Zone 1
Report to the Zone Commissioners
for Calendar Year 2016
By Jason Uhley, General Manager-Chief Engineer
January 2017

Accolades & Accomplishments

LID Project

In 2012, the District completed a $2.5 million retrofit of our headquarters in Riverside, CA to incorporate Low Impact Development features and landscaping. Since its construction, this project has received numerous awards, including the latest received from the National Association of Flood and Stormwater Management Agencies (NAFSMA) in 2016: "Top Overall Project" – Stormwater Management Green Infrastructure Awards.

Eagle Canyon Dam

In November 2015, the District completed the Eagle Canyon Dam project, which not only put an end to this canyon's repeated damaging flash flooding, but also included $1.2 million in environmental clean-up (funded by Palm Springs and Cathedral City) at this long blighted location. This $10 million project has since received several awards, including:

- ASCE Overall Project of the Year (San Bernardino/Riverside Branch)
- ASCE Flood Management Project of the Year (Los Angeles Section)
- APWA Project of Merit Award (Southern California Chapter)
- ASCE Outstanding Flood Management Project (Statewide)

Romoland/Homeland Project

In 2016, the District completed the $27 million Romoland MDP Line A project, the largest single contract the District has ever issued. Construction of Romoland Line A's follow-up stage, the $14.3 million "Homeland Line 1 and Juniper Flats Basin" contract will be complete in early 2017. These projects are good examples of the District and County working to achieve "smart growth" by ensuring that important infrastructure is built concurrently with new development rather than retrofit afterward.

Water Conservation & Water Quality

District staff continues to meet with regional water agencies in an effort to better understand local groundwater basins and to promote joint stormwater recharge and other water conservation projects. To help locate and prioritize projects, the District is investigating/tracking dozens of existing basin/dam facilities which could be retrofitted to improve stormwater capture and recharge. The Stormwater and Water Conservation Geodatabase system (rivco.permitrack.com) continues to be used to assist the Cities, County and developers with addressing flood control and National Pollutant Discharge Elimination System (NPDES) stormwater quality requirements.

Capital Improvement Plan Projects

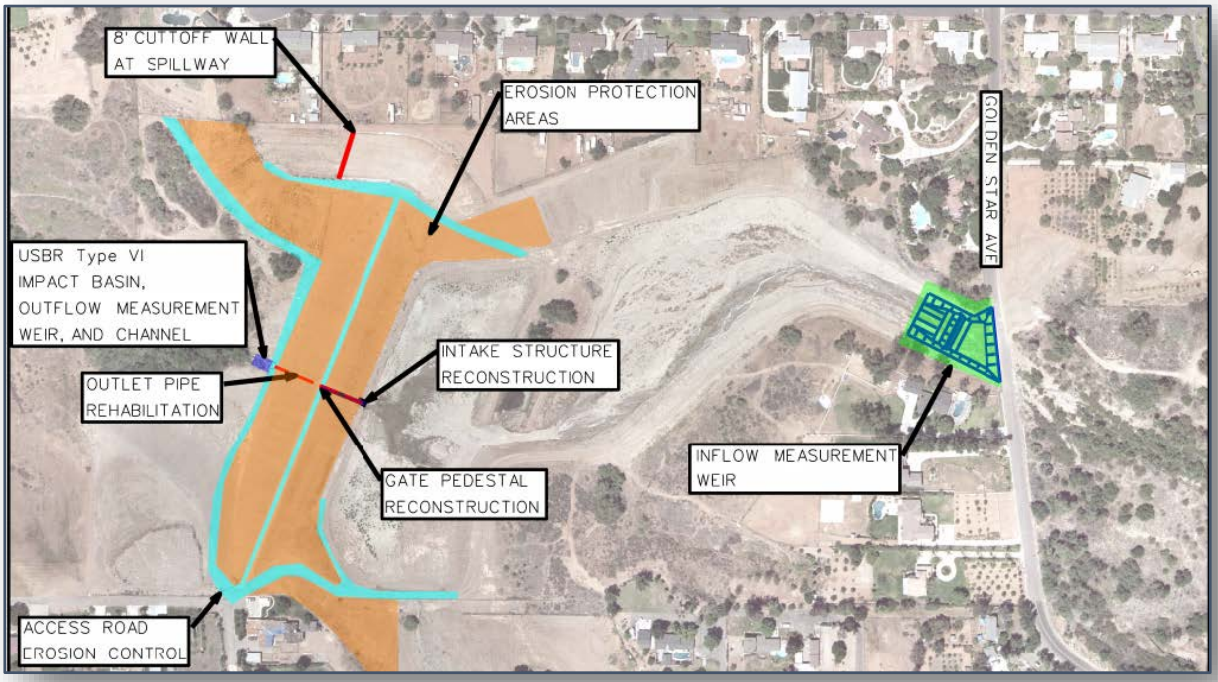
Sycamore Dam Outlet Modification (1-8-00042-90)

