



Beverly Hills' Stormwater Makeover

The City of Beverly Hills, California, is committed to meeting its 87 acre-feet stormwater management target—advancing both water conservation and pollution prevention. The City is implementing Low Impact Development (LID) strategies, green streets, and regional stormwater projects. A flagship effort is the Burton Way Median Green Streets and Water-Efficient Landscape Project, the City's first regional stormwater initiative and a model for blending nature-based solutions with modern technology to deliver multiple environmental benefits.

The Burton Way project integrates infiltration swales and Continuous Deflection Separation (CDS) technology to treat stormwater runoff while supplying irrigation for a new 3-acre water-efficient landscape. Designed to manage wet- and dry-weather flows from a 211-acre drainage area spanning commercial, industrial, and multifamily zones, the project is projected to save 5 million gallons of water annually, demonstrating Beverly Hills' commitment to resilient, conservation-forward stormwater management.

**BEVERLY HILLS, CALIFORNIA, USA****STORMWATER****INDUSTRIAL**



CHALLENGES FACED

- Approvals for the diversion structures took nearly a year, delaying the public bid and construction start, impacting the overall schedule.
- Excavating the 1 MG underground reservoir required extensive shoring.
- The project experienced hydraulic design issues related to the CDS units and pump station in one of the diversion structures.
- The absence of a Supervisory Control and Data Acquisition (SCADA) design when the project was put out to bid.

TECHNOLOGIES & SOLUTIONS USED

- The project includes two fifteen-foot-wide swales that serve as natural filtration systems, treating stormwater runoff by using vegetation and soil to filter out contaminants.
- CDS units separate debris from the stormwater before it flows into the swales or is pumped to the landscape irrigation system.
- Creation of a 3-acre water-efficient landscape that is irrigated with treated stormwater runoff.

IMPACT & INSIGHTS



The recently completed project is currently in a six-month monitoring and benefit quantification phase. In support of stormwater management goals, the project has successfully diverted approximately 6.5 million gallons of urban runoff into bioswales, achieving a 90% reduction in zinc loading from the watershed. Additionally, about 5 million gallons of this captured runoff have been utilized to irrigate a three-acre, water-efficient landscape, resulting in an estimated US \$50,000 in water cost savings for the City. At the current rate, the project is projected to generate more than US \$100,000 in annual water savings.

LESSONS LEARNED



The project's operations rely on water/wastewater assets—pump stations, PLCs, and SCADA. A targeted peer review for constructability and O&M, especially of pump sizing, PLC integration, and SCADA specifications, would have strengthened the design. Early involvement of stormwater and wastewater divisions could have optimized maintenance hole placement/sizing, flagged additional needs in CDS units, pump stations, and underground reservoirs, and ensured practical sampling locations. Overall, cross-sector design review would have improved reliability, maintainability, and monitoring efficiency.

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By treating and reusing stormwater for irrigation, it is estimated that this project will conserve up to 5 million gallons of potable water annually.

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