitoring, Assessment, and Performance Plans
A PAEP will be prepared upon notification of grant award, which is expected in November 2006, and will be completed by February 2007.

Other Submittals	
Project Assessment and Evaluation Plan	Feb 2007

San Gabriel Valley Riparian Habitat *Arundo* Removal Project

Project Description

The San Gabriel Valley Riparian Habitat *Arundo* Removal Project will restore natural riparian habitat and increase surface water flow to the Rio Hondo percolation basins in the San Gabriel Valley. The proposed project will remove 30 net acres of *Arundo donax* (*Arundo* or giant reed), which is classified Federally and by California as a noxious weed. The following description is taken from Noxious Wildland Weeds of California [Attachment 8, Reference 9-3]:

> *Arundo* displaces native plants and associated wildlife species as a consequence of the massive stands it forms. Several special status species are associated with California's semi-arid riparian zones, including Least Bell's vireo, Southwestern willow flycatcher and Yellow-billed cuckoo, all of which are negatively affected by the replacement of willow/cottonwood riparian vegetation by Giant reed. Unlike native riparian plants, *Arundo* provides little shading to the in-stream habitat, leading to increased water temperatures and reduced habitat quality for aquatic wildlife. At risk are protected species like Arroyo toad, Red-legged frog, Western pond turtle, Santa Ana sucker, Arroyo chub, Unarmored three-spined stickleback, Tidewater goby and Southern steelhead trout, among others.
>
> *Arundo* is also suspected of altering hydrological regimes and reducing groundwater availability by transpiring large amounts of water from semi-arid aquifers. It alters channel morphology by retaining sediments and constricting flows, and in some cases may reduce stream navigability. Dense growths present fire hazards, often near urbanized areas, more than doubling the available fuel for wildfires and promoting post-fire regeneration of even greater quantities of Giant reed. Uprooted plants also pose clean-up problems when deposited on banks or in downstream estuaries and during floods create hazards where trapped behind bridges and other structures.

Removal will occur at an average cost of $7,000 per net acre at three locations:

- San Gabriel River (at Whittier Narrows) [16 acres]
- Crossover Channel (North side by Whittier Narrows Dam and east of Rosemead Blvd) [7 acres]
- Rio Hondo River (at Whittier Narrows and north of San Gabriel Blvd) [7 acres]

Additionally, to restore natural riparian habitat by selective herbicide applications without biomass removal, proposed project will control other invasive exotic plants — including castor bean, Ailanthus, passion vine, small fan palms, small eucalyptus, tamarisk, perennial pepperweed, milk thistle, tree tobacco, fountain grass — at locations listed above [at Whittier Narrows] plus at Santa Fe Dam Basin, San Gabriel River channel in Azusa, and Eaton Canyon Park.

The Project is a continuation of larger campaign to eradicate all *Arundo* from urban riparian areas of San Gabriel Valley. Since 1997, over ten projects have removed *Arundo* throughout the Rio Hondo and San Gabriel River watersheds upstream of Whittier Narrows flood control basin and from parts of Whittier Narrows basin. *Arundo* control projects totaling about 95 net acres in San Gabriel Valley have been funded and/or managed by numerous organizations, including

USACE; LACDPW; USDA, Angeles National Forest; Azusa Rock Co/Vulcan Materials; Los Angeles Conservation Corps for City of Industry; Glenn Lukos Associations for City of La Habra; Center for Natural Lands Management for Los Angeles/Long Beach Harbors.

The proposed project of 30 net acres will complete protection of high-quality riparian habitat remaining at Whittier Narrows north of San Gabriel Blvd. and east of Rosemead Blvd. These targeted areas within Whittier Narrows basin do not qualify for funding of *Arundo* removal for the purpose of clearing flood control channels, as did most previously cleared *Arundo* infestations higher in the watershed.

Work Items through May 1, 2007

The following sections discuss work items that are either: 1) complete as of application submittal; or 2) will be completed by May 1, 2007. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. If the submittal was completed prior to application submission, the submittal is included with the application. Otherwise, if the submittal will occur after application submission, the submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs

Project administration will be conducted by Los Angeles & San Gabriel Rivers Watershed Council (LASGRWC) and includes contracting for *Arundo* removal and coordination with land owners or managers [e.g. USACE or Los Angeles County Department of Parks and Recreation (LACDPR)]. LASGRWC has contracted Riparian Repairs to provide project administration services as needed.

(b) Land Purchase / Easement

Acquisition of land or right-of-way is not required because Whittier Narrows basin is owned by USACE and partly managed by LACDPR. Necessary permits for access have been obtained.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

Mapping of two of three *Arundo* populations at Whittier Narrows was conducted by Bill Neill of Riparian Repairs in 2002 and 2004 and detail mapping used aerial photographs. Final mapping is posted at LASGRWC website (*http://www.lasgrwc.org/exotics.html*). The previous *Arundo* mapping was paid for by previous funding but the old maps warrant updating and a third area needs to be mapped based on recent aerial photos. The additional *Arundo* mapping will be complete by May 1, 2007.

Design / Engineering

Biomass reduction and herbicide treatment of *Arundo* will be applied using procedures proven to be economical and effective in previous riparian habitat restoration work.

Environmental Documentation

USACE issued a Categorical Exclusion in February 2002 for *Arundo* and non-native trees removal at Whittier Narrows Basin, Sepulveda Basin, and Los Angeles River at Glendale

narrows. The Categorical Exclusion was renewed in May 2006 and will add the Santa Fe Dam Basin and renew the term.

Environmental Documentation Submittals	
Categorical Exclusion	Original - Feb 2002 Renewed – May 2006

Permit Acquisition

CDFG issued Streambed Alteration Agreement 5-2002-0355 in October 2002 and renewed the agreement in May 2006 for projects in the San Gabriel Valley to cover a broad range of exotic plant removal activities. RWQCB 401 permit and USACE 404 permit are not required because the project does not negatively impact water quality or involve stream channel excavation (see Appendix 5-9).

Permitting Submittals	Purpose	Approval Date
CDFG Streambed Alteration Agreement	Regulates the impact of non-native exotic plant species removal on wildlife, such as ensuring the removal activities do not disturb nesting birds.	Original - Oct 2002 Renewed – May 2006

Work Items to Complete after May 1, 2007

The following sections discuss work items that will be completed after May 1, 2007. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted. All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. The submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs Project administration is conducted by LASGRWC and includes contracting for *Arundo* removal and coordination with land owners or managers (e.g. USACE or LACDPR). LASGRWC has contracted Riparian Repairs to provide project administration services as needed.

(d) Construction / Implementation Biomass reduction and herbicide treatment of *Arundo* will be applied by experienced contractors using procedures proven to be economical and effective in previous riparian habitat restoration work. Contractors for biomass reduction will be selected based on past performance and availability of tractor mowers on a low-cost basis. As on-site project manager, Riparian Repairs, will be responsible for mowing and chainsaw crew supervision and for herbicide application. *Arundo* will be removed by mowing/mulching tractors and herbicide application. Project implementation will consist of mowing/mulching 10 to 15 acres per year during 2007 and 2008 followed by herbicide treatment of *Arundo* resprouts from 2009-2011 until eradicated.

(e) Environmental Compliance / Mitigation / Enhancement The proposed project does not require mitigation because it will enhance riparian habitat. The proposed project will comply with environmental regulations specified by the CDFG Streambed Alteration Agreement, such as surveying for bird nests prior to tractor operation during nesting season.

(f) Construction Administration Riparian Repairs, as on-site project manager, will supervise contractors and report progress to LASGRWC.

Construction Administration Submittals	
Monthly Construction Reports	Quarterly

(g) Other A QAP and PAEP will be prepared upon notification of grant award.

Task includes conducting post-removal field mapping surveys of the treatment areas to document eradication effectiveness, identify new growth, and evaluate native plant succession.

Other Submittals	
Project Assessment and Performance Plans	Sep 2008

Solstice Creek Restoration Project

Project Description

This project is part of a larger project to restore Solstice Creek to a more natural condition through removal of debris, sediment, invasive species, and creek barriers. The restored riparian areas will provide habitat for federally endangered Southern Steelhead Trout. This particular project focuses on restoration of side drainages of Solstice creek and areas impacting the riparian zone through sediment and invasive species inputs. These areas are currently degraded by the presence of debris (old farming equipment) and non-native invasive plant species. The overall project involves eight components. Below is a table outlining the project components and their status.

Table 1: Project Overview

Component	Funding	Status
Remove barriers to fish passage and existing debris in channel: 1) Remove instream barriers to fish passage from NPS property. 2) Remove sediment and debris from the stream channel. 3) Replace two low water crossings with bridges.	Combination of NPS and California Department of Fish and Game funds. Total project cost: $540,000	Completed as of June 2007
4) Remove non-native invasive plant species from within the stream and stream banks	$210,000 from NPS $77,366 from Coastal Conservancy Proposition 12 Funds	On-going. Expect completion by December of 2009.
5) Restore work areas damaged during barrier removal.	Proposition 12 Funds from Coastal Conservancy.	On-going. Expect completion by December of 2009.
6) Remove non-native invasive species from side channels.	Prop 50 IRWMP	Begin work October 1st, 2008. Complete by December 30th 2010.
7) Remove non-native invasive species from areas influencing the riparian area (adjacent slopes) and re-vegetate with native plant species	Prop 50 IRWMP	Begin work October 1st, 2008. Complete by December 30th 2010.
8) Remove debris from adjacent slopes that could re-enter the stream course	Prop 50 IRWMP	Begin work October 1st, 2008.Complete by December 30th 2010.

Component of Larger Project

The larger project is to restore Solstice creek overall for enhancement of habitat for federally endangered southern steelhead trout. This project involves 8 components:

1) remove instream barriers to fish passage
2) remove sediment and debris from the stream channel
3) replace two low water crossings with bridges
4) remove non-native invasive plant species from within the stream and streambanks
5) restore work areas damaged during barrier removal
6) remove non-native invasive plant species from side channels
7) remove non-native invasive species from areas influencing the riparian area (adjacent slopes) and re-vegetate with native plant species
8) remove debris from adjacent slopes that could enter the streamcourse

Other grant funds have been obtained to accomplish steps 1-5. Steps 1 and 2 are complete. Step 3 complete (construction of two bridges). Steps 4 and 5 are in progress. Here we are seeking funds to complete the project by completing steps 6, 7, and 8. These restoration actions will provide long-term protection to the stream and steelhead habitat by removing all adjacent sources of debris, trash, and non-native invasive species propagules.

Scope of Work

The Project scope of work includes 6 primary tasks:

1. Project Administration
2. Land / Right-of-Way (ROW) Acquisition
3. Planning / Design / Engineering / Environmental Documentation
    a. Project Planning *(Financial Plan, Stakeholder Outreach, Studies)*
    b. Design / Engineering
    c. Environmental Documentation
    d. Permit Acquisition
4. Construction / Implementation
5. Environmental Compliance / Mitigation / Enhancement
6. Construction Administration

A description of each task as well as task deliverables to the State are included in the following sections.

Task 1: Project Administration

Project administration will be conducted by NPS restoration ecologist (in-kind federal donation 10% time) and by Mountains Restoration Trust staff at 10% time. Project administration will include hiring of project staff, overseeing budget, and processing of timecards and other administrative tasks. This will also include drafting and signing of cooperative agreement with grant administrating agency.

Task 2: Land / Right-of-Way Acquisition

No land or right of way acquisitions are necessary for this project. The project takes place entirely on NPS owned lands.

Task 3: Planning / Design / Engineering / Environmental Documentation

Task 3a: Project Planning

There is no financing plan for this project. All sources of funds for each aspect of the project have already been identified and are in hand except for the restoration funds requested in this proposal (see budget). For the restoration work to be funded by proposition 50 grant funds, Mountains Restoration Trust will advance the monies from base operating funds to fund this project until reimbursement is received from the grant funds.

Stakeholder Outreach. Stakeholder outreach was conducted as part of the original NEPA scoping for the overall steelhead restoration plan for Solstice Creek. This stakeholder outreach and public scoping was conducted in 2000 and 2002.

Project Planning Submittal(s)	
Financing Plan	Not Applicable
Public Workshop Attendance Sheet	Completed by 2001
Feasibility Study	Not Applicable

Task 3b: Design / Engineering

- The restoration work is designed based on previous work by NPS in Solstice Canyon. All work areas have been identified on the project map. Within each work area (Solstice Creek main stem plus two tributaries) individual disturbed areas will be located and mapped using global position system tools. Once disturbed areas are mapped, a detailed implementation plan will be developed for the entire project area. Overall the restoration plantings will be in groups of 3-5 plants. Plant groups will be 5 feet on center. For more details on the restoration project design, see Task 4, Implementation.

Design Submittal(s)	
10% drawings and cost estimate	Jul 7, 2005
30% drawings and cost estimate	Jul 7, 2005
60% drawings, specifications, and cost estimate	Jul 2006
90% drawings, specifications, and cost estimate	Sep 2006
Final construction documents	Nov 2006
Project Assessment and Evaluation Plan & Quality Assurance Protection Plan	Feb 2007

Task 3c: Environmental Documentation

This project requires NEPA permitting. An EA and public comment period were completed and permit issued for the entire Solstice creek steelhead habitat restoration project in August of 2005 (see attached FONSI). In addition, the park requires project specific NEPA compliance for our invasive species removal and re-vegetation activities. These activities were determined to be a categorical exclusion on November 10, 2003. This early environmental compliance was done for the ecological restoration portion of the project because we have been doing invasive species removal and native plant installation in the canyon riparian area as components of several projects since 2001.

Environmental Documentation Submittal(s)	
Environmental Assessment	Feb. 1st 2005
Finding of No Significant Impact	August 2005
Categorical Exclusion for Restoration Plantings	November 2003

Task 3d: Permit Acquisition

The restoration work described in this project only requires NEPA compliance from the National Park Service. No permits are required.

Task 4: Construction / Implementation

Development of Detailed Implementation Plan – Project Manager and NPS Restoration Ecologist

The detailed implementation plan includes maps and evaluations of each individual work area. The detailed implementation plan is the blueprint for the entire project and must be detailed and site specific. The infestation map, application of integrated pest management, and drafting of the plant palette comprise the detailed implementation plan.

4.1 Infestation mapping – Project Manager

Within the work areas shown in figure 5.1, each individual non-native invasive species infestation must be identified. Each infestation will be mapped using a Trimble GeoExplorer and transferred onto a site map. The area of each infestation will be identified and the surrounding vegetation will be described. Some of this work is being done by NPS staff as part of the post-fire recovery work in Solstice Canyon (funded by the NPS). This work will be completed by October 1st, 2008. Additional mapping and planning will be completed by the project manager by December 31st, 2008.

4.2 Application of Integrated Pest Management – Project Manager

After all infestations have been quantified, a removal plan will be developed for each infestation using integrated pest management principles. The most environmentally friendly and effective removal method will be chosen for each infestation on a site-specific basis. Removal efforts will start at the top of the watershed and work down stream. The integrated pest management plan will be completed by January 30th, 2009.

4.3 Pre-Project Monitoring – Project Manager

Prior to beginning eradication work, ten monitoring transects will be installed within the work area. The location of monitoring transects were chosen randomly and are identified in figure 5.1. At each location a 30 meter permanent transect will be installed. One meter square plots will be assessed for vegetation every 5 meters along the transect. In addition to vegetation transects, ten photopoints will also be installed and photographed prior to on the ground project work initiation. This monitoring work will be completed by November 30th, 2008.

4.4 Development of Native Plant Palette – Project Manager and NPS Restoration Ecologist

Based on the vegetation descriptions in 1.1, plant palettes will be developed for each infestation in 1.1. Each area will be re-planted with appropriate native vegetation grown from seed or cuttings from Solstice Canyon. Species may include Artemisia californica, Alnus rubra, Platanus racemosa, Encelia californica, Keckiella cordifolia, Venegazia carpesoides, Artemisia douglasiana, Salvia spathacea, Clematis lasiantha, Lessingia filaginifolia and others. Plant palettes will be completed by January 31st, 2009.

4.5 Growth of Plants for Outplanting – NPS Nursery Biotechnician

NPS nursery biotechnician and NPS volunteers will grow plants for this project based on the plant palettes developed for each infestation. Mountains Restoration Trust will pay NPS for needed plants for the project at a cost of $5.50/plant. Plants will be provided on an as needed basis from January 1st, 2009 through December 31st, 2010.

4.6 Installation of Native Plants – Project Manager and Volunteers

Restoration plantings will be installed using a combination of NPS and volunteer labor. The project manager will be responsible for planning volunteer planting days and coordinating field work. In addition, the project manager will recruit and train interested community members for on-going planting and site maintenance. We anticipate working with a wide variety of community, school, and youth groups based on our previous experience working in Solstice Canyon and other sites throughout the Santa Monica Mountains. The NPS has a large and diverse group of dedicated volunteers who assist with ecological restoration plantings and site maintenance. Plantings will take place on an on-going basis from January 2009 through December of 2010.

4.7 Site Maintenance Years 1 and 2 – Project Manager and Volunteers

The project manager will be responsible for aftercare of plants including watering, weeding, and mulching. Watering will be done using a combination of tank truck, direct watering from hosebibs where available, and use of fire backpack sprayers where necessary. The project manager will also train interested volunteers. Maintenance will occur on an on-going basis from January 2009 through December of 2010.

4.8 Post-planting Monitoring – Project Manager

The project manager will re-take photopoints and reassess permanent transects once a year for the duration of the project. This will occur in October 2009 and October 2010.

4.9 Site Maintenance Years 3-5 – NPS Restoration Biotechnician and NPS Restoration Ecologist

After the completion of the project in 2007, yearly site maintenance (weeding) will be accomplished by NPS base staff at no cost to the project.

4.10 Drafting and Submittal of Final Report – Project Manager

The project manager will analyze the monitoring data and submit a final project report by December 31st, 2010.

Task 5: Environmental Compliance / Mitigation / Enhancement

The environmental protection measures determined for this project during environmental review include only using a dibble for planting whenever planting occurs in an area of known archeological resources and posting public notices to inform the public about ecological restoration activities.

Task 6: Construction Administration

This project does not include construction so there is no construction administration.

South Los Angeles Wetlands Park – Work Plan

Project Description

This project will involve the purchase of a 9-acre site lcoated at 5413 Avalon Boulevard in Los Angeles. Part of the site is currently owned by the Los Angeles County Metropolitan Transportation Authority (MTA) and is operated as a vehicle service facility. The project will covnert this site into a wetlands park which will be designed to treat urban runoff from an 520-acre area. Subsequent to this project the site will olso incorporate additional educational facilities. The proposed project will involve stormwater runoff diversion facilites from an adjacent storm drain. Wet weather runoff will be routed to a pretreatment facility that will remove debris such as trash, vegitatio, and sediments. Runoff would then be pumped to the east end of the wetlands where it will undergo additional treatment as it flows through the wetland basin. The pretreatment and the wetland facilities will be designed to treat about 16 cfs which will incude the naussance flows and a small portion of the runoff during storm events.

The native plant species will also be chosen so that the site is self-sustaining during dry weather periods while providing addiitonal treatment for the stormwater runoff. Based on the expected climate and hydrology for the site, five plant communities/ habitats have been chosen for the South Los Angeles Wetlands site. These habitats are: open water, emergent marsh, riparian scrub, riparian woodland, and upland. Additional microhabitats can also be created onsite to attract specific species or specific plant species can be incorporated into the upland habitats to attract birds and butterflies. Where feasible, mature vegetation will be used to give the appearance of fully developed plant communities and to minimize the time for these communities to obtain 50% coverage, the point at which they may be considered self-sustaining.

The Wetlands Park will provide the South LA community a much needed public green space and recreational facility. Recreational activities that the park will offer include: bird and wildlife observation, photographic opportunities, trail walking and running. As part of the larger effort, a multi-use facility will be built onsite, which could accommodate community and school programming. As a former transportation facility, the site would include rail museum elements, such as historic photos, artifacts, and interpretive pieces to document the history of mass transit in the City and preserve architectural heritage through the re-use of historical buildings.

The park will also serve as an outdoor classroom for school-age children and adults alike. Visitors to the Wetlands Park will learn about aquatic and riparian ecosystems, and observe native California habitat and species. Educational signage in the park could also include explanations of the physical and biological processes at work in a wetland, as well as how wetlands reduce non-point source pollution.

Scope of Work

The Project scope of work includes 11 primary tasks:

a. Project Administration
b. Land / Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement

f. Construction Administration
g. Other

A description of each task as well as task deliverables to the State is included in the following sections.

(a) Direct Project Administration Costs

Project administration tasks related to the project will be performed by City of Los Angeles (City) staff, which includes managerial, engineering, field and clerical personnel. The project administration activities include the following tasks:

- Seek and coordinate City and State funding for the project
- Coordinate the approval of the various stages of the project by the City's Board of Public Works, and the City Council
- Package construction contract proposal, advertise contract and solicit bids
- Evaluate bids, select contractor, and award bid
- Track overall project milestones, finance and budgets, and resource allocation
- Maintain project documentation
- Administer project quality control plan
- Prepare quarterly progress reports and deliverables to the State
- Oversee stakeholder participation through out project
- Coordinate maintenance training

Project Administration Submittals	
Quarterly Progress Reports	Quarterly

(b) Land Purchase / Easement

The proposed site for the South Los Angeles Wetlands Park is located in the City of Los Angeles, approximately 5 miles south of downtown Los Angeles and approximately ½ a mile east of the 110 freeway. The neighborhood is considered South Central Los Angeles, which is a highly urbanized area, with limited open space and community facilities. The location falls within the jurisdiction of the Ninth Council District.

The South parcel of the property is bounded by 54th and 55th streets is currently owned by the MTA. The site was used as a vehicle repair station and the site is considered surplus property by MTA and they are a willing seller. Negotiations to acquire the property are near completion. On June 14, 2006, the Executive Management and Audit Committee of the Board of Directors of MTA unanimously approved the proposed sale. Councilwoman Jan Perry of the City of Los Angeles is leading the purchase acquisition efforts and has indicated that the land transaction is anticipated to be completed in the next two months.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

Many stakeholders have already been involved in the project thus far. Future stakeholder participation includes at least one public meeting that will include a wide range of neighborhood

community groups and regional environmental groups. Public meeting will be announced to maximize public participation and community involvement.

The project was the focus of the South Los Angeles Wetlands Park Concept Feasibility Report, which was completed in April 2003. The report creates a conceptual overview and feasibility to create project. The report outlines the area surrounding the project and the ability to create a recreational and educational open space that also provides beneficial reuse and improvement to water quality. The objective is to create a dialogue amongst community leaders, private citizens, regulatory, and funding agencies to maximize the beneficial use of the project for the community. The project is so highly regarded that it was included among six projects specifically sited in 2004 Collection Systems Settlement Agreement (CSSA) regarding sewage spills between City of Los Angeles, RWQCB, Santa Monica Baykeeper, and a coalition of community groups.

Project Planning Submittals	
South Los Angeles Wetlands Park Concept Feasibility Report	June 2006

Design / Engineering

The predesign (10% design) started in October 2006 and was completed in February 2008. This task finalized the project layout, the project workplan, and a preliminary cost estimate. This preliminary design was reviewed by various City departments and interested stakeholders. Subsequently, the 50% design will be conducted and will prepare detail plans and specifications. The 90% design will address comments received from the 50% design phase. The final construction documents will be prepared and will include final plans, specifications, and project engineer's detail cost estimate. This design of the project may be conducted by a qualified contracted consultant.

The 10% Design will include:

- Surveys of the project site area and determining of staging of personnel and equipment
- Geotechnical report (additional soil boring tests)
- Preliminary environmental reporting needs
- Complete hydraulic and hydrologic analysis to estimate flows and determine flow path
- Updated preliminary project schedule
- Conceptual site plans and design of park and treatment facilities
- Updated cost estimate
- Research permits required for the project

The 50% Design will include:

- Review issues and comments received at 10% design completion.
- Update cost estimation
- Environmental documentation
- Building and Safety permits if required
- Survey drawings
- Right of way maps and documentations
- Structural design and cost estimation for treatment and pumping facilities
- Pump sizing and flow calculation
- Landscape architectural layout of green areas, and contouring of the wetlands

The 90% design (pre-final) will include:

- Review issues and comments received at 50% design completion
- Update cost estimation
- Prepare survey drawings
- Right-of-way maps and documentations
- Update structural design of the treatment and pumping facilities
- Environmental requirements have been incorporated
- Design calculations are correct and complete
- Research report numbers and expiration dates are properly shown in the plans

The 100% design (final) will include:

- Drawing details and sections
- Plans are completed and organized
- The locations and features of the structures, substructures, equipment, fixtures, piping, conduits, ducts, building members, building appurtenances and utilities are coordinated such that there are no physical conflicts that could prevent their installation or proper use.
- Ensure that there is adequate access to all equipment and fixtures that must be operated and maintained.
- Plan sheets and details are coordinated within and among design disciplines
- Plans and specifications are consistent and coordinated
- Project award is advertised for construction/implementation of project. The package consists of the complete, signed, and "As-Advertised" plans and specifications.

Design Submittals	
10% Design and Cost Estimate	Feb 2008
50% Design	Dec 2008
90% Design	Oct 2009
Final Construction Documents	Sep 2010

Environmental Documentation

The environmental documentation will be completed concurrent with the completion of the design.

Environmental Documentation Submittals	
Initial Study Checklist	June 2006
CEQA Documentation	Sep 2010

Permit Acquisition

Two environmental assessments, a preliminary endangerment assessment (PEA) and a supplemental site assessment were performed in 2004 and 2005 to identify subsurface contamination, if any. The PEA identified eight areas of potential concern for investigation. In response to the PEA, a Supplemental Site Assessment (SSA) was conducted. Based on the SSA findings, the California Department of Toxic Substances Control determined that the site would be suitable for a Wetlands Park provided that the pretreatment clarifiers that are still on-

site are properly abandoned. The City will submit its plan for the removal of the clarifiers and request permission to proceed in November 2008.

City-issued permits will be obtained from the City of Los Angeles. A meeting with United States Forestry and Wildlife Service (USFWS) at the project site to discuss the project and its relationship to any populations of listed species known or considered potentially present will be scheduled. No USFWS permit is required.

Permitting Submittals	Purpose	Approval Date	Status
DTSC Permit	For abandonment of clarifiers and approval of site use	November 2008	Will be submitted in Dec 2008

(d) Construction / Implementation

Construction Submittals	
Notice to Proceed	Sep 2010
Final Construction Inspection Checklist	Jun 2013

A qualified contractor will conduct the construction of this project. The completed construction contract documents will be advertised and bids will be solicited the lowest responsible qualified bidder will be selected to construct this project. The construction of this project will include a number of key elements.

Diversion of stormwater runoff will involve the construction of a berm along the storm drain that will route the flow to a pretreatment structure.

Pretreatment system will provide removal of trash, sediment and vegetation. This will be accomplished through the use of a hydraudynamic separator such as a CDS system.

Pump Station is needed due to the elevation of the storm drain in relation to the upstream end of the wetland.

Wetlands will consist of a deep marsh system with a vegetated main channel. For the central part of the wetlands, significant amount of soil will be removed that will serve as fill for the peripheral area.

Irrigation and Piping System will ensure that the flow is properly distributed and that during the dry season adequate water is distributed to the plants. A "Smart Irrigation" system will be selected for this purpose.

Since the site is located in a densely populated area of the City, construction scheduling needs to be done such that the surrounding neighborhoods are not drastically impacted by the construction activities. As one of the goals is to improve the neighborhood for its residents, the impact on the residents during construction is an important consideration, which will include the frequency and duration of street closures, truck traffic, street sweeping, watering the site during grading activities to reduce dust, etc.

Additionally, the sequencing of construction needs to be phased such that the new habitat is immediately supported by the water supply once the plants are installed (i.e. the runoff needs to

be completely diverted and able to begin watering the wetlands before the wetlands habitat can be installed). Furthermore, the time of year that the project is built needs to account for the potential of wet season storm events, and therefore certain portions of construction should not be done during the wet season.

Existing structures that will require demolition include the MTA buildings and their associated parking lots. A staging area for construction vehicles will be onsite and traffic control measures, according to the approved traffic control plan, will be implemented along affected streets. Per communication between the California Department of Toxic Substances Control (DTSC) and the City of Los Angeles, any contaminated soil at the site will be extracted before the remaining construction tasks begin.

(e) Environmental Compliance / Mitigation/ Enhancement

The historical activities at the site have led to its classification by the California Department of Toxic Substances Control (CDTSC) as a site mitigation and brownfield reuse site (Envirostor Database ID 60000138) (CDTSC 2005). Per CDTSC, brownfields are sites with actual or perceived contamination and the potential for redevelopment or reuse. A Site assessment was conducted to determine any subsurface contamination. Two environmental assessments, a preliminary endangerment assessment (PEA) and a supplemental site assessment were performed in 2004 and 2005 to identify subsurface contamination, if any. A PEA was completed by UltraSystems Environmental Inc. in July 2004. The PEA identified eight areas of potential concern for investigation. In response to the PEA, a Supplemental Site Assessment (SSA) was completed by Ninyo and Moore in June 2005 and found that the organic contaminants concentrations to be below levels that would require remediation. DTSC has concurred that the site is suitable for a wetlands park.

Because the site currently has a number of abandoned pretreatment clarifiers, these need to be removed prior to execution of the other implementation tasks.

Another primary goal of this task is to ensure that construction activity is consistent with regulatory requirements. This project will require the preparation of a Storm Water Pollution Prevention Plan (SWPPP) for the duration of the construction. This will involve both the project administrator and the construction contractor to have proper SWPPP certified training, a thorough SWPP on site and its proper implementation. This includes details on planning, staging, storing, transporting, sorting and disposal of materials removed from the park area during construction complying with all RCRA and other environmental standards. Maximum effort will be made to identify and recycle all recyclables.

(f) Construction Administration

Construction management and engineering services during construction activities included will be performed by the City of Los Angeles. These efforts include:

- Identify and set up cost tracking mechanisms with related work orders.
- Complete Bid and Award Process, provide notice to proceed construction, provide neighborhood notification of construction project including its funding, duration, goals and objectives of the project
- Track the quality of the construction project by conducting periodic inspections
- Coordinate construction activities with all stakeholders by holding periodic meetings, reviewing construction progress and providing timely feedback.

- Identify lead inspector from the Bureau of Contract Administration, establish regular communications with the person
- Provide periodic updates to stakeholders through e-mail, mailings, and neighborhood meetings
- Provide information for the quarterly reporting to the State
- Complete project, follow up with reports, auditing spare parts and provide training for operations/maintenance personnel
- Close out of construction contract

(g) Other Costs

Monitoring, Assessment, and Performance Plans

The Project Assessment and Evaluation Plan, the Monitoring Plan, and the Quality Assurance Project Plan will be prepared prior to construction completion, which is expected in December 2008.

Other Submittals	
Project Assessment and Evaluation Plan	Dec 2008
Monitoring Plan	Dec 2008
Quality Assurance Project Plan	Dec 2008

Whittier Narrows Water Reclamation Plant UV Disinfection

Project Description

This project will convert the disinfection practices at the 15 million gallons per day (mgd) Whittier Narrows WRP from chlorination to a dual barrier disinfection process utilizing UV irradiation and a small dosage of free chlorine. Currently, the tertiary-treated filtered effluent that this plant produces is disinfected to Title 22 standards by chloramination, which requires the addition of chlorine and ammonia. The vast majority of this water is currently discharged to the Rio Hondo and San Gabriel Coastal Basin Spreading Grounds, also known as the Montebello Forebay Groundwater Recharge Project, where the effluent is blended with other water supplies for groundwater replenishment.

This groundwater, after subsequent pumping and treatment, ultimately becomes the drinking water supply for over one million residents in the greater Los Angeles area, including for many disadvantaged communities. In the near future, a portion (approximately 4 mgd) of the treated flow will be beneficially reused to irrigate an adjacent recreational park area, instead of being discharged. The remaining recycled water (~9 mgd) from the Whittier Narrows WRP will continue to be used for groundwater replenishment.

Over the past decade, LACSD has successfully converted the Whittier Narrows WRP, as well as a number of other water reclamation plants, to a nitrogen removal process known as nitrification/denitrification (NDN). These changes were made to comply with new requirements for ammonia contained in NPDES permits for these facilities and were required to be met by June 2003. NDN has been successful at lowering effluent ammonia levels, making the effluent less toxic to aquatic life.

However, an unintended consequence of the newly implemented treatment process is that higher levels of NDMA are produced in the final disinfection step. Since the modification of the treatment plants to the NDN mode, NDMA has been observed at shallow groundwater monitoring wells which are part of the Whittier Narrows Operable Unit. These wells are near the Whittier Narrows WRP discharge point to the Rio Hondo Spreading Grounds and the elevated NDMA levels have been linked to Whittier Narrows WRP effluent by joint studies performed by LACSD and the EPA, and in turn reviewed by California DHS and the Los Angeles RWQCB. This project will change the disinfection practice from chloramination to UV light irradiation in conjunction with some free chlorine to prevent NDMA generation and destroy a significant portion of NDMA that is normally in the effluent as well as result in secondary water quality benefits. This project, in combination with other LACSD actions to address the elevated NDMA levels (such as source control, operational changes at the Whittier Narrows WRP, and research and development of a dilution and attenuation model), should:

- Restore the groundwater to the NDMA levels that were typically observed before the NDN implementation;
- Assure compliance with multiple regulatory requirements (such as those for disinfection and for water recycling);
- Allow continued use of recycled water for groundwater recharge;

- Ensure no new issues regarding disinfection byproducts arise, such as trihalomethanes, and reduce or eliminate the potential for ammonia to be present in the treated effluent.

Most importantly, this project will ensure that up to an average of 50,000 afy of recycled water can continue to be recharged into the Montebello Forebay of the Central Basin, thus avoiding the need to import water from other regions for that purpose. This amount of effluent is the annual volume of recharge permitted from the three tributary LACSD facilities: Whittier Narrows WRP, San Jose Creek WRP, and Pomona WRP. The Whittier Narrows WRP currently contributes most of its effluent to this project (currently 5,600 afy) and will contribute more in the future (up to 10,000 afy) after other plant modifications are implemented. The other two plants mentioned above contribute the remainder, and are linked to this project by their NPDES permits and the regional NDMA issue. The Montebello Forebay Groundwater Recharge Project is a joint project of LACSD, Water Replenishment District of Southern California (WRD) and LACDPW.

UV disinfection at the Whittier Narrows WRP is a pivotal project because it is a demonstration project of this technology at LACSD facilities and one of only a few publicly owned treatment works in the Los Angeles Region to employ this technology at a tertiary wastewater treatment plant. Following successful project implementation and operations, other LACSD water reclamation plants may also convert to UV disinfection. This project is an important first step in the conversion process because lessons learned from this project will be applied at the other plants, as appropriate, in a cost-effective manner.

As mentioned above, the project is an important water quality improvement project that is part of a set of investigations and actions underway to address elevated NDMA levels in tertiary treated water disinfected by chloramination. These activities are described in supporting documents, including the San Jose Creek and Pomona Water Reclamation Plants NPDES permits (Order Nos. R4-2004-0099 and R4-2004-0097, Finding No. 48 and 47, respectively) (Attachment 8, References 12-2 and 12-1, respectively) and reports that have been submitted to the Los Angeles RWQCB [see Attachment 8, Reference 12-1 (Letter to Los Angeles RWQCB dated April 2004]. These other activities are mostly being performed in parallel and include, among other things, source control, technical research, operational changes to the Whittier Narrows WRP and to the Montebello Forebay Spreading Operation, and attenuation and dilution studies (including development of a model).

The project is pivotal because it will serve as a UV demonstration project for LACSD (which operates a total of 10 water reclamation plants in Los Angeles County), as well as for the region. The lessons learned from the Whittier Narrows WRP conversion will be valuable in evaluating and designing upgrades at the other plants to the dual disinfection approach. Because UV disinfection is not commonly used at other water
reclamation plants in this region, this project will also serve as a model for other treatment plants and agencies outside of LACSD.

Work Items through April 15, 2008
The following sections discuss work items that are either: 1) complete as of application submittal; or 2) will be completed by April 15, 2008. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. If the submittal was completed prior to application submission, the submittal is included with the application. Otherwise, if the submittal will occur after application submission, the submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs

Project administration tasks related to the project will be performed by LACSD staff, which includes managerial, engineering, field and clerical personnel. The project administration activities through April 15, 2008 include the following tasks:

- Develop contract agenda item for the LACSD Board of Directors
- Provide for advertisement of contract
- Distribute bid invitations and issue instructions to potential bidders
- Evaluate bids and selection of lowest responsible bidder
- Check that bonding requirements have been met
- Let contracts and obtain procurement of services
- Give Notice to Proceed after all requirements have been met

(b) Land Purchase / Easement

The land associated with this project is already leased by LACSD, owned by the Federal Government, and operated by USACE. Therefore, no additional effort to implement the project is required.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

The feasibility of the project has been addressed by vendor equipment validation studies, in-house pilot studies, and a Preliminary Design Report prepared by LACSD. Equipment validation studies determined the power and effluent flow per lamp to achieve the required dosage with effluent of different UV transmissivity. This allows the calculation of the overall number of UV lamps required and the necessary power for different flows and effluent conditions for daily operational control. Additional in-house pilot studies were performed at Whittier Narrows WRP to make sure no other disinfection byproducts, such as cyanide, were being generated that would cause compliance issues in the future. The Preliminary Design Report analyzed retrofitting the existing facilities with the dual disinfection process and making it work in conjunction with a newly completed reuse pump station design and construction that was recently completed.

At least two public meetings were held as part of the environmental documentation process and attendance sheets for each meeting have been submitted to the State. Also, a number of meetings have been held with various agencies, including the WRD, LACDPW, Los Angeles RWQCB, United States Environmental Protection Agency (EPA) (Region IX), DHS, LACDPR, and Upper San Gabriel Valley Municipal Water District.

Design / Engineering

The Preliminary (30%) Design was completed in November 2005 (see Appendix 5-12) and the final design was completed by September 2007. The preliminary and final designs were

prepared by LACSD staff. A description of each stage of design and submittals are discussed in the following sections.

Preliminary (30%) Design - The Preliminary Design was completed in November 2005 and included project objectives, facility siting and facility layout. A cost estimate was performed based on the results of validation work conducted by the two major UV equipment vendors, Trojan and Wedeco. The number of UV lamps was determined for the design UV transmittance, peak sanitary flow and peak wet weather flow conditions.

UV System Procurement - The UV System Procurement submittal will include details of the solicitation, evaluation and selection of UV system proposals. All pertinent documents will be provided including the Request For Proposal, proposals, proposal evaluation documents, and all associated transmittal letters. Pre-selection of the UV system was necessary so that the successful bidder's equipment could be incorporated into the design. The UV equipment procurement agreement was structured so that it would ultimately be transferred to the contractor. The final cost of the UV system will be provided in the submittal.

Final Design - Final Design & Construction Documents will consist of the design package that was advertised for project award for construction/implementation of the project. The package will consist of the complete, signed, "As-Bid" plans and specifications. Also, a final cost breakdown will be provided based on the Contractor's submitted baseline schedule.

Environmental Documentation

The project underwent environmental review in conformance with CEQA. The project was found to be categorically exempt from CEQA per Article 15302 c of the CEQA Guidelines because the project consists of the functional replacement of existing disinfection facilities with new disinfection facilities located on the same site and having the same purpose and capacity as the replaced facilities.

Environmental Documentation Submittals	
CEQA Documentation (Notice of exemption)	Aug 2007

Permit Acquisition

The project has a number of permits required for project implementation. These permits will be acquired in concurrence with progress on the project design, depending upon the specific permit.

System validations, which are the basis of design, must be on file with, and accepted by, CA DPH. The two major UV equipment vendors, Trojan and Wedeco, were invited to pilot test their equipment at the Whittier Narrows WRP using actual plant effluent, which is recommended for relatively large projects such as this one. Trojan agreed to validate their UV equipment with both LSI and Heraeus lamps, but Wedeco preferred to rely on their previous validation work. Trojan's validation tests showed that the Heraeus lamp system was the most efficient and would require the fewest lamps for our project. The Heraeus lamp system validation and the associated end of lamp life validation were accepted by DPH at the end of April 2006.

