

2002-2004

BIENNIAL REPORT



WATERSHED MANAGEMENT DIVISION

LOS ANGELES RIVER/HARBOR WATERSHED

VIK BAPNA, Watershed Manager

Section Background

The Los Angeles River Watershed Section (now Los Angeles River/Harbor Watershed Section) was created in August 2000.

Early influences on watershed management within the watershed included controversy surrounding the Los Angeles County Drainage Area (LACDA) Project, the Sun Valley Watershed Project, the Los Angeles River Master Plan, and the Arroyo Seco Restoration Feasibility Study. Stakeholder groups for these projects were established at the time of the creation of the Section.

The Los Angeles River Watershed Section initially focused on Public Works' already established collaboration with stakeholders on the previously-mentioned projects involving 1) an effort to restore or revitalize the channels within the watershed and 2) a more conscientious effort to consider watershed management alternatives.

During the past two years, a number of changes have occurred within the Section. In July 2003, the Dominguez Channel Watershed and associated responsibilities were added to the Section as part of an overall Division reorganization.

With this addition, the continued development and completion of the Dominguez Channel Watershed Management Master Plan (WMMP) was taken on by the Section. In order to reflect the addition of the

Dominguez Channel Watershed, the Section's name was changed from "Los Angeles River Watershed" to "Los Angeles River/Harbor Watershed".

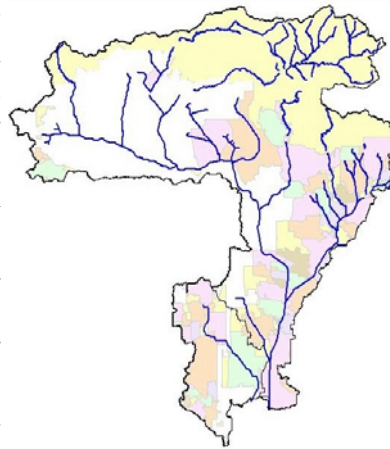
The overall focus of the Section has also changed during the past two years. Shortly after the Section's creation, the focus was on planning projects and fostering stakeholder relationships. The efforts of the past two years have been directed toward implementation of projects developed from the planning efforts. A large number of Project Concept Reports (PCRs) were completed and several projects are now well into the design phase.

The Section has also been given several additional responsibilities. This includes assuming project management responsibilities for our projects until the construction phase. In order to prepare for this new responsibility, each of the Section staff was required to attend Project

Management training.

The development of a trash TMDL for the Los Angeles River Watershed has also added a significant new dimension to the Section's focus. Planning efforts and implementation projects are now focusing on meeting Federal Clean Water Act (CWA) requirements to control trash and other water quality pollutants.

As a result of these added responsibilities, the Section has seen a growth in the number of staff. The Section presently has 11 staff; two years ago, there were six staff.



Mission

To create a balance between urban and natural resources within the Los Angeles River/Harbor Watershed. Improve Angelenos' quality of life by developing multiuse projects which will enhance water quality, increase flood protection, promote groundwater recharge, provide recreational and habitat opportunities, and create open space. Work with stakeholders including politicians, interest groups, and jurisdictional agencies to further our watershed management implementation efforts.

Accomplishments

Grants —Applied For and Received

During the past two years, the Los Angeles River/Harbor Watershed Section has pursued funding opportunities for the Section's proposed projects. Often, funding has been sought jointly with other project stakeholders. Some of the funding opportunities include the Cal-Fed grant program, Propositions 12, 40 (Urban Park Act), and 50, and Proposition A.

Several Grants have been successfully obtained by the Section and its stakeholders. In conjunction with City of Pico Rivera, Propositions 12 and 40 funds were secured for the Rio Hondo and San Gabriel Coastal Basins Spreading Grounds Project (totaling

approximately \$2 million).

The Tujunga Wash Restoration Project was awarded Proposition 12 funds of \$1.9 million, and the Rivers and Mountains Conservancy (RMC) awarded the Dominguez Gap Wetlands Restoration Project \$200,000 in Proposition 12 funds and nearly \$2.3 million from the Consolidated Cal-Fed Grant.

