Santa Monica Feeder

- Constructed in 1941
- 24-mile pipeline of varying diameter and pipe material
  - 28” to 58” diameter
  - Precast concrete, steel, cast iron
- Supplies treated water to Glendale, Burbank, Los Angeles, Beverly Hills, and Santa Monica
Santa Monica Feeder Leak Location

Intersection of Sunset Blvd. and Alpine Dr. in Beverly Hills
(32” cast iron pipe)

- Sepulveda Feeder
- Beverly Hills PCS
- BH-1, BH-2
- SMN-1

Santa Monica Feeder

Isolation Valve

Service Connection
Initial Actions

- 1-2 gpm leak identified at Sunset Blvd. and Alpine Dr. in Beverly Hills on Friday, Dec. 14
- Multiple agency pipelines and utilities at this location

Coordination with member agencies to isolate Santa Monica Feeder and turn off service connections

- Leak on Santa Monica Feeder confirmed
Leak Location and Repair Plan

- Potential leak locations identified through acoustic monitoring and ground penetrating radar

- Two potential repair methods
  - Leak at joint could be repaired internally, unless significantly corroded
  - Leak in pipe section would require pipeline and component fabrication, as well as significant excavation

- Street potholing initiated to further investigate location of leak and possible repair methods
Parallel Work on Potential Repair Methods

**Joint Leak:** Internal Seal Repair

- Internal Seals Purchased

**Pipe Section Leak:** Pipe Fabrication

- 30” Steel Replacement Pipe
- Steel Transition Pieces
Fabrication of Pipeline Components

Rolling steel transition pieces to connect existing pipeline and potential replacement pipeline
Pipeline Inspection

- Inspections confirmed leaks at several pipe joints

Entering pipeline for inspection

Inspecting joint leak from surface

Separation at pipe joint
On-site Repair Activities
Repaired Pipeline

- Internal seal installed
- Internal seal close-up
- New pipeline access flange
Final Inspection and Return to Service

- Flushed and disinfected pipeline
- Conducted pipeline pressure test
- Returned pipeline and service connections to service
- Performed temporary road repairs

Restoring street surface following repairs
Agency Operational Coordination

- Daily operational coordination meetings between Metropolitan, Beverly Hills, LADWP, and Santa Monica
- Established detailed understanding of each agency’s system
- Coordinated operations to provide alternative flows to impacted agencies
  - Utilized agency interconnections
  - Reversed flow in Santa Monica Feeder from Sepulveda Feeder, downstream of shutdown area
Media Coordination

For immediate release

December 22, 2018

REPAIR WORK ON WATER DELIVERY PIPELINE IN BEVERLY HILLS COMPLETED
Conservation Order Lifted, Sunset Boulevard to Open Sunday Morning

Crews from the Metropolitan Water District of Southern California have completed repairs on the main water delivery pipeline serving Beverly Hills ahead of schedule.

The work was expected to last through the weekend, but the pipeline is now fully functional. Sunset Boulevard at Alpine Drive will open in both directions Sunday morning, with final repairs to be made to the roadway in January 2019.

“We are thankful for the community’s cooperation and the diligence of all who worked to resolve this leak as quickly as possible,” said Beverly Hills Mayor Adaasm Gold.

During the repairs, city residents and businesses were asked to take extra steps to conserve water until the water line was returned to service. Normal water efficient habits may now resume.

“Thanks to the patience and cooperation of the residents, visitors and businesses in Beverly Hills, we’ve been able to make some emergency repairs and ensure the city has a reliable water supply,” said Sam Osen, Metropolitan’s water systems operations manager.

Evidence of the leak was discovered at the intersection of Sunset Boulevard and Alpine Drive a week ago. After pinpointing the exact location of the leak, Metropolitan’s Santa Monica Feeder crew began repairs Wednesday.

The Santa Monica Feeder, completed in 1941, stretches 14 miles from Eagle Rock to Santa Monica and serves treated water to five cities along the way.
Emergency Repair Cost Estimates

- Metropolitan labor costs estimated at $470,000
  - Construction, inspection, shutdown and operations activities

- Contract work estimated at $130,000
  - Seal purchase and installation
  - Vacuum truck services
  - Temporary street repairs
  - Pipeline disinfection

- Executed emergency contracts per Administrative Code Section 8122(b)
Future Work Planned

- Conduct detailed analysis to determine cause of pipeline leak
- Evaluate options to enhance water delivery reliability for impacted agencies
- Initiate comprehensive assessments in 2019
  - Potential leak sites
  - Pipeline condition
  - Soil properties
- Follow up on additional proactive repairs, if necessary