Permitting Submittals	Purpose	Approval Date	Status
DHS Letter of Acceptance of Trojan Equipment Validation– Heraeus lamps with 4 inch spacing	Dosage regression and EOLL approval necessary for design with Heraeus lamp system	Apr 2006	Accepted by DPH
Engineering Report	Describe basis of design to DPH and RWQCB	Jun 2008	Will be submitted in Apr 2008

(d) Other Costs

A PAEP was prepared in March 2008. The PAEP includes the required elements of the QAPP and MP. A Labor Compliance Plan was accepted by the Districts' Board of Directors in December 2007.

Other Submittals	
Project Assessment and Evaluation Plan (PAEP)	Mar 2008
Labor Compliance Plan	Dec 2007

Work Items to Complete after April 15, 2008

The following sections discuss work items that will be completed after April 15, 2008. The work items are divided into each of the seven primary budget tasks but tasks without work items are omitted.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion. The submittal will occur upon completion of the work as indicated in the submittal tables.

(a) Direct Project Administration Costs

- Project administration tasks related to the project will be performed by LACSD staff, which includes managerial, engineering, field and clerical personnel. The project administration activities after April 15, 2008 include the following tasks:
- Administer project finances
- Maintain contract escrow bid documents
- Control project records and document distribution
- Handle basic administration, planning, meetings, actions and recordkeeping
- Identify project stakeholders and their various roles and needs
- Ensure and maintain proper labor practices and wage rates
- Administer project quality control plan
- Manage risk assessment plan

Project Administration Submittals	
Quarterly Progress Reports	Quarterly

(b) Planning / Design / Engineering / Environmental Documentation

Permit Acquisition

The Engineering Report will provide regulatory agencies (such as the California Department of Health Services, Los Angeles County Department of Health Services, Regional Water Quality Control Board and State Water Resources Control Board) with design basis details and demonstrate that modifications will be successfully incorporated in the existing treatment train. Also, the report will include details on the UV equipment, monitoring, controls, reliability, contingency plans, operation and maintenance, and training of personnel.

The Field Commissioning Tests are performed to ensure that the UV disinfection system is operating properly and according to its intended design. The commissioning tests include testing of electrical components, flow velocity or bioassay testing through the reactors, flow splitting among reactors, water level control, other controls and alarms, and instrument calibration.

Permitting Submittals	**Purpose**	**Approval Date**
Engineering Report	Describe basis of design to DPH and RWQCB	Jun 2008
Field Commissioning Test – First Two UV Trains	Verify operational integrity to DPH and RWQCB	May 2009
Field Commissioning Test – Total UV System		Dec 2009

(c) Construction / Implementation

Construction will be performed by a general contractor that was selected through a competitive bid process. The construction project will include the construction of UV reactors and flow distribution channels. The following major equipment items will be included: 1) UV disinfection system 2) filter backwash pump; and 3) slide gates.

A large portion of the cost of a UV construction project is the UV disinfection system. This equipment will be constructed in concrete UV reactors on the top of two existing chlorine contact tanks (CCTs). These existing CCTs will then be used for storage of recycled water. A new recycled water pump station located next to the CCTs has recently been completed. The work will be split into two phases, in which one CCT is taken out of service at a time to keep the plant operational.

A new filter backwash pump will be provided in one of the contact tanks to even out the effluent flow for UV disinfection, since the required UV dosage application is very flow sensitive. Other work consists of installing flow channels for routing of water to storage or receiving water, automated sluice gates and weirs to provide isolation and flow control, and sampling modifications so the proposed facilities can meet existing regulatory requirements.

Existing chlorination facilities will be modified to provide for a dual barrier system utilizing free chlorine. Chlorine will also provide the option of maintaining a chlorine residual for the reuse pipeline. Existing ammonia facilities will be modified so that the pipeline residual can be a free chlorine residual or chloramine residual, at the discretion of the purveyor.

The sequence of construction and implementation follows from the above description and the schedule contained in Attachment 7. Construction will begin by taking the first of two existing chlorine contact tanks out of service and constructing the UV channels on top. The second CCT will continue to be operated with existing chloramination disinfection. Other work will be performed concurrently to modify the filter effluent pump station piping, sampling equipment and the chlorination and washwater facilities.

Following fabrication and delivery of UV equipment, installation will proceed on the first two of four UV trains. Then the field-commissioning tests will be performed on the first two trains, with the test report submitted to CA DPH and the RWQCB. Since the acceptance of the field commissioning will require an uncertain amount of time, the first modified CCT will be returned to chloramination service in order to continue to produce effluent meeting Title 22 requirements for reuse. The second CCT will be taken out of service and construction will proceed on the two UV channels over that CCT. The filter effluent backwash pump and equipment will also be installed. Field-commissioning tests will be performed on the final configuration of UV trains and a report will be submitted to DPH and the RWQCB. Upon acceptance of a field-commissioning test report by DPH, the entire disinfection operation will be switched to the dual barrier disinfection system.

Although the occurrence of wet weather is not considered a major factor in this construction project, the Whittier Narrows WRP does provide hydraulic relief of the downstream sewers and the JWPCP. The inflow and infiltration of water into the sewer system that are associated with normal rainfall amounts can usually be tolerated without spills. However, if there are successive storms and forecasts of heavy rain, the construction sequence may be altered to provide extra

capacity at the Whittier Narrows WRP in order to avoid sanitary sewer overflows downstream or to provide extra hydraulic relief at the JWPCP.

Construction Submittals	
Notice to Proceed	Mar 2008
Project Acceptance by LACSD Board of Directors	Jan 2010

(d) Environmental Compliance / Mitigation / Enhancement

Anticipated activities include routine dust control and sediment control.
Dust control will be an issue during concrete demolition and traffic around the construction area. There is no earthwork involved with this project. Sediment control will be an issue at the contractor's laydown area but no transport of sediment and construction materials off the plant boundaries will be addressed.

(e) Construction Administration

Construction administration/management will be performed by LACSD engineering staff and will include the following activities:

- Manage pre-construction meeting
- Check qualifications of construction management team
- Evaluate qualifications of special inspection where applicable
- Arrange for survey to set stakes and stationing
- Process or forward requests for information (RFI's)
- Check that work is performed according to contract documents
- Check that equipment is supplied according to approved submittals
- Track work tasks and deliverables on the project's critical path
- Interpret information from project management software tools
- Perform or review progress updates and reports
- Track work completion for payments
- Keep track of work performed on "time and materials" basis
- Coordinate shutdowns and critical work with plant operations
- Identify any ongoing operational constraints
- Keep track of plant security issues
- Keep track of construction mitigation issues
- Keep track of health and safety issues
- Provide for checkout of equipment and systems
- Verify any intermediate, mechanical and contract completion milestones

Engineering services will be performed by LACSD engineering staff and will include the following activities:

- Establish construction milestones and evaluate liquidated damages
- Define the project Grant Contract Scope of Work and distinguish out of scope work
- Issue contract drawings and specifications
- Perform pre-bid jobsite walk-through

- Issue addendums to contract documents
- Obtain fire department approval where applicable
- Review contractor badge and security system
- Work with contractor and field for acceptance of baseline construction schedule
- Review submittals
- Provide services for witness testing where applicable
- Process requests for information (RFI's) received from the field
- Issue changes in work as appropriate
- Track extra work claims and credit
- Process engineering change orders
- Document with change orders with justifications and forward for legal review

Construction Administration Submittal	
Monthly Construction Reports	Monthly

Wilmington Drain Restoration Multiuse

Project Description

The City of Los Angeles envisions restoring Wilmington Drain via a multi-step approach including native re-vegetation, storm water containment, pretreatment, enhanced public access and educational signage. This strech of the drain occupies an area of 20 acre area betweeen the City of Lomita and Lomita Blvd. to the North, and the City of Los Angeles, Kenneth Malloy Harbor Regional Park to the South. The drain is a Los Angeles County drainage easement conveying flow from a drainage area of about 14 square miles. Upsteam from the proposed project site, the drain is concrete lined. The portion of the drain that is targeted by this project consists of a soft-botton channel that has been designated by USGS as a blue-line stream.

A detailed project layout was developed in June 2006 and will be further revised upon additional participation by interested groups. Non-native landscaping will be removed and replaced with appropriate native species. Storm water flow control will be achieved using natural materials and well-planned landscaping features, avoiding the need for destructive clearing of the channel. A sediment and trash capture component will provide necessary pre-treatment of storm water flows before they reach the restored habitat areas. Decomposed granite trails with educational signage will provide learning and passive recreational opportunities.

The project will create a public park to provide recreational apportunities for the surrounding disadvantaged communities. The park will include multiple annemities, including a fenced off-leash dog area. Site furnishing will include tree-shaded benches, drinking fountains, quality concrete waste receptacles, and picnic tables shall offer visible seating and safe gathering spaces. The park will also allow for a utility access on the west bank. Other park features include a 12-foot wide access roads with compacted stabilized decomposed granite paving, fencing, access gates, pedastrian trails, signage, and fencing.

Scope of Work

The project scope of work includes seven primary tasks:

a. Project Administration
b. Land / Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement
f. Construction Administration
g. Other

A description of each task as well as task deliverables to the State is included in the following sections.

(a) Direct Project Administration Costs

This project will be administered by the LADPW. The staff and their duties will consist of clerical, managerial, engineering, design, construction administration, field and office work. The major tasks will include the following:

- Seek and coordinate City of Los Angeles and State funding for the project

- Coordinate the approval of the various stages of the project by the City of Los Angeles's Board of Public Works, and the City of Los Angeles Council
- Package construction contract proposal, advertise contract and solicit bids
- Evaluate bids, select contractor, and award bid
- Track overall project milestones, finance and budgets, and resource allocation
- Maintain project documentation
- Administer project quality control plan
- Prepare quarterly progress reports and deliverables to the State
- Oversee stakeholder participation through out project
- Coordinate maintenance training

Project Administration Submittals	
Quarterly Progress Reports	Quarterly

(b) Land Purchase / Easement

The proposed park is in a flood control channel and the adjacent easement is administered by LACFCD. The City of Los Angeles and LACFCD have cooperated in preparing the existing feasibility study and on the development of the project. Tentatively, it has been agreed that the park component of this project will be operated by the City of Los Angeles and the trash capture component will be operated by the Los Angeles County.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

The Wilmington Drain Restoration Multiuse Project Concept Report regarding this project was completed in June 2006 (see Attachment 5-13). The report identified the project layout and sought input from stakeholders, such as the Los Angeles County, elected officials from the area, the Audubon Society, the Department of Recreation and Parks, and Los Angeles County. A workshop will be held in late June 2006.

Planning Submittals	
Concept Report	June 2006
Public Workshop Attendance Sheet	June 2006

Design / Engineering

The 10% Design will include:

- Preliminary design of the two trash capture systems
- Surveys of the drain and its surrounding areas to determine staging of personnel and equipment
- Estimate flows and flow path that will be taken by first flush flows
- Preliminary determination of types of native and non-native flora
- Determination of the permits needed
- Survey of the non-native vegetation that needs to be removed

- Landscape architectural layout of green areas, contour of the drain channel, re-configuration and layout of gabions at the southern bend of the drain
- Conceptual design of access ways, walkways, parking lot, benches, rest areas, and rest room facilities

The 50% Design will include:
- Revisions based on comments received on the 10% design
- More detail plans and outdated layout of the proposed park and associated facilities
- Prepare survey drawings
- Right-of-way maps and documentations
- Update structural design and cost estimation for trash capturing system
- Updated cost estimate

The 90% Design will include:
- Review issues and comments received at 50% design completion
- Update cost estimation
- Obtain required permits
- Complete survey drawings
- Right-of-way maps and documentations
- Update structural design and cost estimation for trash capturing system
- Environmental requirements have been incorporated
- Complete design calculations
- Design specification

The 100% design (final) will include:
- Drawing details and sections
- Plans are completed and organized
- Plan sheets and details are coordinated within and among design disciplines
- Plans and specifications are consistent and coordinated
- Project award is advertised for construction/implementation of project. The package consists of the complete, signed, and "As-Advertised" plans and specifications.

Design Submittals	
10% Design and Cost Estimate	Jun 2009
50% Design	Oct 2009
90% Design	Apr 2010
Final Construction Documents	Jun 2010

Environmental Documentation

An Initial Study Environmental Checklist Form (see Attachment 5-13) was prepared concurrently with this grant application that indicates that this project will not have an environmental impact. This project is exempt from CEQA requirements CEQA per Exemption Class 1(4) of the City of Los Angeles's CEQA Guidelines, which provides that "installation of new equipment and /or industrial facilities involving negligible or no expansion of use is exempt from the requirements of CEQA if required for safety, health, the public convenience, or environmental control."

Environmental Documentation Submittals	
Initial Study Environmental Checklist Form	June 2006
Mitigated Negative Declaration	June 2010

Permit Acquisition

Permitting will depend on the extent of the work that will be performed on the drain. It is expected that permits will be required from the CDFG, Los Angeles RWQCB, and the City of Los Angeles Department of Animal Control. The application for the permits will be initiated upon completion of the design.

Permitting Submittals	Purpose	Approval Date	Status
CDFG xx Permit	To ensure no wildlife impact	April 2007	Expected
RWQCB xx Permit	Wilmington Drain is a Water of the State and is designated as Blue line by USGS	April 2007	Expected
City of Los Angeles Department of Animal Control	Permit for the dog park	April 2007	Expected

(d) Construction / Implementation

Construction and Rehabilitation/Revitalization of the Wilmington Drain will consist of the following major elements.

Gabion reconstruction: The scope includes removal of dilapidated existing rip-rap filled gabions and replacing them with rounded stone filled baskets. Baskets are to be installed in a contoured sinuous form along the banks, to promote smooth flow minimizing eddy currents and their detrimental effects on fill material. Gabions protection will be battered, and sited to allow vegetation with seed and locally harvested willow wattles to take root.

Addition of site amenities/improvements will be accomplished by the addition/improvement of the following elements

- ADA accessible restroom, parking area and drinking fountain.
- Fenced off-leash dog area with drinking fountain and dog watering area (regulatory signage to either require dogs to be on-leash and on-trails, or excluded in park outside off-leash dog area).
- Site furnishings to include tree shaded benches, drinking/canine watering fountains, quality concrete waste receptacles, and picnic tables.
- Re-grade the 12-ft wide utility access road (West bank) with compacted stabilized decomposed granite paving, fencing and access gates. Gates and access road layout shall facilitate park trash removal and drive through maintenance vehicles.
- Trails: Graded 6-ft wide compacted stabilized decomposed granite paving. Design layout to provide safe circulation, provide wildlife viewing areas and to protect channel habitat.
- Signage: Kiosks, monument signage, and trail signage.
- Fencing/Safety: Removal and disposal of existing chain link fencing an d installation of new tubular steel fencing on the perimeter. Fence, trail and planting design layout will provide

clear sight lines from perimeter circulation/roadways, and allow for ease of access for clean-up and debris removal.

- Community access gate (Picture 3 on layout figure): Community input required on types of plants, benches, gates, new fencing and pedestrian access at existing RD1.5 housing access area.

Vegetation: Remove known exotic and invasive plants from the project area and the neighboring properties where feasible. To select and plant native plants primarily from the riparian and coastal sage-scrub communities capable of naturalizing (especially in riparian areas) or reseeding from park into channel areas. Plantings shall include trees, shrubs, lawn, groundcover, and vines. Vines will be useful in preventing graffiti on common perimeter block walls and as forager for the fauna. It is expected that minimal irrigation runoff from bank plantings may be used to extend wet season habitat. All plantings shall be irrigated either temporarily in order to establish, or permanently as required to provide a green planted barrier for fire control and public use.

Secondary planting goal is to create a native plant and trail edge timber barrier between trails and channel that protects nesting and foraging habitat from dust, debris, canines, and human traffic. These plants will consist in part of stock propagated from one site cuttings and will stop windblown debris from floating into the channel, facilitate maintenance, and provide a degree of pollutant removal and water treatment benefits for surface flow into the channel.

The tertiary planting goal is to extend and improve the use of both the riparian habitat and neighborhood/community park space through the installation of enhanced passive park space, a picnic area, neighborhood entry, and trailside plantings.

Storm water quality improvements will include:

1. Trash netting system at North end of drain at Lomita Blvd
2. Trash netting system at Figueroa Drain
3. Park surface flow mitigation via grass filters, channel perimeter planting restricted area use, and formation of walking trails.
4. Channel perimeter in-flow mitigation via catch basin filters and improved utility access for maintenance purposes.
5. Install quality waste receptacles and provide bio-degradable waste bags at off-leash dog areas, trails and parking/picnic areas. Provide dumpster sited for ease of access at the utility entrance.
6. Provide bi-lingual prominently displayed signage for collecting, sorting, and storing trash in separate recycle bins.

Construction Submittals	
Pre construction	Dec 2010
Notice to Proceed	Dec 2010
Construction Inspection Checklist	Dec 2012
Post Construction Photos	Dec 2012

(e) Environmental Compliance / Mitigation/ Enhancement

Environmental compliance, mitigation and enhancements will involve detailed planning, staging, storing, transporting, sorting and disposal of materials removed from the park area during construction complying with all environmental standards. Maximum effort will be made to identify and recycle all recyclables. Construction will be carried out between the hours of 08:00 a.m. and 3:00 p.m. to comply with the Mayors ordinance in order to mitigate the effects of noise, light traffic and other environmentally detrimental factors on the neighborhoods. Mitigation measures for dust control and sediment control will be in effect during the duration of the entire project. Construction activity will take place during dry weather and a construction Stormwater Pollution Prevention Plan will be prepared.

(f) Construction Administration

Construction management and engineering services during construction activities will be performed by the City of Los Angeles. These efforts include:

- Identify and set up cost tracking mechanisms with related work orders.
- Complete Bid and Award Process, provide notice to proceed construction, provide neighborhood notification of construction project including its funding, duration, goals and objectives of the project.
- Track the quality of the construction project by conducting periodic inspections.
- Coordinate construction activities with all stakeholders by holding periodic meetings, reviewing construction progress and providing timely feedback.
- Identify lead inspector from the Bureau of Contract Administration, establish regular communications with the person.
- Provide periodic updates to stakeholders through e-mail, mailings, and neighborhood meetings.
- Provide information for the quarterly reporting to the State.
- Complete project, follow up with reports, auditing spare parts and provide training for operations/maintenance personnel.
- Close out of construction contract.

(g) Other

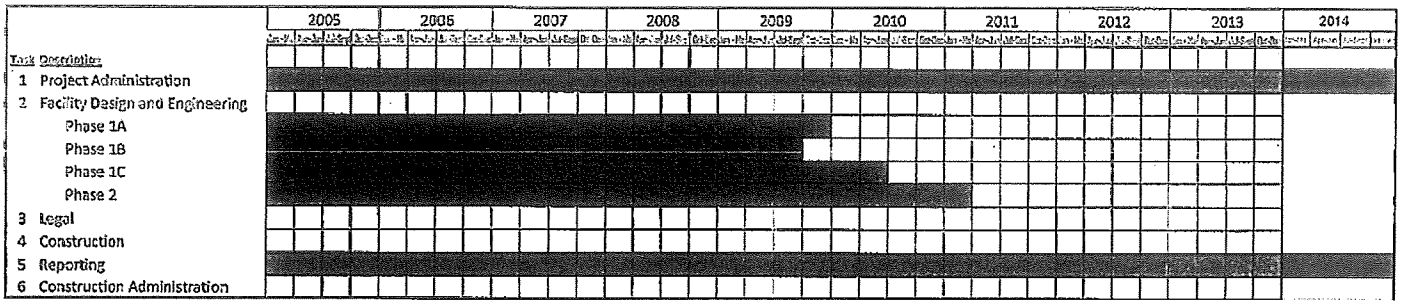
A PAEP will be prepared upon notification of grant award, which is expected in November 2006, and will be completed in June 2010. The monitoring plan and the associated QAPP is not included as part of this grant-funded work since annual reports will be submitted to the State subsequent to the completion of this project and for a period of ten years.

Other Submittals	
Project Assessment and Evaluation Plan	June 2010

Attachment 3
Amendment 3

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District



JWPCP Marshland Enhancement

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

ID	Task Name	Duration	Start	Finish
1	COMPONENT 1: Installation of Water Conservation Equipment	0 days	Thu 8/1/13	Thu 8/1/13
2	**Task 1A - Customers, Site Locations**	**304 days?**	**Thu 8/1/13**	**Tue 9/30/14**
3	Plan, Develop, Administer Vendor Contract	22 days?	Thu 8/1/13	Fri 8/30/13
4	Planning and Development of Site Selection Criteria	21 days?	Mon 9/2/13	Mon 9/30/13
5	Selection of Customers and Customer Sites	267 days?	Mon 9/23/13	Tue 9/30/14
6	Enrollment of Customers	267 days?	Mon 9/23/13	Tue 9/30/14
7	**Task 1B - Customer Site Surveys and Equipment Selection**	**267 days?**	**Mon 9/23/13**	**Tue 9/30/14**
8	Perform Water Audits	267 days?	Mon 9/23/13	Tue 9/30/14
9	Customer Equipment Needs and Retrofits List	267 days?	Mon 9/23/13	Tue 9/30/14
10	**Task 1C - Activation, Commissioning, and Testing**	**267 days?**	**Mon 9/23/13**	**Tue 9/30/14**
11	Perform Water Audits	267 days?	Mon 9/23/13	Tue 9/30/14
12	Customer Equipment Needs and Retrofits List	267 days?	Mon 9/23/13	Tue 9/30/14
13	COMPONENT 2: Development of Notification and Awareness (Alert) Program	0 days	Mon 9/2/13	Mon 9/2/13
14	**Task 2A - Custom Notification and Awareness (Alert) Program**	**112 days?**	**Thu 8/1/13**	**Fri 1/3/14**
15	Plan, Develop, Administer Vendor Contract and/or Procure Equipment	22 days?	Thu 8/1/13	Fri 8/30/13
16	Program, Planning and Development	46 days?	Fri 8/30/13	Fri 11/1/13
17	Program Implementation & Conservation Practices Tools	25 days?	Mon 11/4/13	Fri 12/6/13
18	Publish, Activate and Test	20 days?	Mon 12/9/13	Fri 1/3/14
19	COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes	0 days	Thu 8/1/13	Thu 8/1/13
20	**Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes**	**871 days?**	**Fri 7/1/11**	**Fri 10/31/14**
21	Landscape Classes (10 Classes)	500 days?	Mon 1/2/12	Fri 11/29/13
22	Demonstration Gardens (5 Gardens)	436 days?	Fri 7/1/11	Fri 3/1/13
23	Marketing and Outreach	109 days?	Thu 8/1/13	Tue 12/31/13
24	COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING	0 days	Thu 8/1/13	Thu 8/1/13
25	**Task 4A - Administration, Management and Reporting**	**327 days?**	**Thu 8/1/13**	**Fri 10/31/14**
26	Administration and Management of Grant Project	327 days?	Thu 8/1/13	Fri 10/31/14
27	Reports and Other Deliverables	327 days?	Thu 8/1/13	Fri 10/31/14
28	Final Report Publication	23 days?	Wed 10/1/14	Fri 10/31/14

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 4: Large Landscape Conservation - West Basin MWD (page 1 of 2)

PROJECT TITLE: Large Landscape Conservation, Runoff Reduction Management & Educational Program			
Work Items	**Duration (# mon)**	**Start Date**	**End Date**
Grant Agreement Date	240	January-07	December-16
Task 1.0 Ocean-Friendly Landscape Classes			
Develop brochure for classes	2	December-08	January-09
Work with Noelle and Surfrider to create draft brochure & informational packets	2	December-08	January-09
Finalize brochure & informational packets	1	January-09	January-09
Market classes to highest residential water users	61	January-09	December-13
Choose sites to conduct classes	59	February-09	December-13
Coordinate site logistics with site owner	59	February-09	December-13
Coordinate RSVPs with SBESC	59	February-09	December-13
Create draft letter to highest water users	60	January-09	December-13
Send letter and brochure to highest water users in targeted area	59	February-09	December-13
Hire module developer	6	May-08	October-08
Develop draft RFP	2	May-08	June-08
Review and finalize RFP	1	July-08	July-08
Post RFP	1	July-08	July-08
Interview module developers	1	August-08	August-08
Develop agreement with module developer	2	September-08	October-08
Develop training module and class materials	6	September-08	February-09
Coordinate with module developer on class info.	2	October-08	November-08
Review draft module & class materials	2	December-08	January-09
Finalize module & class materials	1	February-09	February-09
Conduct 40 classes	59	February-09	December-14
Conduct 3 classes in FY 08-09	5	February-09	June-09
Conduct 12 classes in FY 09-10	12	July-09	June-10
Conduct 10 classes in FY 10-11	12	July-10	June-11
Conduct 5 classes in FY 11-12	12	July-11	June-12
Conduct 10 classes in FY 12-13/13-14/14-15	12	July-12	December-14
Task 2.0 Ocean-Friendly Demonstration Gardens			
Hire Landscape Architect	9	May-08	January-09
Develop draft RFP	1	May-08	May-08
Review draft RFP	2	June-08	July-08
Finalize RFP and post	3	July-08	September-08
Interview and hire landscape architect	1	October-08	October-08
Finalize landscape designer agreement	3	November-08	January-09
Select sites to retrofit (with application process)	35	February-09	December-11
Meet with Directors to present information on gardens	2	February-09	March-09
Meet with prospective site owner	49	February-09	February-12
Oversee the budget/designs for each site	49	February-09	February-12
Oversee designs of 11 demonstration gardens	70	September-08	June-14
Finalize Contract with Surfrider	4	September-08	December-08
Coordinate with Surfrider and landscape designer throughout process	68	November-08	June-14
Oversee design and ensure signage is placed throughout	62	April-09	June-14
Implement gardens	64	March-09	June-14
Install 0 gardens in FY 08-09	4	March-09	June-09
Install 0 gardens in FY 09-10	12	July-09	June-10
Install 1 garden in FY 10-11	12	July-10	June-11
Install 3 gardens in FY 11-12/ 12-13	24	July-11	June-13
Install 7 gardens in FY 12-13/ 13-14	12	July-13	June-14
Install 5 additional gardens in FY 14-15	6	July-14	December-14
Task 3.0 Centralized Irrigation Controllers			
Develop marketing materials/brochures for centralized irrigation controllers	13	May-08	January-09
Meet with Noelle to discuss layout/format & to coordinate with graphic design firm	1	July-08	July-08
Develop draft materials/brochure	6	July-08	December-08
Finalize materials/brochure	1	January-09	January-09
Target highest water users of 1 acre or greater	68	July-09	December-14
Create draft letter to highest water users throughout service area	2	July-09	July-09
Finalize letter with Ron's input	2	July-09	July-09
Send out letters (quarterly) targeting different service area locations with marketing brochure attached	14	July-09	October-12
Install 1,117 controllers	75	October-08	December-14
Procure services for Vendor	4	October-08	January-09
Develop draft agreement with Vendor	2	February-09	March-09
Finalize agreement with Vendor	2	March-09	April-09
Coordinate the installations with Vendor	68	May-09	December-14

Project 4: Large Landscape Conservation - West Basin MWD (page 2 of 2)

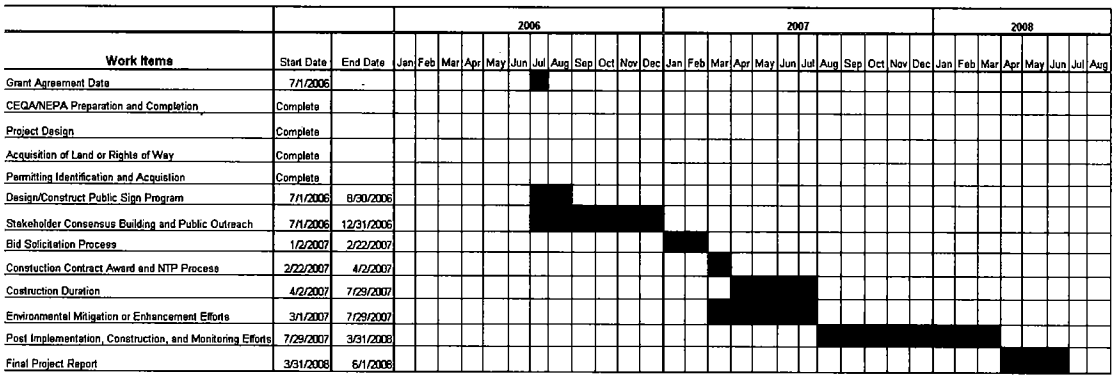
Task 4.0 Residential Irrigation Controller Rebates			
Develop rebate form and brochure	2	December-08	January-09
Work with Noelle on creating draft rebate form and brochure	2	December-08	January-09
Finalize rebate form and brochure	1	January-09	January-09
Provide rebate funding to 500 irrigation controllers	64	September-08	December-14
Task 5.0 Landscape Surveys and Turf Removal Rebates	8	April-14	December-14
Task 5.1 Landscape Surveys	8	April-14	December-14
Task 5.2 Turf Removal Rebates	8	April-14	December-14
Task 6.0 Marketing and Outreach	80	May-08	December-14
See above tasks			
Task 7.0 Runoff Measuring Devices			
Select eligible site for placement of first device	2	March-09	April-09
Select eligible site for placement of second device	2	March-10	April-10
Monitor runoff of site pre-installation of first device	13	May-09	May-10
Monitor runoff of site pre-installation of second device	13	May-10	May-11
Install first device	1	June-10	June-10
Install second device	1	June-11	June-12
Monitor runoff of site post-installation of first device	48	July-10	June-14
Monitor runoff of site post-installation of second device	36	July-11	June-14
Task 8.0. Database Management			
Track number of centralized irrigation controllers installed and residential irrigation controller rebates issued	68	May-09	December-14
Monitor water savings of devices at 10% of the sites that installed them	66	July-09	December-14
Monitor water savings pre and post installation of demonstration gardens installed	72	January-09	December-14
Monitor runoff from runoff measuring devices pre-installation	24	May-09	May-11
Monitor runoff from runoff measuring devices post-installation	54	July-10	December-14
Task 9.0 PAEP			
Create draft PAEP	4	Jul-08	Oct-08
Finalize and submit to DWR	5	Aug-08	Nov-08
Task 10. Project Administration			
Reporting			
Quarterly Reports	20	Jul-08	Oct-14
Annual Reports	5	Jul-09	Nov-13
Final Report	1	Jun-12	December-14
Task 11.0 Planning/Site Selection	200	May-08	December-14
Task12.0 Contingency		N/A	

Las Virgenes Creek Restoration Project

PROJECT SCHEDULE

City of Calabasas

Construction of the Las Virgenes Creek Restoration Project



Work Items	Start Date	End Date
Grant Agreement Date	7/1/2006	-
CEQA/NEPA Preparation and Completion	Complete	
Project Design	Complete	
Acquisition of Land or Rights of Way	Complete	
Permitting Identification and Acquisition	Complete	
Design/Construct Public Sign Program	7/1/2006	8/30/2006
Stakeholder Consensus Building and Public Outreach	7/1/2006	12/31/2006
Bid Solicitation Process	1/2/2007	2/22/2007
Construction Contract Award and NTP Process	2/22/2007	4/2/2007
Construction Duration	4/2/2007	7/29/2007
Environmental Mitigation or Enhancement Efforts	3/1/2007	7/29/2007
Post Implementation, Construction, and Monitoring Efforts	7/29/2007	3/31/2008
Final Project Report	3/31/2008	6/1/2008

Revised Project Schedule (page 94 of 154) - Malibu Creek Watershed Water Conservation & Runoff Reduction Project

Revised schedule for the Malibu Creek Watershed Urban Water Conservation and Runoff Reduction Project

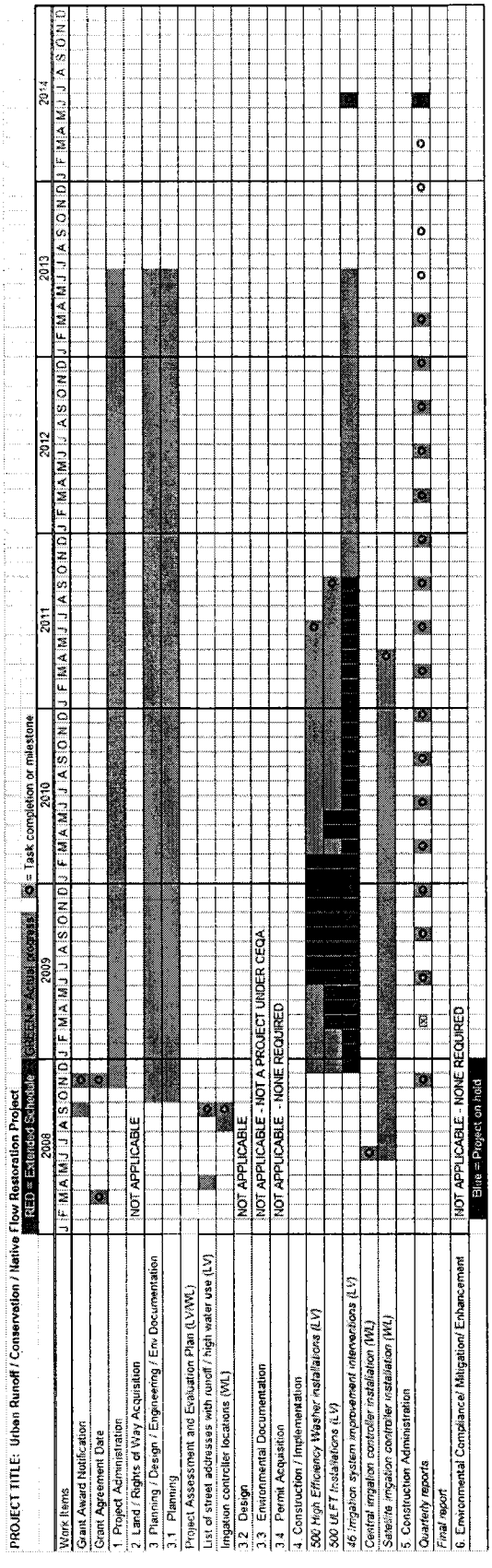
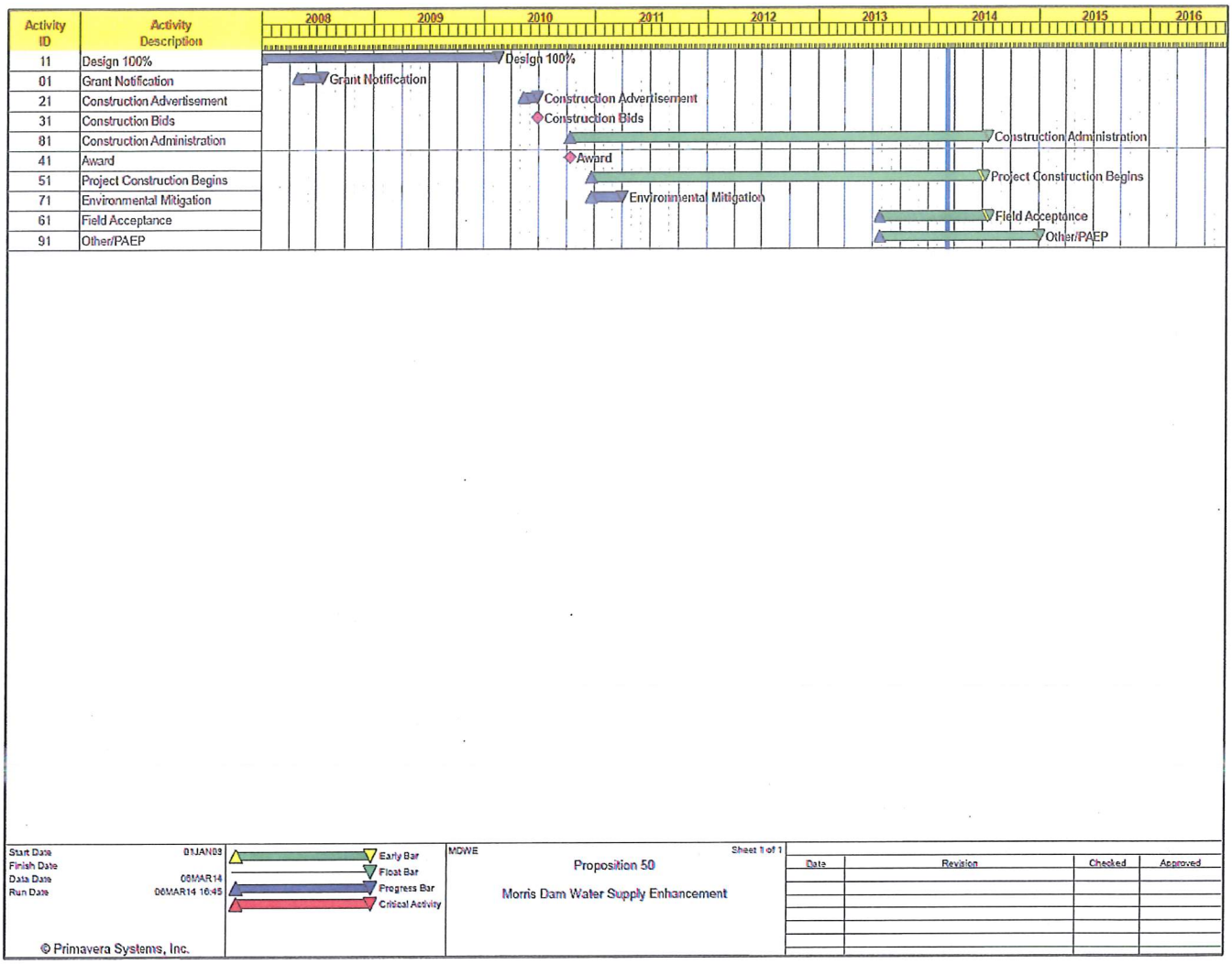
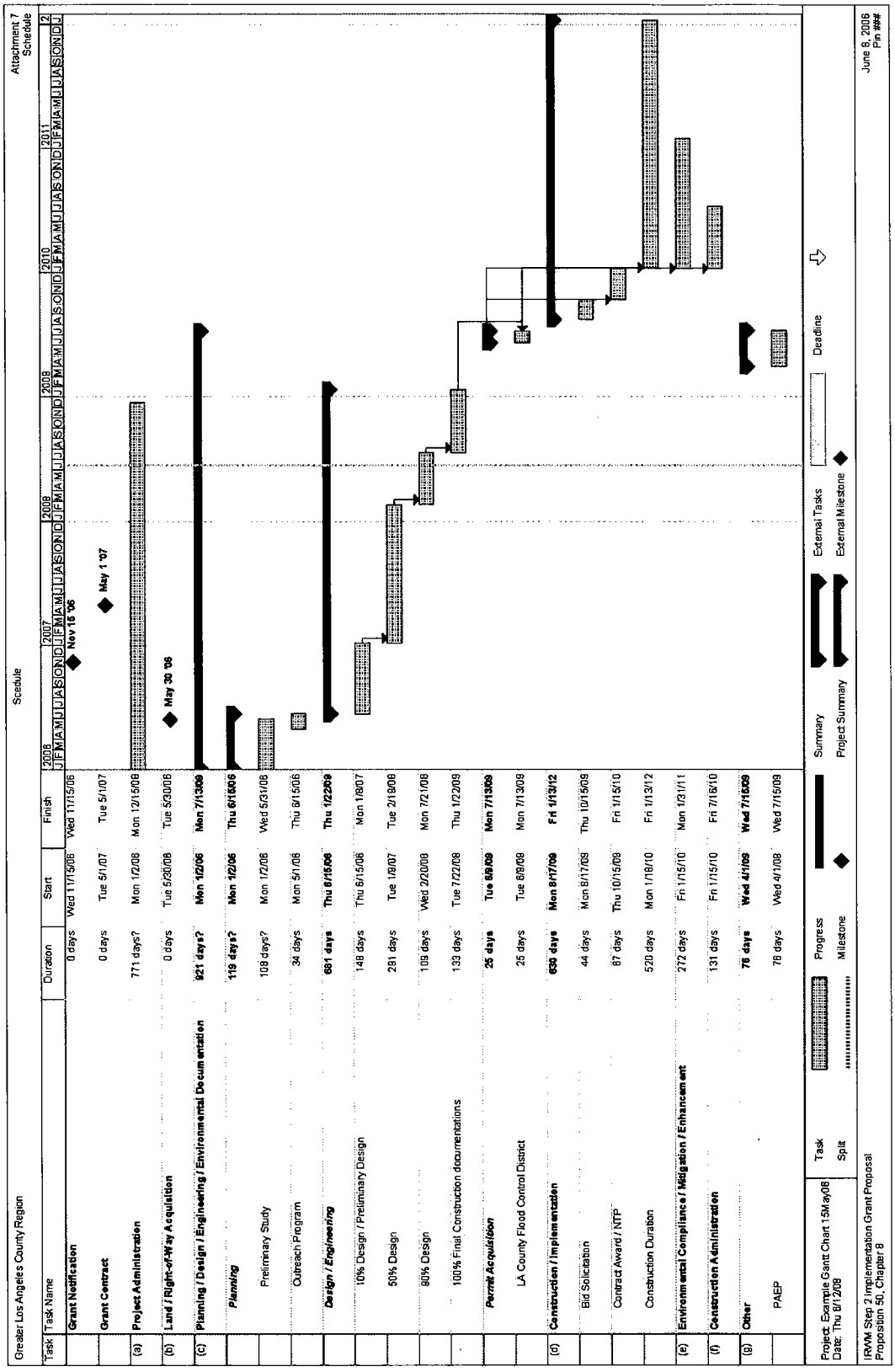