The project is located in the city of Riverside, southeast of the intersection of Central Avenue and Chicago Avenue. This project will upgrade the level of safety and serviceability for Sycamore Dam, one of seven Division of Safety of Dams (DSOD) jurisdictional reservoirs constructed in the 1950s and 60s in Riverside. A Preliminary Design Report has been substantially completed and initial project components have been identified, including the repair/reinforcement of the existing outlet channel, construction of a new debris rack structure, erosion controls on the embankment of the Dam, construction of a safer access road into the facility, design for safer routing of floodwaters from the emergency spillway to Central Avenue and the installation of a control section to measure outflow from the outlet pipe of the dam. Completion of this project is planned to follow the Woodcrest Dam Outlet Modification project.

Woodcrest Dam Outlet Modification (1-8-00045-90)

This project will upgrade the level of safety and serviceability for Woodcrest Dam, one of seven Division of Safety of Dams (DSOD) jurisdictional reservoirs constructed in the 1950s and 60s in Riverside. The scope of work for the project is as follows: design and construction of a new inlet structure/debris rack, outlet structure and energy dissipation system, inflow and outflow measurement weir structures, extended cutoff wall at the emergency spillway, cured–in-place pipe liner for outlet pipe rehabilitation, installation of a new automated gate system which includes the gate, valves, stem and pedestal, and the installation of rock mulch along the dam embankments for erosion control.

Work on the 60% plans has been temporarily placed on hold while geotechnical investigations and seismic evaluations of the dam are performed.



Monroe MDP - Monroe Channel Rehabilitation (1-8-00071-04)

At the request of the City of Riverside, this project will replace the City of Riverside's existing open channel from Magnolia Avenue to California Avenue with an underground reinforced concrete box storm drain. The District most recently added a requirement for solid sheeting shoring through a portion of the project because of limited space, and continues to work with the City to incorporate above-ground features into the District's design drawings. Final design drawings are anticipated by the end of December 2016 and advertising for construction around January-February 2017.