The total amount of grant money awarded to the Section in the past two years was more than \$6 million.

The Section has applied for grants for other projects including Wrigley Greenbelt and the Sun Valley Park Groundwater Monitoring Project.

Project Concept Reports and Feasibility Studies

During the past two years, the Los Angeles River/Harbor Watershed Section has completed more than 20 PCRs and feasibility studies.

Some of the more notable studies and reports include: Tuxford Green, which partially addresses one of the most problematic flooding issues in the Los Angeles County, Rio Hondo and San Gabriel Coastal Basins Spreading Grounds Phase II, which will result in bike trails and community access within Los Angeles County Flood Control District (LACFCD) spreading grounds, Los Angeles River Headwaters, which will create a bike path and right-of-way improvements along the Los

Angeles River, and Tujunga Central Restoration Project that uses various alternatives to naturalize Central Tujunga Wash within an existing city park.





Other multiobjective PCRs and Feasibility Studies completed by the Section include:

- Bell/Cudahy Riverfront Greenway
- Brookside Area Channel Improvements
- Best Management Practice Effectiveness Study
- DDI 23—Watershed Study
- Dominguez Channel Top Park
- Dominguez Retention Basin Analysis
- Elisian Valley Street Ends

- Longden Yard Site Improvements
- Lower Arroyo Channel Naturalization
- Nichols Sediment Placement Site
- Olive Circle Flooding
- Project 46I Channel Replacement
- Project 5202 Sycamore Grove Park Stream Daylighting
- Rubio Regional Relief
- Rubio Wash Channel Cover
- Santa Ana/Salt Lake Drainage Study
- Sun Valley Steam Plant
- Sun Valley Strathern Pit
- Sun Valley Sheldon Pit
- Tuxford Green

Designs

Design plans for the following projects were completed during the past two years or are currently in the design phase:

- Tuxford Green
- Sun Valley Park Project (currently in construction)
- Dominguez Gap Wetlands Multiuse Project
- Sun Valley Steam Plant Project
- Tujunga Wash Restoration
- Rio Hondo and San Gabriel Coastal Basins Spreading Grounds Phase II

Watershed Accomplishments

The Section completed several other projects during the past two years. These include three Earth Day events within the two Los Angeles River and Dominguez Channel Watersheds, the Los Angeles River Trash Boom Demonstration Project, and the Los Angeles River Landscape and Signage Guidelines. The guidelines will be used as a foundation for landscaping and signage guidelines throughout the Los Angeles River/Harbor Watershed and for other watersheds within Los Angeles County.



Other Section

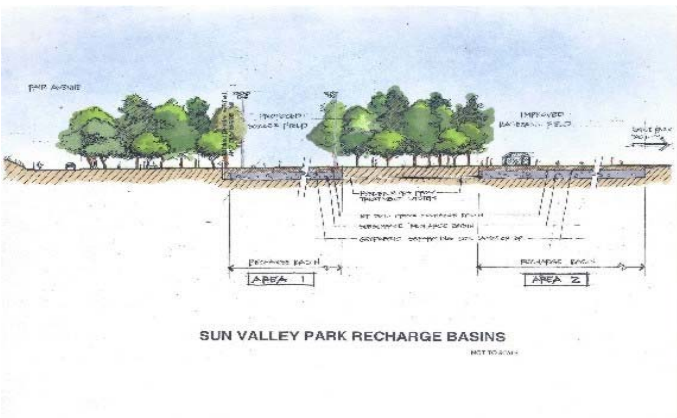
accomplishments in the past two years include:

- Development of a Sun Valley Water Quality Monitoring Program.
- Leadership of the Council of Arroyo Seco Agencies
- Completion of the Dominguez WMMP.
- Completion and Board acceptance of the Sun Valley Program Environmental Impact Report.
- Completion of the LACDA Stormwater Project Management Plan.
- Creation of a working relationship with and obtaining funding from the U.S. Army Corps of Engineers (Corps) in several watersheds including Sun Valley, Arroyo Seco, and Tujunga Wash.
- Completion of water quality sampling in Rio Hondo, Compton Creek, and Arroyo Seco Watersheds.