EXHIBIT B – REVISED PROJECT SCHEDULES

Project 7: Morris Dam Water Supply Enhancement



North Atwater Creek Restoration



Revised Project Schedule (page 97 of 154) – Pacoima Wash Greenway Project

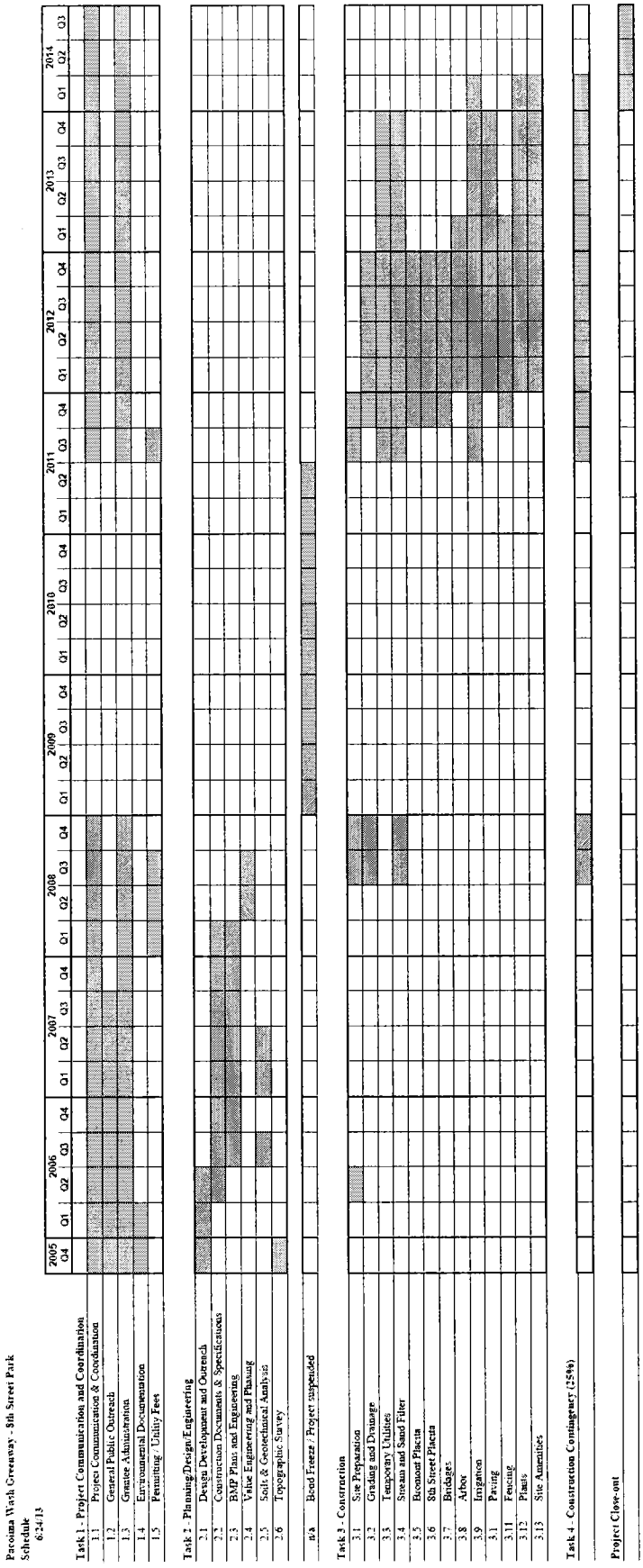
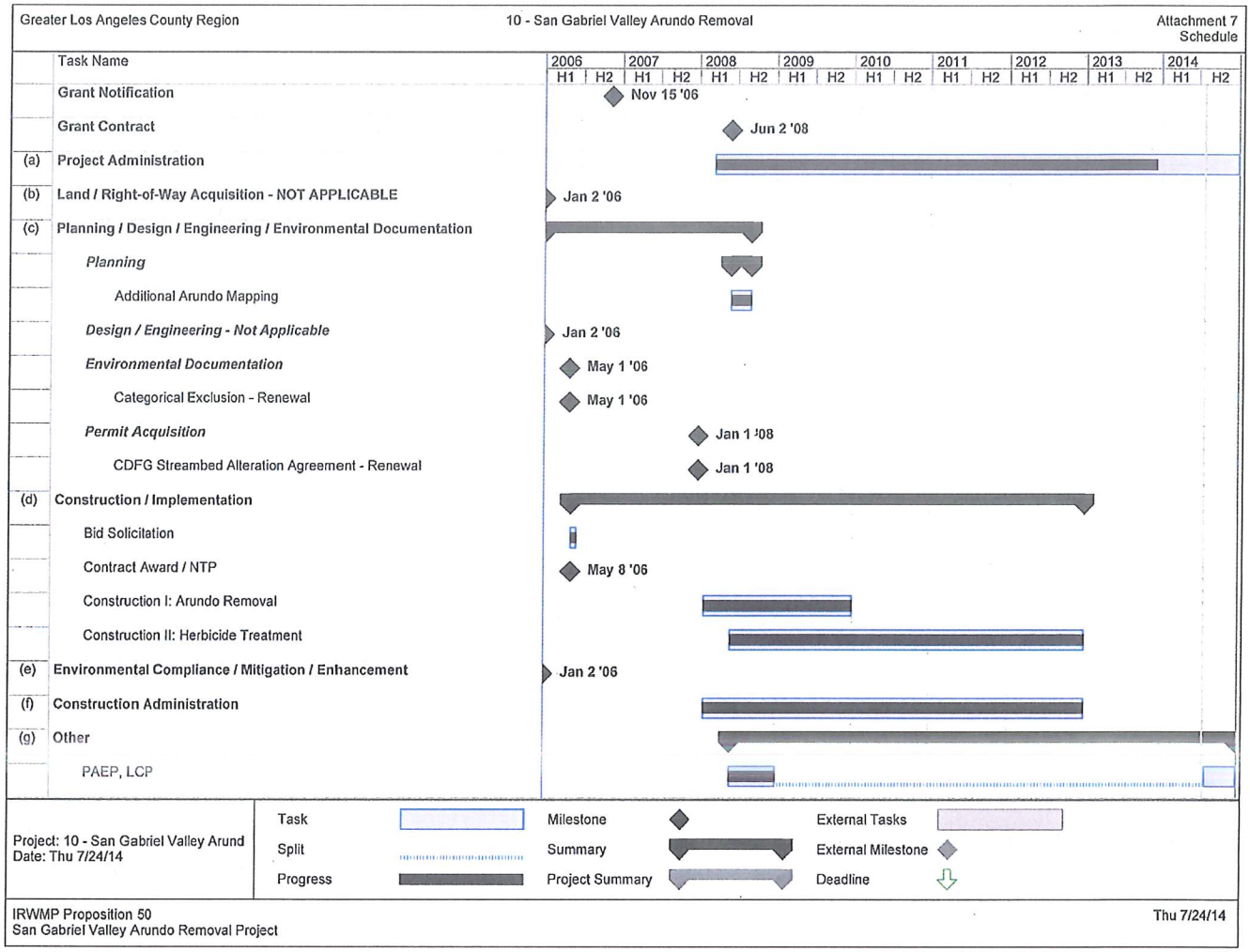
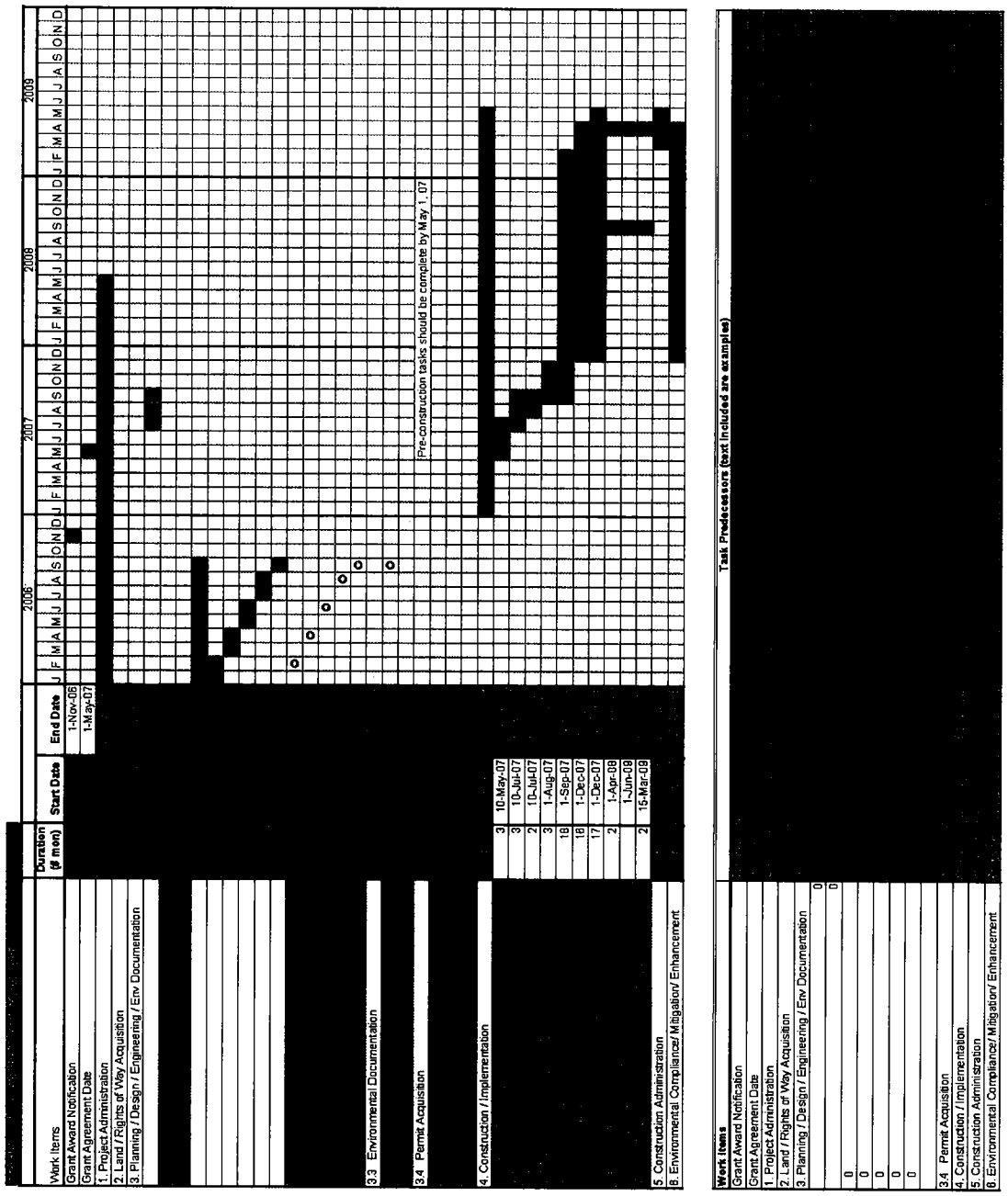


EXHIBIT B – REVISED PROJECT SCHEDULES

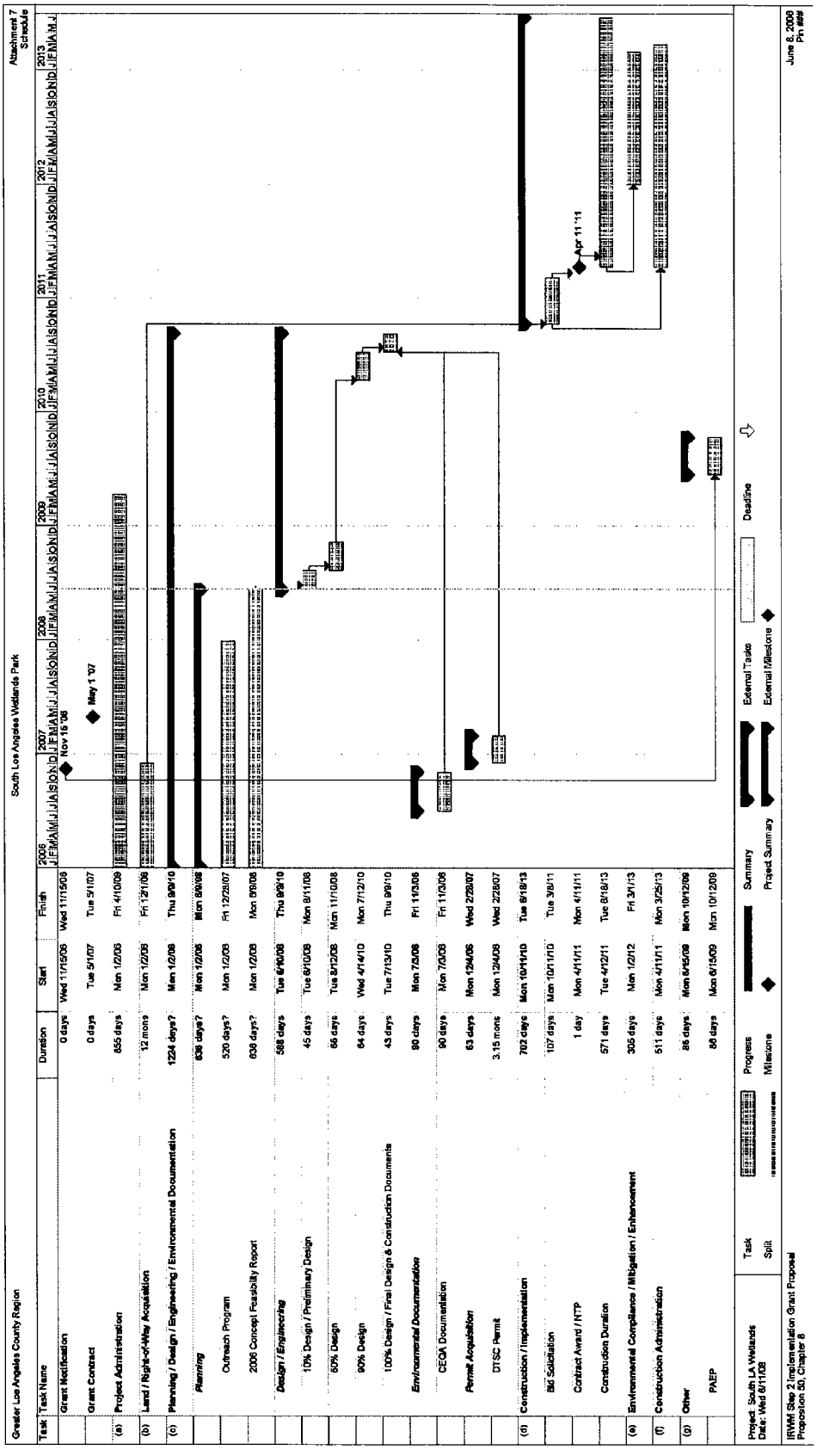
Project 10: San Gabriel Valley Arundo Removal



Solstice Creek Restoration Project



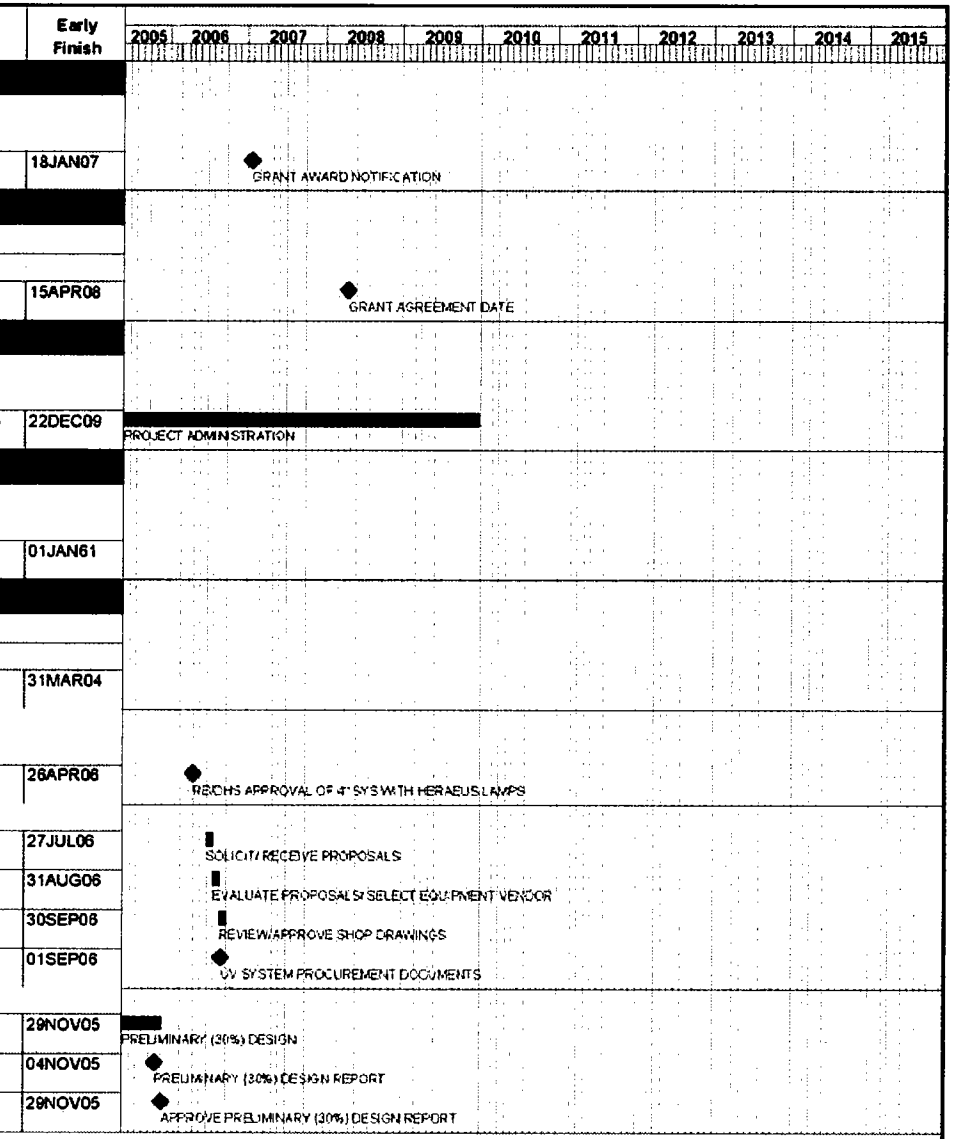
South Los Angeles Wetlands Park



Task	Task Name	Duration	Start	Finish
	Grant Notification	0 days	Wed 11/15/06	Wed 11/15/06
	Grant Contract	0 days	Tue 5/1/07	Tue 5/1/07
(a)	Project Administration	855 days	Mon 1/2/06	Fri 4/10/09
(b)	Land / Right-of-Way Acquisition	12 mons	Mon 1/2/06	Fri 12/1/06
(c)	Planning / Design / Engineering / Environmental Documentation	1224 days?	Mon 1/2/06	Thu 9/9/10
	Planning	636 days?	Mon 1/2/06	Mon 6/9/08
	Outreach Program	520 days?	Mon 1/2/06	Fri 12/28/07
	2006 Concept Feasibility Report	638 days?	Mon 1/2/06	Mon 6/9/08
	Design / Engineering	588 days	Tue 6/10/08	Thu 9/9/10
	10% Design / Preliminary Design	45 days	Tue 6/10/08	Mon 8/11/08
	60% Design	66 days	Tue 8/12/08	Mon 11/10/08
	90% Design	64 days	Wed 4/14/10	Mon 7/12/10
	100% Design / Final Design & Construction Documents	43 days	Tue 7/13/10	Thu 9/9/10
	Environmental Documentation	90 days	Mon 7/3/06	Fri 11/3/06
	CEQA Documentation	90 days	Mon 7/3/06	Fri 11/3/06
	Permit Acquisition	63 days	Mon 12/4/06	Wed 2/28/07
	DTSC Permit	3.15 mons	Mon 12/4/06	Wed 2/28/07
(d)	Construction / Implementation	702 days	Mon 10/11/10	Tue 8/18/13
	Bid Solicitation	107 days	Mon 10/11/10	Tue 3/8/11
	Contract Award / NTP	1 day	Mon 4/11/11	Mon 4/11/11
	Construction Duration	571 days	Tue 4/12/11	Tue 8/18/13
(e)	Environmental Compliance / Mitigation / Enhancement	305 days	Mon 1/2/12	Fri 3/1/13
(f)	Construction Administration	511 days	Mon 4/11/11	Mon 3/25/13
(g)	Other	85 days	Mon 5/25/09	Mon 10/12/09
	PAEP	60 days	Mon 6/15/09	Mon 10/12/09

Whittier Narrows Water Reclamation Plant UV Disinfection

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
GRANT NOTIFICATION				
550	GRANT AWARD NOTIFICATION	0		18JAN07
GRANT CONTRACT				
560	GRANT AGREEMENT DATE	0		15APR08
PROJECT ADMINISTRATION				
570	PROJECT ADMINISTRATION	1,666	01JUN05	22DEC09
LAND/ RIGHT OF WAY ACQUISITION				
580	LAND/RIGHT OF WAY ACQUISITION	0		01JAN61
PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOC.				
PLANNING				
590	PLANNING	0		31MAR04
DESIGN/ ENGINEERING				
TROJAN EQUIPMENT VALIDATIONS				
450	RB/DHS APPROVAL OF 4" SYS WITH HERAEUS LAMPS	0		26APR06
SELECTION OF UV EQUIPMENT SUPPLIER				
410	SOLICIT/ RECEIVE PROPOSALS	61	29JUN06	27JUL06
430	EVALUATE PROPOSALS/ SELECT EQUIPMENT VENDOR	0	28JUL06	31AUG06
440	REVIEW/APPROVE SHOP DRAWINGS	31	01SEP06	30SEP06
435	UV SYSTEM PROCUREMENT DOCUMENTS	0		01SEP06
PRELIMINARY DESIGN				
460	PRELIMINARY (30%) DESIGN	180	01JUN05	29NOV05
600	PRELIMINARY (30%) DESIGN REPORT	0		04NOV05
350	APPROVE PRELIMINARY (30%) DESIGN REPORT	0		29NOV05



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Whittier Narrows WRP

UV Disinfection Facilities

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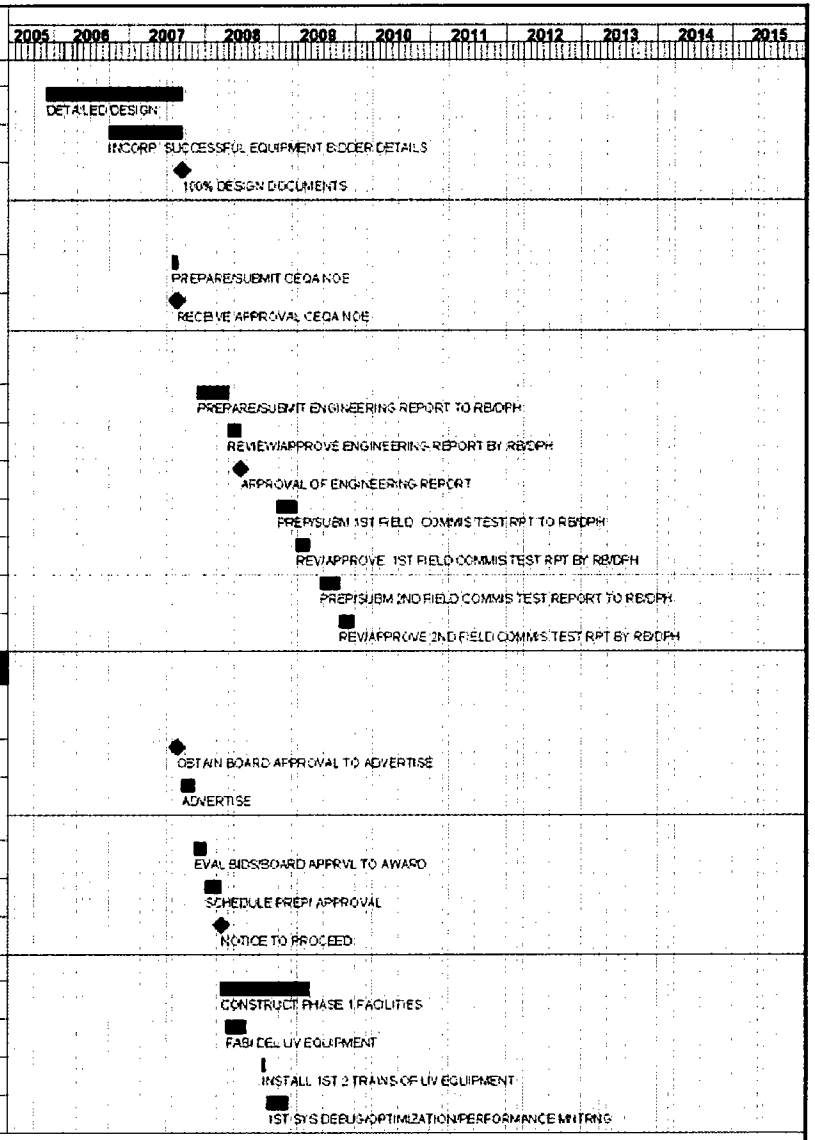
Sheet 1 of 3

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
	DETAILED DESIGN			
360	DETAILED DESIGN	365	01DEC05	19SEP07
370	INCORP SUCCESSFUL EQUIPMENT BIDDER DETAILS	91	01OCT06	19SEP07
340	100% DESIGN DOCUMENTS	0		19SEP07
	ENVIRONMENTAL DOCUMENTATION			
	CEQA DOCUMENT			
30	PREPARE/SUBMIT CEQA NOE	61	01AUG07	22AUG07
480	RECEIVE APPROVAL CEQA NOE	0		22AUG07
	PERMIT ACQUISITION			
	REG. WATER QLTY CONTROL BOARD DPH			
230	PREPARE/SUBMIT ENGINEERING REPORT TO RB/DPH	61	01DEC07	30APR08
240	REVIEW/APPROVE ENGINEERING REPORT BY RB/DPH	30	01MAY08	30JUN08
250	APPROVAL OF ENGINEERING REPORT	0		30JUN08
495	PREP/SUBM 1ST FIELD COMMIS TEST RPT TO RB/DPH	31	19DEC08	25MAR09
510	REV/APPROVE 1ST FIELD COMMIS TEST RPT BY RB/DPH	31	26MAR09	27MAY09
500	PREP/SUBM 2ND FIELD COMMIS TEST REPORT TO RB/DPH	31	15JUL09	16OCT09
260	REV/APPROVE 2ND FIELD COMMIS TEST RPT BY RB/DPH	30	19OCT09	22DEC09
	CONSTRUCTION/ IMPLEMENTATION			
	BID SOLICITATION			
50	OBTAIN BOARD APPROVAL TO ADVERTISE	0		22AUG07
60	ADVERTISE	62	20SEP07	15NOV07
	CONTRACT AWARD/ NTP			
70	EVAL BIDS/BOARD APPRVL TO AWARD	59	16NOV07	09JAN08
80	SCHEDULE PREP/ APPROVAL	75	09JAN08	26MAR08
90	NOTICE TO PROCEED	0		27MAR08
	CONSTRUCTION DURATION			
100	CONSTRUCT PHASE 1 FACILITIES	153	27MAR08	27MAY09
120	FAB/ DEL UV EQUIPMENT	153	16APR08	21JUL08
140	INSTALL 1ST 2 TRAINS OF UV EQUIPMENT	61	10OCT08	23OCT08
300	1ST SYS DEBUG/OPTIMIZATION/PERFORMANCE MNTRNG	31	05NOV08	09FEB09



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Whittier Narrows WRP

UV Disinfection Facilities

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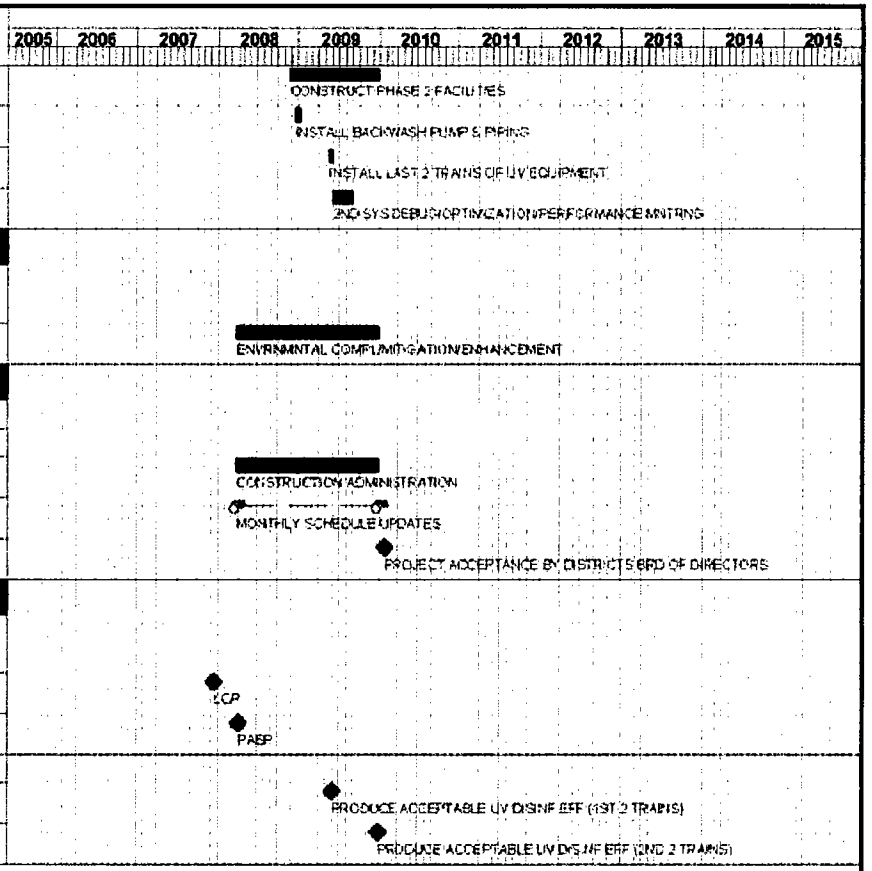
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
160	CONSTRUCT PHASE 2 FACILITIES	91	24NOV08	22DEC09
180	INSTALL BACKWASH PUMP & PIPING	90	17DEC08	08JAN09
190	INSTALL LAST 2 TRAINS OF UV EQUIPMENT	61	14MAY09	28MAY09
320	2ND SYS DEBUG/OPTIMIZATION/PERFORMANCE MNTRNG	30	05JUN09	01SEP09
ENVIRONMENTAL COMPLIANCE/MITIGATION/ ENHANCEMENT				
470	ENVRNMNTAL COMPL/MITIGATION/ENHANCEMENT	457	27MAR08	22DEC09
CONSTRUCTION ADMINISTRATION				
210	CONSTRUCTION ADMINISTRATION	2,087	27MAR08	22DEC09
270	MONTHLY SCHEDULE UPDATES	457	27MAR08	22DEC09
290	PROJECT ACCEPTANCE BY DISTRICTS BRD OF DIRECTORS	0		27JAN10
OTHER				
LCP, PAEP				
280	LCP	0		20DEC07
220	PAEP	0		31MAR08
EFFLUENT DISCHARGE				
310	PRODUCE ACCEPTABLE UV DISINF EFF (1ST 2 TRAINS)	0		28MAY09
330	PRODUCE ACCEPTABLE UV DISINF EFF (2ND 2 TRAINS)	0		23DEC09



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UV Disinfection Facilities

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COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Revised Project Schedule (page 104 of 154) - Wilmington Drain Restoration Multi-use Project

Revised Schedule-Wilmington Drain Multiuse Project

PROJECT SCHEDULE			
Phase	Start	Completion	% Completed
Predesign	9/1/2007	6/30/2009	100
Design	7/1/2009	1/25/2011	100
Right of Way/Approvals	1/26/11	2/6/2012	100
Bid and Award	2/7/2012	4/5/2013	100
Construction	4/6/2013	4/10/2016	1
Post-Construction	4/11/2016	10/9/2016	0

Summary of Submittals

Task	Task Name	Grant Agreement Due Date	Date Submitted Revised Due Dates
Planning			
	Concept Report	6/30/06	6/30/06
	Public Workshop Attendance Sheet	6/30/06	6/30/06
Task - Design / Engineering			
	10% Design and Cost Estimate	6/30/09	10/23/09
	50 % Design	10/31/09	1/25/10
	90% Design	4/30/10	1/21/10
	Final Construction Documents	6/30/10	4/22/11
Task - Environmental Documentation Submittal			
	Initial Study Environmental Checklist Form	6/30/06	10/30/08
	Environmental Impact Report	6/30/10	10/22/10
Task - Permits			
	CDFG Permit	4/30/07	4/22/11
	CDFG Incidental Take Permit		4/29/13
	RWQCB Permit	4/30/07	10/21/11
	City of Los Angeles Department of Animal Control	4/30/07	Not Applicable
Task - Construction Submittals			
	Pre Construction Photos	12/31/10	7/29/13
	Notice to Proceed	12/31/10	7/29/13
	Construction Inspection Checklist	12/31/12	5/10/16
	Post Construction Photos	12/31/12	4/10/16
Task -- Other Submittals			
	Project Assessment and Evaluation Plan	6/30/10	10/21/11
	Invoicing	Quarterly	7/31/16
	Quarterly Progress Report	Quarterly	7/31/16

Attachment 4
Amendment 3

EXHIBIT C – REVISED SUMMARY BUDGET TABLE

SUMMARY BUDGET TABLE - Amendment 3

NOTE: Red font indicate changes from original summary budget table located on page 105 of Agreement No. 4600007659.