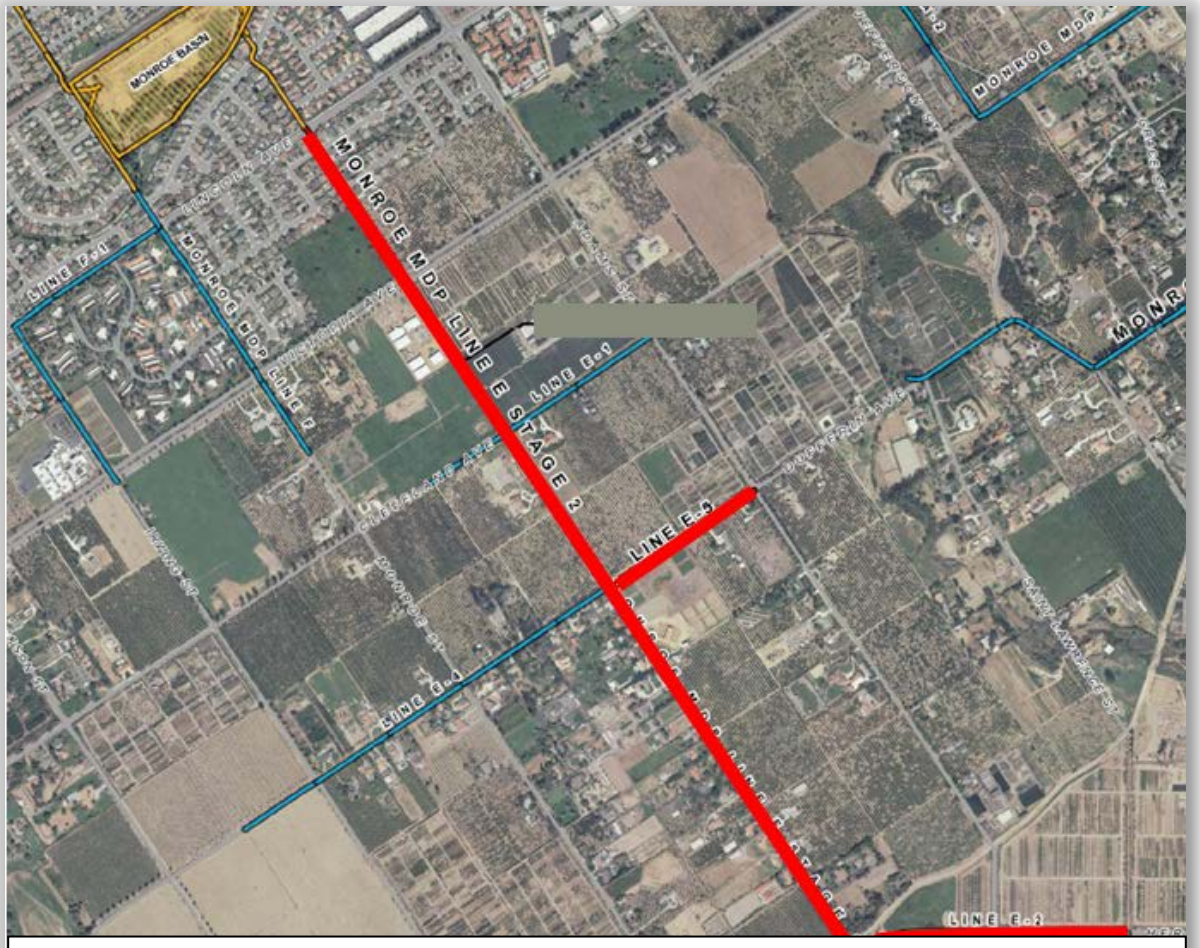
Monroe Basin Improvements (1-8-00071-90)

The District is proposing modifications to the dual-use Monroe Basin to facilitate capture and recharge dry weather flows from upstream agricultural and urban areas. Removing these dry weather flows will assist the District and the City of Riverside with meeting their obligations under the Middle Santa Ana River TMDL for bacteria. The recharge project may further enhance recharge of the Arlington Groundwater Basin and reduce nuisance conditions impacting the operation of Monroe Park.

Monroe MDP Line E, Stages 2 and 3 (1-8-00073-02, -03)

The proposed Line E, Stage 2 system, which includes the Line E-5 lateral, begins downstream at the existing Line E, Stage 1 at the intersection of Gratton Street and Lincoln Avenue and continues south along Gratton Street for approximately 4,255 lineal feet. Line E-5 begins at the corner of Gratton Street and Dufferin Avenue and extends eastward along Dufferin for approximately 1,380 lineal feet. The proposed Line E, Stage 3 system, which includes the Line E-2 lateral, begins at the intersection of Gratton Street and Dufferin Avenue at the downstream terminus and continues south along Gratton Street for approximately 3,335 lineal feet onto Hermosa Road. Extending from the intersection of Gratton Street and Hermosa Road eastward approximately 2,230 additional lineal feet would be the Line E-2 lateral.