Projects in the Los Angeles River/ Harbor Watershed

Sun Valley Park

Public Works, in collaboration with the Sun Valley Watershed Stakeholders Group, designed an innovative watershed management project at the Sun Valley Park and Recreation Center that will provide not only relief



of flooding, but also other benefits such as reduced stormwater pollution, increased groundwater supply, recreational opportunities, and community beautification.

The project will provide these benefits by capturing upstream residential runoff and conveying it to

underground treatment units and two underground infiltration basins within the park for beneficial groundwater recharge.

The project will also enhance the recreational facilities and aesthetics at the park by installing a new soccer field, sports lighting for the soccer field, new irrigation and turf for the existing baseball fields, new bleacher seats, educational signage, and a vegetated swale with native landscaping.

Because this project provides multiple benefits, it has attracted multiple partners, including the City of Los Angeles and TreePeople. The City has agreed to maintain the facilities within the park after construction. TreePeople dedicated \$473,000 from a Proposition 12 Murray-Hayden grant to partially fund the project's recreational enhancements.

Construction of the project began in the summer of 2004. The project is the first of this type to be implemented in an intensely urbanized area. It will also be the first project implemented as part of the overall Sun Valley Watershed Master Plan (WMP) and will serve as a blueprint for similar projects within the Plan.

Landscape and Signage Guidelines

The Los Angeles River Master Plan (Master Plan), was adopted by the Los Angeles County Board of Supervisors in June 1996, provides a vision for a continuous greenway along the Los Angeles River and Tujunga Wash. The Master Plan recommended that Landscaping and Signage Guidelines be developed to facilitate consistency in the implementation of projects along the River and to ensure that the River's flood capacity would not be affected. With approval from the Master Plan Advisory Committee, Public Works completed these Guidelines which will be applied to all subsequent projects along the Los Angeles River and its tributaries.

The Master Plan identified the need for a signage program to facilitate connections between communities

and recreational facilities along the River. The Signage Guidelines, finalized in August 2003, provide specifications for the design, placement, and installation of safety, informational, regulatory, and directional signage. The sign specifications include a heron logo and a river background to provide unique and consistent awareness of the Los Angeles River.



The Master Plan proposed the Landscape Guidelines to provide consistent native landscaping along the River for sustaining habitat, to ensure that flood control maintenance and access are not impacted, and to facilitate the permit process. The Guidelines provide design specifications for amenity features, planting setbacks, and plant palettes. In January 2004, the

Master Plan Advisory Committee reviewed and approved the guidelines. The County of Los Angeles Board of Supervisors adopted the guidelines in March 2004.

Overall, the Landscape and Signage Guidelines adhere to Public Works' commitment for implementing the Master Plan and improving LACFCD right of ways.

Tujunga Wash Restoration Project

Tujunga Wash is a 9-mile rectangular channel constructed in the 1950s by the Corps that conveys runoff from Hansen Dam to the Los Angeles River. Currently, approximately 65 feet of LACFCD-owned right of way, along both sides of the channel, lacks landscaping and recreational amenities. With its extensive right of way, Tujunga Wash is recognized for its potential for greenway enhancements in the Master Plan.