Project No.	Project Short Name	Sponsor Agency	Estimated Total Project Cost	Estimated Local Cost	Other State Funds	Max Grant Funds	Required Local Cost Share	Retention Amount DWR will withhold per project
1	Central Basin SWRP	Central Basin Municipal Water District	$ 7,359,461	$ 5,609,461		$ 1,750,000	$ 5,609,461	$ 175,000
2	JWPCP Marshland Enhancement	Sanitation Districts of Los Angeles County	$ 3,444,692	$ 3,044,692		$ 400,000	$ 1,976,523	$ 40,000
3	Large Landscape Conservation - Central Basin MWD	Central Basin Municipal Water District	$ 1,950,000	$ 1,050,000		$ 900,000	$ 200,000	$ 90,000
4	Large Landscape Conservation - West Basin MWD	West Basin Municipal Water District	$ 2,977,237	$ 1,578,890		$ 1,398,347	$ 993,494	$ 139,835
5	Las Virgenes Creek Restoration	City of Calabasas	$ 1,063,090	$ 548,090		$ 515,000	$ 548,090	$ 51,500
6	Malibu Creek Conservation	Las Virgenes Municipal Water District	$ 930,720	$ 283,000		$ 647,720	$ 283,000	$ 64,772
7	Morris Dam Water Supply	Los Angeles County Flood Control District	$ 13,922,899	$ 8,303,681		$ 5,619,218	$ 6,914,366	$ 561,922
8	North Atwater Creek Restoration*	City of Los Angeles, Watershed Protection Division	$ 3,257,320	$ 1,007,320		$ 2,250,000	$ 1,007,320	$ 225,000
9	Pacoima Wash/8th Street Park	Mountains Recreation & Conservation Authority	$ 2,287,000	$ -	$ 1,700,000	$ 587,000	$ -	$ 58,700
10	San Gabriel Valley Arundo Removal	Council for Watershed Health	$ 253,200	$ 50,200		$ 203,000	$ 49,900	$ 20,300
11	Solstice Creek Restoration	Mountians Restoration Trust	$ 260,896	$ 150,000		$ 110,896	$ -	$ 11,090
12	South Los Angeles Wetlands	City of Los Angeles, Watershed Protection Division	$ 17,100,000	$ 10,591,417	$ 2,700,000	$ 3,808,583	$ 4,500,000	$ 380,858
13	Whittier Narrows WRP UV	Sanitation Districts of Los Angeles County	$ 11,704,268	$ 9,704,268		$ 2,000,000	$ 7,886,890	$ 200,000
14	Wilmington Drain	City of Los Angeles, Watershed Protection Division	$ 15,500,000	$ 10,689,764		$ 4,810,236	$ 1,000,000	$ 481,024
		Grant Total:	**$ 82,010,783**	**$ 52,610,783**	**$ 4,400,000**	**$ 25,000,000**	**$ 30,969,044**	**$ 2,500,000**

* Amounts reflect changes from original budget through Amendment 1.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District

Budget Category		Other State Funds	Estimated Local Cost	Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Project Administration Costs	-	$1,668,162	$1,668,162	$0	$1,668,162
(b)	Facility Design & Engineering	-	$3,930,445	$3,930,445	$1,750,000	$5,680,445
(c)	Legal	-	$10,854	$10,854	$0	$10,854
(d)	Construction	-	$0	$0	$0	$0
(e)	Reporting	-	$0	$0	$0	$0
(f)	Construction Administration/Construction Management	-	$0	$0	$0	$0
(g)	Construction Contingency (4%)	-	$0	$0	$0	$0
	Grand Total	**-**	**$5,609,461**	**$5,609,461**	**$1,750,000**	**$7,359,461**

JWPCP Marshland Enhancement Project

Budget Category		Other State Funds	Non-State Share	Requested Grant Funding	Total
(a)	Direct Project Administration Costs	-	$43,210	-	$43,210
(b)	Land Purchase/ Easement	-	-	-	-
(c)	Planning/ Design/ Engineering/ Environmental Doc	-	$469,700	-	$469,700
(d)	Construction/ Implementation	-	$1,780,475	$380,000	$2,160,475
(e)	Environmental Compliance/ Mitigation/ Enhancement	-	$2,000	-	$2,000
(f)	Construction Administration	-	$196,048	$20,000	$216,048
(g)	Other Costs	-	$13,140	-	$13,140
(h)	Construction/ Implementation Contingency	-	$540,119	-	$540,119
(i)	**Grand Total**	**-**	**$3,044,692**	**$400,000**	**$3,444,692**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$2,604,214 Expended to date** **$440,478 LACSD user fees**			

Note: All costs are in 2005 dollars and rounded to the nearest dollar

JWPCP Marshland Enhancement Detailed Construction Cost Estimate

Cost Item	Quantity	Unit	Unit Price	Total
Clearing & Grubbing	1	Lot	$461,500	$461,500
Mobilization	2	Ea	$66,500/time	$133,000
Site Preparation, Fencing	1	Lot	$176,230	$176,230
Earthwork				
Strip & Stockpile Upland/Wetland Topsoil	8,530	CY	$8.20	$70,000
Excavation & Grading	1	Lot	$152,116	$152,116
Drainage	1	Lot	$17,550	$17,550
Water Control Structures				
Replace Outlet Slide Gate	1	Lot	$8,000	$8,000
Trash Rack	1	Lot	$20,000	$20,000
Utilities (Electrical Connection for (Irrigation Controller)	1	Lot	$1,354	$1,354
Irrigation System				
Automatic Controller	1	Lot	$8,790	$8,790
Drip System	2,032	Ea Plant	$51.26	$104,154
Spray System	22,719	SF	$0.15	$3,487
Erosion Control & Hydro-seeding				
Hydro-seed Meadow and Native Grasses	5.28	Ac	$6,180	$32,630
Maintenance & Guarantee (1 year)	1	Lot	$46,450	$46,450
Silt Fence	3,042	Ft	$1.91	$5,802

Cost Item	Quantity	Unit	Unit Price	Total
Trees & Shrubs*				
Trees—15 gal.	156	Ea	$83.50	$13,026
Trees—5 gal.	207	Ea	$34.50	$7,142
Trees—1 gal.	268	Ea	$20	$5,360
Shrubs—5 gal.	149	Ea	$18.20	$2,712
Shrubs—1 gal.	1,429	Ea	$6.80	$9,717
Ground Cover—1 gal.	106	Ea	$80.72	$8,557
Maintenance & Guarantee @ 8% (120 days)	8% of base		$46,514 base	$3,721
Emergent Marsh Plants*				
Emergent Plants—4" pot	1,730	Ea	$2.35	$4,066
Emergent Plants—bare root	13,072	Ea	$1.91	$25,031
Maintenance & Guarantee @ 5% (90 days)	5% of base		$29,097 base	$1,455
Seasonal Wetland Plants*				
Herbaceous Plants—4" pot	4,463		$2.35	$10,488
Herbaceous Plants—bare root	4,413		$2.35	$10,371
Maintenance & Guarantee @ 5% (90 days)	5% of base		$11,519 base	$576
Habitat Structures				
Bat Nesting Boxes	4	Ea	$450	$1,800
Kestrel Nesting Platform	1	Ea	$1,000	$1,000
Vehicular Paving Surfaces				
Compacted Road Base @ Driveway & Parking	16,957	SF	$8.47	$143,701
Pavement	16,957	SF	$4.54	$76,988
Concrete Curb	601	Ft	$29.40	$15,640
Car Stops	10	Ea	$450	$4,500
Handicap Parking Signs & Paint	1	Lot	$1,755	$1,755
Pedestrian Paving Surfaces				
Pavement Pathway @ Entrance & Main Path	5,399	SF	$4.54	$24,512
Pavement Pathway @ Teaching Area	1,257	SF	$4.54	$5,707
Pavement Pathway @ Wildlife Viewing Areas #1 & 2	1,953	SF	$4.54	$8,867
Pavement Pathway @ Wildlife Viewing Area #3	563	SF	$4.54	$2,556
Saw Cut Pathways for conduit	1	Lot	$7,900	$7,900
Boardwalks & Bridges				
Bridges and Boardwalks	1	Lot	$127,000	$127,000
Wildlife Viewing Areas	1	Lot	$18,664	$18,664
Pedestrian Access Control				
Wood Rail Fence	811	Ft	$62.52	$50,700
Wood Bollards w/Chain	537	Ft	$80.89	$43,440
Site Furnishings & Signs				
Benches, Trash Receptacles, and Signs	1	Lot	$17,500	$17,500
Educational Displays*				

Cost Item	Quantity	Unit	Unit Price	Total
Display Structures	1	Lot	$10,200	$10,200
Graphic Layout & Production	3	Ea	$3,300	$9,900
Pavilions & Pergolas				
Overlook Pergola @ Education Area	1	Ea	$12,000	$12,000
Shade Pavilion @ Wildlife Viewing Area #1	1	Lot	$32,000	$32,000
Subtotal				**$1,959,615**
Adjustment for Inflation (various years to 2005 dollars)	5% of Subtotal			$97,981
Subtotal (2005$)				**$2,057,596**
Bonds & Insurance	5% of Subtotal (2005$)			$102,880
Construction Subtotal				**$2,160,476**
Construction Contingency	25% of Construction Subtotal			$540,119
Construction Total with Contingency				**$2,700,595**

* Work Not Completed; Actual Cost to Date Plus Estimated Remaining Costs

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
COMPONENT 1: Installation of Water Conservation Equipment					
Task 1A - Customers, Site Locations	-	$250,000	$50,000	$185,000	$435,000
Task 1B - Customer Site Surveys, Analysis and Equipment Selection	-	$175,000	$50,000	$80,000	$255,000
Task 1C - Activation, Commissioning, and Testing	-	$450,000	$100,000	$400,000	$850,000
COMPONENT 2: Development of Notification and Awareness (Alert) Program					
Task 2A - Custom Notification and Awareness (Alert) Program	-	$25,000	$0	$25,000	$50,000
COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes					
Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes	-	$0	$0	$160,000	$160,000
COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING					
Task 4A - Administration, Management and Reporting	-	$150,000	$0	$50,000	$200,000
Grand Total	-	**$1,050,000**	**$200,000**	**$900,000**	$1,950,000

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

Budget Break-out Detail:

Implementation of Central Basin MWD IRWMP Central Basin's Portion of the Water Conservation/ Management & Education Program	Budget Amount by Task (DWR Share)	Budget Amount by Task (CBMWD Share)*	Task Totals
COMPONENT 1: Installation of Water Conservation Equipment			
Task 1A - Customers, Site Locations			
Plan, Develop, Administer Vendor Contract *(Breakdown of Costs - Table 1)*	$0	$15,000	$15,000
Planning and Development of Site Selection Criteria *(Breakdown of Costs - Table 1)*	$10,000	$60,000	$70,000
Selection of Customers and Customer Sites *(Breakdown of Costs - Table 1)*	$25,000	$25,000	$50,000
Enrollment of Customers *(Breakdown of Costs - Table 1)*	$150,000	$150,000	$300,000
Task Sub-Total	**$185,000**	**$250,000**	**$435,000**
Task 1B - Customer Site Surveys, Analysis and Equipment Selection			
Perform Water Audits *(Breakdown of Costs - Table 2)*	$75,000	$165,000	$240,000
Customer Equipment Needs and Retrofits List *(Breakdown of Costs - Table 2)*	$5,000	$10,000	$15,000
Task Sub-Total	**$80,000**	**$175,000**	**$255,000**
Task 1C - Activation, Commissioning, and Testing			
Water Conservation Equipment *(Breakdown of Costs - Table 3)*	$400,000	$121,000	$521,000
Removal and Installation of Water Conservation Equipment *(Breakdown of Costs - Table 3)*	$0	$329,000	$329,000
Task Sub-Total	**$400,000**	**$450,000**	**$850,000**
COMPONENT 2: Development of Notification and Awareness (Alert) Program			
Task 2A - Custom Notification and Awareness (Alert) Program			
Plan, Develop, Administer Vendor Contract and/or Procure Equipment	$0	$8,000	$8,000
Program, Planning and Development	$0	$5,000	$5,000
Program Implementation & Conservation Practices Tools	$25,000	$10,000	$35,000
Publish, Activate and Test	$0	$2,000	$2,000
Task Sub-Total	**$25,000**	**$25,000**	**$50,000**
COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes			
Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes			
Landscape Classes (10 Classes)	$50,000	$0	$50,000
Demonstration Gardens (5 Gardens)	$50,000	$0	$50,000
Marketing and Outreach	$60,000	$0	$60,000
Task Sub-Total	**$160,000**	**$0**	**$160,000**
COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING			
Task 4A - Administration, Management and Reporting			
Administration and Management of Grant Project *(Breakdown of Costs - Table 4)*	$25,000	$150,000	$175,000
Reports and Other Deliverables	$15,000	$0	$15,000
Final Report Publication	$10,000	$0	$10,000
Task Sub-Total	**$50,000**	**$150,000**	**$200,000**
Project Grand Total	**$900,000**	**$1,050,000**	**$1,950,000**

TABLES

TABLE 1: Task 1A Customers, Site Locations	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Plan, Develop, Administer Vendor Contract	$100	150	$15,000
Planning and Development of Site Selection Criteria	$140	500	$70,000
Selection of Customers and Customer Sites	$140	357	$50,000
Enrollment of Customers	$140	2,143	$300,000
			$435,000

TABLE 2: Task 1B Customer Site Surveys, Analysis and Equipment Selection	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Perform Water Audits	$140	1,714	$240,000
Customer Equipment Needs and Retrofits List	$140	107	$15,000
			$255,000

TABLE 3: Task 1C Water Conservation Equipment and Labor Estimated Costs	*Equipment ($)*	*Quantity (Each)*	*Vendor Rate ($/Hour)*	*Labor (Hours)*	*Equipment Costs ($)*	*Labor Costs ($)*	*Vendor Total ($)*
Zero Water & Ultra Low Water Urinals	$1,000	200	$60	8	$200,000	$96,000	$296,000
Clothes Washers	$600	50	$60	5	$30,000	$15,000	$45,000
Dishwashers	$600	110	$60	5	$66,000	$33,000	$99,000
High Efficiency Toilets	$350	200	$60	6	$70,000	$72,000	$142,000
Laminar Flow Restrictors	$20	1,000	$50	0	$20,000	$9,900	$29,900
Large Rotary Nozzles	$15	4,000	$50	0	$60,000	$49,500	$109,500
Rotating Nozzles for Spray Heads	$15	5,000	$41	0	$75,000	$53,600	$128,600
					$521,000	**$329,000**	**$850,000**

TABLE 4: Administration and Management Costs - CBMWD Personnel	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Project Manager - Public Affairs	$100	1,000	$100,000
Project Manager - Engineering	$100	500	$50,000
Project and Administrative Support - Public Affairs	$50	500	$25,000
			$175,000

*Notes: CBMWD will utilize funding from a U.S. Department of Energy - Energy Efficiency and Conservation Block Grant Award (U.S. DOE EECBG) in the amount of $1,050,000 for project; Removal and installation of water conservation equipment is not an approved activity under the DWR scope of work. Labor costs will be covered entirely by DOE grant funding only. DWR and DOE will share the cost of water conservation equipment.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 4: Large Landscape Conservation – West Basin MWD (Old)[1]

	Budget Category	Other State Funds	Estimated Local Cost	Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
1.0	Ocean-Friendly Garden Landscape Classes	-	$66,569	$64,563	$67,423	$133,992
2.0	Ocean-Friendly Demonstration Gardens	-	$32,083	$23,983	$320,962	$353,045
3.0	**Irrigation Controllers**					
3.1	Phase I - USBR In-Kind & MWD In-Kind	-	$391,855	$391,855	$505,357	$897,212
3.2	Phase II - USBR In-Kind & MWD In-Kind	-	$611,855	$358,452		$611,855
4.0	**Irrigation Controller Rebates**					
4.1	Phase I - 1/3rd of controllers (1-450)	-	$36,000	$26,911	$69,750	$105,750
4.2	Phase II - 1/3rd of controllers (451-900)	-	$36,000	$26,911	$69,750	$105,750
4.3	Phase III -1/3rd of controllers (901-1350)	-	$36,000	$26,911	$69,750	$105,750
5.0	Marketing and Outreach	-	$15,992	$15,992	$29,008	$45,000
6.0	Run-off Devices	-	-	$0	$68,000	$68,000
7.0	Database Management	-	$52,031	$52,031	-	$52,031
8.0	PAEP	-	$10,000	$10,000	-	$10,000
9.0	Administration	-	$76,000	$49,707	-	$76,000
10.0	Planning-Site Selection	-	$26,440	$0	-	$26,440
11.0	Contingency	-	$10,205	$0	-	$10,205
(I)	**Grand Total**	-	**$1,401,030**	**$1,047,316**	**$1,200,000**	**$2,601,030**

Sources of Funds: Non-State: $821,923 WBMW Conservation Budget; and
Share (Funding Match): $811,710 MW Conservation / Landscape Incentives Program

Note:

1. This budget table was revised from the original per Informal Amendment #1 - see progress report Q4-2011. Specifically: 1) grant funds and required local cost share amounts were reallocated (totals remained the same) for several tasks; 2) Sub-tasks for Tasks 3 and 4 were added in an effort to address cash-flow issues of project proponent (allowing sooner grant payout once required cost-share is met on a sub-task basis); and 3) revised estimates were provided for Local Cost and Total Project Cost. These changes are reflected in this table.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 4: Large Landscape Conservation – West Basin MWD (Revised)

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
1	**Ocean-Friendly Garden Landscape Classes**	-	$68,032	$64,563	$67,423	$135,455
2	**Ocean-Friendly Demonstration Gardens**	-	$102,679	$23,983	$519,309	$621,988
3	**Centralized Irrigation Controllers (1,117)**					
3.1	Phase I - USBR In-Kind & MWD In-Kind	-	$391,855	$391,855	$505,357	$897,212
3.2	Phase II - USBR In-Kind & MWD In-Kind	-	$611,855	$358,452	$0	$611,855
4	**Residential Irrigation Controller Rebates**					
4.1	Phase I - 1/3rd of controllers (1-450)	-	$36,000	$26,911	$69,750	$105,750
5	**Landscape Surveys and Turf Removal Rebates**					
5.1	Landscape Surveys	-	$20,000	$0	$70,122	$90,122
5.2	Turf Removal Incentive	-	$100,000	$0	$100,000	$200,000
6	**Marketing and Outreach**		$15,992	$15,992	$29,008	$45,000
7	**Run-off Devices**	-	$0	$0	$37,378	$37,378
8	**Database Management**	-	$97,723	$52,031	$0	$97,723
9	**PAEP**	-	$10,000	$10,000	$0	$10,000
10	**Administration**	-	$88,109	$49,707	$0	$88,109
11	**Planning-Site Selection**	-	$26,440	$0	$0	$26,440
12	**Contingency**	-	$10,205	$0	$0	$10,205
	Grand Total	-	**$1,578,890**	**$993,494**	**$1,398,347**	**$2,977,237**

Note: Above budget table is for A-3 (includes redistributed $198K funds); re-allocated funds from Tasks 4.2, 4.3 and 7 to new Task 5); and revised Local Cost, Required Local cost share and Estimated Total project costs for several tasks.

Las Virgenes Creek Restoration

	Budget Category	Other State Funds	Non-State Share	Requested Grant Funding	Total
(a)	Direct Project Administration Costs	-	$20,000	-	**$40,430**
(b)	Land Purchase/ Easement	-	-	-	-
(c)	Planning/ Design/ Engineering/ Environmental Doc	-	$12,090	-	**$12,090**
(d)	Construction/ Implementation	-	$462,000	$370,000	**$832,000**
(e)	Environmental Compliance/ Mitigation/ Enhancement	-	-	$20,000	**$20,000**
(f)	Construction Administration	-	-	$35,000	**$35,000**
(g)	Other Costs	-	$44,000	$20,000	**$64,000**
(h)	Construction/ Implementation Contingency	-	$10,000	$70,000	**$80,000**
(i)	**Grand Total**	-	**$548,090**	**$515,000**	**$1,063,090**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$548,090 City of Calabasas General Fund and Los Angeles County Supervisor's Office**			

Note: All costs are in 2005 dollars and rounded to the nearest dollar.

Las Virgenes Creek Detailed Construction Cost Estimate

Cost Item	Quantity	Unit	Unit Price	Total
Mobilization	1	L.S.	$20,000.00	**$20,000**
Clearing and Grubbing; Channel Demolition & Removal	1,500	Ton	$60.00	**$90,000**
Earthwork (side slopes, terraces, low-flow channel, rock groin, willow trenches)	3,000	C.Y.	$70.00	**$210,000**
Planted Rock Toe Revetment	750	Ton	$100.00	**$75,000**
Planted Rock Weirs and Pool	1,400	Ton	$148	**$207,200**
Willow Trench Staking	1	L.S.	$6,500.00	**$6,500**
Rootwads	4	Each	$3,500.00	**$14,000**
Planted Coir Bio D Blocks	1,100	L.F.	$18.00	**$19,800**
Hydroseeding	1.00	L.S.	$6,500.00	**$6,500**
Erosion Control Blankets: Terrace	1,300	S.Y.	$13.00	**$16,900**
Erosion Control Blankets: Slopes	800	S.Y.	$13.00	**$10,400**
Irrigation	1	L.S.	$30,000.00	**$30,000**
Planting	0.75	Acre	$46,000.00	**$34,500**
Retaining Walls (4-ft high)	2,200	S.F.	$14.00	**$30,800**
Concrete Masonry Floodwalls	200	L.F.	$200.00	**$40,000**
Concrete cut-off walls retrofit/outfalls/utility concrete cap	120	yds	$590.00	**$70,800**
			Subtotal	**$882,400**
			Contingency (10%)	**$88,240**
			TOTAL	**$970,640**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 6: Malibu Creek Conservation

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$22,205	$22,205	$29,377	$51,582
(b)	Land Purchase/Easement	-	$0	$0	$0	$0
	Planning and Stakeholder Effort	-	$0	$0	$0	$0
	Design and Engineering	-	$0	$0	$0	$0
	Assessment, engineering, geotechnical, hydraulics, water quality, plans & specs	-	$0	$0	$0	$0
	Environmental Documentation	-	$0	$0	$0	$0
(c)	Planning/Design/Engineering/Environmental Documentation	-	$13,322	$13,322	$0	$13,322
(d)	Construction/Implementation	-	$210,826	$210,826	$608,343	$819,169
(e)	Environmental Compliance/Mitigation/Enhancement	-	$0	$0	$0	$0
(f)	Construction Administration	-	$35,526	$35,526	$0	$35,526
(g)	Other Costs (legal, permits, monitoring, preparing PAEP/MP/QAPP)	-	$1,121	$1,121	$0	$1,121
(h)	Construction/Implementation Contingency	-	$0	$0	$10,000	$10,000
(i)	**Grand Total**	$0	$283,000	$283,000	$647,720	$930,720

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 7: Morris Dam Water Supply (Old)[1]

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$602,500	$623,274	0	$602,500
(b)	Land Purchase/ Easement	-	-	-	0	-
(c)	Planning/ Design/ Engineering/Environmental Doc	-	$1,938,975	$466,606	0	$1,938,975
(d)	Construction/ Implementation	-	$6,914,366	$4,240,767	$5,135,634	$12,050,000
(e)	Environmental Compliance/ Mitig./Enhancement	-	$154,500	$19,682	0	$154,500
(f)	Construction Administration	-	$453,200	$821,912	0	$453,200
(g)	Other Costs (PAEP)	-	$5,000	$3,067	0	$5,000
(h)	Construction/ Implementation contingency	-	$1,205,000	$739,059	0	$1,205,000
(i)	**Grand Total**	**-**	**$11,273,541**	**$6,914,366**	**$5,135,634**	**$16,409,175**
Sources of Funds for Non-State Share (local Cost): District Flood Funds						

Note 1 - This budget table was revised from the original per Informal Amendment #1 - see email dated June 13, 2013 from DWR to LA County. Specifically, several budget categories were reallocated for required local cost share.

Project 7: Morris Dam Water Supply (Revised)

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$735,820	$623,274	0	$735,820
(b)	Land Purchase/ Easement	-	-	-	0	-
(c)	Planning/ Design/ Engineering/Environmental Doc	-	$512,753	$466,606	0	$512,753
(d)	Construction/ Implementation	-	$4,980,782	$4,240,767	$5,619,218	$10,600,000
(e)	Environmental Compliance/ Mitig./Enhancement	-	$23,433	$19,682	0	$23,433
(f)	Construction Administration	-	$840,893	$821,912	0	$840,893
(g)	Other Costs (PAEP)	-	$5,000	$3,067	0	$5,000
(h)	Construction/ Implementation contingency	-	$1,205,000	$739,059	0	$1,205,000
(i)	**Grand Total**	**-**	**$8,303,681**	**$6,914,366**	**$5,619,218**	**$13,922,899**
Sources of Funds for Non-State Share: District Flood Funds						

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENGINEER'S ESTIMATE - TOTAL PROJECT

PROJECT: FCC0000496 MORRIS DAM POWER SYSTEM AND VALVE UPGRADE - PHASE 1

ESTIMATED: REVISED:

ITEM	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
1	CONSTRUCTION SCHEDULE	MTH	1	1,221,661.00	1,221,661.00
2	PARTNERING (ALLOWANCE OF $35,000)	AL	35,000	1.00	35,000.00
3	IMPLEMENTATION OF BMPs	LS	100%	10,000.00	10,000.00
4	PREPARE HEALTH AND SAFETY PLAN	LS	100%	26,255.00	26,255.00
5	IMPLEMENTATION OF THE HEALTH AND SAFETY PLAN	LS	100%	26,255.00	26,255.00
6	OFFICE FACILITIES	LS	100%	36,087.00	36,087.00
7	MOBILIZATION	LS	100%	683,053.00	683,053.00
8	ELECTRICAL DEMOLITION	LS	100%	194,287.00	194,287.00
9	Asbestos and Lead Based Paint Abatement	LS	100%	656,373.00	656,373.00
10	EARTHWORK	LS	100%	38,738.00	38,738.00
11	AC PAVEMENT	LS	100%	6,582.00	6,582.00
12	Demolition of Control House	LS	100%	17,853.00	17,853.00
13	Demolition of Outlets	LS	100%	166,719.00	166,719.00
14	Demolition of Generator Room	LS	100%	39,382.00	39,382.00
15	Drilled Foundation Caissons	LS	100%	117,191.00	117,191.00
16	Cast Iron Pipe and Accessories	LS	100%	1,649.00	1,649.00
17	Waste Holding Tank	LS	100%	7,607.00	7,607.00
18	Cast in Place concrete	LS	100%	8,437.00	8,437.00
19	MISCELLANEOUS SHOTCRETE	LS	100%	5,726.00	5,726.00
20	MISCELLANEOUS GROUT	LS	100%	6,564.00	6,564.00
21	Handrailing / Guardrailing	LS	100%	12,604.00	12,604.00
22	Grating and Trenchcovers	LS	100%	43,237.00	43,237.00
23	Anchorage	LS	100%	27,166.00	27,166.00
24	Site Miscellaneous Metal	LS	100%	35,787.00	35,787.00
25	Woodwork	LS	100%	4,459.00	4,459.00
26	Control House Thermal and Moisture Protection	LS	100%	20,759.00	20,759.00
27	Doors and Windows	LS	100%	26,803.00	26,803.00
28	Finishes	LS	100%	166,036.00	166,036.00
29	Building Specialities	LS	100%	13,218.00	13,218.00
30	Residential Equipment	LS	100%	17,102.00	17,102.00
31	Standby Generator System	LS	100%	151,104.00	151,104.00
32	Computer Hardware / Software	LS	100%	260,784.00	260,784.00
33	Uninterruptable Power Supply	LS	100%	27,818.00	27,818.00
34	Cathodic Protection	LS	100%	9,127.00	9,127.00
35	Strainers	LS	100%	1,812.00	1,812.00
36	Piping	LS	100%	43,301.00	43,301.00
37	Steel Pipe	LS	100%	1,060,886.00	1,060,886.00
38	3-in air release / vaccum valve	LS	100%	16,299.00	16,299.00
39	Ball Valves	LS	100%	330.00	330.00
40	Gate Valves	LS	100%	8,393.00	8,393.00
41	Knife Gates	LS	100%	9,055.00	9,055.00
42	72-in Fixed Cone Valve	EA	1	456,283.00	456,283.00
43	42-in Fixed Cone Valve	EA	1	244,396.00	244,396.00
44	20-in Jet Flow Gate	EA	1	192,160.00	192,160.00
45	Hydraulic Control System	LS	100%	165,948.00	165,948.00

PROJECT: FCC0000496 MORRIS DAM POWER SYSTEM AND VALVE UPGRADE - PHASE 1

ESTIMATED: REVISED:

46	Slide Gate Hydraulic Operators	LS	100%	139,665.00	139,665.00
47	Plumbing	LS	100%	14,928.00	14,928.00
48	Heating Ventilation, and Air Conditioning	LS	100%	36,220.00	36,220.00
49	Raceway and Cable System	LS	100%	1,902,525.00	1,902,525.00
50	Lighting	LS	100%	1,176,787.00	1,176,787.00
51	Metering Panel	EA	1	10,366.00	10,366.00
52	480 volt motor control center	EA	3	60,005.00	180,015.00
53	Bypass Isolation Automatic Transfer Switch	LS	100%	20,185.00	20,185.00
54	Lightning Protection System	LS	100%	41,659.00	41,659.00
55	CCTV Surveillance System	LS	100%	44,370.00	44,370.00
56	Telephone System	LS	100%	65,196.00	65,196.00
57	Structural Concrete (RISER)	CY	2,251	130.00	292,630.00
58	Bar Reinforcing Steel (RISER)	LB	216,000	1.00	216,000.00
59	Drill and Bond Dowel (RISER)	LF	6,276	40.00	251,040.00
60	Structural Steel (RISER)	LB	93,188	3.00	279,564.00
61	Existing Structure Removal (RISER)	LS	100%	80,000.00	80,000.00
62	Slide Gate Accessories and Appurtenances (RISER)	LS	100%	900,000.00	900,000.00
63	Water Quality Testing	LS	100%	10,000.00	10,000.00
64	Diversion and Care of Water Plan and Implementation (RISER)	LS	100%	65,637.00	65,637.00

GRAND TOTAL FOR ESTIMATE = 12,047,073.00

EXHIBIT C
BUDGET

North Atwater Creek Restoration Budget

Detailed Project Budget - ORIGINAL

	Budget Category	Other State Funds	Non-State Share (required cost-share)	DWR Grant Share	Total
(a)	Direct Project Administration Costs	$0	$0	$0	$0
(b)	Land Purchase/ Easement	$0	$0	$0	$0
(c)	Planning/ Design/ Engineering/ Environmental Doc	$0	$250,000	$500,000	$750,000
(d)	Construction/ Implementation	$0	$1,750,000	$1,750,000	$3,500,000
(e)	Environmental Compliance/ Mitigation/ Enhancement	$0	$0	$0	$0
(f)	Construction Administration	$0	$0	$0	$0
(g)	Other Costs	$0	$0	$0	$0
(h)	Construction/ Implementation contingency	$0	$0	$0	$0
(i)	**Grand Total**	**$0**	**$2,000,000**	**$2,250,000**	**$4,250,000**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$2,000,000**	**City of Los Angeles, Wastewater Capital Improvement Program**		

Note: All costs are in 2005 dollars and rounded to the nearest dollar

Detailed Project Budget - REVISED

	Budget Category	Other State Funds	Non-State Share (required cost-share)	DWR Grant Share	Total
(a)	Direct Project Administration Costs	$0	$0	$0	$0
(b)	Land Purchase/ Easement	$0	$0	$0	$0
(c)	Planning/ Design/ Engineering/ Environmental Doc	$0	$229,073	$468,247	$697,320
(d)	Construction/ Implementation	$0	$778,247	$1,781,753	$2,560,000
(e)	Environmental Compliance/ Mitigation/ Enhancement	$0	$0	$0	$0
(f)	Construction Administration	$0	$0	$0	$0
(g)	Other Costs	$0	$0	$0	$0
(h)	Construction/ Implementation contingency	$0	$0	$0	$0
(i)	**Grand Total**	**$0**	**$1,007,320**	**$2,250,000**	**$3,257,320**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$2,000,000**	**City of Los Angeles, Wastewater Capital Improvement Program**		

Pacoima Wash Greenway

Budget Category		Other State Funds	Non-State Share	Requested Grant Funding	Total
(a)	Project Communication and Coordination	$134,933	$0	$24,675	**$159,608**
(b)	Land Purchase/ Easement	-	-	-	-
(c)	Planning/ Design/ Engineering	$72,054	$0	$41,955	**$114,009**
(d)	Construction/ Implementation	$1,194,410	$0	$416,296	**$1,610,706**
(e)	Construction/ Implementation contingency	$298,603	$0	$104,074	**$402,677**
(f)	**Grand Total**	$1,700,000	$0	$587,000	**$2,287,000**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		$500,000 Other State Source -Santa Monica Mountains Conservancy Prop 50 $1,200,00 Other State Source -Santa Monica Mountains Conservancy Prop 84			

Note: All costs are in 2005 dollars and rounded to the nearest dollar

Pacoima Wash Greenway – Detailed Budget Costs

Pacoima Wash Greenway - 8th Street Park					7/1/08	
Budget						
			DWR Share	**Match**	**Total**	
Task 1 - Project Communication and Coordination						
	1.1	Project Communication & Coordination	$ -	$ 87,933	$ 87,933	
	1.2	General Public Outreach	$ -	$ 12,000	$ 12,000	
	1.3	Grantee Adminstration	$ -	$ 25,000	$ 25,000	
	1.4	Environmental Documentation	$ -	$ 5,000	$ 5,000	
	1.5	Permitting / Utility Fees	$ 10,000	$ 5,000	$ 15,000	
	1.6	County	$ 14,675	$ -	$ 14,675	
				Task 1 Subtotal	**$ 159,608**	
Task 2 - Planning/Design/Engineering						
	2.1	Design Development and Outreach	$ -	$ 11,760	$ 11,760	
	2.2	Construction Documents & Specifications	$ 9,983	$ 36,546	$ 46,529	
	2.3	BMP Plans and Engineering	$ 19,000	$ 7,800	$ 26,800	
	2.4	Value Engineering and Phasing	$ 6,480	$ -	$ 6,480	
	2.5	Soils & Geotechnical Analysis	$ 6,492	$ 420	$ 6,912	
	2.6	Topographic Survey	$ -	$ 12,375	$ 12,375	
	2.7	Reimbursables	$ -	$ 3,153	$ 3,153	
				Task 2 Subtotal	**$ 114,009**	
Task 3 - Construction						
	3.1	Mobilization	$ 20,000	$ 29,000	$ 49,000	
	3.2	Field Office Facility	$ 1,500	$ 1,500	$ 3,000	
	3.3	Clearing and Grubbing	$ 42,741	$ 50,000	$ 92,741	
	3.4	Temporary Utilities	$ 1,000	$ 1,000	$ 2,000	
	3.5	Site Work/Erosion Control	$ 5,000	$ 5,000	$ 10,000	
	3.6	Earthwork - Grading	$ 100,000	$ 75,000	$ 175,000	
	3.7	Fencing	$ -	$ 176,640	$ 176,640	
	3.8	Irrigation	$ -	$ 142,632	$ 142,632	
	3.9	Planting	$ -	$ 127,373	$ 127,373	
	3.10	Paving	$ -	$ 96,902	$ 96,902	
	3.11	Placitas	$ 95,117	$ 76,441	$ 171,558	
	3.12	Sediment Vaults	$ 36,300	$ -	$ 36,300	
	3.13	Stream, Infiltration Basin	$ 74,638	$ 200,000	$ 274,638	
	3.14	Bridges	$ 40,000	$ 68,780	$ 108,780	
	3.15	Arbor	$ -	$ 44,940	$ 44,940	
	3.16	Site Furnishings & Artwork	$ -	$ 65,000	$ 65,000	
	3.17	Inspections/Construction Administration	$ -	$ 34,202	$ 34,202	
				Task 3 Subtotal	**$ 1,610,706**	
Task 4 - Construction Contingency (25%)			$ 104,074.00	$ 298,603	$ 402,677	
			$ 587,000	**$ 1,700,000**	**$ 2,287,000**	**GRAND TOTAL**

Copy of Budget and Schedule (MRCA-1July08)

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 10: San Gabriel Valley Arundo Removal

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration	-	-		$8,400	$8,400
(b)	Land Purchase/ Easement	-	-		-	-
(c)	Planning/ Design	-	$300	$298	-	$300
(d)	Construction/Implementation	-	$49,900	$49,602	$158,100	$208,000
(e)	Environmental Compliance	-	-		-	
(f)	Construction Administration	-	-		$10,000	$10,000
(g)	Other Costs, QAP/PAEP	-	-		$26,500	$26,500
(h)	Construction/Implementation contingency	-	-		-	$0
(i)	**Grand Total**	**-**	**$50,200**	**$49,900**	**$203,000**	**$253,200**
Sources of Funds for Non-State Share (Funding Match) and $49,900 Mitigation funds from LASGRWC and SAGE						

Additional activities will be implemented under Task G (QAP/PAEP), using the reallocated grant funds ($25,000, resulting in $203,000 grant funds total), as described in Attachment 2. These activities include: conducting field surveys of treatment areas to evaluate success, identify new growth, and verify native plant succession. The detailed cost break-out for these additional activities is provided below:

Task	Labor Discipline	Estimated Total Hours	Cost/Hour	Estimated Total Cost
g	GIS specialist	40	55.31	$2,212
g	Field Technician	229	49.86	$11,418
g	Project Manager	105	29.85	$3,134
g	Project Supervisor	138.2	59.7	$8,251
	Total:	**512**	**-**	**$25,000**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 11: Solstice Creek Restoration

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	$0	$0	$0	$3,103	$3,103
b	Land Purchase/ Easement	$0	$0	$0	-	$0
c	Planning/ Design/ Engineering/Environmental Documentation	$0	$100,000	$0	-	$100,000
d	Construction/Implementation	$0	$0	$0	$107,793	$107,793
e	Environmental Compliance/Mitigation/ Enhancement	$0	$50,000	$0	-	$50,000
f	Construction Administration	$0	$0	$0	-	$0
g	Other Costs	$0	$0	$0	-	$0
h	Construction/Implementation Contingency	$0	$0	$0	-	$0
I	**Grand Total**	**$0**	**$150,000**	**$0**	**$110,896**	**$260,896**

Sources of Funds for Non-State Share (Funding Match) and Other State Funds:
$150,000 grant from federal funds (NPS) - already expended (pre-award) $32,530.00 in-kind services from NPS staff not shown here.

The redistributed grant funds ($32,530, resulting in $110,896 grant funds total) will allow for cost overruns to be captured (additional staff time for project implementation), under Task d (above). These activities include: coordination and supervision of field work and labor for weeding and planting restoration activities. The detailed cost break-out for these activities is provided below:

Task	Labor Discipline	Description	Estimated Total Hours	Cost/Hour	Estimated Total Cost
d	Field Coordinator/Supervisor	Field coordinate/supervise	429	20.06	$8,606
d	National Park Service (NPS) Field Technician	Weeding and Planting	200	13.03	$2,606
d	California Conservation Crew (CCC)	Weeding and Planting	1455	16	$23,280
Total:		-	**2,084**	-	**$34,492**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 12: South Los Angeles Wetlands

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	-	$60,000	$24,325	-	$60,000
b	Land Purchase and Clean-up	-	$3,900,000	$1,581,081	-	$3,900,000
c	Planning/ Design/ Engineering/Environmental Doc	-	$391,417	$202,703	$1,608,583	$2,000,000
d	Construction/Implementation	$2,700,000	$3,600,000	$1,621,622	$2,200,000	$8,500,000
e	Environmental Compliance/ Mitigation/Enhancement	-	$600,000	$243,243	-	$600,000
f	Construction Administration	-	$1,000,000	$405,405	-	$1,000,000
g	Other Costs	-	$40,000	$16,216	-	$40,000
h	Construction/Implementation/ contingency	-	$1,000,000	$405,405	-	$1,000,000
i	**Grand Total**	**$2,700,000**	**$10,591,417**	**$4,500,000**	**$3,808,583**	**$17,100,000**

Sources of Funds for Non-State Share (Funding Match) and Other State Funds:

$1,000,000 LA County Proposition K

$2,000,000 Wastewater Capital Improvement Program

$8,100,000 City of LA Proposition O

$2,700,000 State of CA - Proposition 40

South Los Angeles Wetlands Park - Detailed Construction Cost Estimate

Project Title: South Los Angeles Wetland Park - FINAL ESTIMATE

Scope: Existing Building/Sitework demolition, New parking, walkways, fencing, and signage. Stormwater collection, treatment and conveyance. Wetland construction and planting.

Work Order: | Client Dept.:

Project Manager: Kendrick Okuda | Project Engineer: Cesar Moran, Psomas

Type of Estimate: ☐ Class "B" ☑ Class "C" ☐ Class "O"

JACOBUS & YUANG, INC. ESTIMATE

Description	Unit	Quantity	Unit Price	Item Total
Demolition				
Demolition: AC Paving, curbs, trench drains + haul off (11" section)	SF	221,765	$ 1.58	$350,389
Demolition: Building demolition (7 buildings)	CF	1,485,000	$ 0.30	$445,500
Demolition: footings and foundations	SF	99,000	$ 2.44	$242,000
Demolition: miscellaneous surface improvements	SF	221,765	$ 0.10	$22,177
General protection allowance - exist bldg	LF	850	$ 3.00	$2,550
Demolition: Rail way demolition (ALLOWANCE)	LS	1	$ 50,000.00	$50,000
Sub-total				**$1,112,615**
Environmental Mitigation				
Demolition: subsurface utility/structure allowance (includes (1) 500 gal. U/g storage tank + (3) grounwater wells)	SF	321,630	$ 0.27	$86,208
Remove and Dispose (E) Clarifier Tank	EA	4	$ 7,500.00	$30,000
Environmental mitigation, buildings	SF	99,000	$ 1.04	$103,125
Environmental mitigation, 25% of soil below AC demo. areas	CY	3,080	$ 120.00	$369,600
Sub-total				**$588,933**
Off-site Work				
Sawcut & patch (E) roadway paving	LF	1,370	$ 25.00	$34,250
Break & restore (E) sidewalk, curb & gutter	LOC	4	$ 7,500.00	$30,000
Driveway	EACH	2	$ 20,000.00	$40,000
Traffic Control	WD	15	$ 750.00	$11,250
Sub-total				**$115,500**
Earthwork/Excavation				
Bulk excavation, pump station, bmp, vault	CY	900	$ 6.43	$5,787
Bulk excavation, pathways, 2'D avg.	CY	4,193	$ 6.43	$26,958
Bulk excavation, parking lot area	CY	2,357	$ 6.43	$15,156
Bulk excavation, wetlands (Per PSOMAS qty)	CY	27,837	$ 6.43	$178,992
Backfill @ pump station, bmp, vault	CY	500	$ 8.04	$4,019
Backfill to create mounds in wetlands & @ berm (From stockpile) - per PSOMAS QTY.	CY	6,786	$ 25.00	$169,650
Export (2-hr round trip) + Dump (Based on Psomas qty)	CY	29,047	$ 16.90	$490,894
Earthwork: Rough grading	SF	321,630	$ 0.34	$109,354
Erosion Control	LS	1	$ 50,000.00	$50,000
Sub-total				**$1,050,810**
Storm Water Treatment & Piping System				
Structural BMP (hydrodynamic separator or equal), 18' x 18' x 16'D	EACH	1	$ 76,684.30	$76,684
Diversion structure (JS), 63" x 36" x 63"	EACH	1	$ 30,000.00	$30,000
Diversion structure (JS), 63" x 24" x 63"	EACH	1	$ 24,000.00	$24,000
Break (E) 63" rcp & poc (N) junction structures	EACH	2	$ 17,000.00	$34,000
20 cfs Pump Station, 20' x 14' x 20'D + 10'D Manhole	EA	1	$ 115,000.00	$115,000
Low flow Pumps, ctrl panel, piping, valves, slide rail, etc., , 30' hd	EA	3	$ 30,000.00	$90,000
High flow Pumps, ctrl panel, piping, valves, slide rail, etc., , 30' hd	EA	3	$ 54,000.00	$162,000
Shoring, 30'D (pump station, bmp, vault - conventional)	SF	4,648	$ 25.00	$116,200
24" Ø Storm Outlet Pipe, Invert 12' (assume size)	LF	270	$ 210.26	$56,770

Project Title: South Los Angeles Wetland Park - FINAL ESTIMATE

Scope: Existing Building/Sitework demolition, New parking, walkways, fencing, and signage. Stormwater collection, treatment and conveyance. Wetland construction and planting.

