

Zone 7
Report to the Zone Commissioners
for Calendar Year 2016
By Jason Uhley, General Manager-Chief Engineer
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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 the new development rather than retrofit afterward.

Water Conservation & Water Quality

District staff continues to meet with regional water agencies in an effort 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

Murrieta Creek Channel - Corps of Engineers (7-8-00021-01)

Murrieta Creek continues to be the District's highest priority project in Zone 7.

On October 27, 2000, the Energy and Water Development Appropriations Act of 2001 was signed into law by President Clinton. The Act specifically directed the U.S. Army Corps of Engineers (Corps) to proceed with a detailed engineering design for the Murrieta Creek Flood Control, Environmental Restoration and Recreation Project. More importantly, Congress committed to funding roughly \$60 million of the project's \$90 million cost.

Currently, the project is divided into four phases: Phase I - channel improvements from the Front Street/Highway 79 South junction upstream to First Street (Temecula); Phase II - channel improvements from First Street upstream to Winchester Road (Temecula); Phase III - the detention basin/environmental restoration/sports park (Murrieta/Temecula); and Phase IV - channel improvements from the detention basin upstream to Vineyard Parkway (Murrieta).

Phase I construction began in December 2003 and was completed in December 2004. The project sustained some damage during winter 2004 and the Corps completed the necessary repairs in May 2007.

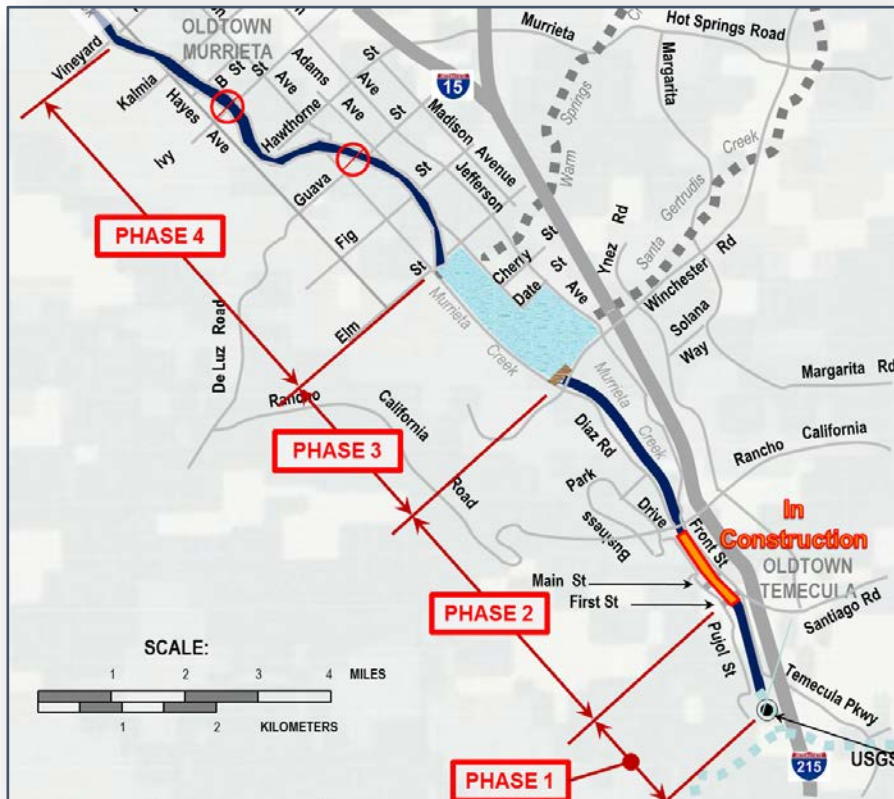
Since the 2003 appropriation, the project has not garnered any significant federal construction funding. The District believes that this is due, in part, to the project's low overall benefit/cost ratio. As originally authorized by Congress, the project includes a relatively expensive "locally preferred option" (i.e., Phase IV) that lowers the project's overall benefit/cost ratio.