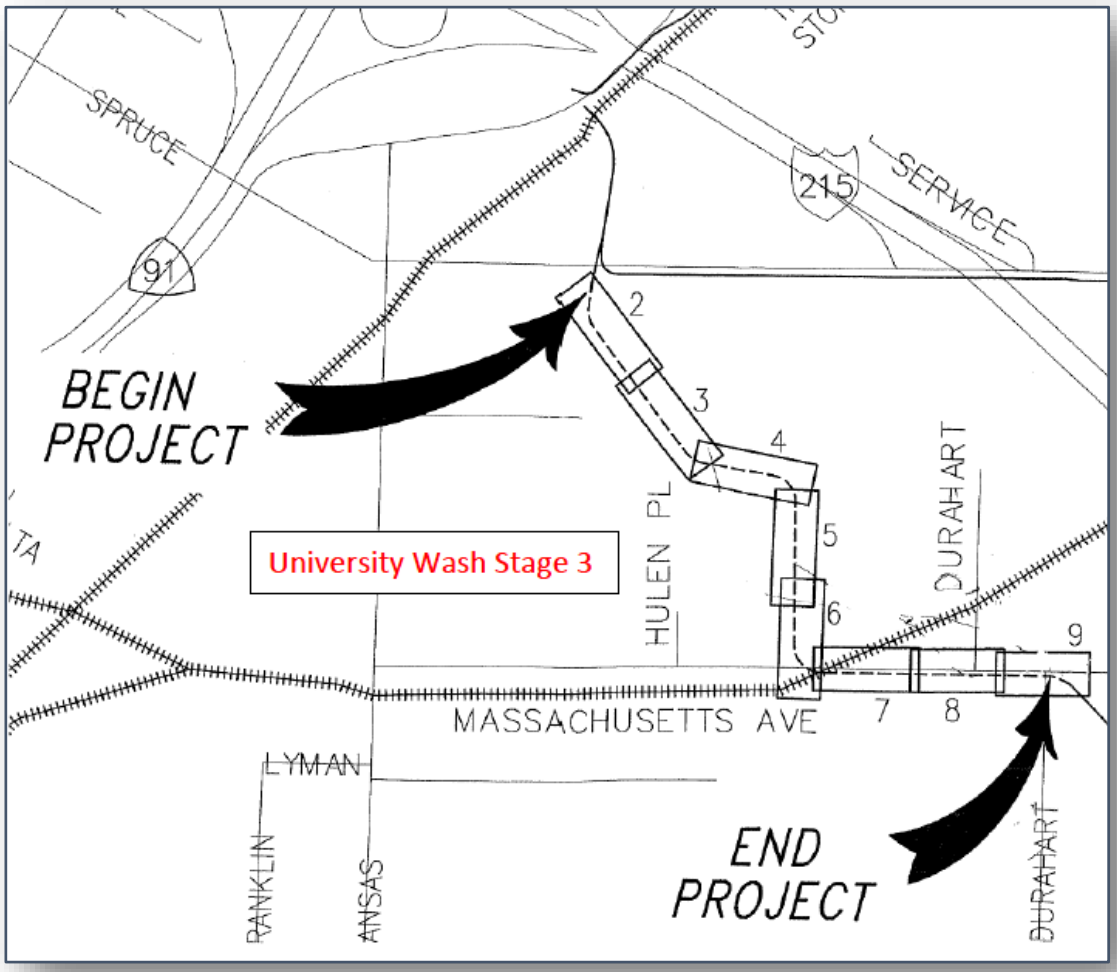
The District and the City of Riverside are in the process of ironing out the terms of a cooperative agreement. The District would be funding the design and construction cost of the project. The City of Riverside would be executing the design, and will also advertise and administer the construction contract. Upon completion, the District will accept facilities for operation and maintenance. The City has received mapping and the hydrology report from the District to begin the design work.



Monroe MDP Line E, Stages 2 and 3; Line E-2 and Line E-3

University MDP University Wash (1-8-00120-03)

This project will extend the existing University Wash upstream of Spruce Street to the intersection of Massachusetts Avenue and Durahart Street. This project has been awarded to Mamco, Inc. dba Alabbasi who was the low bidder. The project is expected to begin construction in February 2017.



