





Los Angeles County Public Works Stormwater Engineering Division P.O. Box 1460 Alhambra, CA 98103-9974

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Devil's Gate Reservoir Restoration Project Begins

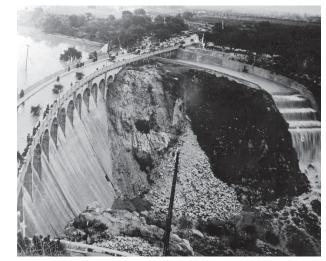
Following several major flood events within the Los Angeles Basin in the early 1900s, the Los Angeles County Flood Control District completed Devil's Gate Dam in 1920 to serve as a critical flood risk management and stormwater capture and storage facility for the Arroyo Seco Watershed.

In 2009, the Station Fire burned more than 160,000 acres in the San Gabriel Mountains, causing more than one million cubic yards (enough to fill the Rose Bowl three times) to erode from scorched hillsides into the Devil's Gate Reservoir. These mountains are highly susceptible to erosion due to their topography, geology, soil, and climate. Erosion is further accelerated when wildfires eliminate the vegetation that would otherwise help to retain soil on steep mountainsides.



1943 Flooding Downstream

If the valves were blocked during a major storm event, there could be uncontrolled releases over the dam's spillway that would impact homes, businesses, roads, and highways downstream from the reservoir. Los Angeles County Public Works is responsible for making sure that Devil's Gate Dam can do its job protecting downstream communities. In November 2017, the County Board of Supervisors approved Public Works' plan for a sustainable sediment management project that will restore the Devil's Gate Reservoir's flood control capacity, enhance native habitat, and establish an annual maintenance program. Listening to the community, the County agreed to reduce its sediment removal of 2.4 million cubic yards proposed in 2014 (the original 2011 recommendation was 4 million cubic yards) down to 1.7 million cubic yards in late 2017, to lessen construction impacts on the communities of La Cañada Flintridge, Pasadena, and Altadena.



This sediment has built up behind the dam, threatening to block the stormwater release valves that allow dam operators to release water down the Arroyo Seco in a controlled fashion.



2009 Station Fire

1922 Devil's Gate Spillway Flow



Hahamongna Watershed Restoration

The Hahamongna Watershed is an invaluable community resource, providing habitat for trees, plants, and wildlife and a wide variety of recreational activities. Public Works is permanently restoring 70 acres of habitat within the watershed by removing invasive plants that have established a foothold within the Devil's Gate Reservoir and replacing them with native plants. The newly-restored habitat will attract a wide variety of native and endangered wildlife, creating a vibrant and diverse ecosystem for bird watching, hiking, jogging and equestrian and bicycle use.

Approximately 70 acres surrounding the annual maintenance area will be replanted with native plant species.

- 2 acres of wetlands
- 48 acres of Riparian Woodland and Riparian Scrub
- 5 acres of upland buffers including the sensitive vegetation community, Riversidean Alluvial Fan Sage Scrub
- 16 acres of Riparian and Riversidean Alluvial Fan Sage Scrub habitats restored within areas temporarily impacted during sediment removal
- 7 acres of Riparian Scrub and Riversidean Alluvial Fan Sage Scrub planted on the side slopes of the Permanent Maintenance Area

Yellow-breasted chat Photo Credit: Martin Meyers

Pre-Restoration Conditions

Due to an overabundance of invasive and nonnative plants and a lack of structural diversity, very little habitat within the reservoir was considered suitable for endangered and threatened species of birds. "Enhancing the native vegetation will provide a natural habitat and wildlife movement corridor for the numerous species in the area, including the least Bell's vireo, yellow warbler, yellow-breasted chat, and burrowing owl," according to Mari Quillman, Wildlife Biologist with ECORP Consulting, Inc. Habitat restoration activities include:

- Removal of nonnative, invasive, and nuisance plants
- Minor grading and recontouring
- Irrigation system installation
- Installation of container plants and pole cuttings and seeding
- Ongoing weed removal and irrigation



least Bell's vireo Photo Credit: Mike Couffer

Black Willow

Photo Credit: ©Neal Kramer



Burrowing owl Photo Credit: Mike Couffe

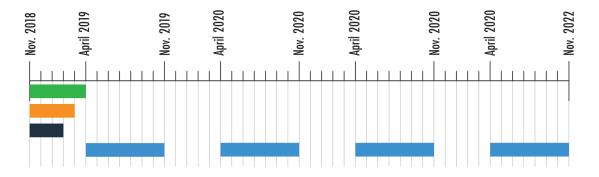


Mulefat Photo Credit: ©Neal Kramer



Devils Gate On-Ground Trail Rendering

Project Schedule



On-site Habitat Restoration Schedule

- Invasive Species Removal, Minor Grading, Native Planting and Seeding, November 2018 – April 2019
- Native Planting and Seeding within Temporarily Impacted Areas, December 2022 – April 2023
- Habitat Management and Monitoring, Ongoing

On-site Habitat Restoration November 2018 – April 2019

Access Road Construction November 2018 – March 2019

Vegetation Removal November 2018 – February 2019

Sediment Removal April – November, 2019 - 2022

Stay Engaged

Public Works engineers and team members will be available at events throughout the community. Visit devilsgateproject.com for project updates and information.

Email us at: devilsgateproject@dpw.lacounty.gov

Call our hotline at: (626)458-2507