Over the past four years, in an effort to increase the project's chances of attaining federal funding and jump start Phase II construction, the District, along with former County Supervisor Jeff Stone and the Cities, have worked with the Corps to accomplish the following:

- Completion of a "Post-Authorization Change Report." This report officially "defers" (i.e., deletes) Phase IV and the unconstructed portion of Phase I (called "Phase IA") from the federal project, optimizes the design of Phase II to reduce its cost and includes analysis of benefits not considered in previous reports. By doing so, the Corps will be able to claim a higher (and, therefore, more competitive) benefit/cost ratio for the revised project (Phases I, II and III).
- Execute an amendment to the Project Cooperative Agreement (PCA) that allows the District to provide "Accelerated Funding" to the Corps for construction of Phase II absent any federal matching funds. The PCA amendment was executed in August 2014 and allowed the District to provide Accelerated Funds in an amount not to exceed the project's authorized "Local Share," approximately \$17,100,000 in FY 2014-2015.
- Develop a second amendment to the PCA that will allow the District to provide "Advanced Funding" to the Corps for subsequent project construction. Upon execution, this second amendment will allow the District to provide additional local funding (i.e., "Advanced Funds") to the Corps for subsequent project construction activities. Advanced Funds are local funds provided to the Corps in excess of the project's authorized "Local Share."

The Corps did receive some additional federal funding (\$500,000 in FY 2012, \$79,840 in FY 2013 and \$350,000 in 2016 reprogramming) to complete the Post-Authorization Change Report, supplemental environmental work and the design of Phase II. Meanwhile, the District continues to vigorously petition both Congress and the Corps for additional project funding.

Due to Corps funding constraints, Phase II is being constructed in multiple reaches. The contract for the first reach, from the existing Phase 1 below First Street to a point 600 feet south of Rancho California Road, was awarded to OHL USA, Inc. in July 2015 for \$16 million. Construction began in September 2015 and is expected to be completed in 2017.



Santa Gertrudis Valley - Browning Street Water Quality Basin (7-8-00025-60)

This project, "Browning Street SD," is located in the unincorporated French Valley area off of Encanto Road, east of Winchester Road (Highway 79) and north of Murrieta Hot Springs Road in the Rancho Bella Vista development. The outfall of Browning Street SD discharges upstream of Tualota Creek which is tributary to Santa Gertrudis Valley Creek. Due to relatively flat topography as well as vegetation ranging from grasses to small trees growing within the riprap, nuisance flows become trapped and pond near the storm drain's outfall. The additional time spent ponded under the sunlight propagates bacterial growth and causes the nutrients, such as phosphorus and nitrogen, to build up over time and exceed the Non-stormwater Action Level (NAL) set forth by the 2010 Santa Margarita Region MS4 Permit.

The District is investigating the possibility of a number of alternatives to mitigate the exceedance of the NALs including water quality basin, drywell, wetland, outfall retrofit, low flow diversion to sewer, public education on overwatering landscape and other applicable BMPs.

Wildomar MDP Lateral C Basin (7-8-00075-03)

On November 17, 2015, the District acquired the detention basin site for the purpose of preserving the floodplain for potential future joint flood control/park use associated with the Wildomar MDP Lateral C project. The cost of the site was \$3,320,000.

Background - In 1980, the District adopted the Wildomar Master Drainage Plan, which includes Lateral C. The drainage area contributing to the Line C system is four square miles. The 2015 purchase agreement acquired the fee title to approximately 19.08 acres of vacant land in Wildomar.

Since the Wildomar MDP was adopted in 1980, impervious surfaces within the Wildomar area have increased. In order to accommodate the additional runoff associated with the increased impervious surface, the District anticipates that a detention basin will be required within the Wildomar MDP Lateral C system to attenuate flow rates to match the capacity of existing downstream facilities. In addition, the City of Wildomar has expressed interest in using a future basin site within the Wildomar Lateral C system as a joint flood control/park use. The District is currently studying the full scope of changes to the Wildomar MDP Lateral C project. The purchase of the basin site will restrict the floodplain from development and reserve the site for potential future joint flood control/park use.



Wildomar MDP Lateral C-1 (7-8-00076-01)

This project (aka Billie Ann Road Storm Drain) constructed an underground storm drain in Refa Street that connects two existing City-maintained lines (in Charles Street and Billie Ann Road) to the District's Wildomar Lateral C Channel at Palomar Street about 1,500 feet to the south. The City administered both the design and construction contracts and the District is funding the construction of the project, along with providing construction inspection and materials testing services. Following design completion in 2015, construction commenced in September 2016. The contractor, Alabbasi, was the low bidder at a bid price of \$1,634,444. The project was completed in December 2016.

