

## Changes to Proposal from Step 1

### Proposal Changes

This Step 2 proposal varies considerably from the Step 1 proposals which were previously submitted covering the same geographic region. These changes are the result of consolidation of multiple planning regions into a single group. Specifically:

- This Step 2 application represents the consolidation of four Step 1 applications and four separate draft Integrated Regional Water Management Plans. The Step 1 applications now represented by this Step 2 application were:
  - North Santa Monica Bay Integrated Regional Water Management Project Proposal (PIN 7084)
  - Los Angeles County South Bay Region Implementation Grant (PIN 7036)
  - Upper Los Angeles River Watershed IRWMP (PIN 7068)
  - San Gabriel and Lower Los Angeles Rivers Watershed IRWM Implementation Grant, Step 1 (PIN 5956)
- In total, these four Step 1 applications contained 68 projects requesting a total of nearly \$175 million in grant funding. With the consolidation of the four Step 1 applications into one Step 2 application and with the reduction in the funding request limit from \$50 million to \$25 million, the Regional Water Management Group undertook a screening to select the 13 projects included in this proposal. This screening process is summarized in Section 5 of the Draft IRWM Plan.
- This Step 2 proposal is being submitted by the Los Angeles County Flood Control District (LACFCD) on behalf of the Region. LACFCD was not the lead applicant for any of the Step 1 applications now consolidated into this Step 2 application.

### Individual Project Changes

Ten of 13 projects included in this Proposal have made minor revisions to the original project information submitted with the Step 1. Most of the revisions result from further progress made on the projects since the Step 1 application was submitted in July 2005. Each project is discussed in the following sections and the PIN for the relevant Step 1 application is noted.

#### 1. Central Basin Southeast Water Reliability Project (PIN 5956)

Three main changes occurred to the SWRP from the Step 1 Application in July 2005 to the Step 2 Application in June 2006. They include:

- Accelerated the schedule due new contractual obligation to deliver recycled water at an earlier date;
- Increased the projects annual recycled water yield to 9,600 acre-feet from 5,600 afy, while maintaining the same number of customers and pipeline length, due to increased recycled water demand in the area;
- Increased the project's total cost to \$44,283,795 due to the previous two changes. Meanwhile, the original State grant request for \$7.6 million has been reduced to \$3.5 million due to the limit of the maximum \$25 million State grant request.

The SWRP scope has been altered since the submission of the Step 1 Application due to increased recycled water demand in the project area. Originally, the project was a two phase project: Phase I consisted of constructing a 4.5 mile pipeline serving 800 acre-feet of recycled water to approximately 28 customers and Phase II (mentioned in the Step 1 Application) consisted of 8.5 miles of pipeline serving

an additional 4,800 acre-feet of recycled water to approximately 72 customers. The construction of both phases would have yielded approximately 5,600 acre-feet of recycled water, serving approximately 100 customers, and construction of 13 miles of pipeline. In addition, the total project cost was \$15.2 million for Phase I. As mentioned above, the Project now will deliver 9,600 afy.

In addition, the Project schedule is greatly accelerated since the Step 1 Application due to a new contractual obligation to deliver recycled water at an earlier date. The original completion date for Phase I alone was July 2009, while the new completion date for the entire project is December 2007. The District is under contractual obligation with the City of Vernon to complete the project by this date. In addition, the City of Vernon has a Power Plant that is being built with the requirement to use recycled water, which is the main driver for completing this pipeline extension by the end of 2007. As a result of project completion acceleration, the entire schedule has changed with respect to the Scope of Work items, including the design, which began in February 2006.

## 2. JWPCP Marshland Enhancement Project (PIN 7036)

Both the cost estimate and the schedule have been refined as the project has progressed through the final design (100% design stage). The cost estimate for the project has been refined as part of the final design process. The final estimate for the total project is \$2,587,530, an increase of \$1,022,530 from the Step 1 application submittal of \$1,565,000. The scope of the field work was also divided into two parts: (1) clearing non-native vegetation and (2) grading, revegetation, and construction of the education and viewing area. The first part of the work was completed in early 2006, while a contract for the second part has been recently approved. It is anticipated that the grading will be completed in late 2006 and the revegetation and construction of the education and viewing area will be completed in late 2007.