Work Order: | Client Dept.:

Project Manager: Kendrick Okuda | Project Engineer: Cesar Moran, Psomas

Type of Estimate: ☐ Class "B" ☑ Class "C" ☐ Class "O"

JACOBUS & YUANG, INC. ESTIMATE

Description	Unit	Quantity	Unit Price	Item Total
Shoring, trenchbox, 12' inv. (pipes, 1-pipelength qty)	LF	270	$ 91.80	$24,786
Shoring, trenchbox, 16' inv. (pipes, 1-pipelength qty)	LF	158	$ 122.40	$19,339
36" Ø Storm Supply Pipe, Invert 16'	LF	158	$ 421.45	$66,589
Outlet Structure (manhole), 6'D	EACH	1	$ 15,000.00	$15,000
Sub-total				**$830,369**
Hydraulic/Water Quality Works				
8" HDPE Force Main, dry condition, n.e. 6' dp	LF	1,360	$ 68.67	$93,396
24" HDPE Force Main, wet condition, n.e. 6' dp	LF	1,130	$ 318.64	$360,067
Distribution manifold, 5 heads	LS	1	$ 30,000.00	$30,000
Camlock Quick Connect w/Plug Valve	LS	1	$ 2,500.00	$2,500
24" DIP Fittings	EACH	3	$ 6,000.00	$18,000
24" DIP Valves	EACH	2	$ 20,000.00	$40,000
Bypass Pumping	LS	1	$ 25,000.00	$25,000
Below ground valve vault, 6'x6'x6'D	EACH	1	$ 10,800.00	$10,800
Water Feature	LS	1	$ 50,000.00	$50,000
Sub-total				**$629,763**
Wetland Park Improvements And Planting				
Wood Bridge				
Wood Bridge 80' long total w/ 2 intermediate supports each w/ (2) 20' long piles + wd. Split rail each side	SF	1,280	$ 125.00	$160,000
Concrete approach walk w/ 1.5' X 1.5' edge beam each side	SF	2,540	$ 17.42	$44,238
Wetland fencing - split rail, vinyl, post at 10' o.c. with 2" x 6" rails T& B - To pathway at bridge	LF	636	$ 20.00	$12,720
Observation deck, 10' x 10'	EACH	2	$ 14,000.00	$28,000
Wetland Cell control structures (Weir structures, 45' L)	EACH	2	$ 35,000.00	$70,000
Wetland Liner (30mil)	SF	192,936	$ 1.85	$356,932
Emergent Marsh (Wet)	SF	47,430	$ 1.50	$71,145
Riparian Habitat	SF	70,060	$ 2.00	$140,120
Permanent Pool	SF	43,290	$ 1.00	$43,290
Perimeter Path (7" Reinforced Natural Concrete fire lane)	SF	28,000	$ 10.74	$300,741
Stabilized decomposed granite (DG) walkway, w/ redwood header on one side	SF	28,500	$ 3.20	$91,520
Wetland fencing - split rail, vinyl, post at 10' o.c. with 2" x 6" rails T& B - To wetland areas	LF	2,600	$ 20.00	$52,000
Bermed park	SF	64,000	$ 5.50	$352,000
Soil Preparation	SF	167,360	$ 0.15	$25,104
Irrigation System, (JYI Riparian habitat & bermed areas)	SF	119,930	$ 1.35	$161,906
One Year Landscape Maintenance Period	LS	1	$ 61,891	$61,891
Stone Rip-rap	SF	1,300	$ 14.61	$19,259
Biota Debris Screen Netting, 2'H	LF	90	$ 30.00	$2,700
Sub-total				**$1,993,566**
Site Improvements				
Service yard paving + fencing	SF	8,430	$ 8.70	$73,341
Parking lot - complete (striping, lighting, LS, irrig)	SF	31,820	$ 8.70	$276,834
Perimeter fencing - vinyl coated chain link, 6' h	LF	3,400	$ 41.00	$139,400

PROP O BOND PROGRAM
PROJECT CONSTRUCTION COST ESTIMATE

Project Title: South Los Angeles Wetland Park - FINAL ESTIMATE

Scope: Existing Building/Sitework demolition, New parking, walkways, fencing, and signage. Stormwater collection, treatment and conveyance. Wetland construction and planting.

Work Order: | Client Dept.:

Project Manager: Kendrick Okuda | Project Engineer: Cesar Moran, Psomas

Type of Estimate: ☐ Class "B" ☑ Class "C" ☐ Class "O"

JACOBUS & YUANG, INC. ESTIMATE

Description	Unit	Quantity	Unit Price	Item Total
PedestrianGates to perimeter fencing - vinyl coated chain link	EACH	7	$ 630.00	$4,410
Vehicular swing gates to perimeter fencing - vinyl coated chain link, per pair, 20' wide, manual + knoxbox	EACH	4	$ 4,525.00	$18,100
Site signage allowance	SF	321,630	$ 0.17	$54,677
Miscellaneous utility protection/connections	LS	1	$ 25,000.00	$25,000
Sub-total				**$591,762**
Site Miscellaneous				
Landscape Repairs to public Blvd.	LS	1	$ 2,500.00	$2,500
Steel floor doors to retention chambers	EACH	2	$ 12,500.00	$25,000
Electrical Work/SCADA				
Allowance for Power service & lighting, pump station	SF	8,400	$ 10.00	$84,000
Allowance for Power supply, water feature (from parking)	LS	1	$ 10,000.00	$10,000
Allowance for Power supply & lighting, parking	SF	31,700	$ 0.82	$25,994
Allowance for Power supply & lighting, bridge	SF	3,820	$ 5.00	$19,100
Lighting system, wetlands (Assumed Excluded)	SF	160,200	$ -	$0
Dewatering	LS	1	$ 25,000.00	$25,000
Testing & Inspection	LS	1	$ 50,000.00	$50,000
Sub-total				**$241,594**
General Conditions for Non-Mobilization Issues (3.5%)		11%	$ 7,154,911	$776,201
Subtotal (1)				**$7,931,112**

Whittier Narrows Water Reclamation Plant UV Disinfection Facilities Project

	Budget Category	Other State Funds	Non-State Share	Requested Grant Funding	Total
(a)	Direct Project Administration Costs	-	$394,340	-	$394,340
(b)	Land Purchase/ Easement	-	-	-	-
(c)	Planning/ Design/ Engineering/ Environmental Doc	-	$1,498,510	-	$1,498,510
(d)	Construction/ Implementation	-	$7,886,890	$2,000,000	$9,886,890
(e)	Environmental Compliance/ Mitigation/ Enhancement	-	$39,430	-	$39,430
(f)	Construction Administration	-	$788,690	-	$788,690
(g)	Other Costs	-	$39,430	-	$39,430
(h)	Construction/ Implementation contingency	-	-	-	-
(i)	**Grand Total**	**-**	$10,647,290	$2,000,000	$12,647,290
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$1,780,460 Expended by agency already $8,866,830 System user fees**			

Note: All costs are in 2007 dollars and rounded to the nearest ten dollars.

Whittier Narrows WRP UV Project – Detailed Construction Cost Breakdown

Cost Item	Quantity	Unit	Unit Price	Total
Project Initiation				
Bonds and Insurance	1	Lump Sum	$70,400	$70,400
Mobilization	1	Lump Sum	$156,170	$156,170
Subtotal Project Initiation				$226,570
Major Equipment				
Contractor Furnished				
UV Equipment	1	Lump Sum	$1,514,450	$1,514,450
Backwash Pump	1	ea.	$151,980	$151,980
Washwater Pump	1	ea.	$3,330	$3,330
Filter Air Release Valves	1	Lump Sum	$7,210	$7,210
Slide Gates	1	Lump Sum	$224,090	$224,090
Lighting Fixtures	1	Lump Sum	$5,550	$5,550
Contol Panels	1	Lump Sum	$39,940	$39,940
24" Magmeter	1	ea.	$13,310	$13,310
Flow Instruments	1	Lump Sum	$5,550	$5,550
Pressure Instruments	1	Lump Sum	$5,550	$5,550
Level Instruments	1	Lump Sum	$5,550	$5,550
FRP Piping	1	Lump Sum	$115,370	$115,370
Butterfly Valves	1	Lump Sum	$55,470	$55,470
Globe Valves	1	Lump Sum	$25,510	$25,510

Miscellaneous Valves	1	Lump Sum	$26,620	$26,620
Slide Gate Actuators	1	Lump Sum	$161,960	$161,960
Electrical Building	1	ea.	$149,760	$149,760
Stop Log and Notch	1	Lump Sum	$35,500	$35,500
Cable Bus and Supports	1	Lump Sum	$75,430	$75,430
Subtotal				$2,622,130
District Furnished				
Sample Pumps	2	ea.	$670	$1,350
Ammonia Pumps	4	ea.	$8,220	$32,880
Ammonia Analyzers	2	ea.	$14,910	$29,810
Chlorine Residual Analysers	2	ea.	$6,800	$13,600
Subtotal				$77,640
Subtotal Equipment				$2,699,770
Construction Activities				
Draining and Cleaning	1	Lump Sum	$8,870	$8,870
Tank Baffles	1	Lump Sum	$648,960	$648,960
Reactor Deck	1	Lump Sum	$475,350	$475,350
Channel Walls	1	Lump Sum	$415,450	$415,450
UV System[1.]	1	Lump Sum	$71,000	$71,000
Slide Gate Installation	1	Lump Sum	$102,510	$102,510
Weir Plates	1	Lump Sum	$12,200	$12,200
Gantry Crane & Installation	1	Lump Sum	$57,690	$57,690
Channel Covers	1	Lump Sum	$737,710	$737,710
Handrailing	1	Lump Sum	$28,840	$28,840
Misc Concrete/Asphalt	1	Lump Sum	$66,560	$66,560
Miscellaneous Mechanical	1	Lump Sum	$5,550	$5,550
Drainage System	1	Lump Sum	$203,010	$203,010
Washwater System[1.]	1	Lump Sum	$163,070	$163,070
Ammonia System[1.]	1	Lump Sum	$118,140	$118,140
Hypochlorite System[1.]	1	Lump Sum	$84,310	$84,310
Sample System[1.]	1	Lump Sum	$67,110	$67,110
Effluent Pump Station[1.]	1	Lump Sum	$61,010	$61,010
Backwash System[1.]	1	Lump Sum	$179,710	$179,710
Testing	1	Lump Sum	$272,400	$272,400
Electrical/Instrumentation[1.]	1	Lump Sum	$1,174,780	$1,174,780
Replace Soil w. Select Fill	15	Cubic Yards	$215	$3,230
Replace Soil w. Granular Fill	15	Cubic Yards	$206	$3,090
Subtotal Construction Activities				$4,960,550
Total				$7,886,890
1. Exclusive of associated equipment costs above.				

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 14: Wilmington Drain

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	-	-	-	-	-
b	Land Purchase/ Easement	-	-	-	-	-
c	Planning/ Design/ Engineering/Environmental Doc	-	$1,850,000	$0	$2,310,236	$4,160,236
d	Construction/Implementation	-	$8,839,764	$1,000,000	$2,500,000	$11,339,764
e	Environmental Compliance/ Mitigation/Enhancement	-	-	-	-	-
f	Construction Administration	-	-	-	-	-
g	Other Costs	-	-	-	-	-
h	Construction/Implementation contingency	-	-	-	-	-
i	**Grand Total**	**-**	**$10,689,764**	**$1,000,000**	**$4,810,236**	**$15,500,000**

Wilmington Drain Restoration Detailed Construction Cost Estimate

Cost Item	Quantity	Unit	Unit Price	Total
Demolition/Removals				
Invasive/Exotic Plant Removal Budget	1	L. S.	$148,000	$148,000
Channel Countouring	8,000	cy	$75	$600,000
Willow Stake Harvesting	1	L. S.	$3,500	$3,500
Hardscape Removals (C.L. Fencing/Paving/Gabions)	1	L. S.	$15,000	$15,000
Landscape and Site Improvements				
Catch basin retrofit	65	ea	1200	$78,000
Parking Area (Permeable Pavement)	3,000	sf	$60	$180,000
Grading (Cut/Fill)	3000	cy	$15	$45,000
Gabion Installation (streamside)	300	cy	$500	$150,000
Boulder Installation	2,500	ton	$300	$750,000
Irrigation system (solar controller & 2" water meter)	23,000	sf	$11	$253,000
ADA Drinking Fountain/dog water	2	ea	$3,500	$7,000
Planting: Native/Riparian	126,000	sf	$18	$2,268,000
Planting: Turf	253,000	sf	$3	$759,000
Mulching: Locating and spreading 3"	2,500	cy	$3.75	$9,375
3" DG paving w/headers (parking/trails)	95,000	sf	$6	$570,000
Channel Trash/Sediment traps ($2.0M+$0.75M)	1	ls	$2,750,000	$2,750,000
Ramp Access (LACFCD)	3	L.S.	$36,000	$108,000
Fencing	2,200	lf	$110	$242,000
Site Furnishings	1	L.S.	$100,000	$100,000
Off-Leashed Dog Park				
3" DG paving w/headers (parking/trails)	3,000	sf	$6	$18,000
Dog Waterer (drinking fountain)	1	L.S.	$3,000	$3,000
Site Furnishings	1	L.S.	$60,000	$60,000
Fencing	500	lf	$110	$55,000
Other Benefits				
Restrooms (meeting ADA standards)	1	L. S.	$1,500,000	$1,500,000
New Electrical Service	1	L. S.	$15,000	$15,000
Water Meter	1	L. S.	$3,500	$3,500
Total Direct Cost				**$10,690,375**
General Conditions	1%			$106,904
Liability Insurance	2%			$213,808
Contractors Fees	10%			$1,069,038
Performance Bond	2%			$213,808
Gross Receipts Tax	0.13%			$13,897
Subtotal Indirect Cost				**$1,617,454**
Total Construction Cost	**$12,307,829**	**is rounded to**		**$12,500,000**

EXHIBIT D
STANDARD CONDITIONS

D.1 ACCOUNTING AND DEPOSIT OF GRANT DISBURSEMENT:
SEPARATE ACCOUNTING OF GRANT DISBURSEMENT AND INTEREST RECORDS: Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. Grantee shall keep complete and accurate records of all receipts, disbursements, and interest earned on expenditures of such funds. Grantee shall require its Local Project Sponsors, contractors, or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by State at any and all reasonable times.

FISCAL MANAGEMENT SYSTEMS AND ACCOUNTING STANDARDS: The Grantee agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit tracing of grant funds to a level of expenditure adequate to establish that such funds have not been used in violation of state law or this Grant Agreement.

REMITTANCE OF UNEXPENDED FUNDS: Grantee, within a period of sixty (60) calendar days from the final disbursement from State to Grantee of grant funds, shall remit to State any unexpended funds that were disbursed to Grantee under this Grant Agreement and were not needed to pay Eligible Project Costs.

D.2 ACKNOWLEDGEMENT OF CREDIT: Grantee and Local Project Sponsors shall include appropriate acknowledgement of credit to the State and to all cost-sharing partners for their support when promoting the IRWM Program or associated grant funded projects or using any data and/or information developed under this Grant Agreement. During construction or implementation of each project, Grantee or Local Project Sponsors shall install a sign at a prominent location which shall include a statement that the project is financed under California Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002, administered by State of California, Department of Water Resources. Grantee shall notify State as each sign has been erected by providing them with a site map with the sign location noted and a photograph of each sign.

D.3 AMENDMENT: No amendment or variation of the terms of this Grant Agreement shall be valid unless made in writing, signed by the parties and approved as required. No oral understanding or agreement not incorporated in the Grant Agreement is binding on any of the parties.

D.4 AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, Grantee assures State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C., 12101 *et seq.*), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.5 AUDITS: State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of the Program, with the costs of such audit borne by State. After completion of the Program, State may require Grantee to conduct a final audit, at Grantee's expense, such audit to be conducted by and a report prepared by an independent Certified Public Accountant. Failure or refusal by Grantee to comply with this provision shall be considered a

breach of this Grant Agreement, and State may take any action it deems necessary to protect its interests.

Grantee agrees that the awarding department, the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Grant Agreement. Grantee agrees to maintain such records for a possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated. Grantee agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Grantee agrees to include a similar right of the State to audit records and interview staff in any contract related to performance of this Agreement.

D.6 BUDGET CONTINGENCY: If the Budget Act of the current year and/or any subsequent years covered under this Grant Agreement does not appropriate sufficient funds for the IRWM Program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of State to make any payments under this Grant Agreement. In this event, State shall have no liability to pay any funds whatsoever to Grantee or to furnish any other considerations under this Grant Agreement and Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, State shall have the option to either cancel this Grant Agreement with no liability occurring to State, or offer a Grant Agreement amendment to Grantee to reflect the reduced amount.

D.7 COMPETITIVE BIDDING AND PROCUREMENTS: Grantee and Local Project Sponsors shall comply with all applicable laws and regulations regarding securing competitive bids and undertaking competitive negotiations in Grantee's contracts with other entities for acquisition of goods and services and construction of public works with funds provided by State under this Grant Agreement.

D.8 COMPUTER SOFTWARE: Grantee certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.

D.9 CONFLICT OF INTEREST:

CURRENT STATE EMPLOYEES: No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.

FORMER STATE EMPLOYEES: For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was

employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.

D.10 DELIVERY OF INFORMATION, REPORTS, AND DATA: Grantee agrees to expeditiously provide, during work on the IRWM Program and throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by State.

D.11 DISPOSITION OF EQUIPMENT: Grantee shall provide to State, not less than 30 days prior to submission of the final project invoice, a final inventory list of equipment purchased with grant funds provided by State. Grantee shall consult with State on the scope of the inventory not less than 60 days prior to the submission of the final project invoice. The inventory shall include all items with a current estimated fair market value of more than $500 per item. Within 60 days of receipt of such inventory, State shall provide Grantee with a list of the items on the inventory that State will take title to. All other items shall become the property of Grantee. State shall arrange for delivery from Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by State.

D.12 DISPUTES: In the event of an invoice dispute, payment will not be made until the dispute is resolved and a corrected invoice submitted. Failure to use the address exactly as provided may result in return of the invoice to the Grantee. Payment shall be deemed complete upon deposit of the payment, properly addressed, postage prepaid, in the United States mail.

Any claim that Grantee may have regarding the performance of this Grant Agreement including, but not limited to claims for additional compensation or extension of time, shall be submitted to the Director, Department of Water Resources, within thirty (30) calendar days of Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to the Grant Agreement to implement the terms of any such resolution.

D.13 DRUG-FREE WORKPLACE REQUIREMENTS: Grantee, Local Project Sponsors, and its their contractors or subcontractors will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code 8350 *et seq.*) and have or will provide a drug-free workplace by taking the following actions:

a) Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code Section 8355(a).

b) Establish a Drug-Free Awareness Program, as required by Government Code Section 8355(b) to inform employees, contractors, or subcontractors about all of the following:

1. The dangers of drug abuse in the workplace,
2. Grantee's policy of maintaining a drug-free workplace,
3. Any available counseling, rehabilitation, and employee assistance programs, and
4. Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.

c) Provide as required by Government Code Sections 8355(c), that every employee, contractor, and/or subcontractor who works under this Grant Agreement:

1. Will receive a copy of Grantee's drug-free policy statement, and
2. Will agree to abide by terms of Grantee's condition of employment, contract or subcontract.

D.14 FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED CIVIL ENGINEER: Upon completion of a construction project and as determined by State, Grantee shall provide for a final inspection and certification by a California Registered Civil Engineer that the project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement.

D.15 GOVERNING LAW: This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

D.16 INCOME RESTRICTIONS: Grantee agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by Grantee under this Grant Agreement shall be paid by Grantee to State, to the extent that they are properly allocable to costs for which Grantee has been reimbursed by State under this Grant Agreement.

D.17 INDEMNIFICATION: Grantee agrees to indemnify State and its officers, agents, and employees against and to hold the same free and harmless from any and all claims, demands, damages, losses, costs, expenses, or liability due or incident to, either in whole or in part, and whether directly or indirectly, arising out of the IRWM Program.

D.18 INDEPENDENT CAPACITY: Grantee, and the agents and employees of Grantee, if any, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.

D.19 INSPECTION OF BOOKS, RECORDS, AND REPORTS: During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may withhold disbursements to Grantee or take any other action it deems necessary to protect its interests, as provided in paragraph 20.

D.20 INSPECTIONS OF PROJECTS BY STATE: State shall have the right to inspect the work being performed at any and all reasonable times, providing a minimum of a 24-hour notice, during the term of the Grant Agreement. This right shall extend to any subcontracts, and Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with State.

D.21 NONDISCRIMINATION: During the performance of this Grant Agreement, Grantee, Local Project Sponsors, and their contractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Grantee, Local Project Sponsors, and their contractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Grantee, Local Project Sponsors, and their contractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) *et seq.*) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 *et seq.*). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Grant Agreement by reference and made a part hereof as if set forth in full. Grantee, Local Project

Sponsors, and their contractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Grantee shall include the nondiscrimination and compliance provisions of this clause in all contracts to perform work under the Grant Agreement.

D.22 OPINIONS AND DETERMINATIONS: The parties agree that review or approval of any IRWM Program applications, documents, permits, plans and specifications or other program information by the State is for administrative purposes only and does not relieve the Grantee of its responsibility to properly plan, design, construct, operate, maintain, implement, or otherwise carry out the IRWM Program.

D.23 PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION: Grantee and Local Project Sponsors shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the IRWM Program without prior permission of State. Grantee and Local Project Sponsors shall not take any action concerning the performance of this Grant Agreement, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of Grantee to meet its obligations under this Grant Agreement, without prior written permission of State. State may require that the proceeds from the disposition of any real or personal property acquired through this Grant Agreement be remitted to State.

D.24 REMEDIES, COSTS, AND ATTORNEY FEES: Grantee agrees that any remedy provided in this Grant Agreement is in addition to and not in derogation of any other legal or equitable remedy available as a result of breach of this Grant Agreement, whether such breach occurs before or after completion of the IRWM Program, and exercise of any remedy provided by this Grant Agreement shall not preclude either party from pursuing any legal remedy or right which would otherwise be available. In the event of litigation between the parties hereto arising from this Grant Agreement, it is agreed that the prevailing party shall be entitled to such reasonable costs and/or attorney fees as may be ordered by the court entertaining such litigation.

D. 25 RETENTION: State shall, for each project, withhold ten percent (10.0%) of the funds requested by Grantee for reimbursement of Eligible Costs until the project is completed and Grantee has met requirements of paragraph 21, Submissions of Reports.

D.26 RIGHTS IN DATA: Grantee and Local Project Sponsors agree that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this Grant Agreement shall be in the public domain. Grantee and Local Project Sponsors may disclose, disseminate and use in whole or in part, any final form data and information received, collected, and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to State for financial support. Grantee and Local Project Sponsors shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so.

D.27 SEVERABILITY OF UNENFORCEABLE PROVISION: If any provision of this Grant Agreement is held invalid or unenforceable by a court of final jurisdiction, all other provisions of this Grant Agreement shall be construed to remain fully valid, enforceable, and binding on the parties.

D.28 SUCCESSORS AND ASSIGNS: This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant

Agreement or any part thereof, rights hereunder, or interest herein by Grantee shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as State may impose.

D.29 TERMINATION, IMMEDIATE REPAYMENT, INTEREST: This Grant Agreement may be terminated by written notice at any time prior to completion of the IRWM Program, at the option of State, upon violation by Grantee of any material provision after such violation has been called to the attention of Grantee and after failure of Grantee to bring itself into compliance with the provisions of this Grant Agreement within a reasonable time as established by State. In the event of such termination, Grantee agrees, upon demand, to immediately repay to State an amount equal to the amount of grant funds disbursed to Grantee prior to such termination. In the event of termination, interest shall accrue on all amounts due at the highest legal rate of interest from the date that notice of termination is mailed to Grantee to the date of full repayment by Grantee.

D.30 TIMELINESS: Time is of the essence in this Grant Agreement.

D.31 TRAVEL: Grantee agrees that travel and per diem costs shall NOT be eligible for reimbursement with State funds, and shall NOT be eligible for computing Grantee cost match. Travel includes the costs of transportation, subsistence, and other associated costs incurred by personnel during the term of this Grant Agreement.

D.32 WAIVER OF RIGHTS: None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

EXHIBIT E
REPORT FORMAT

QUARTERLY REPORT

Quarterly Reports shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects contained in the IRWM Program.

The quarterly report should reflect the status of all of the projects identified in the Grant Agreement. A brief summary of program status should also be provided.

PROJECT STATUS

For each project, describe the work performed during the quarter including:

PROJECT INFORMATION

- Legal matters;
- Engineering matters;
- Environmental matters;
- Status of permits, easements, rights-of-way, and approvals as may be required by other State, federal, and/or local agencies;
- Major accomplishments during the quarter (i.e. tasks completed, milestones met, meetings held or attended, press releases, etc.);
- Discussion of the ambient surface water and groundwater data submittal effort for the previous quarter, including a description of the data submitted and date(s) of submittal;
- Issues/concerns that have, will, or could affect the schedule or budget, with a recommendation on how to correct the matter; and
- Description of the differences between the work performed and the work outlined in the project work plans.
- Discussion of project performance achieved over the previous quarter relative to the criteria established in the Project Assessment and Evaluation Plan (PAEP).

COST INFORMATION

- Listing showing costs incurred during the quarter by the grantee, the local project sponsor overseeing the work, and each contractor working on the project. Listing should include hours per task worked on during the quarter for above personnel;
- A discussion on how the actual budget is progressing in comparison to the project budget included in the Work Plan; and
- A revised budget, by task, if changed from latest budget in Work Plan.

SCHEDULE INFORMATION

- A schedule showing actual progress verse planned progress as shown in Exhibit B;
- A discussion on how the actual schedule is progressing in comparison to the schedule in Exhibit B; and

- A revised schedule, by task, if changed from latest schedule in Exhibit B.

ANTICIPATED ACTIVITIES NEXT QUARTER

Provide a description of anticipated activities for the next quarterly reporting period.

PROJECT COMPLETION REPORT

Project Completion Reports shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects contained in the IRWM Program. A Project Completion Report is required for each project identified in the Work Plan, Exhibit A.

EXECUTIVE SUMMARY

The Executive Summary consists of a maximum of ten (10) pages summarizing project information (see report status section below for topics). The Executive Summary should include the following:

- Brief description of work proposed to be done in the original Water Security, Clean Drinking Water, Coastal And Beach Protection Act Of 2002 IRWM Implementation Grant application;
- Description of actual work completed and any deviations from the work plan identified in the Grant Agreement;
- Describe the mechanism or process that allows for continued performance monitoring of the projects in meeting the objectives of the IRWM Plan;
- Identify if as result of the project implementation, updates or changes the IRWM Plan are necessary. If updates or changes anticipated, summarize the necessary updates or changes and anticipated time frame when it will be accomplished; and
- Describe how the implemented projects will meet the regional priority identified in the IRWM Plan and how the project contributes to regional integration.

REPORTS AND/OR PRODUCTS

- Provide a copy of the final technical report or study;
- Provide a map and shapefile(s) showing the location of the completed project. A description of the geographic projection and datum used for the shapefile must be submitted with the shapefile (a NAD '27 datum and either a UTM 10 or UTM 11 projection, dependent on the project's location in the state, should be utilized);
- If any wells were constructed as part of the project, provide the following information: well logs; borehole geophysical logs; state well number; site information to include horizontal (NAD '27) and vertical (NAVD '88) datum to be determined within 0.5 feet;
- Provide an electronic copy of any as-built plans (media: CD-ROM; PDF format);
- Provide copies of any data collected along with location maps;
- If applicable, describe the findings of any study and whether the study determined the engineering, hydrologic, hydrogeologic, environmental, economic and financial feasibility of the project.

COST & DISPOSITION OF FUNDS INFORMATION

- A list of invoices showing:
  - The date each invoice was submitted to State;
  - The amount of the invoice;
  - The date the check was received; and

- The amount of the check. (If a check has not been received for the final invoice, then state this in this section.)

- A summary of final funds disbursement including:
  - Labor cost of personnel of agency/ major consultant /sub-consultants. (Indicate personnel, hours, rates, type of profession and reason for consultant, i.e., design, CEQA work, etc.);
  - Construction cost information, shown by material, equipment, labor costs, and change orders;
  - Any other incurred cost detail; and
  - A statement verifying separate accounting of grant disbursements.
- Summary of project cost including:
  - Accounting of the cost of project expenditure;
  - Include all internal and external costs not previously disclosed;
  - A discussion of factors that positively or negatively affected the project cost and any deviation from the original project cost estimate.

ADDITIONAL INFORMATION

- A final project schedule showing actual progress verse planned progress;
- Certification that the project was conducted in accordance with the approved work plan and any approved modifications thereto; and
- Submittal schedule for Post Performance Report and outline of the reporting format.

GRANT COMPLETION REPORT

The Grant Completion Report shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects in the IRWM Program funded by this Grant Agreement.

EXECUTIVE SUMMARY

The Executive Summary consists of a maximum of twenty (20) pages summarizing information for the grant as well as the individual projects

REPORTS AND/OR PRODUCTS

- Summary of the regional priorities, objectives, and water management strategies of the IRWM Plan;
- Brief comparison of work proposed in the original Water Security, Clean Drinking Water, Coastal And Beach Protection Act Of 2002 IRWM Implementation Grant application and actual work done;
- Brief description of the projects completed and how they will further the goals identified in the IRWM Plan;
- Identify remaining work and mechanism for their implementation;
- Identify any changes to the IRWM Plan as result of project implementation; and
- Submit an updated IRWM Plan.

COST & DISPOSITION OF FUNDS INFORMATION

- A summary of final funds disbursement for each project.

ADDITIONAL INFORMATION

- A final schedule showing individual project's actual progress duration verse planned progress
- Certification that the Program was conducted in accordance with the approved work plan and any approved modifications thereto.
- Discussion of the synergies of the completed projects, including the integration of project benefits and a comparison of actual benefits versus those discussed in the original proposal.

POST PERFORMANCE REPORT

The Post Performance Report shall generally use the following format. This format may be modified as necessary to effectively communicate information on the operation of the various projects in the IRWM Program funded by this Grant Agreement.

REPORTS AND/OR PRODUCTS

- Summary of the operations of the project;
- Brief discussion of the project benefits to water quality, water supply, and the environment;
- Brief comparison and any explanations for any differences between the expected versus actual project success in meeting IRWM priorities as stated in the original IRWM Implementation Grant application;
- Summary of any additional costs and/or benefits deriving from the project; and
- Any additional information relevant to or generated by the continued operation of the project.

EXHIBIT F
GRANTEE RESOLUTION

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

DONALD L. WOLFE, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: WM-3

June 8, 2006

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

77 JUN 20 2006

SACHI A. HAMAI
EXECUTIVE OFFICER

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

RESOLUTION TO APPLY FOR INTEGRATED REGIONAL WATER MANAGEMENT IMPLEMENTATION GRANT FUNDS (PROPOSITION 50, CHAPTER 8)
ALL SUPERVISORIAL DISTRICTS
3 VOTES

IT IS RECOMMENDED THAT YOUR BOARD ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT:

Adopt the enclosed Resolution delegating authority to the Chief Engineer of the Los Angeles County Flood Control District (District), or his designee, to file an application with the California Department of Water Resources (DWR) and State Water Resources Control Board (State Board), on behalf of itself and other local entities in the Greater Los Angeles County region (Region), for Proposition 50, Chapter 8, implementation grant funds in an amount not to exceed $25 million to assist in financing 13 projects in the region; and designating the Chief Engineer of the District, or his designee, to act as the authorized representative of the District when conducting business with the DWR and/or the State Board on any and all matters related to this grant, including negotiating and executing a Grant Agreement and any Amendments and signing requests for payment or reimbursement.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

In November 2002, the voters of California enacted the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50), adding provisions to the California Water Code. Chapter 8 of Proposition 50, commencing with Water Code, Section 79560, authorizes the Legislature to appropriate $500 million for an Integrated Regional Water Management Program (Program).

The intent of the Program is to encourage integrated regional strategies for the management of water resources and to provide funding through competitive grants for projects that protect communities from drought, improve water reliability, protect and improve water quality, and improve local water security by reducing dependence on imported water. In November 2004, the DWR and the State Board adopted guidelines to establish the process and criteria to solicit applications, evaluate proposals, and award grants under the Program.

The Program consists of both planning grants for development of Integrated Regional Water Management Plans (IRWMPs) and implementation grants to construct projects. The District will be the grant administrator for a planning grant recently awarded by the DWR and State Board to develop an IRWMP for the region. The IRWMP is to be adopted by January 1, 2007.

The implementation grants are designed for projects that are ready for, or nearly ready, to proceed to implementation. The allocation of implementation grant funds requires a two-step application process. Several entities within the County of Los Angeles, namely, the Cities of Downey and Los Angeles, Santa Monica Bay Restoration Commission, Watershed Conservation Authority, and West and Central Basin Municipal Water Districts, submitted step 1 implementation grant proposals on behalf of themselves and other local entities within their jurisdictions in July 2005. Step 1 implementation grant proposals were evaluated based on the criteria provided. On March 10, 2006, the DWR and State Board invited certain entities to have one agency submit a consolidated step 2 implementation grant application on their behalf, incorporating their projects into one IRWMP for the entire region. The DWR, State Board, and the consolidated entities requested the District to be the grantee and submit the application for step 2 implementation grant funds on behalf of itself and other local entities for grant funds in the amount of $25 million.

The following local entities have proposed projects to be included in the step 2 implementation grant proposal for the Region: The Cities of Calabasas and Westlake Village, Central and West Basin Municipal Water Districts, Las Virgenes Municipal Water District, City of Los Angeles Department of Public Works Bureau of Sanitation, Los Angeles County Sanitation Districts, Los Angeles and San Gabriel Rivers Watershed Council, Mountains Recreation and Conservation Authority, National Park Service, and the District (collectively, Local Entities).

The District, as the lead agency, intends to submit a step 2 implementation grant application on behalf of itself and the other Local Entities, which will include a suite of 13 projects and will identify the required minimum funding match of at least 10 percent of total project costs. The 13 projects are described in Enclosure A and include the Morris Dam Water Supply Enhancement, which is a District project.

The enclosed Resolution will allow the Chief Engineer of the District, or his designee, to apply for implementation grant funds in the amount of $25 million. If awarded grant funds, we will return to the Board of Supervisors for acceptance of the grant funds and to request authority to negotiate and execute an Agreement with the other Local Entities who would be responsible for implementing each of the individual projects as well as providing the matching funds required and stated on the grant application. Board approval will also be required to proceed with the District's Morris Dam Water Supply Enhancement project.

Implementation of Strategic Plan Goals

This action is consistent with the County's Strategic Plan Goal of Fiscal Responsibility by actively seeking grant funds to augment the County's funding sources. It is also consistent with the County's Strategic Plan Goal of Community Services since the implementation of the projects in the grant application would improve the quality of life for residents in the County.

FISCAL IMPACT/FINANCING

There will be no impact to the County's General Fund.

The estimated total cost of implementing the 13 projects is $71,166,250, of which $25,000,000 will be reimbursed from the implementation grant, if awarded. The remaining $46,166,250 will come from the Local Entities' matching funds, as described on Enclosure A.

The total cost of implementing the District's project, the Morris Dam Water Supply Enhancement project, is estimated at $12,827,000 and will be budgeted in the Fiscal Year 2007-08 Flood Control District budget. If the grant is awarded, the District will receive $5,135,634 from the grant funds to partially reimburse the project.

Upon award of grant funds, we will request your Board to accept the grant funding and authorize the implementation of the Morris Dam Water Supply Enhancement project.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The grant program requires grant applications to include a Resolution from the jurisdiction's governing body identifying the representative authorized to file the application and execute the Grant Agreement. The enclosed Resolution has been prepared to conform to this requirement and has been approved as to form by County Counsel.

ENVIRONMENTAL DOCUMENTATION

Adoption of the enclosed Resolution does not constitute a project subject to the requirements of the California Environmental Quality Act (CEQA) in that it can be seen with certainty that the action will not result in a direct or reasonably foreseeable indirect physical change in the environment (Public Resources Code, Section 21065). If selected for grant funding, the District and the other Local Entities will demonstrate that they have complied with all applicable CEQA requirements and the appropriate environmental documents will be prepared in accordance with the requirements of CEQA and the Program guidelines.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The implementation of these projects will enhance the quality of life for residents in the region by improving water quality and water reliability while reducing dependence on imported water.

CONCLUSION

Please return three adopted copies of this letter and three copies of the signed Resolution to Public Works.

Respectfully submitted,

DONALD L. WOLFE
Director of Public Works

RP:ad
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Enc. (2)

cc: Chief Administrative Office
County Counsel

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES, CALIFORNIA, ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, APPROVING THE FILING OF AN APPLICATION FOR AN INTEGRATED REGIONAL WATER MANAGEMENT IMPLEMENTATION GRANT

WHEREAS, the Legislature and the Governor of the State of California have provided funds for the Integrated Regional Water Management Grant Program pursuant to the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50); and

WHEREAS, this grant program is jointly administered by the California Department of Water Resources and State Water Resources Control Board; and

WHEREAS, the California Department of Water Resources and State Water Resources Control Board require the governing body of a grant applicant to designate, by Resolution, an authorized representative for filing the grant application and executing the Grant Agreement; and

WHEREAS, the Los Angeles County Flood Control District (hereinafter referred to as DISTRICT) intends to submit an application for implementation grant funds in the amount of Twenty-five Million and 00/100 Dollars ($25,000,000.00) for projects under the Integrated Regional Water Management Grant Program on behalf of the following local entities in the Greater Los Angeles County Region: Cities of Calabasas and Westlake Village, Central and West Basin Municipal Water Districts, Las Virgenes Municipal Water District, City of Los Angeles Department of Public Works Bureau of Sanitation, County Sanitation Districts of Los Angeles County, Los Angeles/San Gabriel Rivers Watershed Council, Mountains Recreation and Conservation Authority, National Park Service, and DISTRICT (hereinafter referred to collectively as Local Entities); and

WHEREAS, the Local Entities have identified thirteen (13) projects in the Greater Los Angeles County Region to be included in the DISTRICT'S implementation grant proposal.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of the County of Los Angeles, acting as the governing body of the DISTRICT:

1. That application be made to the California Department of Water Resources and State Water Resources Control Board on behalf of the Local Entities to obtain an Integrated Regional Water Management Implementation Grant pursuant to the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 and to enter into an

Agreement to receive a grant for implementation of thirteen (13) projects that protect communities from drought, conserve and improve water quality, restore habitat, and reduce dependency on imported water;

2. That the Board of Supervisors authorizes and directs the Chief Engineer of the DISTRICT, or his designee, to file such application for grant funds in an amount not to exceed Twenty-five Million and 00/100 Dollars ($25,000,000.00) and designates the Chief Engineer, or his designee, to act as the authorized representative of the DISTRICT when conducting business with the California Department of Water Resources and/or State Water Resources Control Board on any and all matters related to this grant, including negotiating and executing the Grant Agreement and any Amendments and signing requests for payment/reimbursement.

The foregoing Resolution was adopted on the 20TH day of JUNE, 2006, by the Board of Supervisors of the County of Los Angeles acting as the governing body of the Los Angeles County Flood Control District.