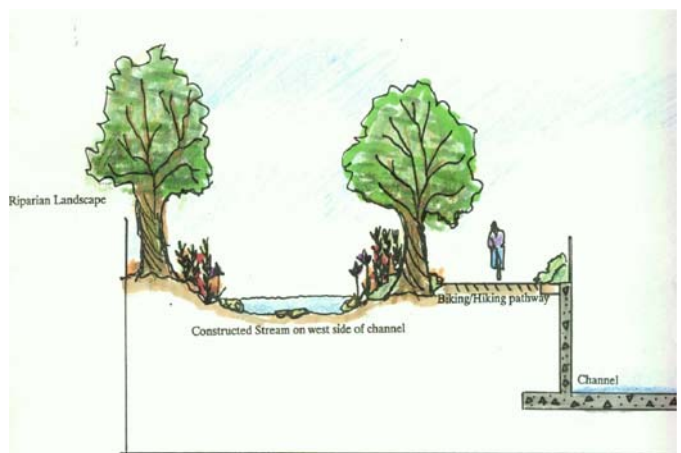


Public Works, in cooperation with the Los Angeles County Board of Supervisors Zev Yaroslavsky's office and the Mountains Recreation and Conservation Authority (MRCA), is currently in the design phase for the Tujunga Wash Restoration Project. This project extends from Vanowen Street to Oxnard Street in the Valley Glen community of the City of Los Angeles for a distance of approximately 6,000 feet on both sides of Tujunga Wash. After several community meetings, the preferred scope of the project is to create an alternative naturalized stream course on the west bank of the channel; heavily landscape both sides of the channel with native trees, shrubs, and perennials; construct meandering walkways and a bikeway, and install various turnouts and interpretive exhibits, all within the existing flood control right of way.

The constructed stream is planned to mimic a small tributary in this region, having a natural, unlined streambed and ephemeral flows. By intercepting flows and allowing runoff to flow through a naturalized stream, the project improves water quality, increases aesthetic value, and creates riparian habitat for a number of species. The project area will also be transformed into a greenway that will provide open space opportunities for a multitude of residents in this dense, urban community.

The Tujunga Wash Restoration Project has attracted grant funding from a variety of sources, including the California Resources Agency, California Department of Water Resources, and Los Angeles County Proposition A funds. In addition, Public Works has committed over \$1 million of LACFCD funding for the project.

The total project cost is estimated at \$7.7 million. It is anticipated that design for the project will be completed in 2004 with construction to follow in spring 2005. Maintenance of the project improvements will be shared by Public Works and MRCA. Public Works will maintain the hydraulic structures and MRCA will be responsible for maintenance of all greenway improvements.



Stormwater Management Plan

The County of Los Angeles has an intricate system of flood control facilities that work together to safely convey runoff and protect properties from flooding. The LACDA Project, completed by the Corps and Public Works in 2001, alleviated severe, potential flood hazard by increasing the capacity of the lower Los Angeles River system, saving \$32 million annually on previously-required flood insurance premiums. As development and land use changes continue, it is vital that a plan be developed to effectively manage stormwater to ensure that the adequate level of flood



protection is provided by the project in the future.

The Stormwater Management Plan is a requirement of the LACDA Project and Project Cooperation Agreement between the Corps and the LACFCD. The Plan consists of a hydrologic and hydraulic model of the entire Los Angeles River system that will paint a complete picture of how land use and stormwater quantities are intertwined, and provide a means to predict flooding impacts based on development changes. This Plan would ensure that any future changes in stormwater inflow or physical changes to the flood control system do not reduce the authorized 133-year level of flood protection along the LACDA Project area.

Currently, the Corps and Public Works completed the hydraulic model for the LACDA Project reaches along the Rio Hondo Channel and the lower Los Angeles River. The next phase of the project is to extend this hydraulic model upstream to the Los Angeles River headwaters and follow up with major tributaries including the upper San Gabriel River. In addition, a hydrologic model will be developed for the entire Los Angeles River system. The development of this model is anticipated to take three years. Following model development, a computerized database will be established to track changes in land use, as well as physical changes to the system that will affect the level of flood protection.

Subwatershed Plans

The Los Angeles River/Harbor Watershed Section has led and/or been involved with the creation of several subwatershed plans. These subwatersheds include:

- Arroyo Seco (lead)
- Compton Creek
- Dominguez Channel (lead)

- Rio Hondo
- Sun Valley (lead)

The following sections contain information about the progress and current status of these subwatershed plans.

