

# LOW IMPACT DEVELOPMENT DEMONSTRATION FACILITY AT FLOOD CONTROL

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On May 14 at the headquarters of Riverside County Flood Control and Water Conservation District, General Manager Warren D. "Dusty" Williams greeted a crowd of District employees, local and regional agencies and political representatives along with members of the public, to formally present the completed Low Impact Development Demonstration Facility

The District, through a partnership with the Santa Ana Watershed Project Authority (SAWPA), embarked in a \$2.5 million renovation to incorporate water conservation and water quality features on its 15-acre site at 1995 Market Street, Riverside. It is the District's goal to implement a variety of Low Impact Development "Best Management Practices" that will demonstrate the local application of these practices to contribute to basin water banking, storm water capture and management, including hydromodification, and water conservation. The Demonstration and Training Facility promotes the increased usage of LID principles and BMPs throughout Riverside, Orange, and San Bernardino Counties, and Southern California.

The Facility includes:

- The conversion of approximately 10,000 square feet of existing asphalt pavement and base with new porous asphalt pavement and new porous concrete pavement and sub drain systems;
- The construction of two raised flow-through planters and one landscape filter basin ("rain garden");
- The replacement of approximately 260 feet of 12- and 20- inch diameter storm drain pipe with a vegetated infiltration swale;
- The replacement of approximately 5,250 square feet of turf landscaped area with an infiltration swale planted with drought tolerant landscaping;
- The deepening of an existing infiltration basin to facilitate positive drainage for the LID IMP features; and
- The construction of 10 monitoring vaults with flow metering and electronic control and recording equipment.

The Facility also includes a monitoring center that centralizes BMP flows for ease of collection and houses automated monitoring equipment to measure *in situ* parameters and collect water quality samples. The Facility's monitored LID BMP network includes the following control surfaces and LID BMPs: roof runoff control, personal vehicle parking control runoff, equipment parking control runoff, porous asphalt with and without filtration, porous concrete with and without filtration, landscape filter basin, and flow-through planter. Data obtained from this network will be used to determine LID BMP effectiveness at mitigating stormwater pollutant runoff and stormwater runoff volume. In addition to water quality and BMP performance monitoring, lessons learned during BMP construction, operation, and maintenance will be documented. This information will be incorporated into the District's LID BMP Manual as well as into other regional and

national databases, and will be submitted for inclusion in publications by organizations such as the California Storm Water Quality Association (CASQA) and ASCE in their International BMP database.

During the ceremony, Bill Flores, Jr., Chairman of the Stormwater Committee of the San Bernardino & Riverside Counties Branch, ASCE, presented a Resolution from the Board of Directors of the Branch, along with a plaque recognizing the District's accomplishment in creating this facility.

The District invites the public to visit the Facility's website at <http://www.rcflood.org/LID.aspx>. The Facility is open to the public for self-guided tours during normal business hours (please check-in at the front desk for a tour brochure). Please contact the District directly for large tours (951.955.1200).