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.
County Counsel

By _____
Deputy

RP:kk
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Enclosure A

Greater Los Angeles County Region -- Prop 50, Chapter 8 Round 1 Projects

No. of Projects	Sub-Region	Project	Project Classification	Agency	Project Description	Total Project Cost	State Request	Cost Share	Cost Share %
1	North Santa Monica Bay	Construction of the Las Virgenes Creek Restoration Project	Habitat restoration	City of Calabasas	The main objective of the project is to reestablish a native creek side habitat to enhance the water quality and biological environment of the area. The restoration would reestablish direct connectivity between the two existing riparian communities to the north and south of the concrete segment.	$1,266,000	$518,000	$771,000	60%
2	North Santa Monica Bay	Urban Runoff / conservation / native flow restoration	Water supply, water quality, habitat	Las Virgenes Municipal Water District, City of Westlake	This project integrates urban runoff reduction & indoor & outdoor water conservation	$1,975,250	$426,000	$1,549,250	78%
3	North Santa Monica Bay	Restoration of Southern Steelhead Habitat in Solstice Creek	Habitat restoration	National Park Service	Removal of built-up sediment and debris trapped behind small dams and impoundments. Removal of fish impediments and riparian habitat restoration.	$500,000	$78,366	$421,634	84%
4	[redacted]	Southeast Water Reliability Project, Phase 1 Water Recycling	Recycled Water	Central Basin Municipal Water District	Constructing a recycled water line from San Jose Creek WRP to distribute recycled water to users in Pico Rivera and Montebello	$15,200,000	$3,530,000	$11,670,000	77%
5	[redacted]	Whittier Narrows Water Reclamation Plant UV Disinfection Studies	Water Treatment	Sanitation Districts of Los Angeles County	Modifying the process of tertiary treatment at the WNWRP from chloramination to UV disinfection	$6,600,000	$2,000,000	$4,600,000	70%
6	San Gabriel and Lower Los Angeles River Watershed/South Bay Watershed/North Santa Monica Bay	Large Landscape Conservation/Runoff Reduction Management and Educational Program.	Conservation	West Basin Municipal Water District and Central Basin Municipal Water District	This project will evaluate and implement a large landscape water management program utilizing centralized weather-based irrigation controllers and systems that link back to the local water and regional agencies regarding end-use water management. The program is designed to allow the local users (parks, schools, cities, etc.) to work with a water management company that utilizes the HydroEarth management system. HydroEarth is an environmentally minded company that provides multi-faceted solutions to conserve water and protect the environment. It also includes ET controller installations, indoor plumbing retrofits, "Ocean Friendly Garden" workshops, and irrigation system retrofits targeted to high runoff residential and commercial properties	$5,268,000	$2,100,000	$3,168,000	60%
7	[redacted]	Wilmington Drain Restoration Multiuse Project	Wetlands Creation/Restoration	City of LA, Dept of Public Works, Bureau of Sanitation, Watershed Protection Division	This project proposes wetlands restoration in the Dominguez Channel Watershed. The project will: • Preserve and restore coastal wetlands ecosystems. • Preserve and restore stream corridors and wetlands in coastal watersheds. • Recover native habitat and species diversity. • Prevent future degradation and/or loss of wetlands resources	$11,120,000	$4,500,000	$6,620,000	60%
8	[redacted]	Marshland Enhancement	Wetlands Creation/Restoration	Sanitation Districts of Los Angeles County	This project will enhance and maintain the vegetation and wildlife habitat value of the 17-acre freshwater JWPCP marshland	$1,565,000	$400,000	$1,165,000	74%
9	[redacted]	North Atwater Creek Restoration and Water Quality Project		City of LA Bureau of Sanitation	Project will expand the existing park by adding over 5 acres of water quality improvement landscaping; project will restore an existing degraded remnant seasonal riparian stream tributary to the LA River, creating an intermittent streambed fed by urban runoff and an intermittent wetlands for improving water quality and increasing infiltration; project includes a native upland wooded area, walk paths, picnic area, informational kiosk, benches, riverfront walk, and a small parking lot featuring storm water BMPs	$5,600,000	$2,250,000	$3,350,000	60%
10	[redacted]	South Los Angeles Wetlands Park		City of LA Bureau of Sanitation	Project will convert a former MTA maintenance facility into a multi-benefit community resource with a water quality treatment element, a constructed wetland, and a community and education center	$8,000,000	$3,300,000	$4,700,000	59%
11	[redacted]	Pacoima Wash Greenway Project: 8th Street Park	Flood control/Stormwater Capture	Mountains Recreation and Conservation Authority	Part of the planned Pacoima Wash Greenway Project - a three mile long corridor of open space which also offers stormwater capture benefits. This project would convert 3 acres of undeveloped land into a natural park that collects, treats and infiltrates residential runoff onsite.	$997,000	$587,000	$410,000	41%
12	[redacted]	Invasive Weed Control in Riparian Habitat	Exotic Species Removal	LA/SG Rivers Watershed Council	Arundo and exotic eradication at 4 locations in the San Gabriel Valley	$208,000	$178,000	$30,000	14%
13	[redacted]	Morris Dam Water Supply Enhancement	Water Supply	Los Angeles County Flood Control District	Lower the operational pool behind Morris Dam by upgrading the dam's control structures to allow more water to be released for recharge at downstream spreading grounds	$12,827,000	$5,135,634	$7,691,366	60%
					Totals:	$71,166,250	$25,606,000	$46,196,350	65%

EXHIBIT G
LOCAL PROJECT SPONSORS

LOCAL PROJECT SPONSORS

Grantee has assigned, for each project, a Local Project Sponsor according to the roles of the participating agencies identified in the IRWM Plan. Local Project Sponsors may act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors are identified for each Sponsored Project on the following page.

Sponsored Project	Sponsor Agency	Primary Contact	Title	Address	Phone
Central Basin SWRP	Central Basin Municipal Water District	David Hill	Water Resources & Planning Manager	6252 Telegraph Road Commerce, CA 90040-2512	(323) 201-5501
JWPCP Marshland Enhancement	Sanitation Districts of Los Angeles County	John Kilgore	Supervising Engineer II	1955 Workman Mill Road Whittier, CA 90607	(562) 699-7411 X2731
Large Landscape Conservation - CENTRAL BASIN MWD	Central Basin Municipal Water District	David Hill	Water Resources & Planning Manager	6252 Telegraph Road Commerce, 90040-2512	(323) 201-5501
Large Landscape Conservation - WEST BASIN MWD	West Basin Municipal Water District	Leighanne Reeser	Water Resource Planner	17140 S. Avalon Blvd., Suite 210 Carson, CA 90746	(310) 660-6225
Las Virgenes Creek Restoration	City of Calabasas	Alex Farassati	Environmental Services Supervisor	26135 Mureau Road Calabasas, CA 91302	(818) 878-4225 x307
Malibu Creek Conservation	Las Virgenes Municipal Water District	Dr. Randal Orton	Resource Conservation Manager	4232 Las Virgenes Road Calabasas, CA 91302	(818) 251-2145
Morris Dam Water Supply	Los Angeles County Flood Control District	Aracely Lasso	Civil Engineer	900 S. Fremont Avenue Alhambra, CA 91803	(626) 458-6125
North Atwater Creek Restoration	City of Los Angeles, Watershed Protection Division	Kosta Kaporis	Environmental Engineer	1149 S Broadway, 10th Fl Los Angeles, CA 90015	(213) 485-0586
Pacoima Wash / 8th Street Park	Mountains Recreation & Conservation Authority□	Ken Frederick	Project Analyst	570 West Avenue 26, Suite 100 Los Angeles, CA 90065	(323) 221-9944 X137
San Gabriel Valley Arundo Removal	Los Angeles and San Gabriel Rivers Watershed Council	Nancy L.C. Steele, D.Env.	Executive Director	700 N. Alameda St. Los Angeles, CA 90012	(213) 229-9950
Solstice Creek Restoration	Mountains Restoration Trust	Debbie Bruschabero	Co-Executive Director	3815 Old Topanga Canyon Road Calabasas, California 91302	(818) 591-1701 X205
South Los Angeles Wetlands	City of Los Angeles, Watershed Protection Division	Kosta Kaporis	Environmental Engineer	1149 S Broadway, 10th Fl Los Angeles, CA 90015	(213) 485-0586
Whittier Narrows WRP UV	Sanitation Districts of Los Angeles County	John Kilgore	Supervising Engineer II	1955 Workman Mill Road Whittier, CA 90607	(562) 699-7411 X2731
Wilmington Drain Restoration	City of Los Angeles, Watershed Protection Division	Kosta Kaporis	Environmental Engineer	1149 S Broadway, 10th Fl Los Angeles, CA 90015	(213) 485-0586

EXHIBIT H
STATEWIDE MONITORING

REQUIREMENTS FOR STATEWIDE MONITORING AND DATA SUBMITTAL

Ambient surface water and groundwater quality monitoring data (may include chemical, physical, or biological data) shall be submitted to the State as described below, with a narrative description of data submittal activities included in project reports, as described in Exhibit E.

Surface water quality monitoring data shall be submitted to the Surface Water Ambient Monitoring Program (SWAMP), which is administered by the State Water Resources Control Board (SWRCB). If a project work plan contains a surface water monitoring element, the Grantee shall also prepare, maintain, and implement a Quality Assurance Project Plan (QAPP) in accordance with:

- The SWAMP QAPP and data reporting requirements.
- The USEPA's *EPA Requirements for Quality Assurance Project Plans* (Publication EPA AQ/R-5, 2001).

The QAPP shall be submitted to the State for review and a decision regarding approval. Any costs related to monitoring data collected prior to and not supported by the approved QAPP may not be reimbursed. Guidance for preparing the QAPP is available at:

http://www.waterboards.ca.gov/swamp/qapp.html

SWAMP comparable electronic format shall be followed. SWAMP data formats and templates can be accessed at:

http://mpsl.mlml.calstate.edu/swdbcompare.html

After the Grantee has followed the proper quality assurance and quality control (QA/QC) procedures and prepared the data for submittal to SWAMP, the data shall be uploaded, using the methodology established by SWAMP, to the California Environmental Data Exchange Network (CEDEN) database at the following link:

http://bdat.ca.gov

Groundwater quality monitoring data shall be submitted to the State through the SWRCB Groundwater Ambient Monitoring and Assessment (GAMA) Program. If a project work plan contains a groundwater ambient monitoring element, the Grantee shall contact the SWRCB GAMA Program for guidance on the submittal of ambient groundwater data. Information on the SWRCB GAMA Program can be obtained at:

http://www.waterboards.ca.gov/gama/index.html

Prior to the Grantee implementing any sampling or monitoring activities, State must be notified in writing as the planned procedure for submittal of groundwater data to GAMA. Any costs related to monitoring data collected prior to submittal of planned procedures may not be reimbursed.

REQUIREMENTS FOR PROJECT ASSESSMENT AND EVALUATION PLAN (PAEP) SUBMITTAL:

Project Assessment and Evaluation Plans (PAEPs) shall be prepared for each project receiving grant funding. For each project, a PAEP shall be submitted to State prior to project construction or monitoring, and as deemed appropriate by State. For information about preparing PAEPs and the recommended content, relevant documentation may be found at the following web site: http://www.waterboards.ca.gov/funding/paep.html

AMENDMENTS

The revised pages included in the following amendments have been incorporated into the Grant Agreement document.

State of California
The Natural Resources Agency
Department of Water Resources

Grant Agreement 4600007659
Amendment 1

Agreement Between The State of California
Department of Water Resources
and
Los Angeles County Flood Control District
Under the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002

Grant Agreement No. 4600007659 (Agreement) is amended as described below, per the request of the City of Los Angeles, Watershed Protection Division, Local Project Sponsor for the North Atwater Project described in Exhibit A in the Agreement:

1. Grantee's Cost - Revise Grantee's Cost, Section 5 (Page 1 of 154 of Agreement) to read as follows:
   GRANTEE'S COST: The reasonable total costs of the Program are estimated to be $173,443,823 which are summarized in Revised Exhibit C, Budget Tables. Grantee agrees to fund or ensure funding of the difference, if any, between the estimate of IRWM Program cost in its grant application and the Grant Amount specified in paragraph 4. Grantee cost share is estimated to be $144,043,823 with a required local match of $106,930,096.

2. Exhibit C Budget – Summary Budget Table: For Project No. 8 North Atwater Creek Restoration (Page 105 of 154 of Agreement), revise:
   a. Estimated Total Project Cost (from $4,250,000 to $3,257,320)
   b. Estimated Local Cost (from $2,000,000 to $1,007,320)
   c. Required Local Cost Share (from $2,000,000 to $1,007,320)

3. Exhibit C, Project Budget Table: Revise and replace the Project Budget Table (Page 118 of 154 of Agreement) as follows:
   a. Shift $31,753 in Grant Share from Task c (Planning/Design/Engineering/Environmental Doc) to Task d (Construction/Implementation)
   b. Revise Estimated Total Project Cost (in accordance with 2.a. above)
   c. Revise Required Local Cost Share (in accordance with 2.c. above)

Revised Exhibit C Budget Tables (Summary and Project) are included as Attachment 1. The overall scope for the North Atwater Creek Project as described in Exhibit A remains the same. All other terms and conditions of the agreement, including exhibits, will remain the same.

IN WITNESS WHEREOF, the Parties execute this Amendment No. 1 to Grant Agreement No. 4600007659:

STATE OF CALIFORNIA,
DEPARTMENT OF WATER RESOURCES

Tracie L. Billington, P.E., Chief
Division of Integrated Regional Water Management – Financial Assistance Branch

Date: 2/13/12

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT,
a body corporate and politic

Chief Engineer

Date: 1/31/12

Approved as to legal form and sufficiency

~~Katherine A. Spanos~~, Assistant Chief Counsel,
Office of the Chief Counsel
Spencer Kenner

2/7/12

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By: _____
Deputy

ATTACHMENT 1

- Exhibit C Summary Budget Table – Original and Revised
- Exhibit C Detailed Project Budget – Original and Revised

EXHIBIT C

BUDGET
SUMMARY BUDGET TABLE – ORIGINAL

Exhibit C Budget Table 1								
Project No.	Project Short Name	Sponsor Agency	Estimated Total Project Cost	Estimated Local Cost Share	Other State Funds	Max Grant Funds	Required Local Cost Share	Retention amount DWR will withhold per project
1	Central Basin SWRP	Central Basin Municipal Water District	$ 98,502,405	$ 94,972,405		$ 3,530,000	$ 70,166,848	$ 353,000
2	JWPCP Marshland Enhancement	County Sanitation Districts of Los Angeles County	$ 3,444,692	$ 3,044,692		$ 400,000	$ 1,976,523	$ 40,000
3	Large Landscape Conservation - CENTRAL BASIN MWD	Central Basin Municipal Water District	$ 2,481,932	$ 1,581,932		$ 900,000	$ 1,581,932	$ 90,000
4	Large Landscape Conservation - WEST BASIN MWD	West Basin Municipal Water District	$ 2,833,633	$ 1,633,633		$ 1,200,000	$ 1,047,317	$ 120,000
5	Las Virgenes Creek Restoration	City of Calabasas	$ 1,063,090	$ 548,090		$ 515,000	$ 516,000	$ 51,500
6	Malibu Creek Conservation	Las Virgenes Municipal Water District	$ 930,720	$ 504,720		$ 426,000	$ 283,000	$ 42,600
7	Morris Dam Water Supply	Los Angeles County Flood Control District	$ 16,409,175	$ 11,273,541		$ 5,135,634	$ 6,914,366	$ 513,563
8	North Atwater Creek Restoration	City of Los Angeles, Watershed Protection Division	$ 4,250,000	$ 2,000,000		$ 2,250,000	$ 2,000,000	$ 225,000
9	Pacoima Wash / 8th Street Park	Mountains Recreation & Conservation Authority	$ 2,287,000		$ 1,700,000	$ 587,000	$ -	$ 58,700
10	San Gabriel Valley Arundo Removal	Los Angeles and San Gabriel Rivers Watershed Council	$ 228,200	$ 50,200		$ 178,000	$ 49,900	$ 17,800
11	Solstice Creek Restoration	Mountains Restoration Trust	$ 228,366	$ 150,000		$ 78,366	$ -	$ 7,837
12	South Los Angeles Wetlands	City of Los Angeles, Watershed Protection Division	$ 17,100,000	$ 11,100,000	$ 2,700,000	$ 3,300,000	$ 4,500,000	$ 330,000
13	Whittier Narrows WRP UV	County Sanitation Districts of Los Angeles County	$ 12,647,290	$ 10,647,290		$ 2,000,000	$ 7,886,890	$ 200,000
14	Wilmington Drain Restoration	City of Los Angeles, Watershed Protection Division	$ 12,030,000	$ 7,530,000		$ 4,500,000	$ 11,000,000	$ 450,000
		Grand Total	$ 174,436,503	$ 145,036,503	$ 4,400,000	$ 25,000,000	$ 107,922,776	$ 2,500,000

Footnotes:
1 - This is the local cost share that must be documented per project. After each project documents this share (per breakdown within tasks), disbursement of funds will be at a 1:1 ratio up to the maximum grant award identified per project.
2 - See Exhibit D, Standard Conditions regarding reimbursement of withheld retention amount.

EXHIBIT C
BUDGET
SUMMARY BUDGET TABLE – REVISED

Exhibit C Budget Table 1

Project No.	Project Short Name	Sponsoring Agency	Estimated Total Project Cost	Estimated Local Cost	Other State Funds	Max Grant Funds	[illegible]	Retention amount DWR will withhold per project[2]
1	Central Basin SWRP	Central Basin Municipal Water District	$ 98,502,405	$ 94,972,405		$ 3,530,000	$ 70,166,848	$ 353,000
2	JWPCP Marshland Enhancement	County Sanitation Districts of Los Angeles County	$ 3,444,692	$ 3,044,692		$ 400,000	$ 1,976,523	$ 40,000
3	Large Landscape Conservation - CENTRAL BASIN MWD	Central Basin Municipal Water District	$ 2,481,932	$ 1,581,932		$ 900,000	$ 1,581,932	$ 90,000
4	Large Landscape Conservation - WEST BASIN MWD	West Basin Municipal Water District	$ 2,833,633	$ 1,633,633		$ 1,200,000	$ 1,047,317	$ 120,000
5	Las Virgenes Creek Restoration	City of Calabasas	$ 1,063,090	$ 548,090		$ 515,000	$ 516,000	$ 51,500
6	Malibu Creek Conservation	Las Virgenes Municipal Water District	$ 930,720	$ 504,720		$ 426,000	$ 283,000	$ 42,600
7	Morris Dam Water Supply	Los Angeles County Flood Control District	$ 16,409,175	$ 11,273,541		$ 5,135,634	$ 6,914,366	$ 513,563
8	North Atwater Creek Restoration	City of Los Angeles, Watershed Protection Division	$ 3,257,320	$ 1,007,320		$ 2,250,000	$ 1,007,320	$ 225,000
9	Pacoima Wash / 8th Street Park	Mountains Recreation & Conservation Authority	$ 2,287,000		$ 1,700,000	$ 587,000	$ -	$ 58,700
10	San Gabriel Valley Arundo Removal	Los Angeles and San Gabriel Rivers Watershed Council	$ 228,200	$ 50,200		$ 178,000	$ 49,900	$ 17,800
11	Solstice Creek Restoration	Mountains Restoration Trust	$ 228,366	$ 150,000		$ 78,366	$ -	$ 7,837
12	South Los Angeles Wetlands	City of Los Angeles, Watershed Protection Division	$ 17,100,000	$ 11,100,000	$ 2,700,000	$ 3,300,000	$ 4,500,000	$ 330,000
13	Whittier Narrows WRP UV	County Sanitation Districts of Los Angeles County	$ 12,647,290	$ 10,647,290		$ 2,000,000	$ 7,886,890	$ 200,000
14	Wilmington Drain Restoration	City of Los Angeles, Watershed Protection Division	$ 12,030,000	$ 7,530,000		$ 4,500,000	$ 11,000,000	$ 450,000
		Grand Total	$ 173,443,823	$ 144,043,823	$ 4,400,000	$ 25,000,000	$ 106,930,096	$ 2,500,000

Footnotes:

1 - This is the local cost share that must be documented per project. After each project documents this share (per breakdown within tasks), disbursement of funds will be at a 1:1 ratio up to the maximum grant award identified per project.

2 - See Exhibit D, Standard Conditions regarding reimbursement of withheld retention amount.

EXHIBIT C
BUDGET

North Atwater Creek Restoration Budget

Detailed Project Budget - ORIGINAL

	Budget Category	Other State Funds	Non-State Share (required cost-share)	DWR Grant Share	Total
(a)	Direct Project Administration Costs	$0	$0	$0	$0
(b)	Land Purchase/ Easement	$0	$0	$0	$0
(c)	Planning/ Design/ Engineering/ Environmental Doc	$0	$250,000	$500,000	$750,000
(d)	Construction/ Implementation	$0	$1,750,000	$1,750,000	$3,500,000
(e)	Environmental Compliance/ Mitigation/ Enhancement	$0	$0	$0	$0
(f)	Construction Administration	$0	$0	$0	$0
(g)	Other Costs	$0	$0	$0	$0
(h)	Construction/ Implementation contingency	$0	$0	$0	$0
(i)	**Grand Total**	**$0**	**$2,000,000**	**$2,250,000**	**$4,250,000**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$2,000,000**	**City of Los Angeles, Wastewater Capital Improvement Program**		

Note: All costs are in 2005 dollars and rounded to the nearest dollar

Detailed Project Budget - REVISED

	Budget Category	Other State Funds	Non-State Share (required cost-share)	DWR Grant Share	Total
(a)	Direct Project Administration Costs	$0	$0	$0	$0
(b)	Land Purchase/ Easement	$0	$0	$0	$0
(c)	Planning/ Design/ Engineering/ Environmental Doc	$0	$229,073	$468,247	$697,320
(d)	Construction/ Implementation	$0	$778,247	$1,781,753	$2,560,000
(e)	Environmental Compliance/ Mitigation/ Enhancement	$0	$0	$0	$0
(f)	Construction Administration	$0	$0	$0	$0
(g)	Other Costs	$0	$0	$0	$0
(h)	Construction/ Implementation contingency	$0	$0	$0	$0
(i)	**Grand Total**	**$0**	**$1,007,320**	**$2,250,000**	**$3,257,320**
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		**$2,000,000**	**City of Los Angeles, Wastewater Capital Improvement Program**		

State of California
The Natural Resources Agency
Department of Water Resources

Grant Agreement 4600007659
Amendment 2

Agreement Between the State of California
Department of Water Resources
and
Los Angeles County Flood Control District
Under the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002

Grant Agreement No. 4600007659 (Agreement) is amended as described below, per the request of the City of Los Angeles, Mountains Recreation and Conservation Authority, Las Virgenes Municipal Water District, and West Basin Municipal Water District through the Los Angeles County Flood Control District (Grantee):

1. Term of Agreement – Revise the Term of Grant Agreement, Section 2 (Page 1 of 154 of Agreement) as follows:

   TERM OF GRANT AGREEMENT: The term of this Grant Agreement begins on January 18, 2007 (effective date), and terminates on December 31, 2016, or when all of the Parties' obligations under this Grant Agreement have been fully satisfied, whichever occurs earlier.

2. Exhibit B, Project Schedule – Revise and replace the Project Schedule for four projects (Pages 92, 94, 97 and 104 of Agreement) with the attached Revised Exhibit B Project Schedules.

The scope and budget for the projects as described in Exhibit A and Exhibit C, respectively, and all other terms and conditions of the Agreement remain the same.

IN WITNESS WHEREOF, the Parties execute this Amendment No. 2 to Grant Agreement No. 4600007659:

STATE OF CALIFORNIA,
DEPARTMENT OF WATER RESOURCES

Tracie L. Billington, P.E., Chief
Financial Assistance Branch
Division of Integrated Regional Water Management

Date: 12/2/13

Approved as to legal form and sufficiency

for Spencer Kenner, Assistant Chief Counsel,
Office of Chief Counsel

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT,

for Gail Farber
Director of Public Works

Date: 10/24/13

APPROVED AS TO FORM:

John F. Krattli
County Counsel

By: _____
Associate

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

GRANT AGREEMENT BETWEEN STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

AGREEMENT NUMBER 4600007659 UNDER THE WATER SECURITY, CLEAN DRINKING WATER, COASTAL AND BEACH PROTECTION ACT OF 2002 (Water Code Section 79500 et seq.)

THIS GRANT AGREEMENT, entered into by and between State of California, acting by and through the Department of Water Resources, herein referred to as the "State" and the Los Angeles County Flood Control District, a public agency in the County of Los Angeles, State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as. follows:

1. PURPOSE OF GRANT: This Grant is made by State to Grantee to assist in financing projects associated with the Greater Los Angeles Region Integrated Regional Water Management Plan pursuant to Chapter 8 (commencing with Section 79560) of Division 26.5 of the California Water Code, hereinafter collectively referred to as "IRWM Program." Grant funds may be used only as provided in this Grant Agreement for Eligible Costs as included in Exhibit A, Work Plan.

2. TERM OF GRANT AGREEMENT: The term of this Grant Agreement begins on January 18, 2007 (effective date), and terminates on December 31, ~~2013~~2016, or when all of the Parties' obligations under this Grant Agreement have been fully satisfied, whichever occurs earlier.

3. SCHEDULE: Grantee shall diligently perform or cause to be performed all IRWM Program work as described in Exhibit A, Work Plan, in accordance with Exhibit B, Schedule.

4. GRANT AMOUNT: The maximum amount payable by State under this Grant Agreement shall not exceed $25,000,000.

5. GRANTEE'S COST: The reasonable total costs of the Program are estimated to be $173,443,823 which are summarized in Exhibit C, Budget. Grantee agrees to fund or ensure funding of the difference, if any, between the estimate of IRWM Program cost in its grant application and the Grant Amount specified in paragraph 4. Grantee cost share is estimated to be $144,043,823 with a required local match of $106,930,096.

6. ELIGIBLE COST: Grantee shall apply State Grant funds received only to Eligible Costs. Eligible Costs are the reasonable and necessary costs of engineering, design, legal fees, land and easement, preparation of environmental documentation, environmental mitigation, and project implementation. Reasonable administrative expenses may be included as project costs and will depend on the complexity of the project preparation, planning, coordination, construction, acquisitions, implementation, and maintenance. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the project including an appropriate pro-rata

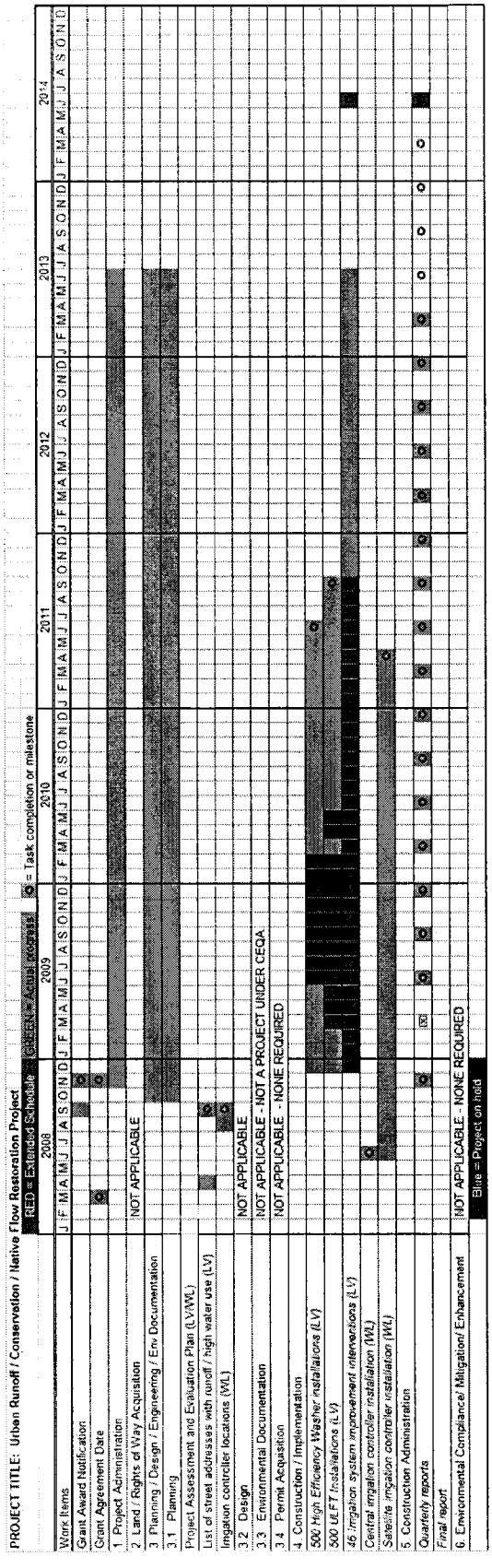
EXHIBIT B

Revised Project Schedule (page 92 of 154) - Large Landscape Water Conservation, Runoff Reduction and Educational Program (West Basin)

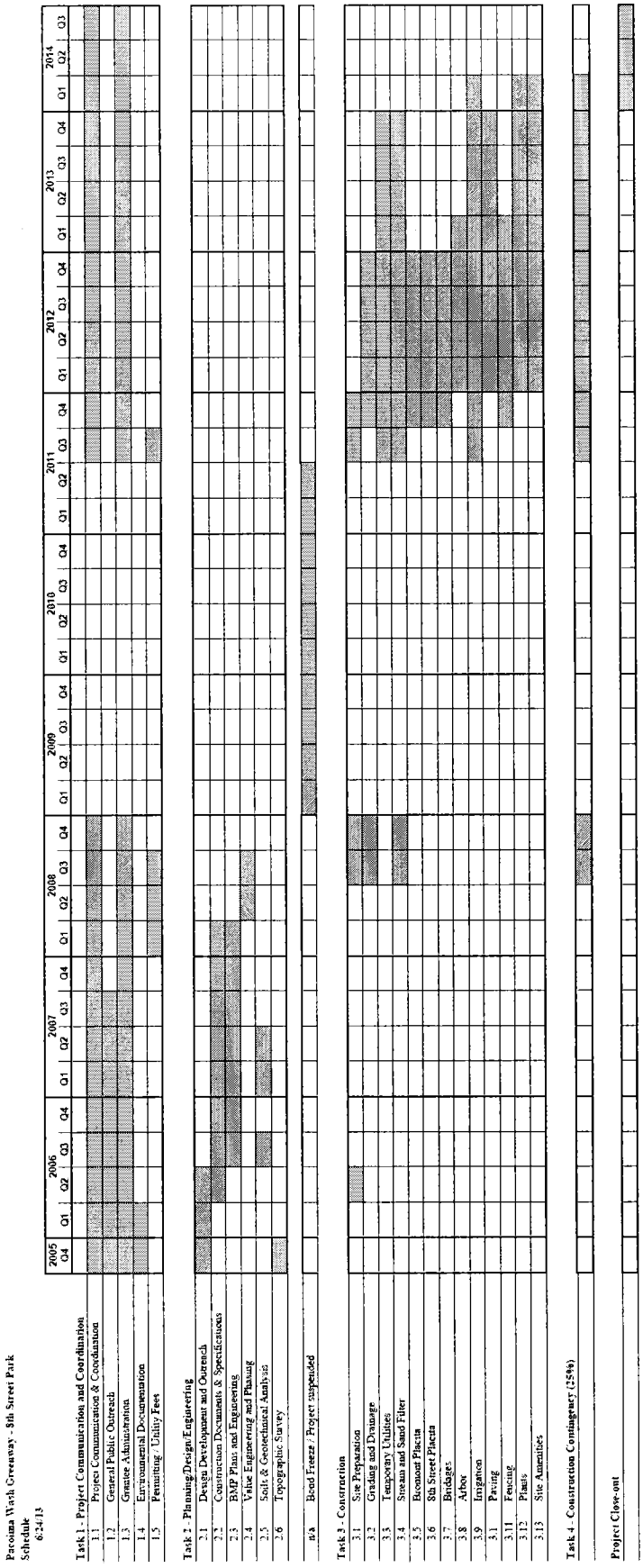
PROJECT TITLE: Large Landscape Conservation, Runoff Reduction Management & Educational Program		
Work Items	**Start Date**	**End Date**
Grant Agreement Date	January-07	December-14
Task 1. Project Administration	May-08	December-14
Task 1.1 Planning/Site Selection	May-08	December-14
Task 2. Planning /Implementation		
Task 2.1 Centralized Irrigation Controllers		
Develop marketing materials/brochures for centralized irrigation controllers	May-08	January-09
Target highest water users of 1 acre or greater	July-09	December-14
Install 1,117 controllers	October-08	December-14
Task 2.2 Residential Irrigation Controller Rebates		
Develop rebate form and brochure	December-08	January-09
Provide rebate funding to 1,350 irrigation controllers	September-08	December-14
Task 2.3 Ocean-Friendly Landscape Classes		
Develop brochure for classes	December-08	January-08
Market classes to highest residential water users	January-09	December-13
Hire module developer	May-08	October-08
Develop training module and class materials	September-08	February-09
Conduct 40 classes	February-09	December-13
Task 2.4 Ocean-Friendly Demonstration Gardens		
Hire Landscape Architect	May-08	January-09
Select sites to retrofit (with application process)	February-09	December-11
Oversee designs of 11 demonstration gardens	September-08	June-14
Implement gardens	March-09	June-14
Task 2.5 Runoff Measuring Devices		
Task 3. Marketing and Outreach	May-08	December-14
Task 4. Monitoring		
Task 5. PAEP	May-08	September-08
Task 6. Contingency	N/A	
Task 7. Reporting	Jul-08	December-14

Revised Project Schedule (page 94 of 154) - Malibu Creek Watershed Water Conservation & Runoff Reduction Project

Revised schedule for the Malibu Creek Watershed Urban Water Conservation and Runoff Reduction Project



Revised Project Schedule (page 97 of 154) – Pacoima Wash Greenway Project



Revised Project Schedule (page 104 of 154) - Wilmington Drain Restoration Multi-use Project

Revised Schedule-Wilmington Drain Multiuse Project

PROJECT SCHEDULE			
Phase	Start	Completion	% Completed
Predesign	9/1/2007	6/30/2009	100
Design	7/1/2009	1/25/2011	100
Right of Way/Approvals	1/26/11	2/6/2012	100
Bid and Award	2/7/2012	4/5/2013	100
Construction	4/6/2013	4/10/2016	1
Post-Construction	4/11/2016	10/9/2016	0

Summary of Submittals

Task	Task Name	Grant Agreement Due Date	Date Submitted Revised Due Dates
Planning			
	Concept Report	6/30/06	6/30/06
	Public Workshop Attendance Sheet	6/30/06	6/30/06
Task - Design / Engineering			
	10% Design and Cost Estimate	6/30/09	10/23/09
	50 % Design	10/31/09	1/25/10
	90% Design	4/30/10	1/21/10
	Final Construction Documents	6/30/10	4/22/11
Task - Environmental Documentation Submittal			
	Initial Study Environmental Checklist Form	6/30/06	10/30/08
	Environmental Impact Report	6/30/10	10/22/10
Task - Permits			
	CDFG Permit	4/30/07	4/22/11
	CDFG Incidental Take Permit		4/29/13
	RWQCB Permit	4/30/07	10/21/11
	City of Los Angeles Department of Animal Control	4/30/07	Not Applicable
Task - Construction Submittals			
	Pre Construction Photos	12/31/10	7/29/13
	Notice to Proceed	12/31/10	7/29/13
	Construction Inspection Checklist	12/31/12	5/10/16
	Post Construction Photos	12/31/12	4/10/16
Task -- Other Submittals			
	Project Assessment and Evaluation Plan	6/30/10	10/21/11
	Invoicing	Quarterly	7/31/16
	Quarterly Progress Report	Quarterly	7/31/16

State of California
The Natural Resources Agency
Department of Water Resources

Grant Agreement 4600007659
Amendment 3

Agreement Between the State of California
Department of Water Resources
and
Los Angeles County Flood Control District
Under the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002

The following modifications shall be made to the agreement:

Grantee's Cost

The estimated total project costs are reduced from $173,443,823 to $82,010,783. Grantee's Funding Match is reduced from $144,043,823 to $52,610,783. See Attachment 1 Paragraph 5.

Exhibit A – Work Plan

Project 1 – Central Basin Southeast Water Reliability Project is revised to remove Task 4 (construction) from the scope and modify project phasing organization. Project 3 – Large Landscape Conservation Central Basin MWD is replaced with an alternative project having similar benefits as the original. Project 4 – Large Landscape Conservation West Basin MWD includes five additional demonstration gardens, and a reduction in the number of weather based irrigation controllers replaced by landscape surveys and Turf removal rebates. Project 7 – Morris Dam Water Supply Enhancement is revised to rehabilitate existing lower dam outlets and install new jet flow gate valves. Project 10 adds activities to include conducting field surveys of treatment areas to evaluate project success, identify new growth, and verify native plant succession. See Attachment 2 for amended Work Plan.

Exhibit B - Schedule

The schedules for Projects 1, 3, 4, 7, and 10 were amended to reflect changes in the Scope of Work. See Attachment 3 for amended project schedules.

Exhibit C – Budget

The $1,780,000 grant funds originally allocated to Project 1 for Construction is redistributed from this project to seven active projects in the agreement. See Attachment 4 for amended summary budget table and amended project budget tables.

All other terms and conditions of the agreement will remain the same.

IN WITNESS WHEREOF, the Parties execute this Amendment No. 3 to Grant Agreement No. 4600007659:

STATE OF CALIFORNIA,
DEPARTMENT OF WATER RESOURCES

Tracie L. Billington, P.E., Chief
Financial Assistance Branch
Division of Integrated Regional Water Management

Date: 9/4/14

Approved as to legal form and sufficiency

for Karin G. Shine

Spencer Kenner, Assistant Chief Counsel,
Office of Chief Counsel

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Gail Farber
Chief Engineer

Date: 8/18/14

Approved as to form

John F. Krattli
County Counsel

By: _____
Senior Associate

Attachment 1
Amendment 3

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

GRANT AGREEMENT BETWEEN STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

AGREEMENT NUMBER 4600007659
UNDER THE WATER SECURITY, CLEAN DRINKING WATER, COASTAL AND BEACH PROTECTION ACT OF 2002
(Water Code Section 79500 et seq.)

THIS GRANT AGREEMENT, entered into by and between State of California, acting by and through the Department of Water Resources, herein referred to as the "State" and the Los Angeles County Flood Control District, a public agency in the County of Los Angeles, State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as. follows:

1. PURPOSE OF GRANT: This Grant is made by State to Grantee to assist in financing projects associated with the Greater Los Angeles Region Integrated Regional Water Management Plan pursuant to Chapter 8 (commencing with Section 79560) of Division 26.5 of the California Water Code, hereinafter collectively referred to as "IRWM Program." Grant funds may be used only as provided in this Grant Agreement for Eligible Costs as included in Exhibit A, Work Plan.

2. TERM OF GRANT AGREEMENT: The term of this Grant Agreement begins on January 18, 2007 (effective date), and terminates on December 31, 2016, or when all of the Parties' obligations under this Grant Agreement have been fully satisfied, whichever occurs earlier.

3. SCHEDULE: Grantee shall diligently perform or cause to be performed all IRWM Program work as described in Exhibit A, Work Plan, in accordance with Exhibit B, Schedule.

4. GRANT AMOUNT: The maximum amount payable by State under this Grant Agreement shall not exceed $25,000,000.

5. GRANTEE'S COST: The reasonable total costs of the Program are estimated to be ~~$173,443,823~~ $82,010,783 which are summarized in Exhibit C, Budget. Grantee agrees to fund or ensure funding of the difference, if any, between the estimate of IRWM Program cost in its grant application and the Grant Amount specified in paragraph 4. Grantee cost share is estimated to be ~~$144,043,823~~ $52,610,783 with a required local match estimated to be~~of $106,930,096~~ $30,969,044.

6. ELIGIBLE COST: Grantee shall apply State Grant funds received only to Eligible Costs. Eligible Costs are the reasonable and necessary costs of engineering, design, legal fees, land and easement, preparation of environmental documentation, environmental mitigation, and project implementation. Reasonable administrative expenses may be included as project costs and will depend on the complexity of the project preparation, planning, coordination, construction, acquisitions, implementation, and maintenance. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the project including an appropriate pro-rata

Attachment 2
Amendment 3

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District
This replaces the entire Project 1 Work Plan in the Agreement

Summary

This work plan provides an overview for the design of the Southeast Water Reliability Project (SWRP) by the Central Basin Municipal Water District (Central Basin).

