



Timeline

- Vegetation Removal – completed November 2018 – January 2019
- Access Road Construction November 2018 – April 2019
- Sediment Removal April – November, 2019 – 2022
- On-site Habitat Restoration November 2018 – December 2023
- Completed



Project Update

The first season of sediment removal for the Devil's Gate Reservoir Restoration project was completed in November 2019. From May 21 - November 15, 2019 approximately 445,460 cubic yards of sediment was removed to help increase flood protection for downstream communities. The second season of the project will begin in April 2020.

This four-year project will remove 1.7 million cubic yards of sediment plus any additional seasonal inflows into the reservoir. The project will restore the flood control capabilities for the downstream communities of Pasadena, South Pasadena and Northeast Los Angeles, protecting lives and properties within the Arroyo Seco Watershed. When the project is complete, the County will begin an annual maintenance program to sustainably manage future inflows of sediment within the reservoir.

Los Angeles County Public Works has implemented supplemental mitigation measures, including additional street sweeping, tire washing and more stringent dust control standards.

Air Quality and Dust Mitigation

In coordination with the South Coast Air Quality Management District, the California Air Resources Board, and key community stakeholders, the project team selected six locations to place air monitoring stations to measure dust emissions during sediment removal operations. The stations are located around the reservoir:

1. Eastern edge of Hahamongna Watershed Park, adjacent to the Arroyo Seco Spreading Grounds
2. La Cañada High School
3. Within Devil's Gate Reservoir, Northwest of the 2019 sediment removal area
4. Along the pedestrian trail on the southwestern edge of Devil's Gate Reservoir
5. Within Devil's Gate Reservoir, Northeast of the 2019 sediment removal area
6. Project site entrance, eastside of Devil's Gate Dam

The monitors were routinely checked by the team, and the reports were and continue to be uploaded to the project website at devilsgateproject.com. In the event that air quality exceedences occur, construction operations are adjusted to ensure compliance.

LA County Public Works implemented an additional plan to contain, reduce, prevent and mitigate fugitive dust emissions. Measures identified within the plan include:

- Pre-watering material prior to loading
- Watering all loaded trucks before leaving the reservoir
- Keeping the sediment moist to reduce dust plumes
- Ensuring street sweepers continuously sweep paved roads and access ramps



TOP: Water trucks watering sediment before being loaded into the trucks.
BOTTOM: Watering all loaded trucks before leaving the reservoir.

By the Numbers

1 season of sediment removal completed
445,460 the approximate cubic yards of sediment that has been removed

1.7 million cubic yards to be removed
26% of total sediment removed

Tire Washing

Two tire washing stations were installed at the exit of the Devil's Gate Reservoir. The stations remove dirt from the tires and undercarriages of the trucks before they are driven onto local streets. Implementing this additional measure in conjunction with the other dust mitigation measures helped:

- Reduce or eliminate the amount of dust that was tracked onto local roads
- Reduce the amount of airborne particulate matter from project activities into the community
- Conserve local water by recirculating water within the tire wash system



Tarping Test

As a measure to potentially control dust blowing off the tops of the loaded trucks while on the freeway, LA County Public Works initiated a pilot program in August for 10 days to evaluate the fugitive dust comparison from covered truck beds to uncovered truck beds.

During the pilot program, 629 truck trips were observed and evaluated by the project team, documenting more than 280 hours of truck trips. The agency monitored trucks traveling along the haul routes, keeping a log of trucks with and without tarps. The results indicated that the tarped trucks showed no appreciable difference in the occurrence of dust coming from the tops of trucks. A report of the findings can be found on the project website here: devilsgateproject.com/docs/Tarping-Pilot-Program-Results.pdf

Habitat Restoration

Construction inspectors and biologists were onsite at the reservoir daily, monitoring the work performed to ensure the natural habitat and wildlife were not impacted. If the biologist or inspector anticipated a threat, work was moved to other project locations.