Arroyo Seco

The Arroyo Seco Watershed encompasses 47 square miles and extends from the San Gabriel Mountains to its confluence with the Los Angeles River just north of downtown Los Angeles. Portions of the Cities of La Cañada Flintridge, Pasadena, South Pasadena, and Los Angeles are within the watershed.

Public Works assumed leadership responsibility for the Council of Arroyo Seco Agencies, which serves as a forum for the agencies involved in the watershed to exchange information and collaborate on projects.



The Corps completed the Reconnaissance Phase of a WMP for the Arroyo Seco in 2004 and started on the Feasibility Phase. As the lead local sponsor for the WMP, Public Works set up cost-share agreements with other local agencies and worked with the Corps to receive credit for in-kind services.

Channel naturalization in Pasadena's Lower Arroyo Park, modified channel geometry in the Brookside area, and daylighting of Project 5202, through Sycamore Grove Park in Los Angeles, were recommended in a series of PCRs completed in 2004.

Compton Creek

The Compton Creek Watershed encompasses an area of 42 square miles and is made up of portions of nine different cities and several Los Angeles County unincorporated areas. The Los Angeles & San Gabriel Rivers Watershed Council received a grant of \$200,000 from Proposition 13 for the development of a WMP for the Compton Creek Watershed.

A Steering Committee was formed to guide the development of the WMP with input from stakeholders. The Steering Committee consists of Los Angeles County Supervisorial Districts I and 2, regulatory agencies, cities, nonprofit organizations and Public Works.

This WMP is being undertaken by the Los Angeles & San Gabriel Rivers Watershed Council, under contract with the State Water Resources Control Board (SWRCB) and local oversight of the Regional Water Quality Control Board (RWQCB), Los Angeles Region. The approved Scope of Work for this effort focuses on four themes:

- Water quality issues (especially trash, pathogens [coliform bacteria], metals [copper, lead] and acidity [pH balance])
- Open space issues (including passive recreational areas, and linkages between them such as



bikeways, equestrian trails, and pedestrian pathways)

- Wetland and urban ecology issues (including potential for restoring riparian habitat and using treatment wetlands as a multipurpose strategy for implementing TMDLs)
- Drainage-corridor naturalization issues (including urban forestry strategies that could involve educational programming with local schools)

These themes also reflect requirements for the Compton Creek WMP to function as a Tributary Plan for the Lower Los Angeles and San Gabriel RMC. WMD provides technical expertise as well as data for the Plan.

Dominguez Channel

The Dominguez Channel Watershed encompasses an area of 120 square miles and it is made up of portions of 17 different cities. Public Works received a grant of \$200,000 from Proposition 13 for the development of a WMMP for the Dominguez Channel Watershed. The preparation of this WMMP involved a proactive approach by stakeholders in the watershed to plan and implement watershed management solutions.



The first step in preparing the WMMP was to establish the Dominguez Watershed Advisory Council (DWAC). The purpose is to create and support implementation of the WMMP. This group, established after submittal of the grant application, includes local government representatives, environmental groups, regulating agencies, members of business and industry, water and sewer service providers, and private citizens.

The WMMP is a comprehensive document to assist stakeholders in the protection, enhancement, and restoration of the environment and beneficial uses of the Dominguez Channel Watershed. The WMMP provides an overview of current conditions within the watershed, identifies and addresses watershed problems

and issues, provides solutions to those problems in the form of an action plan of recommended measures and projects, and identifies potential funding opportunities to assist with implementation of the Plan.

The goals of the Dominguez Channel WMMP are to:

1. Protect and enhance water quality.
2. Conserve, reuse, and recharge the water supply.
3. Protect, enhance, and restore native habitat and biological resources.
4. Promote public awareness and involvement in watershed management.
5. Implement stewardship of the watershed in balance with economic and environmental impacts.