The project consists of:

1. Design and management of Phase 1A, Phase 1B, Phase 1C, and Phase 2

Phase 1A - Design of approximately 3.9 miles of buried 30-inch diameter steel pipeline. The design includes approximately 0.7 miles of 12-inch diameter ductile iron pipeline. The design includes supporting 684 linear feet of 30-inch welded steel pipe from the Beverly Boulevard bridge at the Rio Hondo River and approximately 1,027 linear feet of 30-inch inside diameter welded steel pipeline inside a 48-inch diameter steel casing being installed with appropriate tunneling methods at two crossings: the intersection of Beverly Boulevard and Rosemead Boulevard and the intersection of West Lincoln Avenue and Montebello Boulevard. The project will pass through portions of the Cities of Montebello and Pico Rivera.

- Phase 1A will add 4.9 miles to the SWRP project.

Phase 1B & Phase 1C – Design for the construction of an 8-inch pipeline as follows:

- 1 mile in length, that would be installed by County Public Works and serve the irrigation needs of the San Gabriel River and Rio Hondo Spreading Grounds (which are owned and operated by County Public Works) as well as the City of Pico Rivera's library and parks on Mines Avenue.
- 1 mile in length that will connect the Mines Avenue line to main system.
- Phase 1B and Phase 1C will add another two miles to the SWRP project.

Phase 2 – Design of approximately 4.5 miles of transmission pipeline that will run from the City of Montebello to the City of Vernon. Phase 2 would complete Central Basin's recycled water transmission system by connecting the existing Rio Hondo and Century area pipelines across the northern portion of the service area. This "loop" will increase available flow and pressure in many areas of the entire distribution system that are currently not adequately served as well as provide recycled water to new customers in the Cities of Pico Rivera, Montebello, Vernon, Los Angeles, County Unincorporated East Los Angeles, Upper San Gabriel Valley Municipal Water District and San Gabriel Valley Municipal Water District.

Task 1 - Project Administration
This task is ongoing throughout the entire project as shown in the schedule at the end of this work plan. At this time, administration consists of project outreach, funding authorizations and approvals, and preparation of budgets and work plans until the project is ready to be implemented.

Task Required Resources
- CBMWD Management and Staff
- Engineering Consultants

Task 2 - Facilities Design & Engineering
Finalize project designs for both SWRP Phase 1 and SWRP Phase 2.

Task Required Resources:
- CBMWD Management and Staff
- HDR Engineering (Design Consultant)
- Pacifica Services (Engineering Consultant)
- CBMWD Legal Counsel

Deliverables:
- Final Design Documents
- CEQA Documents

Task 3 - Legal
Legal tasks include easements and rights of way for pipeline construction that are expected to be completed prior to construction in early 2009.

Task Required Resources:
- CBMWD Management and Staff
- Pacifica Services (Engineering Consultant)
- CBMWD Legal Counsel

Task 4 - Reporting
Reporting consists of regular quarterly reports on project status to the U.S. Bureau of Reclamation and the California Department of Water Resources via Los Angeles County Flood Control District

Task Required Resources:
- CBMWD Management and Staff
- HDR Engineering

Deliverables:
- Quarterly Progress Reports
- Final Project Completion Report

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 3: Large Landscape Conservation - Central Basin MWD – Old Project Name. Water Conservation/ Management & Education Program – Revised Project Name. ***This replaces the entire Project 3 Work Plan in the Agreement***

SUMMARY

The project objectives include installation of water conservation equipment, development of a notification and awareness (alert) program to manage potable water end use of Central Basin's water purveyor customers, and landscape retrofits and workshops.

The project objectives are broken up into four (4) components. They are:

1. Installation of Water Conservation Equipment[1]
2. Development of a Custom Online Notification and Awareness (Alert) Program
3. Drought Tolerant Demonstration Gardens and Landscape Classes
4. Administration, Management and Reporting.

Note 1: The costs associated with removal and installation of water conservation equipment is not included in the scope of work under this grant agreement, but is included here to illustrate the full scope of work being undertaken. Labor costs for this portion of the project will be covered by Department of Energy grant funds (under agreement with CBMWD), as local cost-share.

End users who participate in this program will receive water conservation equipment and will become part of the custom online alert program. The custom online alert program will be set up to send notifications related to regional water conditions such as drought and irrigation water use adjustments required by local governmental agencies to end users to save potable water. In addition, to conserving potable water, the objective of the new system is to help reduce demand during drought and to provide best practice conservation tools and educational tools to customers.

Along with the equipment and alert program, the project includes development of drought tolerant demonstration gardens in the Central Basin service area and hosting educational workshops on drought tolerant landscape.

The four (4) components are as described below.

COMPONENT 1 (0% Complete):

Installation of Water Conservation Equipment: The types of equipment chosen for this project are: water efficient clothes washers, dishwashers, toilets, large rotary nozzles, rotating nozzles and spray heads, zero water urinals and laminar flow restrictors. The goal is to install equipment at public, commercial and community based organization end users to decrease reliance on imported water sources, and conserve water resources by focusing on water resource management.

A qualified vendor will be obtained to provide plan development, marketing, audits and

retrofit installations. The vendor will be supplied an approved equipment list that will be used during audits. The vendor will determine the equipment needs and will be responsible for the enrollment of each customer into the program. The vendor will procure the equipment for each customer and provide backup for equipment purchases with invoicing. The vendor will be required to recycle equipment removed during retrofits.

The number and type of equipment installations for each retrofit will be customized on the basis of customer needs and identified during the water and energy audit process. Individual customer equipment needs are variable and the magnitude of customer enrollments remains to be determined by the vendor. The preliminary project goal is to enroll approximately 40 customers into the program. A re-evaluation of the preliminary goal of customer enrollments will be reevaluated by the vendor during the planning process.

An example of one (1) customer retrofit would be the installation of five (5) toilets, one (1) clothes washer and one (1) dish washer at a public non-profit organization.

TASKS

Task 1A - Customers, Site Locations:

Plan, Develop, and Administer Vendor Contract: Central Basin will seek assistance from a qualified vendor.

Planning and Development of Site Selection Criteria: The objective is to develop customer selection strategy. Selected public, commercial and community based organization end user customers will be required to participate with the notification and awareness (alert) program in order to qualify for equipment installations (Task 2A).

Selection of Customers and Customer Sites: After Central Basin approves the customer selection criteria, the vendor in collaboration with Central Basin, will develop a list of potential areas and target customers.

Enrollment of Customers: The vendor will meet with target customers identified through the selection process to present the project, project benefits, expectations and timeframe. The goal of this meeting will be to enroll public, commercial and community based organization end users to take part in the program. Individual customer equipment needs are variable and the magnitude of customer enrollments remains to be determined by the vendor.

The preliminary project goal is to enroll approximately 40 customers into the program. A re-evaluation of the preliminary goal of customer enrollments will be re-evaluated by the vendor during the planning process

Task 1B - Customer Site Survey, Analysis and Equipment Selection:

Perform Water Audits: Each target customer selected will have a water audit

performed. The number of audits preformed is proportional to the quantity of target customers provided by the vendor and the number of those customers that enroll in the program. The results from the audits will be used to determine individual customer equipment needs.

The preliminary project goal is to enroll approximately but not limited to 40 customers into the program. At the time that 40 customers have been qualified, the vendor and Central Basin staff will evaluate the remaining budget the service area needs and the cost of additional retrofit. This evaluation will to help to increase the number of additional participants.

The vendor will submit the audit reports to Central Basin for review, comments and approval.

List of Potential Equipment Needs and Retrofits: Based on the project objectives and requirements of customers, the vendor will prepare a list of appropriate and necessary equipment to be installed at customer sites. The vendor will submit a list of appropriate and necessary equipment to the Central Basin for review.

Task 1C - Activation, Commissioning, and Testing:

Retrofits, Removal and Installation: The vendor will use the water audits to procure the necessary equipment to use for retrofits. "Activation, commissioning and testing" the equipment means that the vendor will perform the initial start up and testing that any piece of equipment undergoes before the customer signs off that it is installed correctly and fully functional. Testing will also ensure that the equipment is following the scope of the project. Once the testing is complete the vendor will calculate the water use and time of use at all customer site locations. Prior to retrofit of equipment each customer will sign an enrollment form. Once installation is complete, each customer will sign a certification form stating the type and number of equipment installed.

Central Basin's initial milestone is to complete 40 sites. The last milestone will be to secure additional sites and to utilize all of the grant funds. Central Basin staff intends to do more than 40 retrofits as grant funds allow.

Deliverables

- Water Audits
- Enrollment and Certification Forms
- Summary Report of Installations Completed
- Customer Names and Equipment Received

COMPONENT 1 FUNDING

U.S. Department of Energy	$875,000
Department of Water Resources	$665,000
Central Basin Municipal Water District	$0
Component Total	$1,540,000

COMPONENT 2 (0% Complete):

Development of a Custom Online Notification and Awareness (Alert) Program: A notification and awareness (alert) program will be developed to aid in management of potable water end use. The new program will be capable of sending notifications or alerts related to regional water conditions such as drought and irrigation water use adjustments required by local governmental agencies to save water. Consumption can then be managed and the volume of water use can be adjusted or shifted as needed by customers.

The notification and awareness web-based program will be developed and be used as a mass public notification program for drought conditions, irrigation schedules and water use ordinances in customer areas. Links to water conservation and best management practice tools will be available via the web-based program to build better water conservation habits. Information on regional drought conditions will also be available so that customers are aware of any regional issues. The web-based awareness program will be developed and released to public agencies within Central Basin service area with active customers for their future use and further development.

TASKS

Task 2A - Custom Notification and Awareness (Alert) Program:

Program, Planning and Development: Central Basin staff will complete research to identify a web-based program structure that will best suit the needs of customers and agencies involved, and have the ability to achieve project objectives.

Plan, Develop, Administer Vendor Contract and/or Procure Equipment: Central Basin will seek assistance from a qualified vendor to develop a web-based program that will best suit the goals of the notification and awareness program. Central Basin will oversee all program planning and development.

Program Implementation and Conservation Practices Tools: The qualified vendor will submit the web-based program details to Central Basin for final approval. The vendor will then procure any necessary software and/or hardware to implement the new program. Once the program is established, Central Basin and the vendor will include links for customers to locate information on best conservation practices related to conservation of water along with requirements or ordinances in their area. Customers will be able to access information and tools to educate themselves with that information.

The vendor will submit weekly progress reports of programming and implementation to Central Basin for review, comments and approval.

Publish, Activate and Test: The vendor will publish the notification and awareness program web-wide and test functionality of any equipment. Testing will ensure that the equipment and program are functioning properly and that they both follow the scope of the project. Once the testing is complete the vendor will provide Central Basin training on its usage.

Deliverables

- Assessment of Program Requirements
- Procurement of Server or Host
- Custom Alert Program

COMPONENT 2 FUNDING

U.S. Department of Energy	$25,000
Department of Water Resources	$25,000
Central Basin Municipal Water District	$0
Component Total	$50,000

COMPONENT 3 (75% Complete):

Drought Tolerant Demonstration Gardens and Landscape Classes: This component of the project includes retrofitting gardens in the Central Basin service area and hosting educational workshops on native landscape designs.

TASKS

Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes:

The retrofit of five (5) locations will include removing water consuming landscaping and replacing it with permeable surfaces and drought tolerant plants. While the retrofit portion of this project will serve as a tangible example of a sustainable landscape design, the workshops will be designed to educate community members on the process of starting and maintaining a drought tolerant garden.

Approximately ten (10) Landscape Classes will be conducted over the period of the project in close cooperation with the agencies. Marketing and outreach will be necessary for both the gardens and classes.

While marketing and outreach efforts will continue to be ongoing, the educational elements of this program, Landscape Classes and Demonstration Gardens, will be scheduled and conducted strictly in coordination with cities and retail water agencies to benefit their residents and customers.

Deliverables

Marketing/Outreach
- Articles in local newspapers
- Presentation at City Council meetings
- Press Releases
- Public Service Announcement

Five (5) Demonstration Gardens
- Demonstration Garden project flyer & list of plants
- Permanent project and plant information signage at the gardens
- Demonstration Garden webpage

Ten (10) Landscape Classes
- Sign-in/Attendance sheets
- Class Instruction Information

COMPONENT 3 FUNDING

U.S. Department of Energy	$0
Department of Water Resources	$160,000
Central Basin Municipal Water District	$0
Component Total	$160,000

COMPONENT 4 (20% Complete):
Administration, Management and Reporting: There will be administration, management and reporting for all four (4) components of this scope of work.

TASKS
Task 4A - Administration, Management and Reporting:
Central Basin will administer and manage the grant contract, customers and the overall activities of the Project.

Reports and Other Deliverables will be provided by Central Basin in accordance with the award requirements.

Central Basin will submit the final report publication to the State of California Department of Water Resources, the U.S. Department of Energy, the Los Angeles County Flood Control District and post it on the Central Basin website.

Deliverables
- Quarterly Progress Reports
- Final Report

COMPONENT 4 FUNDING

U.S. Department of Energy	$150,000
Department of Water Resources	$50,000
Central Basin Municipal Water District	$0
Component Total	$200,000

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 4: Large Landscape Conservation – West Basin MWD (Revisions to the original work plan are indicated below)

Project Description

The project will have several components. The first component of the project is to target large landscape sites of 1 acre and greater. Centralized irrigation controllers will be provided with the goal of conserving 1 afy of water for each acre of land and to reduce urban runoff as a result. Through the installation and management of landscape weather-based irrigation controllers, an estimated 20 to 50 percent of irrigation water will be conserved, thus reducing imported water needs. Also, up to 70 percent of water runoff will be reduced at the site because less water will be applied to the landscape. There is also an Area of Special Biological Significance (ASBS) within this Region that the project will positively impact.

The program will also provide an accountability documentation trail that will show water reduction and urban runoff data. The project will include large landscapes and other areas that contribute to high water usage and runoff pollution. The targeted landscape sites will include large landscapes in schools, parks, multi-family greenbelts, business parks, facility landscapes, street medians, and residential sites over 1,500 square feet that are the top water users in the area.

The primary objectives of this project are to increase water supply reliability, improve water quality, conduct public educational classes and develop water efficient demonstration gardens to increase public awareness. By developing this integrated approach, the various stakeholders will work together to meet the objectives of the project.

This project includes a large landscape water management program utilizing centralized weather-based irrigation controllers and a computer management system that link back to the local and water regional agencies for end-use water management. The program is designed to allow the local users (parks, schools, cities, etc.) to work with a water management company, HydroEarth~~, that~~ that utilizes a water management system. Participants will be provided with centralized irrigation controllers and management tools. HydroEarth is an irrigation technology company that provides multi-faceted solutions to conserve water and protect the environment.

The second component of the project is to target the top residential water users in the region. A total of ~~1,350~~500 rebates will be provided to residential customers to help customers purchase and install "smarter" irrigation controllers. Each irrigation controller can range from $200 to $700.

Most of the residential weather-based irrigation controllers use built-in or on-site weather data.

The third component of the Project will be to develop and provide the residential

landscape classes for the residents and business owners. WBMWD has formed a partnership with the Surfrider Foundation to develop and offer "Ocean Friendly" Garden landscape classes. The Surfrider Foundation is an environmental organization dedicated to restoring and protecting coastal and marine ecosystems. The classes will be multi-faceted and provide information on various subjects including: weather-based irrigation controllers (rebates), native plants, garden designs, irrigation system "tune-ups" and also provide information on the State's water supply and water quality issues.

The fourth component of the project involves installation of demonstration gardens. These ~~10~~ 16 "Ocean Friendly" demonstration gardens will be implemented throughout the watersheds within WBMWD's service area. Through the classes, participants will learn about the demonstration gardens, which will encourage participants to develop their own "Ocean Friendly Garden." The gardens will provide "real-life" examples of the plants and irrigation systems that will be taught in the classes. The classes will provide a unique mechanism necessary to disseminate information regarding the program and to increase public awareness about the water supply and water quality issues. The classes will help gain public acceptance of the program to help ensure its success.

The fifth component of the project involves providing landscape surveys and a turf removal rebate program to customers within the WBMWD service area.

This project is identified in the WBMWD 2005 Urban Water Management Plans (Appendix 8, References 3-2) as part of its larger Conservation Program and in the 2006 Water Conservation Master Plan that identifies this project as meeting the long-term goals of water supply reliability through conservation measures. Finally, this project is part of the MWD Five-Year Conservation Strategy Plan (see Appendix 5-3). This plan was adopted in 2005 and the goal is to conserve 1.1 million acre-feet of water by 2025. This project will act as a pilot project for the region to determine the success of the project's components including reduced urban runoff, improved water quality, and decreased potable water supply usage. To date, 16 irrigation controllers have been installed in the WBMWD service area. Since this is a pilot program, it will require more funding in order for additional controllers to be installed. For the next fiscal year, this program will make up a majority of the District's conservation program budget.

Work Items through August 1, 2008

The following sections discuss work items that are either: 1) complete as of application submittal; or 2) will be completed by August 1, 2008.

All work items will be documented by submittals to the State. These submittals are listed in boxes at the end of each task along with an estimated date of submittal completion.

(a) Land Purchase / Easement

There are no land or right-of-way acquisitions necessary for this project because the centralized irrigation controllers that are installed will replace a site's current, inefficient watering system device. The existing programming system devices will be replaced with the "smart, weather-based" systems that retrieve weather data in order to water the

landscape with the appropriate amount based on the weather conditions.

(b) Planning / Design / Engineering / Environmental Documentation

Planning

As part of the IRWMP Process, WBMWD has presented its project to the sub-regional stakeholder groups and received positive feedback. All of the watershed coordinators will be contacted to work with WBMWD to help market and implement the program.

In 2006, WBMWD developed and adopted its Water Conservation Master Plan which contains a 5-Year Action Plan. As part of the development process, two stakeholder classes were held (March 6, 2006 and April 27, 2006) to receive input from cities, water agencies, environmental groups, residents and others interested parties. Stakeholders recommended conducting landscape projects as a way to conserve water and reduce runoff. Many of the stakeholders are helping promote the program via their communication channels. Included in the budget is funding for marketing and outreach efforts which will include materials for the classes, rebates and brochures for the centralized and residential irrigation controllers, and information about the demonstration gardens.

Design / Engineering

This project has been designed from the aspect of an implementation project and not a construction project in that sites will be identified for the demonstration gardens, classes and irrigation controllers. WBMWD has been working with several cities and its retail water agencies to begin identifying suitable sites for the installation of these "Smart" irrigation landscape controllers to conserve water and reduce dry-season runoff.

Environmental Documentation

The project does not require environmental documentation because it is not a construction project nor will it have any adverse environmental impacts.

Permit Acquisition

Permits are not required because the centralized irrigation controllers will simply replace existing irrigation controllers at project sites. Nor is there a need for a permit for the landscape classes or demonstration gardens. All components of the project will be coordinated with the site owners prior to implementation.

(c) Environmental Compliance / Mitigation / Enhancement

The project does not require any environmental compliance, mitigation, or enhancement because it does not require environmental documentation.

(d) Other Costs

A Project Assessment and Evaluation Plan (PAEP) will be prepared and completed by August 2008.

Other Submittals	
Project Assessment and Evaluation Plan	Aug 2008

Work Items to Complete after September 1, 2008

The following sections discuss work items that will be completed after September 1, 2008. The work items are divided into each of the nine primary budget tasks.

All work items will be documented by submittals to the State in the form of Quarterly and Annual reports.

1. Ocean-Friendly Garden Landscape Classes

The 40 "Ocean Friendly" landscape classes will be held over a 4-year period (project duration). The first year of implementation will have 5 classes within the WBMWD service area, with 15 in the second and third years and 5 in the last year of the project. Years 2 and 3 carry the bulk of the classes because there will be a start up period in the first year and then a tailing off period in the last year.

2. Ocean-Friendly Demonstration Gardens

There are a total of ~~10~~ 16 "Ocean Friendly" demonstration gardens that will be implemented throughout WBMWD's service area. There will be ~~2~~ 3-4 installed within each of WBMWD's Direction Division boundaries to ensure even coverage throughout the service area. The estimated cost for each garden is $35,300. We recognize that this may not be sufficient funding for each garden; however we will adjust the recipient sites to ensure that no more funding is needed for this task item. For example, there may be an instance where we have a recipient site that only requires half of the $35,300 and another site that may require more than $35,300. In these cases, we will adjust the funding accordingly within the $~~353,000~~621,988 total budget.

3. ~~Centralized~~ Irrigation Controllers

There are ~~1,117~~558 centralized irrigation controllers that will be installed evenly throughout WBMWD's service area. These will be installed over the 4 year period and is the largest task of this program. This task involves marketing to those sites that are the most eligible candidates to receive the free devices, coordinating with HydroEarth and the site owner to install the controller devices and all its components, and ensuring proper management of the system.

4. ~~Residential~~ Irrigation Controller Rebates

There are ~~1,350~~450 residential irrigation controller rebates that will be marketed in this program primarily through the 40 "Ocean Friendly" classes that will be conducted but also through WBMWD's other outreach events and website. Each rebate covers up to $235 of the cost of the controller. A resident may choose a model that exceeds this amount but each rebate will cover only up to $235. This total task amounts to $~~317,250~~105,750 over the 4 year period. In addition, West Basin will conduct

"exchange events" —in which a resident would exchange their old, inefficient irrigation controller which would be recycled, with a new weather-based irrigation controller (WBIC). West Basin anticipates distributing 500 WBICs at these events.

5. Landscape Surveys and Turf Removal Rebates

Task 5.1 This task includes providing for free landscape surveys to customers within our service area. This program is in high demand because people want to know how much water they can save by making changes within their landscape. This component will be jointly funded through Metropolitan Water District's rebate program and the DWR grant funds.

Task 5.2 This task is for a turf removal rebate program within the WBMWD service area. Metropolitan Water District currently provides $1 per square foot of turf removed and this task will add to this amount by another dollar, to make the rebate $2 per square foot of turf removed, 50/50 cost share. This increase in funding will ensure that more landscapes are converted and at a higher rate than if only one dollar was provided. The process to receive the $2 per square foot is managed by Metropolitan Water District and they ensure that the landscape is converted to a lower, water-use landscape post-removal through pre- and post-photos and an application form.

6. Marketing and Outreach

The marketing and outreach for this project includes marketing of the classes, demonstration gardens, centralized irrigation controllers, and residential irrigation controller rebates. The classes will be marketed through the distribution of flyers to residents, businesses and public facilities, on WBMWD's website and at other outreach events that WBMWD participates in. The demonstration gardens will be marketed through direct contact and coordination with WBMWD's 17 cities. For the centralized irrigation controllers, a letter will be sent to the highest water users within WBMWD's service area. Marketing of this task will also occur on the website and at other outreach events. For the residential irrigation controller rebates, the Landscape Surveys and the Turf Removal Incentive, marketing will occur at the classes that will be conducted, on the website and at other outreach events.

7. Run-off Devices

Two run-off devices will be installed at two separate locations within WBMWD's service area. The first run-off device will be located in the City of Malibu where the Area of Special Biological Significance is located and be installed in the first year of the project. The second site will be determined after the first device is installed and will need to be monitored prior to installation in the second year of the project. This task requires coordination with the two cities that will be recipients of the devices.

8. Database Management

This task involves managing the database of information for all components of the program including marketing and outreach efforts, attendance of residents at all 40 classes (50 people per class), recipients of the centralized irrigation controllers and the residential irrigation controller rebates, scheduling of all components including the

progress of each demonstration garden, output indicators, performance measures, runoff device data pre and post installation, project budget and schedule, and the vendors and partnerships utilized for this project.

9. PAEP

Staff will prepare a PAEP (Project Assessment and Evaluation Plan) in accordance with DWR guidance.

~~9.~~ 10. Administration

The project will be administered by WBMWD and the tasks will be in cooperation with several other organizations.

Organization	Administration Responsibilities
HydroEarth	• Responsible for providing WBMWD with quarterly reports on the number of centralized irrigation controllers installed and locations of the installations. • Providing water usage comparison reports for pre and post controller installations. • Conducting and monitoring pre and post runoff reduction analysis and creating reports of the results. • Testing design and reporting for drought, emergency and peaking capabilities.
Surfrider Foundation	• Coordinate with WBMWD on the recipient sites of the demonstration gardens. • Coordinate on the sites of the "Ocean Friendly" Garden landscape classes • Provide WBMWD with quarterly reports on the number of "Ocean Friendly" Garden landscape classes conducted and "Ocean Friendly" demonstration gardens developed.
South Bay Cities Council of Governments	• Help market the "Ocean Friendly" Garden landscape classes to the cities in the South Bay. • Take reservations for each of the scheduled classes. • Assist in locating the sites to conduct the classes.

WBMWD	• Manage implementation of irrigation controllers by HydroEarth Inc. • Check that work is performed according to contract documents. • Manage the location of the installations, the landscape classes and the demonstration gardens. • Track work tasks and deliverables on the project's path. • Perform or review progress updates and reports. • Track work completion for payments. • Keep track of work performed on a "time and materials" basis. • Provide quarterly and annual reports showing activity conducted and program results to DWR.

Project Administration Submittals	
Quarterly and Annual Progress Reports	Quarterly and Annually

~~10.~~11. Planning-Site Selection

This task involves the coordination of WBMWD staff with their partners (Surfrider Foundation, HydroEarth and the South Bay Cities Council of Governments). All of these organizations will work with WBMWD to identify the sites to conduct the 40 classes, to install the demonstration gardens and to install the centralized irrigation controllers. Agreements with all three of these organizations will be secured prior to implementation of their tasks.

12. Contingency

Contingency funds will be made available for components of the project with unanticipated costs.

EXHIBIT A – REVISED PROJECT WORK PLAN

Project 7: Morris Dam Water Supply (Revisions to the original work plan are indicated below)

Project Description

Water supply for the region comes from native runoff from the San Gabriel Mountains and imported water supplied mostly from the CALFED Bay-Delta area. The demand for water exceeds the local water supply that is captured behind three dams along the San Gabriel River, which are owned and operated by the LACFCD. Morris Dam, which is the furthest south of these three dams on the river supply system, currently must maintain a minimum pool of water to prevent damage from sediments to the outlet works of the dam. This minimum pool restricts the amount of native water supply that can be captured by the dam and later spread downstream for use in the Basin. The Morris Dam Water Supply Enhancement Project would allow physical modifications to Morris Dam to facilitate a lower operational reservoir pool behind the dam and enable the capture and conjunctive management of the additionally conserved water. The reservoir capacity will remain the same and only modifications to the ~~intake~~ dam structures and control system would be required to gain this benefit. This would help the LACFCD meet the needs of the Main San Gabriel Basin and in turn would reduce the burden on imported water sources that are required to supplement the Basin's needs.

Morris Dam enables the LACFCD to regulate storm flows and runoff to downstream spreading grounds. Currently, the LACFCD maintains a 9,720 acre-foot operational reservoir pool of water behind the dam (minimum pool) to protect the outlet valves from damage or operational failure due to river flows with high sediment loads. This Project will increase the effective reservoir capacity by 5,720 acre-feet by reducing the required minimum pool to 4,000 acre-feet while improving the reliability of the discharge system. As a result, 5,720 acre-feet more water can be captured at the dam for downstream groundwater recharge and extraction purposes.

The Project entails physical modifications to the Morris Dam Valves, lower outlet structures, ~~and~~ Control Systems, and the addition of new jet flow gate valves to facilitate a lower operational reservoir pool and the reliable conjunctive management of the resulting increased conserved native water. These modifications consist of ~~constructing a new inlet location to take water from the reservoir at a different location (higher elevation)~~ refurbishing ~~and~~or replacing the river outlet valves with a more robust type of valve that is not as susceptible to damage and operational failure if some sediment gets in the outflow. Modifications to the control system include the electrical upgrades needed to power the new valves electric motor operators and other systems, and intelligent controls so that the valves and gate will be able to control outflows to match capacity of water conservation systems downstream.

The project ~~consists of modifications to Morris Dam to~~ will allow greater flexibility in dam releases and enable greater amounts of local runoff from the San Gabriel River watershed to be conserved. The modifications include: ~~constructing a new inlet location on the dam's outlet works;~~ replacing the dam's outlet valves with those less susceptible to damage and mis-operation if some sediment gets in the water being released (the watershed tributary to the reservoir is by nature a highly erosive one). The new outlets will eliminate current gaps in outflow rates and will include the ability to make small releases.

Summary of scope changes: The project was planned as two phases, Phase I was the valve, control, and power system upgrades, and Phase II was originally planned as an intake structure modification. In 2010 the design for Phase II was modified. The existing lower outlets were rehabilitated and two new jet flow gate valves were added in lieu of the previous plan for a new inlet structure. The modifications were made in response to constructability concerns with the original Phase II design. The rehabilitated outlets and new jet flow gate valve are extremely tolerant of high sediment loads and can be confidently operated with a lower operational pool. Therefore, this modified Phase II design will achieve the same project benefits and water conservation goals as the original Phase II design. Project construction did not require dewatering of the reservoir.

Scope of Work

The Project scope of work includes seven primary tasks:

a. Project Administration
b. Land / Right-of-Way Acquisition
c. Planning / Design / Engineering / Environmental Documentation
d. Construction / Implementation
e. Environmental Compliance / Mitigation / Enhancement
f. Construction Administration
g. Other

A description of each task as well as task deliverables to the State are included in the following sections.

(a) Project Administration

Project administration will be performed by the LACFCD Water Resources Division and Construction Division. The LACFCD will provide an onsite inspector for the duration of the construction project and will hold weekly construction meetings to discuss project submittals, items of concern, on-going work, anticipated work, schedule, quality control, and safety. Meeting minutes will be prepared and all changes necessary will be handled.

(b) Land / Right-of-Way Acquisition

No land or right-of-way acquisition is required for this project because the dam, reservoir, and spreading grounds are owned and operated by LACFCD.

(c) Planning / Design / Engineering / Environmental Documentation

Planning

Stakeholder outreach and comments were solicited as part of the environmental documentation process. A reconnaissance level feasibility study [Morris Dam River Intake Modification Study] to evaluate possible modifications to the existing intake structure to mitigate operation problems associated with sediment build up at Morris Dam was finalized in April 2004. Preliminary concepts were analyzed and a proposed modification was recommended for further evaluation and design. This report outlined potential permit requirements and preliminary costs.

Project Planning Submittals	
Public Workshop Attendance Sheet	Nov 2006
Morris Dam River Intake Modification Study	April 2004

Design / Engineering

The Final Design for the rehabilitation of the valves, control house, and electrical upgrade of the dam was completed in August 2004. The 30% concept design for the modified intake structure was completed in April 2004. The complete final design for the project including rehabilitation of the valves, controls and intake structure modification will be complete by June 2008.

Black and Veatch prepared the preliminary and final design for the valve rehabilitation and the 30% concept plan for the intake structure modification. LACFCD Design Division will complete the final design of the intake structure modification. Submittal dates for each stage of design are identified in the table following the discussion. The design consists of the following subtasks:

- 10% Design
- 30% Design
- 60% Design
- 90 Percent Design
- Final Design

10% Design

The Preliminary Design for the Project was completed in 2000 and included project design memorandum, facility valve / gate inspection, architectural inspection, and

Control House inspection, schedule for completion and a preliminary cost estimate.

30% Design

The 30% Design includes Architectural Trip Memorandum, Electrical Inspection Trip memorandum, Issue Control House Architectural Concept and Letter Report of findings. These reports/memorandums were finalized in 2000. A separate reconnaissance level feasibility study (30% design) to evaluate possible modifications to the existing intake structure to mitigate operation problems associated with sediment build up at Morris Dam was finalized in April 2004. Preliminary concepts were analyzed and a proposed modification was recommended for further evaluation and design. This report outlined potential permit requirements and preliminary costs.

50% Design

A 50% Design package for the valve/control system and electrical upgrade portion of the project was submitted by Black and Veatch in 2001. This package refined the tasks performed during the 30% design memos and prepare draft details for District and State review. The 50% Design package for the intake structure modification was completed in October 2007 by District's design division and submitted for internal review and approval. An updated cost estimate will be prepared.

90% Design

The 90% Design for the valve/control system and electrical upgrade portion of the project included complete plans and specifications, address comments from the 50% design phase. The 90% design package for the intake structure modification was completed December 2007 by District's design division. This package was submitted for review and comment to the State.

Final Design

Final Design & Construction Documents for just the valve rehabilitation, electrical upgrade, and control system upgrade was finalized in August 2004. The final documents included plans, specifications, an engineer's opinion on project construction cost and calculations for the components of the projects and a Design Summary Report.

~~The intake structure modification design is providing the final component for this project and includes all necessary calculations, plans, specifications and design summary report. A bid package combining the two components is being developed and submitted for construction. In addition, an updated cost estimate including the final design costs for the intake structure modification has been developed.~~

Environmental Documentation

The project requires compliance with CEQA as part of the environmental review process and, based on an Initial Study checklist, CEQA requirements were fulfilled with a MND. The Initial Study was completed in September 2006 and the Draft MND was

distributed in October 2006 and comments will be received through November 2006. The Final MND will then be prepared and certified by the Los Angeles County Board of Supervisors in March 2007.

Environmental Documentation Submittals	
Initial Study Checklist	May 2006
Initial Study	September 2006
Draft MND	November 2007
Final MND	March 2007

Permit Acquisition

The project has a number of permits required for the project implementation and these permits will be acquired in concurrence with the project design. The project includes activities that, as defined in Section 1602 of the State's Fish and Game Code, potentially modify a lake and streambed. Activities include lowering the reservoir to the elevation of the intakes to the dam's outlet works, which are being modified to allow greater flexibility in dam releases, and moving away any sediment that has accumulated up against the outlet works and their intakes. The CDFG oversees compliance with the Fish and Game Code. A Streambed/ Lake Alteration Operation Letter from the State's Department of Fish and Game was obtained on June 21, 2007. The above activities are also regulated by Section 404 of the federal Clean Water Act, compliance with which is overseen by the Corps. A permit from the Corps is thus required and will be obtained. Issuance of federal permits requires compliance with NEPA. The project's activities are within the scope of the Corps' Nationwide Permit No. 3 (Maintenance of an Existing Flood Control Facilities). The Corps has already completed the necessary NEPA documents and Decision Notices for its Nationwide Permits. As a result, with the Corps' issuance of a Nationwide Permit for the project, the project will comply with NEPA. A Nationwide Permit 3 was issued on December 21, 2007. Before the Corps can issue its Section 404 permits, Section 401 of the federal Clean Water Act requires a water quality certification (401 WQC) from the State for the project. The State Water Resources Control Board (SWRCB), oversees the issuance of 401 WQCs. The State's RWQCB process the 401 WQC applications and make their recommendations to the SWRCB for 401 WQC conditions. A 401 WQC was obtained on August 24, 2007 for the proposed project.

~~The Department of Water Resources Division of Safety of Dams (DSOD) will be required to approve the final design on the intake modification plans. DSOD has approved the rehabilitation of the valves and control system modification in August~~

~~2005. The final approval of the intake structure modification is anticipated in June 2008.~~ Did not occur – see summary of scope changes, above)

Permitting Submittals	Purpose	Approval Date	Status
USACE 404 Permit	Construction in waterways	Dec 2007	Completed
CDFG Streambed Alteration Agreement	Construction in a streambed	Jun 2007	
RWQCB 401 Water Quality Certification	Complete Dewatering of Reservoir	Aug 2007	
~~DSOD Approval (intake structure modification)~~	~~Overview of Dam modification~~	~~June 2008~~	~~Final 100% Design of intake structure modification pending~~

(d) Construction

This task involves construction of the bid package by a general engineering contractor selected from an open competitive bid. The LACFCD anticipates to advertise for 60-days. Construction will be performed by a general engineering contractor that will be selected during a low-bid process; however contractors must show previous work experience in dealing with the type of work anticipated. A pre-bid meeting onsite will be held to outline the anticipated work and answer questions from prospective contractors. Once awarded, a 90 day move-in/staging period is anticipated.

~~The first year of c~~Construction will involve valve rehabilitation, the addition of two new jet flow gate valves, construction of a new control house and upgrade of the electrical infrastructure. ~~The project will involve fully dewatering the reservoir behind Morris Dam during the second year of construction and will require the relocation of fish from the reservoir to suitable downstream locations and institute best management practices to prevent impacts downstream from sediment-laden flows~~

The District will provide a full-time onsite inspector for the entire duration of the project and weekly contractor meetings will be held to discuss all work and any outstanding issues as they arise. The project is anticipated to be completed within 24 months.

Construction Submittals	
Notice to Proceed	Nov 2008
Notice of Completion	Nov 2010
Final Construction Summary Report	Nov 2010

(e) Environmental Compliance / Mitigation / Enhancement

Environmental compliance, mitigation, & enhancement activities will include benefits to habitat along the San Gabriel River, including increased recreational opportunities. A mitigation plan has not been defined but will be defined during completion of environmental documentation.

The impacts of the project will be of a temporary nature and will be fully mitigated. BMPs will be employed for water quality impacts. These BMPs will include desilting basins and check dams to minimize sediment-loading downstream of the dam during dewatering activities and protection measures to ensure minimal impacts to downstream resources. When the reservoir is lowered for outlet modification work, fish in the reservoir (most of which are non-native) will be removed and relocated to recreational areas approved by the CDFG. As is the current practice for releases from Morris Dam, the water released from the reservoir during its lowering will be directed to LACDPW numerous groundwater recharge facilities downstream, thus avoiding waste of the water to the ocean. These facilities include San Gabriel Canyon Spreading Grounds, Santa Fe Spreading Grounds, Peck Water Conservation Park, Rio Hondo Coastal Spreading Grounds, San Gabriel Coastal Spreading Grounds and the soft bottom reaches of the San Gabriel River itself.

The mitigation measures noted above will reduce the project's impacts to levels of non-significance. The MND documented the environmental impacts and the environmental benefits resulting from the project, discussed how the project's benefits from greater amounts conserved of local runoff equal, if not exceed, any temporary negative impacts of the project.

(f) Construction Administration

Construction management activities include resident engineering, inspection services, quality control, and general construction management duties. These activities will be performed by the LACFCD Construction, Flood Maintenance, and Water Resources Divisions. Engineering services during construction activities include technical support

by the design firm, Black and Veatch. These services may include pre-bid conference, design changes /requests for information associated with questions of the design and proposed design changes. Shop drawing review of architectural features including steel and concrete, mechanical valves and operators, and electrical power and control features. Site visits as needed will be performed by Black and Veatch to observe the progress of the contractor and ensure that the equipment and project are being constructed in conformance with the design.

Construction Administration Submittals	
Monthly Construction Reports	Quarterly

(g) Other

Monitoring, Assessment, and Performance Plans
A PAEP will be prepared upon notification of grant award.

Other Submittals	
Project Assessment and Performance Plans	Nov 2008

(f) Construction Administration Riparian Repairs, as on-site project manager, will supervise contractors and report progress to LASGRWC.

Construction Administration Submittals	
Monthly Construction Reports	Quarterly

(g) Other A QAP and PAEP will be prepared upon notification of grant award.

Task includes conducting post-removal field mapping surveys of the treatment areas to document eradication effectiveness, identify new growth, and evaluate native plant succession.