In addition, the grant request was decreased from \$500,000 to \$400,000.

## 3. Large Landscape Water Conservation, Runoff Reduction and Educational Program (PIN 7084, 7036 and 5956)

The changes that have occurred to the project from the Step 1 application include the consolidation of three sub-regional projects (from the North Santa Monica Bay, South Bay, and the Lower San Gabriel and Los Angeles Rivers sub-regions) into one regional project. The project details remain the same, but the budget, schedule and number of the controllers to be used has changed. Since the consolidation of the Greater Los Angeles County Region, this project is the only regional project that spans across many watersheds.

The total project cost has been reduced from \$7.2 million to \$5.2 million due to the decrease in the total State grant request. This, in turn, means that fewer controllers will be installed and fewer classes will be held. The schedule has been altered slightly, due to the consolidation of the projects as well as the budget reduction.

## 4. Las Virgenes Creek Restoration Project (PIN 7084)

The Step 1 application requested \$856,000 of State funds with a match of \$180,000; total project cost of \$1,036,000. The City of Calabasas reduced the requested State funds in its Step 2 budget by \$341,000 to allow greater funding opportunities in the Step 2 process for projects within this integrated region. The City was able to secure a grant with the Santa Monica Bay Restoration Commission, Grant Agreement No. 02-138 for portions of the project. Additional budget has been provided for some administrative tasks which were not known during the Step 1 process, thus slightly increasing the overall project total.

## 5. Malibu Creek Watershed Water Conservation Runoff Reduction, and Native Flow Restoration Project (PIN 7084)

The project description has been modified to integrate two local and similar projects proposed by Las Virgenes Municipal Water District (LVMWD) and the City of Westlake Village in the Step 1 application (PIN 7084). This partnership will improve communication between the local water agency and the client city, and to “mine” the collaborative arrangement for advantages such as those identified above (see project integration discussion). Other changes were made to provide greater detail of the combined project consistent with information requested for the Step 2 application.

## 6. Morris Dam Conjunctive Use Enhancement Project (PIN 5956)

No modifications to the project have been made since the Step 1 application submittal. The LACFCD has reduced its requested funds from \$9.8 million to \$5.14 million to accommodate the reduced anticipated funds from the State. In addition, cost for the project has increased due the high cost of construction materials (especially steel), demand for qualified civil contractors, and fuel price increases.

## 7. North Atwater Creek Restoration Project (PIN 7068)

The Detailed Project Budget for this project has been updated based on further evaluation of the various budget components. The most significant change is related to the construction costs which are expected to be lower than indicated in the Step 1 Proposal. The budget for administrative costs has been reduced, while the budget for design-related costs are anticipated to be greater than indicated in the Step 1 Proposal.

## 8. Pacoima Wash Greenway Project: 8<sup>th</sup> Street Park (PIN 7068)

The budget for the project has been updated since the Step 1 application as it design has continued to progress. Also, the Santa Monica Mountains Conservancy has provided additional funding to meet increased costs reflected in the updated budget.

## 9. San Gabriel Valley Riparian Habitat Arundo Removal Project (PIN 5956)

The Step 2 project name was revised from the Step 1 project name (Invasive Weed Control in Riparian Habitat) due to two main changes in the project description from the Step 1 application:

- Focus on only one invasive species
- *Arundo* removal from three project sites instead of four

As a result of the changes, total project cost was reduced by from \$232,000 to \$192,000.

The Step 1 application included removal of both *Arundo* and other invasive exotic plants such as castor bean, Tree of Heaven, Mexican fan palms, passion vine, and others. The Step 2 project focuses only on *Arundo* removal because control of other invasive exotic plants in riparian areas of San Gabriel Valley was funded separately by \$36,000 grant to Los Angeles & San Gabriel Rivers Watershed Council (LASGRWC) from the San Gabriel and Lower Los Angeles Rivers & Mountains Conservancy for work started in August 2005.

Geographically, the project now targets three areas of the Whittier Narrows basin because the fourth area (Upper Walnut Creek and Bonelli Regional Park) will be cleared by the California Department of Transportation through a mitigation project managed by San Gabriel Mountains Regional Conservancy. This project is currently planned to be complete in the Summer of 2007.