Rio Hondo

The Rio Hondo Watershed is the second largest tributary watershed to the Los Angeles River and hydrologically links the Los Angeles and San Gabriel Rivers via Whittier Narrows and Santa Fe Dams. Comprised of a watershed area encompassing approximately 142 square miles, the Rio Hondo is a primary source of drinking water to a multitude of residents within Los Angeles County.

In 2001, the San Gabriel Valley Council of Governments (SGVCOG) received a \$200,000 Proposition 13 Watershed Planning Grant for the Rio Hondo Watershed through the SWRCB. A Project Management Team (PMT) was formed to lead this effort that included Public Works, the SGVCOG, RMC, LARWQCB, and the consultant team of Moore Iacofano Goltsman, Inc.



In addition, a Project Advisory Committee (PAC) was formed that included the 22 cities within the watershed, water agencies, non-profit groups, elected officials, regulators, and other government agencies. Finally, various subcommittees were formed to address issues including water quality and regional project implementation strategies.

The Rio Hondo WMP is a multiobjective plan that seeks to restore the beneficial uses of Rio Hondo and achieve the overall vision of a healthy watershed. This will be accomplished through the proper management of the following watershed goals: Water Quality, Water Conservation and Supply, Habitat, Recreation, Stewardship, Open Space, Public Health and Safety, and Flood Protection. The WMP will provide an organized framework for constituents of the Rio Hondo Watershed to work together, identify high-priority projects that would achieve short-and long-range watershed goals identified, and help secure future funding and other resources to implement these projects.

The Rio Hondo WMP is anticipated to be completed in late summer 2004. Following the completion of this WMP, a core advisory committee will continue to meet regularly to coordinate implementation of the various projects and programs recommended in the WMP.

Sun Valley

The mission of the Sun Valley Watershed Project is “to solve the local flooding problem while retaining all stormwater runoff from the watershed, increasing water conservation, recreational opportunities, wildlife habitat, and reducing stormwater pollution.”

To accomplish this mission, Sun Valley’s 4.4-square mile urban/industrial watershed is to be retrofitted with various watershed management techniques and BMPs. The Sun Valley Watershed Group, led by Public Works, developed the Sun Valley WMP for that purpose. This WMP, and its Draft Program Environmental Impact Report, were approved by the Board of Supervisors in March 2004.

Currently, three Phase I projects identified by the WMP are in the design phase and are scheduled for implementation within the next three years. These Phase I projects, in combination with other identified projects within the WMP, will provide the Sun Valley community with an innovative, cost effective, and sustainable solution to flooding.



Lessons Learned

- Federal budget fluctuations can have a substantial effect on the Corps' timeline for completing jointly-funded feasibility studies and projects. This should be considered when approaching the Corps for funding and project assistance.
- Several lessons were learned in contract management as the Section moved from a planning function to take on the role as Project Managers.
- Grant Management—The funding agency should be contacted for guidance before attempting to write a grant proposal. This not only helps the manager understand the specific objectives of the funding agency, but it also creates a project recognition with the agency.
- Interdepartmental relationships have been found to be extremely important to the on-time delivery of projects. One key is to request assistance and information early in the project planning process and make certain that involved divisions are aware of the project early in the planning process.
- Political support from the County of Los Angeles Board of Supervisors and city councils are paramount to successful project implementation and funding support.



Future

The Los Angeles River/Harbor Watershed Section proposes to continue to further its missions and learn from past efforts. It will continue to lead studies and projects to resolve flood protection issues, while improving the County of Los Angeles' recreational and natural resources. Some of the anticipated goals for the next two years include:

- Moving from project development to construction of projects. The Section will continue to work with the designs and PCRs that have been completed to see them through to construction.
- Completion of Sun Valley pilot projects and focus on other projects in Sun Valley.
- 100% compliance with new TMDLs
- A renewed focus on Project Management
- Monitoring effectiveness of initial pilot projects
- Finding new and innovative funding sources and partnerships for both project construction and long-term sustainable maintenance.
- Maintaining the momentum from adopted watershed plans by continuing stakeholder relationships and implementing proposed projects.