Other Submittals	
Project Assessment and Performance Plans	Sep 2008

Attachment 3
Amendment 3

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District

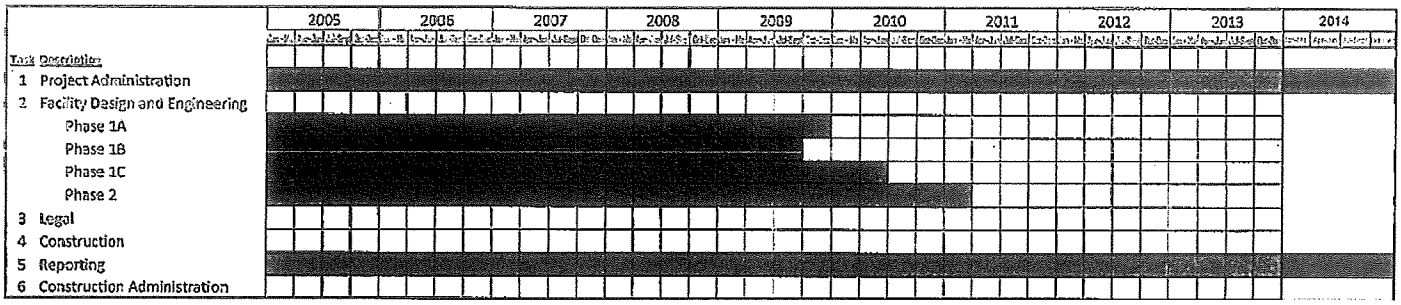


EXHIBIT B – REVISED PROJECT SCHEDULES

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

ID	Task Name	Duration	Start	Finish
1	COMPONENT 1: Installation of Water Conservation Equipment	0 days	Thu 8/1/13	Thu 8/1/13
2	**Task 1A - Customers, Site Locations**	**304 days?**	**Thu 8/1/13**	**Tue 9/30/14**
3	Plan, Develop, Administer Vendor Contract	22 days?	Thu 8/1/13	Fri 8/30/13
4	Planning and Development of Site Selection Criteria	21 days?	Mon 9/2/13	Mon 9/30/13
5	Selection of Customers and Customer Sites	267 days?	Mon 9/23/13	Tue 9/30/14
6	Enrollment of Customers	267 days?	Mon 9/23/13	Tue 9/30/14
7	**Task 1B - Customer Site Surveys and Equipment Selection**	**267 days?**	**Mon 9/23/13**	**Tue 9/30/14**
8	Perform Water Audits	267 days?	Mon 9/23/13	Tue 9/30/14
9	Customer Equipment Needs and Retrofits List	267 days?	Mon 9/23/13	Tue 9/30/14
10	**Task 1C - Activation, Commissioning, and Testing**	**267 days?**	**Mon 9/23/13**	**Tue 9/30/14**
11	Perform Water Audits	267 days?	Mon 9/23/13	Tue 9/30/14
12	Customer Equipment Needs and Retrofits List	267 days?	Mon 9/23/13	Tue 9/30/14
13	COMPONENT 2: Development of Notification and Awareness (Alert) Program	0 days	Mon 9/2/13	Mon 9/2/13
14	**Task 2A - Custom Notification and Awareness (Alert) Program**	**112 days?**	**Thu 8/1/13**	**Fri 1/3/14**
15	Plan, Develop, Administer Vendor Contract and/or Procure Equipment	22 days?	Thu 8/1/13	Fri 8/30/13
16	Program, Planning and Development	46 days?	Fri 8/30/13	Fri 11/1/13
17	Program Implementation & Conservation Practices Tools	25 days?	Mon 11/4/13	Fri 12/6/13
18	Publish, Activate and Test	20 days?	Mon 12/9/13	Fri 1/3/14
19	COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes	0 days	Thu 8/1/13	Thu 8/1/13
20	**Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes**	**871 days?**	**Fri 7/1/11**	**Fri 10/31/14**
21	Landscape Classes (10 Classes)	500 days?	Mon 1/2/12	Fri 11/29/13
22	Demonstration Gardens (5 Gardens)	436 days?	Fri 7/1/11	Fri 3/1/13
23	Marketing and Outreach	109 days?	Thu 8/1/13	Tue 12/31/13
24	COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING	0 days	Thu 8/1/13	Thu 8/1/13
25	**Task 4A - Administration, Management and Reporting**	**327 days?**	**Thu 8/1/13**	**Fri 10/31/14**
26	Administration and Management of Grant Project	327 days?	Thu 8/1/13	Fri 10/31/14
27	Reports and Other Deliverables	327 days?	Thu 8/1/13	Fri 10/31/14
28	Final Report Publication	23 days?	Wed 10/1/14	Fri 10/31/14

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 4: Large Landscape Conservation - West Basin MWD (page 1 of 2)

PROJECT TITLE: Large Landscape Conservation, Runoff Reduction Management & Educational Program			
Work Items	**Duration (# mon)**	**Start Date**	**End Date**
Grant Agreement Date	240	January-07	December-16
Task 1.0 Ocean-Friendly Landscape Classes			
Develop brochure for classes	2	December-08	January-09
Work with Noelle and Surfrider to create draft brochure & informational packets	2	December-08	January-09
Finalize brochure & informational packets	1	January-09	January-09
Market classes to highest residential water users	61	January-09	December-13
Choose sites to conduct classes	59	February-09	December-13
Coordinate site logistics with site owner	59	February-09	December-13
Coordinate RSVPs with SBESC	59	February-09	December-13
Create draft letter to highest water users	60	January-09	December-13
Send letter and brochure to highest water users in targeted area	59	February-09	December-13
Hire module developer	6	May-08	October-08
Develop draft RFP	2	May-08	June-08
Review and finalize RFP	1	July-08	July-08
Post RFP	1	July-08	July-08
Interview module developers	1	August-08	August-08
Develop agreement with module developer	2	September-08	October-08
Develop training module and class materials	6	September-08	February-09
Coordinate with module developer on class info.	2	October-08	November-08
Review draft module & class materials	2	December-08	January-09
Finalize module & class materials	1	February-09	February-09
Conduct 40 classes	59	February-09	December-14
Conduct 3 classes in FY 08-09	5	February-09	June-09
Conduct 12 classes in FY 09-10	12	July-09	June-10
Conduct 10 classes in FY 10-11	12	July-10	June-11
Conduct 5 classes in FY 11-12	12	July-11	June-12
Conduct 10 classes in FY 12-13/13-14/14-15	12	July-12	December-14
Task 2.0 Ocean-Friendly Demonstration Gardens			
Hire Landscape Architect	9	May-08	January-09
Develop draft RFP	1	May-08	May-08
Review draft RFP	2	June-08	July-08
Finalize RFP and post	3	July-08	September-08
Interview and hire landscape architect	1	October-08	October-08
Finalize landscape designer agreement	3	November-08	January-09
Select sites to retrofit (with application process)	35	February-09	December-11
Meet with Directors to present information on gardens	2	February-09	March-09
Meet with prospective site owner	49	February-09	February-12
Oversee the budget/designs for each site	49	February-09	February-12
Oversee designs of 11 demonstration gardens	70	September-08	June-14
Finalize Contract with Surfrider	4	September-08	December-08
Coordinate with Surfrider and landscape designer throughout process	68	November-08	June-14
Oversee design and ensure signage is placed throughout	62	April-09	June-14
Implement gardens	64	March-09	June-14
Install 0 gardens in FY 08-09	4	March-09	June-09
Install 0 gardens in FY 09-10	12	July-09	June-10
Install 1 garden in FY 10-11	12	July-10	June-11
Install 3 gardens in FY 11-12/ 12-13	24	July-11	June-13
Install 7 gardens in FY 12-13/ 13-14	12	July-13	June-14
Install 5 additional gardens in FY 14-15	6	July-14	December-14
Task 3.0 Centralized Irrigation Controllers			
Develop marketing materials/brochures for centralized irrigation controllers	13	May-08	January-09
Meet with Noelle to discuss layout/format & to coordinate with graphic design firm	1	July-08	July-08
Develop draft materials/brochure	6	July-08	December-08
Finalize materials/brochure	1	January-09	January-09
Target highest water users of 1 acre or greater	68	July-09	December-14
Create draft letter to highest water users throughout service area	2	July-09	July-09
Finalize letter with Ron's input	2	July-09	July-09
Send out letters (quarterly) targeting different service area locations with marketing brochure attached	14	July-09	October-12
Install 1,117 controllers	75	October-08	December-14
Procure services for Vendor	4	October-08	January-09
Develop draft agreement with Vendor	2	February-09	March-09
Finalize agreement with Vendor	2	March-09	April-09
Coordinate the installations with Vendor	68	May-09	December-14

Project 4: Large Landscape Conservation - West Basin MWD (page 2 of 2)

Task 4.0 Residential Irrigation Controller Rebates			
Develop rebate form and brochure	2	December-08	January-09
Work with Noelle on creating draft rebate form and brochure	2	December-08	January-09
Finalize rebate form and brochure	1	January-09	January-09
Provide rebate funding to 500 irrigation controllers	64	September-08	December-14
Task 5.0 Landscape Surveys and Turf Removal Rebates	8	April-14	December-14
Task 5.1 Landscape Surveys	8	April-14	December-14
Task 5.2 Turf Removal Rebates	8	April-14	December-14
Task 6.0 Marketing and Outreach	80	May-08	December-14
See above tasks			
Task 7.0 Runoff Measuring Devices			
Select eligible site for placement of first device	2	March-09	April-09
Select eligible site for placement of second device	2	March-10	April-10
Monitor runoff of site pre-installation of first device	13	May-09	May-10
Monitor runoff of site pre-installation of second device	13	May-10	May-11
Install first device	1	June-10	June-10
Install second device	1	June-11	June-12
Monitor runoff of site post-installation of first device	48	July-10	June-14
Monitor runoff of site post-installation of second device	36	July-11	June-14
Task 8.0. Database Management			
Track number of centralized irrigation controllers installed and residential irrigation controller rebates issued	68	May-09	December-14
Monitor water savings of devices at 10% of the sites that installed them	66	July-09	December-14
Monitor water savings pre and post installation of demonstration gardens installed	72	January-09	December-14
Monitor runoff from runoff measuring devices pre-installation	24	May-09	May-11
Monitor runoff from runoff measuring devices post-installation	54	July-10	December-14
Task 9.0 PAEP			
Create draft PAEP	4	Jul-08	Oct-08
Finalize and submit to DWR	5	Aug-08	Nov-08
Task 10. Project Administration			
Reporting			
Quarterly Reports	20	Jul-08	Oct-14
Annual Reports	5	Jul-09	Nov-13
Final Report	1	Jun-12	December-14
Task 11.0 Planning/Site Selection	200	May-08	December-14
Task12.0 Contingency		N/A	

EXHIBIT B – REVISED PROJECT SCHEDULES

Project 7: Morris Dam Water Supply Enhancement

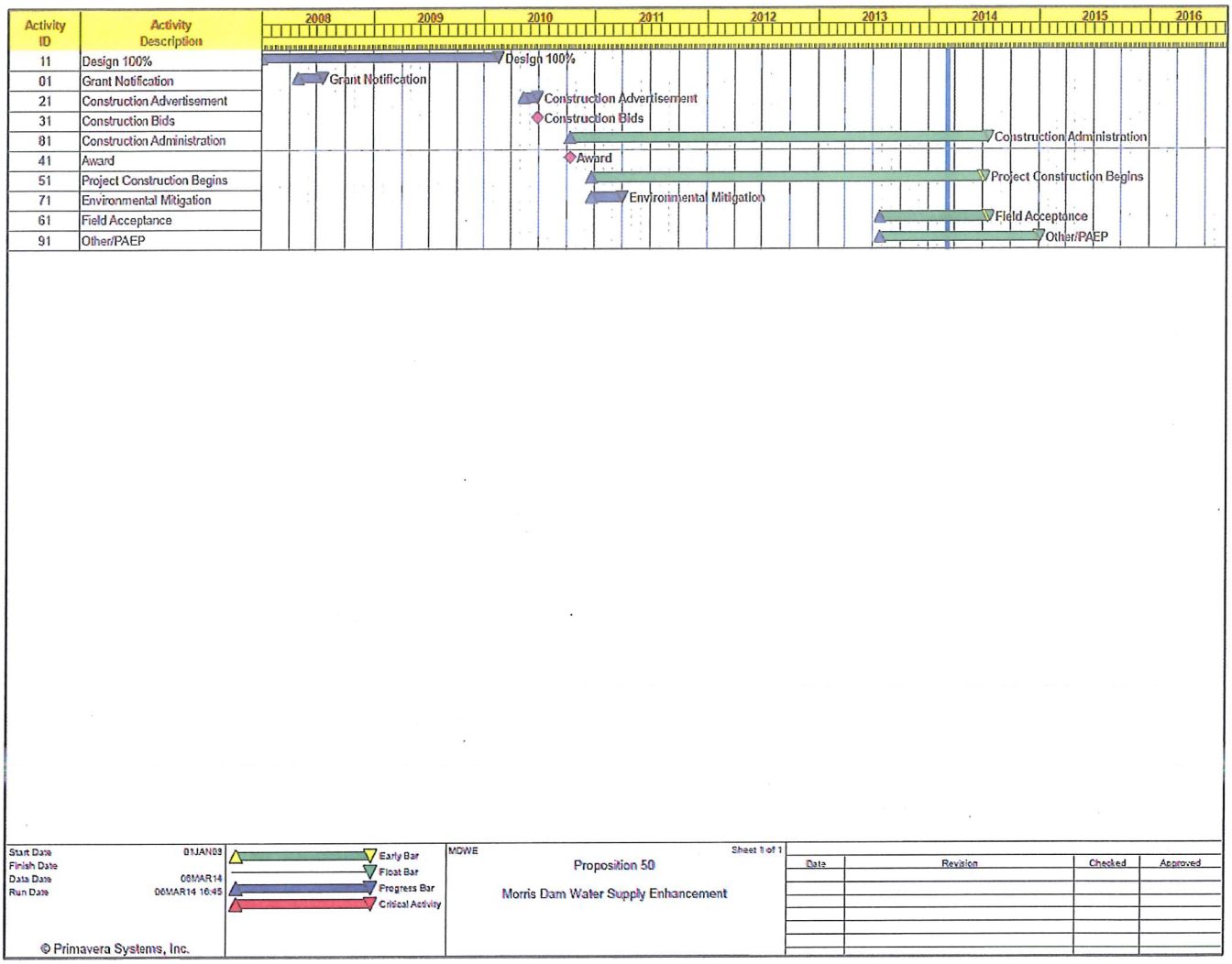
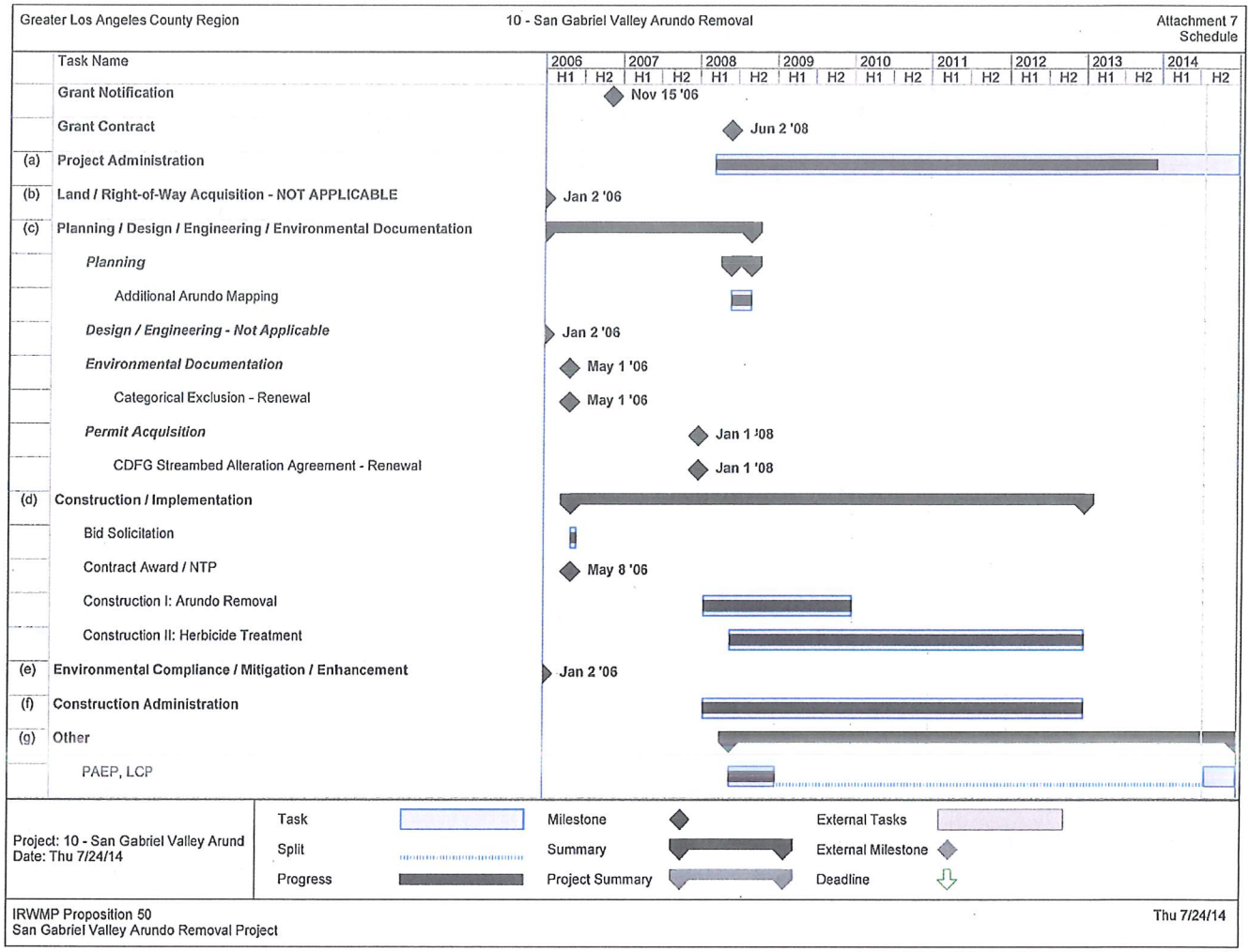


EXHIBIT B – REVISED PROJECT SCHEDULES

Project 10: San Gabriel Valley Arundo Removal



Attachment 4
Amendment 3

EXHIBIT C – REVISED SUMMARY BUDGET TABLE

SUMMARY BUDGET TABLE - Amendment 3

NOTE: Red font indicate changes from original summary budget table located on page 105 of Agreement No. 4600007659.

Project No.	Project Short Name	Sponsor Agency	Estimated Total Project Cost	Estimated Local Cost	Other State Funds	Max Grant Funds	Required Local Cost Share	Retention Amount DWR will withhold per project
1	Central Basin SWRP	Central Basin Municipal Water District	$ 7,359,461	$ 5,609,461		$ 1,750,000	$ 5,609,461	$ 175,000
2	JWPCP Marshland Enhancement	Sanitation Districts of Los Angeles County	$ 3,444,692	$ 3,044,692		$ 400,000	$ 1,976,523	$ 40,000
3	Large Landscape Conservation - Central Basin MWD	Central Basin Municipal Water District	$ 1,950,000	$ 1,050,000		$ 900,000	$ 200,000	$ 90,000
4	Large Landscape Conservation - West Basin MWD	West Basin Municipal Water District	$ 2,977,237	$ 1,578,890		$ 1,398,347	$ 993,494	$ 139,835
5	Las Virgenes Creek Restoration	City of Calabasas	$ 1,063,090	$ 548,090		$ 515,000	$ 548,090	$ 51,500
6	Malibu Creek Conservation	Las Virgenes Municipal Water District	$ 930,720	$ 283,000		$ 647,720	$ 283,000	$ 64,772
7	Morris Dam Water Supply	Los Angeles County Flood Control District	$ 13,922,899	$ 8,303,681		$ 5,619,218	$ 6,914,366	$ 561,922
8	North Atwater Creek Restoration*	City of Los Angeles, Watershed Protection Division	$ 3,257,320	$ 1,007,320		$ 2,250,000	$ 1,007,320	$ 225,000
9	Pacoima Wash/8th Street Park	Mountains Recreation & Conservation Authority	$ 2,287,000	$ -	$ 1,700,000	$ 587,000	$ -	$ 58,700
10	San Gabriel Valley Arundo Removal	Council for Watershed Health	$ 253,200	$ 50,200		$ 203,000	$ 49,900	$ 20,300
11	Solstice Creek Restoration	Mountians Restoration Trust	$ 260,896	$ 150,000		$ 110,896	$ -	$ 11,090
12	South Los Angeles Wetlands	City of Los Angeles, Watershed Protection Division	$ 17,100,000	$ 10,591,417	$ 2,700,000	$ 3,808,583	$ 4,500,000	$ 380,858
13	Whittier Narrows WRP UV	Sanitation Districts of Los Angeles County	$ 11,704,268	$ 9,704,268		$ 2,000,000	$ 7,886,890	$ 200,000
14	Wilmington Drain	City of Los Angeles, Watershed Protection Division	$ 15,500,000	$ 10,689,764		$ 4,810,236	$ 1,000,000	$ 481,024
		Grant Total:	**$ 82,010,783**	**$ 52,610,783**	**$ 4,400,000**	**$ 25,000,000**	**$ 30,969,044**	**$ 2,500,000**

* Amounts reflect changes from original budget through Amendment 1.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 1: Southeast Water Reliability Project
Central Basin Municipal Water District

Budget Category		Other State Funds	Estimated Local Cost	Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Project Administration Costs	-	$1,668,162	$1,668,162	$0	$1,668,162
(b)	Facility Design & Engineering	-	$3,930,445	$3,930,445	$1,750,000	$5,680,445
(c)	Legal	-	$10,854	$10,854	$0	$10,854
(d)	Construction	-	$0	$0	$0	$0
(e)	Reporting	-	$0	$0	$0	$0
(f)	Construction Administration/Construction Management	-	$0	$0	$0	$0
(g)	Construction Contingency (4%)	-	$0	$0	$0	$0
	Grand Total	**-**	**$5,609,461**	**$5,609,461**	**$1,750,000**	**$7,359,461**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
COMPONENT 1: Installation of Water Conservation Equipment					
Task 1A - Customers, Site Locations	-	$250,000	$50,000	$185,000	$435,000
Task 1B - Customer Site Surveys, Analysis and Equipment Selection	-	$175,000	$50,000	$80,000	$255,000
Task 1C - Activation, Commissioning, and Testing	-	$450,000	$100,000	$400,000	$850,000
COMPONENT 2: Development of Notification and Awareness (Alert) Program					
Task 2A - Custom Notification and Awareness (Alert) Program	-	$25,000	$0	$25,000	$50,000
COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes					
Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes	-	$0	$0	$160,000	$160,000
COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING					
Task 4A - Administration, Management and Reporting	-	$150,000	$0	$50,000	$200,000
Grand Total	-	**$1,050,000**	**$200,000**	**$900,000**	$1,950,000

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 3:
Large Landscape Conservation - Central Basin MWD – Old Project Name
Water Conservation/ Management & Education Program – Revised Project Name

Budget Break-out Detail:

Implementation of Central Basin MWD IRWMP Central Basin's Portion of the Water Conservation/ Management & Education Program	Budget Amount by Task (DWR Share)	Budget Amount by Task (CBMWD Share)*	Task Totals
COMPONENT 1: Installation of Water Conservation Equipment			
Task 1A - Customers, Site Locations			
Plan, Develop, Administer Vendor Contract *(Breakdown of Costs - Table 1)*	$0	$15,000	$15,000
Planning and Development of Site Selection Criteria *(Breakdown of Costs - Table 1)*	$10,000	$60,000	$70,000
Selection of Customers and Customer Sites *(Breakdown of Costs - Table 1)*	$25,000	$25,000	$50,000
Enrollment of Customers *(Breakdown of Costs - Table 1)*	$150,000	$150,000	$300,000
Task Sub-Total	**$185,000**	**$250,000**	**$435,000**
Task 1B - Customer Site Surveys, Analysis and Equipment Selection			
Perform Water Audits *(Breakdown of Costs - Table 2)*	$75,000	$165,000	$240,000
Customer Equipment Needs and Retrofits List *(Breakdown of Costs - Table 2)*	$5,000	$10,000	$15,000
Task Sub-Total	**$80,000**	**$175,000**	**$255,000**
Task 1C - Activation, Commissioning, and Testing			
Water Conservation Equipment *(Breakdown of Costs - Table 3)*	$400,000	$121,000	$521,000
Removal and Installation of Water Conservation Equipment *(Breakdown of Costs - Table 3)*	$0	$329,000	$329,000
Task Sub-Total	**$400,000**	**$450,000**	**$850,000**
COMPONENT 2: Development of Notification and Awareness (Alert) Program			
Task 2A - Custom Notification and Awareness (Alert) Program			
Plan, Develop, Administer Vendor Contract and/or Procure Equipment	$0	$8,000	$8,000
Program, Planning and Development	$0	$5,000	$5,000
Program Implementation & Conservation Practices Tools	$25,000	$10,000	$35,000
Publish, Activate and Test	$0	$2,000	$2,000
Task Sub-Total	**$25,000**	**$25,000**	**$50,000**
COMPONENT 3: Drought Tolerant Demonstration Gardens and Landscape Classes			
Task 3A - Drought Tolerant Demonstration Gardens and Landscape Classes			
Landscape Classes (10 Classes)	$50,000	$0	$50,000
Demonstration Gardens (5 Gardens)	$50,000	$0	$50,000
Marketing and Outreach	$60,000	$0	$60,000
Task Sub-Total	**$160,000**	**$0**	**$160,000**
COMPONENT 4: ADMINISTRATION, MANAGEMENT, REPORTING			
Task 4A - Administration, Management and Reporting			
Administration and Management of Grant Project *(Breakdown of Costs - Table 4)*	$25,000	$150,000	$175,000
Reports and Other Deliverables	$15,000	$0	$15,000
Final Report Publication	$10,000	$0	$10,000
Task Sub-Total	**$50,000**	**$150,000**	**$200,000**
Project Grand Total	**$900,000**	**$1,050,000**	**$1,950,000**

TABLES

TABLE 1: Task 1A Customers, Site Locations	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Plan, Develop, Administer Vendor Contract	$100	150	$15,000
Planning and Development of Site Selection Criteria	$140	500	$70,000
Selection of Customers and Customer Sites	$140	357	$50,000
Enrollment of Customers	$140	2,143	$300,000
			$435,000

TABLE 2: Task 1B Customer Site Surveys, Analysis and Equipment Selection	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Perform Water Audits	$140	1,714	$240,000
Customer Equipment Needs and Retrofits List	$140	107	$15,000
			$255,000

TABLE 3: Task 1C Water Conservation Equipment and Labor Estimated Costs	*Equipment ($)*	*Quantity (Each)*	*Vendor Rate ($/Hour)*	*Labor (Hours)*	*Equipment Costs ($)*	*Labor Costs ($)*	*Vendor Total ($)*
Zero Water & Ultra Low Water Urinals	$1,000	200	$60	8	$200,000	$96,000	$296,000
Clothes Washers	$600	50	$60	5	$30,000	$15,000	$45,000
Dishwashers	$600	110	$60	5	$66,000	$33,000	$99,000
High Efficiency Toilets	$350	200	$60	6	$70,000	$72,000	$142,000
Laminar Flow Restrictors	$20	1,000	$50	0	$20,000	$9,900	$29,900
Large Rotary Nozzles	$15	4,000	$50	0	$60,000	$49,500	$109,500
Rotating Nozzles for Spray Heads	$15	5,000	$41	0	$75,000	$53,600	$128,600
					$521,000	**$329,000**	**$850,000**

TABLE 4: Administration and Management Costs - CBMWD Personnel	*Rate ($/Hour)*	*Labor (Hours)*	*Total ($)*
Project Manager - Public Affairs	$100	1,000	$100,000
Project Manager - Engineering	$100	500	$50,000
Project and Administrative Support - Public Affairs	$50	500	$25,000
			$175,000

*Notes: CBMWD will utilize funding from a U.S. Department of Energy - Energy Efficiency and Conservation Block Grant Award (U.S. DOE EECBG) in the amount of $1,050,000 for project; Removal and installation of water conservation equipment is not an approved activity under the DWR scope of work. Labor costs will be covered entirely by DOE grant funding only. DWR and DOE will share the cost of water conservation equipment.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 4: Large Landscape Conservation – West Basin MWD (Old)[1]

	Budget Category	Other State Funds	Estimated Local Cost	Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
1.0	Ocean-Friendly Garden Landscape Classes	-	$66,569	$64,563	$67,423	$133,992
2.0	Ocean-Friendly Demonstration Gardens	-	$32,083	$23,983	$320,962	$353,045
3.0	**Irrigation Controllers**					
3.1	Phase I - USBR In-Kind & MWD In-Kind	-	$391,855	$391,855	$505,357	$897,212
3.2	Phase II - USBR In-Kind & MWD In-Kind	-	$611,855	$358,452		$611,855
4.0	**Irrigation Controller Rebates**					
4.1	Phase I - 1/3rd of controllers (1-450)	-	$36,000	$26,911	$69,750	$105,750
4.2	Phase II - 1/3rd of controllers (451-900)	-	$36,000	$26,911	$69,750	$105,750
4.3	Phase III -1/3rd of controllers (901-1350)	-	$36,000	$26,911	$69,750	$105,750
5.0	Marketing and Outreach	-	$15,992	$15,992	$29,008	$45,000
6.0	Run-off Devices	-	-	$0	$68,000	$68,000
7.0	Database Management	-	$52,031	$52,031	-	$52,031
8.0	PAEP	-	$10,000	$10,000	-	$10,000
9.0	Administration	-	$76,000	$49,707	-	$76,000
10.0	Planning-Site Selection	-	$26,440	$0	-	$26,440
11.0	Contingency	-	$10,205	$0	-	$10,205
(I)	**Grand Total**	-	**$1,401,030**	**$1,047,316**	**$1,200,000**	**$2,601,030**

Sources of Funds: Non-State: $821,923 WBMW Conservation Budget; and
Share (Funding Match): $811,710 MW Conservation / Landscape Incentives Program

Note:

1. This budget table was revised from the original per Informal Amendment #1 - see progress report Q4-2011. Specifically: 1) grant funds and required local cost share amounts were reallocated (totals remained the same) for several tasks; 2) Sub-tasks for Tasks 3 and 4 were added in an effort to address cash-flow issues of project proponent (allowing sooner grant payout once required cost-share is met on a sub-task basis); and 3) revised estimates were provided for Local Cost and Total Project Cost. These changes are reflected in this table.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 4: Large Landscape Conservation – West Basin MWD (Revised)

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
1	**Ocean-Friendly Garden Landscape Classes**	-	$68,032	$64,563	$67,423	$135,455
2	**Ocean-Friendly Demonstration Gardens**	-	$102,679	$23,983	$519,309	$621,988
3	**Centralized Irrigation Controllers (1,117)**					
3.1	Phase I - USBR In-Kind & MWD In-Kind	-	$391,855	$391,855	$505,357	$897,212
3.2	Phase II - USBR In-Kind & MWD In-Kind	-	$611,855	$358,452	$0	$611,855
4	**Residential Irrigation Controller Rebates**					
4.1	Phase I - 1/3rd of controllers (1-450)	-	$36,000	$26,911	$69,750	$105,750
5	**Landscape Surveys and Turf Removal Rebates**					
5.1	Landscape Surveys	-	$20,000	$0	$70,122	$90,122
5.2	Turf Removal Incentive	-	$100,000	$0	$100,000	$200,000
6	**Marketing and Outreach**		$15,992	$15,992	$29,008	$45,000
7	**Run-off Devices**	-	$0	$0	$37,378	$37,378
8	**Database Management**	-	$97,723	$52,031	$0	$97,723
9	**PAEP**	-	$10,000	$10,000	$0	$10,000
10	**Administration**	-	$88,109	$49,707	$0	$88,109
11	**Planning-Site Selection**	-	$26,440	$0	$0	$26,440
12	**Contingency**	-	$10,205	$0	$0	$10,205
	Grand Total	-	**$1,578,890**	**$993,494**	**$1,398,347**	**$2,977,237**

Note: Above budget table is for A-3 (includes redistributed $198K funds); re-allocated funds from Tasks 4.2, 4.3 and 7 to new Task 5); and revised Local Cost, Required Local cost share and Estimated Total project costs for several tasks.

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 6: Malibu Creek Conservation

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$22,205	$22,205	$29,377	$51,582
(b)	Land Purchase/Easement	-	$0	$0	$0	$0
	Planning and Stakeholder Effort	-	$0	$0	$0	$0
	Design and Engineering	-	$0	$0	$0	$0
	Assessment, engineering, geotechnical, hydraulics, water quality, plans & specs	-	$0	$0	$0	$0
	Environmental Documentation	-	$0	$0	$0	$0
(c)	Planning/Design/Engineering/Environmental Documentation	-	$13,322	$13,322	$0	$13,322
(d)	Construction/Implementation	-	$210,826	$210,826	$608,343	$819,169
(e)	Environmental Compliance/Mitigation/Enhancement	-	$0	$0	$0	$0
(f)	Construction Administration	-	$35,526	$35,526	$0	$35,526
(g)	Other Costs (legal, permits, monitoring, preparing PAEP/MP/QAPP)	-	$1,121	$1,121	$0	$1,121
(h)	Construction/Implementation Contingency	-	$0	$0	$10,000	$10,000
(i)	**Grand Total**	$0	$283,000	$283,000	$647,720	$930,720

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 7: Morris Dam Water Supply (Old)[1]

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$602,500	$623,274	0	$602,500
(b)	Land Purchase/ Easement	-	-	-	0	-
(c)	Planning/ Design/ Engineering/Environmental Doc	-	$1,938,975	$466,606	0	$1,938,975
(d)	Construction/ Implementation	-	$6,914,366	$4,240,767	$5,135,634	$12,050,000
(e)	Environmental Compliance/ Mitig./Enhancement	-	$154,500	$19,682	0	$154,500
(f)	Construction Administration	-	$453,200	$821,912	0	$453,200
(g)	Other Costs (PAEP)	-	$5,000	$3,067	0	$5,000
(h)	Construction/ Implementation contingency	-	$1,205,000	$739,059	0	$1,205,000
(i)	**Grand Total**	**-**	**$11,273,541**	**$6,914,366**	**$5,135,634**	**$16,409,175**
Sources of Funds for Non-State Share (local Cost): District Flood Funds						

Note 1 - This budget table was revised from the original per Informal Amendment #1 - see email dated June 13, 2013 from DWR to LA County. Specifically, several budget categories were reallocated for required local cost share.

Project 7: Morris Dam Water Supply (Revised)

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration Costs	-	$735,820	$623,274	0	$735,820
(b)	Land Purchase/ Easement	-	-	-	0	-
(c)	Planning/ Design/ Engineering/Environmental Doc	-	$512,753	$466,606	0	$512,753
(d)	Construction/ Implementation	-	$4,980,782	$4,240,767	$5,619,218	$10,600,000
(e)	Environmental Compliance/ Mitig./Enhancement	-	$23,433	$19,682	0	$23,433
(f)	Construction Administration	-	$840,893	$821,912	0	$840,893
(g)	Other Costs (PAEP)	-	$5,000	$3,067	0	$5,000
(h)	Construction/ Implementation contingency	-	$1,205,000	$739,059	0	$1,205,000
(i)	**Grand Total**	**-**	**$8,303,681**	**$6,914,366**	**$5,619,218**	**$13,922,899**
Sources of Funds for Non-State Share: District Flood Funds						

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 10: San Gabriel Valley Arundo Removal

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
(a)	Direct Project Administration	-	-		$8,400	$8,400
(b)	Land Purchase/ Easement	-	-		-	-
(c)	Planning/ Design	-	$300	$298	-	$300
(d)	Construction/Implementation	-	$49,900	$49,602	$158,100	$208,000
(e)	Environmental Compliance	-	-		-	
(f)	Construction Administration	-	-		$10,000	$10,000
(g)	Other Costs, QAP/PAEP	-	-		$26,500	$26,500
(h)	Construction/Implementation contingency	-	-		-	$0
(i)	**Grand Total**	**-**	**$50,200**	**$49,900**	**$203,000**	**$253,200**
Sources of Funds for Non-State Share (Funding Match) and $49,900 Mitigation funds from LASGRWC and SAGE						

Additional activities will be implemented under Task G (QAP/PAEP), using the reallocated grant funds ($25,000, resulting in $203,000 grant funds total), as described in Attachment 2. These activities include: conducting field surveys of treatment areas to evaluate success, identify new growth, and verify native plant succession. The detailed cost break-out for these additional activities is provided below:

Task	Labor Discipline	Estimated Total Hours	Cost/Hour	Estimated Total Cost
g	GIS specialist	40	55.31	$2,212
g	Field Technician	229	49.86	$11,418
g	Project Manager	105	29.85	$3,134
g	Project Supervisor	138.2	59.7	$8,251
	Total:	**512**	**-**	**$25,000**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 11: Solstice Creek Restoration

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	$0	$0	$0	$3,103	$3,103
b	Land Purchase/ Easement	$0	$0	$0	-	$0
c	Planning/ Design/ Engineering/Environmental Documentation	$0	$100,000	$0	-	$100,000
d	Construction/Implementation	$0	$0	$0	$107,793	$107,793
e	Environmental Compliance/Mitigation/ Enhancement	$0	$50,000	$0	-	$50,000
f	Construction Administration	$0	$0	$0	-	$0
g	Other Costs	$0	$0	$0	-	$0
h	Construction/Implementation Contingency	$0	$0	$0	-	$0
I	**Grand Total**	**$0**	**$150,000**	**$0**	**$110,896**	**$260,896**

Sources of Funds for Non-State Share (Funding Match) and Other State Funds:
$150,000 grant from federal funds (NPS) - already expended (pre-award) $32,530.00 in-kind services from NPS staff not shown here.

The redistributed grant funds ($32,530, resulting in $110,896 grant funds total) will allow for cost overruns to be captured (additional staff time for project implementation), under Task d (above). These activities include: coordination and supervision of field work and labor for weeding and planting restoration activities. The detailed cost break-out for these activities is provided below:

Task	Labor Discipline	Description	Estimated Total Hours	Cost/Hour	Estimated Total Cost
d	Field Coordinator/Supervisor	Field coordinate/supervise	429	20.06	$8,606
d	National Park Service (NPS) Field Technician	Weeding and Planting	200	13.03	$2,606
d	California Conservation Crew (CCC)	Weeding and Planting	1455	16	$23,280
Total:		-	**2,084**	-	**$34,492**

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 12: South Los Angeles Wetlands

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	-	$60,000	$24,325	-	$60,000
b	Land Purchase and Clean-up	-	$3,900,000	$1,581,081	-	$3,900,000
c	Planning/ Design/ Engineering/Environmental Doc	-	$391,417	$202,703	$1,608,583	$2,000,000
d	Construction/Implementation	$2,700,000	$3,600,000	$1,621,622	$2,200,000	$8,500,000
e	Environmental Compliance/ Mitigation/Enhancement	-	$600,000	$243,243	-	$600,000
f	Construction Administration	-	$1,000,000	$405,405	-	$1,000,000
g	Other Costs	-	$40,000	$16,216	-	$40,000
h	Construction/Implementation/ contingency	-	$1,000,000	$405,405	-	$1,000,000
i	**Grand Total**	**$2,700,000**	**$10,591,417**	**$4,500,000**	**$3,808,583**	**$17,100,000**

Sources of Funds for Non-State Share (Funding Match) and Other State Funds:

$1,000,000 LA County Proposition K

$2,000,000 Wastewater Capital Improvement Program

$8,100,000 City of LA Proposition O

$2,700,000 State of CA - Proposition 40

EXHIBIT C – REVISED PROJECT BUDGET TABLE

Project 14: Wilmington Drain

	Budget Category	Other State Funds	Estimated Local Cost	Estimated Required Local Cost Share	DWR Grant Funding	Estimated Total Project Cost
a	Direct Project Administration Costs	-	-	-	-	-
b	Land Purchase/ Easement	-	-	-	-	-
c	Planning/ Design/ Engineering/Environmental Doc	-	$1,850,000	$0	$2,310,236	$4,160,236
d	Construction/Implementation	-	$8,839,764	$1,000,000	$2,500,000	$11,339,764
e	Environmental Compliance/ Mitigation/Enhancement	-	-	-	-	-
f	Construction Administration	-	-	-	-	-
g	Other Costs	-	-	-	-	-
h	Construction/Implementation contingency	-	-	-	-	-
i	**Grand Total**	**-**	**$10,689,764**	**$1,000,000**	**$4,810,236**	**$15,500,000**