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# Insight

SECOND QUARTER 2019

## STORMWATER: BELLFLOWER'S WATER CAPTURE PROJECT

### Inside This Issue:

- P6 On The Cover
- P8 Raindrops to Resources
- P10 Incentivizing Small Scale Stormwater Projects

**Public Works: Serving You and Your Community**



**BELLFLOWER UNDERTAKES STORMWATER CAPTURE PROJECT IN CARUTHERS PARK**  
 BERNARDO INIGUEZ | PROJECT MANAGER | BELLFLOWER

On Wednesday, July 24, Bellflower hosted a tour of their Water Capture project site at Caruthers Park for over 70 public works officials, elected officials, and consultants. A huge undertaking for the City of Bellflower, this project is part of the City of Bellflower's effort towards implementing both the Los Cerritos Channel and the Lower San Gabriel River Watershed Management Plans with the construction of a multi-benefit regional stormwater capture facility.

The Caruthers Park Stormwater and Urban Runoff Capture Project will capture discharge from a 261-acre area from the 72" Storm Drain (BI 1902, Line A) on the south side of the park in the Los Cerritos Channel Watershed. The project will also capture discharges from 2,995 acres from the 38'W x 9'H LACFCD channel (Project 16, Line A) on the east side of the park in the Lower San Gabriel River. The objective of this project is to address the water quality objectives, particularly the TMDLs for metals. The facility will redirect all dry weather and wet weather runoff from the storm drain and open channel through the diversion systems and pretreatment systems to remove trash, debris, and sediment. A drainage pipeline will convey the flows into a large, buried, multi-chambered storage and infiltration facility.

The project consists of the following major components:

**Storm Drain Diversion Systems:** The diversion from Project 16 Channel and BI 1902 storm drain will be accomplished through drop inlet structures that will capture and divert flows.

**Subsurface Storage and Diversion Facility:** A 2.96 million-gallon (9.1 acre-feet) underground storage and infiltration reservoir will be constructed beneath the park.

**Stormwater Harvesting Unit:** A reservoir of approximately 342,000 gallons will store water and treat it in a stormwater harvesting facility. Once treated, the water will be used to safely irrigate the park.

**Project Facts:**

Total cost: **\$13 million—design and construction**  
 Funding: **Caltrans Cooperative Implementation Agmt**

Construction Schedule: Start: **May 2019**  
 Complete: **December 2020**

Designer: **Tetra Tech**

Precast Concrete Chambers: **Oldcastle Precast**

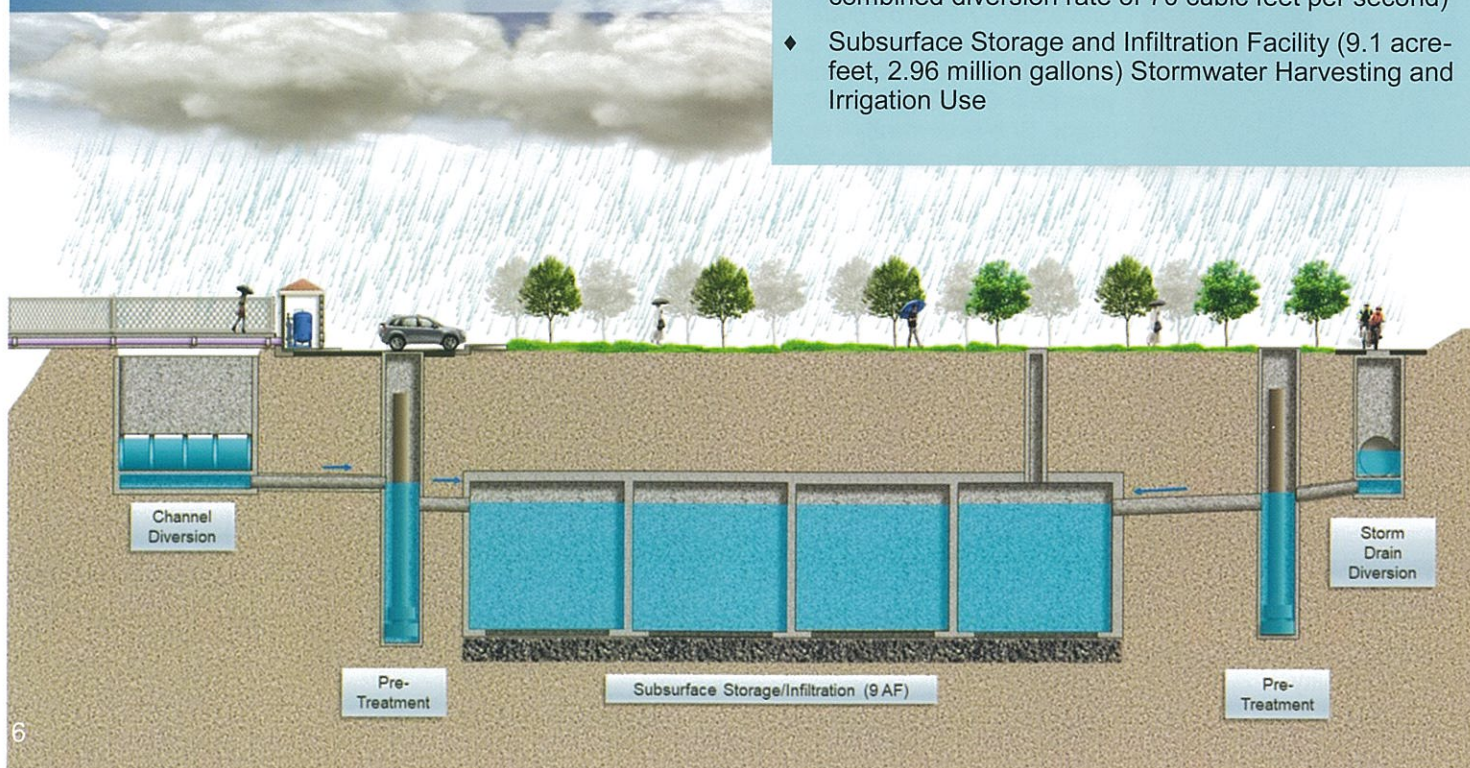
Construction Contractor: **Reyes Construction**

Construction Inspection: **Willdan**

City Project Manager: **Bernie Iniguez**  
**Public Works Manager**  
 (562) 804-1424, ext. 2233  
 biniguez@bellflower.org

- ◆ Urban Runoff and Stormwater Capture Facility
- ◆ Storm Drain and Channel Diversion System (max combined diversion rate of 70 cubic feet per second)
- ◆ Subsurface Storage and Infiltration Facility (9.1 acre-feet, 2.96 million gallons) Stormwater Harvesting and Irrigation Use

**Schematic Diagram**



Right: Precast reinforced concrete unit (upper half) being lifted off truck and into place.

Below: Modular units assembled into an infiltration chamber.

Above: Bellflower Project Manager Bernie Iniguez leads Intern Rusty Rapp and Public Works Director Ken Rukavina from Palos Verdes Estates on a tour of the inside of the partially constructed Oldcastle pre-cast stormwater reservoir. They are standing on geotextile on top of four 9" lifts of 3/4" crushed rock (3') to enhance infiltration of the captured stormwater.