LA County Public Works is also restoring and enhancing more than 70 acres of habitat within the Hahamongna Watershed. The removal of invasive plant species will help improve and protect existing habitat while attracting native and endangered wildlife. Enhancing the native vegetation around the perimeter of the future maintenance area will also provide a natural habitat and a wildlife movement corridor for the numerous species in the area, including the least Bell's vireo, yellow warbler, yellow-breasted chat, and burrowing owl.

"The County is dedicated to protecting and preserving the ecosystem within the Hahamongna Watershed, and the project team is taking extra precautions to safeguard the habitat for long term growth," stated Mari Quillman, Wildlife Biologist with ECORP Consulting, Inc.

The County's goal is to restore the habitat by removing and controlling the invasion of non-native plants, such as perennial pepperweed. The project team is in the process of planting more restorative plants such as native willows, cottonwoods and mulefat. These plants will create a diverse array that will, in time, replace the woody debris seen today.

There are three phases of habitat restoration activities around the perimeter of the reservoir. The first phase of the project includes removal of vegetation, and planting and reseeding with native plants and trees. To date, a total of 300 coast live oak acorns and 4,407 container plants have been planted and a total of 72 pounds of seed have been applied. Container planting and seeding will continue along the west and east sides of the reservoir.

From now until April 2020, trail users can enjoy full access to their favorite trails and views.

When work resumes, visitors can still use a majority of the trail system north of the dam after working hours and on weekends.

On Sept. 28, 2019, JPL engineers and technicians watch as a crane lifts the rocket-powered descent stage away from the Mars 2020 rover during testing.

Community Spotlight: JPL Brings Mars Closer to the Arroyo

Highlighting the great work of our neighbors across the Hahamongna Park, Jet Propulsion Laboratory (JPL) is building and managing the operation of the Mars 2020 rover launch project for NASA. The rover will launch within the United Launch Alliance Atlas V rocket on July 2020 from the Space Launch Complex 41 at Cape Canaveral, FL.

JPL has been studying the vast distance to Mars, sending a series of orbiting spacecraft and surface rovers to the Red Planet. Engineers and technicians are measuring the weight capacity and gravity for travel purposes and life expectancy on Mars.

The new spacecraft is expected to land February 2021, with the rover built to investigate an area where the ancient environment may have been favorable for past microbial life. The rover will probe Martian rocks for evidence of past life and collect rock and soil samples, which will be cached on the surface for potential return to Earth by a future mission.

A bonus stowaway on this spacecraft is the experimental Mars Helicopter—the first heavier-than-air vehicle to attempt flight on another planet.

LA County is proud of the great work our neighbors and local businesses are accomplishing. Please let the LA County Public Works team know of any special projects your company is working on that can be spotlighted in the next newsletter. The team can be reached at devilsgateproject@pw.lacounty.gov



Civic Engagement

Since the project began, numerous local elected officials including Los Angeles County Supervisor Kathryn Barger and representatives from the cities of Pasadena and La Cañada Flintridge, media and local nonprofit organizations have toured the site and met with community leaders to ensure community concerns are addressed.

To ensure that community input was being received throughout the project's construction, Supervisor Barger established the Community Advisory Committee. The Committee met regularly with LA County officials and had representatives from La Cañada Flintridge, Pasadena, and Altadena.

Assistant Deputy Director Steve Burger conducting media interview.



Community Outreach

The project team meets regularly with local residents, business leaders and elected officials. Team members also host roundtable events to provide project updates and answer any questions or concerns raised by community members.

If you would like to receive a project update for your organization or group, please contact the project team by email at devilsgateproject@pw.lacounty.gov or by phone at (626) 458-2507.



Thank You!

LA County Public Works appreciates the community's engagement throughout the sediment removal process.

The ongoing support will make a difference as the County works to protect residents and businesses downstream from potential flooding caused by future storms.

For More Information

To learn about the project, receive project updates or contact the project team, please feel free to contact us:



devilsgateproject.com



devilsgateproject@pw.lacounty.gov



(626) 458-2507