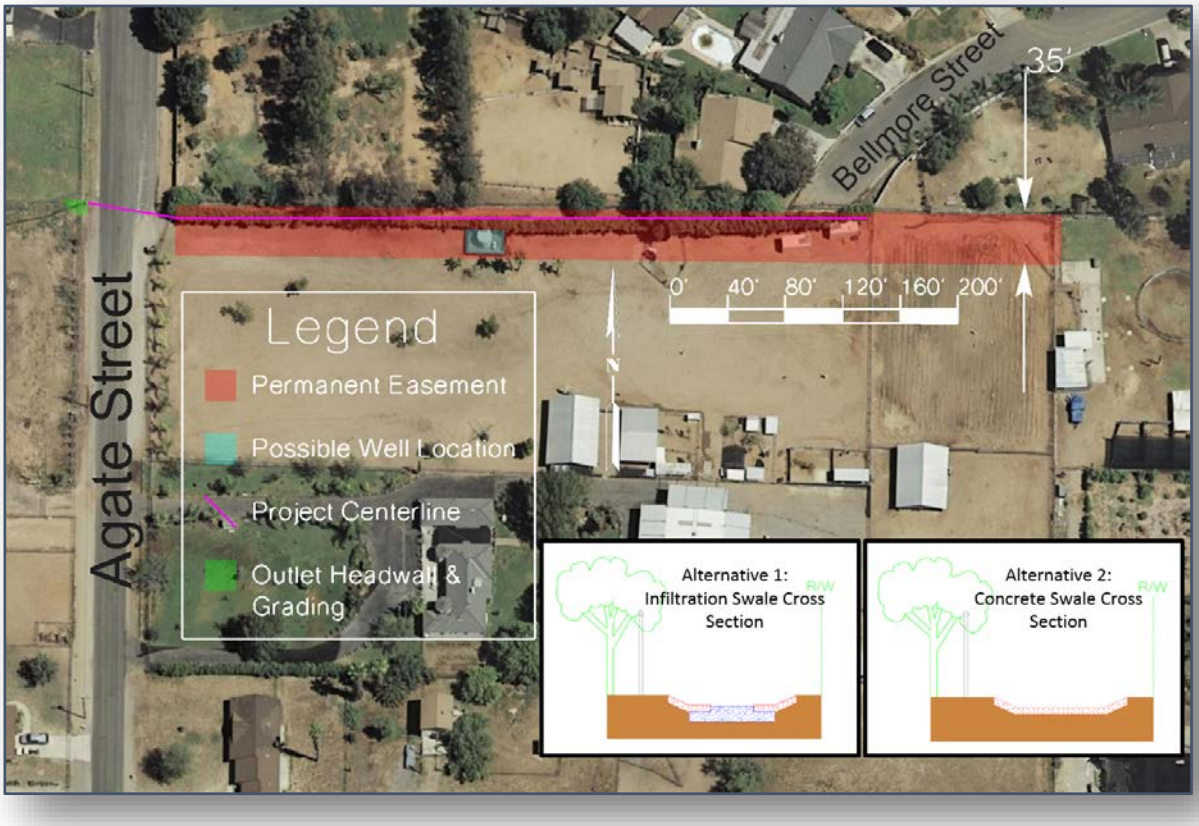
Mockingbird Canyon Restoration (1-8-00185-00)

Mockingbird Canyon Wash has been severely damaged during large storm events over the past four decades, most recently in December 2010. Damage has been significant, affecting public and private drainage facilities as well as roads; repairs have been costly. A portion of this damage can be attributed to various improvements and encroachments that occurred as the area has developed.

The best long-term solution appears to be the streambank stabilization of Mockingbird Canyon Wash. The District hired JE Fuller Hydrology and Geomorphology, Inc. to study the wash and identify key locations where grade stabilization structures would be needed. JE Fuller completed the study and developed a proposed conceptual level management/remediation plan to stabilize the wash. In the following months, the District will be moving forward with the environmental work on the plan pursuant to the California Environmental Quality Act (CEQA).

Jurupa-Pyrite MDP Line A-2, Stage 1 (1-8-00234-01)

This project consists of the construction of an interim portion of Line A-2 to alleviate flooding to the properties at the end of Bellmore Street and surrounding the proposed project site. This project follows the master-planned alignment, beginning at the southern end of Bellmore Street and continuing westerly under Agate Street. Design mapping and the Project Charter have been completed. A Preliminary Environmental Assessment 30% plans are currently in progress. Right of way acquisition will be required for this project and is currently being evaluated.



Southwest Riverside MDP Lines G, G-1, F-1 (1-8-00319-01)

This is a project within the city of Riverside. Line G, Stage 2 extends the existing Line G, Stage 1 project from Lincoln Avenue southerly to Victoria Avenue in Meyers Street. It also includes Lateral G-1 which runs east along Victoria Avenue to Van Buren Boulevard and Lateral F-1 which runs west along Victoria Avenue to Harrison Street. The District funded the design and construction of the facility and the City designed the project and administered the construction contract. The project was constructed in 2016.