## 10. Solstice Creek Southern Steelhead Habitat Restoration (PIN 7084)

The only change made is to clarify how this project fits with the larger project and to specify the area of influence of this particular project (side drainages and areas influencing the riparian area). The timeline has also been changed to match with the proposed awarding of funds. The total duration (2 years) of the project has not changed.

## 11. South Los Angeles Wetlands Park Project (PIN 7068)

The project description and the scope of work have been modified to incorporate the new information based on further evaluation and refinement of the project concept since the submittal of the Step 1 application. One significant change is that the project no longer includes the use of pumped groundwater to sustain the wetlands but instead the wetlands will be supported using dry-weather runoff. This change was necessitated because further evaluation found the ground water table is much lower than anticipated. In addition, jurisdictional issues over water rights to the underlying aquifer could not be adequately addressed. Another component of the project that was not reflected in the Step 1 application is the incorporation of the educational facilities and rail museum as part of this project. The Step 1 application was not clear if these facilities would be constructed as part of this project. The Step 2 application considers these facilities as part of the larger project and are planned to be implemented subsequent to the South Los Angeles Wetlands Park project.

The Detailed Project Budget for this project has been updated based on the changes discussed above and also reflects the land acquisition that is part of match by the city of Los Angeles.

## 12. Whittier Narrows Water Reclamation Plant UV Disinfection Facilities Project (PIN 5956)

Since the Step 1 Application in July 2005, the proposed project has been modified from a single barrier disinfection process (UV only) to a dual barrier disinfection process (chlorine and UV). This is in response comments contained in the conditional acceptance letter from the California Department of Health Services, dated October 24, 2005, to Michael Shortt of Trojan Technologies. This letter confirmed the conditional acceptance of DHS for the UV 3000™ Plus system with LSI lamps at 4-inch spacing. In this letter, the DHS expressed their concerns with inadequate adenovirus inactivation using the minimum required dosage and stated “...an agency such as the County Sanitation Districts of Los Angeles County might consider it prudent to establish a UV system design objective above that recommended by the NWRI/AWWARF Guidelines.”

LACSD treatment objective is no detectable virus in the plant effluent, which is verified by monthly virus testing. This is LACSD’s historical method of meeting Title 22 regulations, and has been used in the past as an accepted alternative to meeting the 450 CT requirement of those regulations. LACSD believes the best way to achieve this level of inactivation in the proposed project is to provide a dual disinfection system. UV irradiation by itself does not result in 4-log inactivation of adenovirus at normal dosage rates (100 mJ/cm<sup>2</sup>) like other pathogens. Adenovirus is a common viral pathogen and a possible etiological agent in waterborne disease, and may require over double the normal dose for 4 log inactivation. Therefore, chlorine at a very low dosage will be applied as free chlorine to inactivate adenovirus to nondetectable levels. This will be followed by normal UV disinfection to inactivate the other pathogens, that are more susceptible to UV, and reduce coliform levels to compliance levels.

Since the Step 1 application submittal, the District has performed research on adenovirus deactivation to develop this new treatment scheme. The dual barrier approach will further protect the recycled water for

indirect potable reuse. Construction of the dual barrier system will have minimum cost impact on the project since the existing sodium hypochlorite facilities will be used and all changes are reflected in the budget in Attachment 6. (These existing facilities would have needed to be maintained anyway as a standby disinfection system to the UV system).

### 13. Wilmington Drain Restoration Multiuse Project (PIN 7036)

The project description and the scope of work have been modified to incorporate the new information based on further evaluation and refinement of the project concept since the submittal of the Step 1 application. The project now includes the creation of a dog park that would assist in controlling illicit excretions from dogs. The project no longer incorporates a sedimentation basin that was indicated in the Step 1 application; however the proposed trash capture nets will remove significant amount of debris, such as trash, vegetation, and some sediment. The use of a sedimentation basin was determined to be unfeasible and unnecessary.

The Detailed Project Budget for this project has been updated based on updated knowledge. All budget items have been updated and address the costs for construction administration, construction contingency, and other costs such as monitoring. Finally the budget for direct administrative and construction costs has been reduced, whereas the budget for design costs will be higher than originally envisioned.