

**Anderson Dam Seismic Retrofit Project
Virtual Public Meetings
Sept. 9, 2020 and Sept. 17, 2020**

Anderson Dam Tunnel Project

1. Can dam construction happen simultaneously with the tunnel project?

No, the tunnel must be built first. Valley Water needs to have an adequately sized outlet pipe for Anderson Reservoir before any dam deconstruction takes place. Once that begins, the existing, and undersized, outlet pipe will no longer be functional. So, not having an outlet during a dam rebuild is not safe. Once the tunnel is in place, it will be safe to build the new dam.

2. Why is this tunnel being constructed? What will the tunnel offer that the dam didn't before?

The tunnel serves two purposes:

- It immediately provides the ability to better control the reservoir level. Currently, there is a 500 cubic-feet-per second (CFS) outlet directly under the embankment, similar to a tiny straw in a giant bowl that is not very effective at lowering and controlling the reservoir level. The new outlet allows for more control so water levels can be lowered much quicker and kept lower, which helps reduce risk.
- The large tunnel goes through the abutment rather than through the embankment, and although piping is present, the tunnel is 24 ½ feet at its maximum diameter. That new 24-foot diameter will allow that pipe to move 4-feet in a vertical direction and 2-feet in a horizontal direction without incurring any damage during an earthquake.

3. Will the drainage pipe stay where it is relative to the creek where the outflow is after being increased from 500 CFS to 5,000?

The releases of up to 500 CFS will continue in the existing creek below Anderson Dam. To handle the anticipated larger flows once the tunnel is constructed, Valley Water is reopening a historic channel of Coyote Creek to accommodate larger volumes of water, without impacting the existing creek channel.

4. Where will the excavation spoils from the tunnel be deposited or stored?

Everything will be on site. As excavations take place, a roadway will be widened that goes from the bottom part of the reservoir to the top where the parking lot is located. All excavation spoils will be transported diagonally across the dam onto the parking lot at the top.

5. Will any blasting be necessary during the deconstruction phase?

There may be about 15 percent of the tunnel work that requires blasting. No blasting is expected during the construction of the Anderson Dam Seismic Retrofit Project.

6. What changes have occurred downstream after the Coyote Creek floods of 2017 to prevent flooding? Could the bigger outlet pipes cause flooding when they are wide open?

Some emergency measures were implemented right after the 2017 flood, including splitting the Coyote Creek Flood Protection Program into two projects. This helps to accelerate portions that need to be designed, constructed and in place before the Anderson Dam Tunnel Construction Project is constructed, implemented and opened up by December 2023. About 40 percent of the original Coyote Creek Flood Protection Project is now a mitigation measure that is needed to prevent the flows coming down from the Anderson Dam Tunnel Project, as well as incidental flows from tributaries from a 10-year storm event.

7. What about the 60 percent of the Coyote Flood Protection Project that won't be completed by 2023?

Certain elements of the original Coyote Creek Flood Protection Project were accelerated as mitigation measures for the ADTP and the FOCP projects. The 60 percent that will be a part of the Coyote Creek Flood Protection Project will need to be designed, constructed and in place by the fall of 2025. This coincides with the higher-level tunnel project of Anderson Dam being constructed and implemented.

8. Will the new higher capacity outlet pipe ever be completely opened? What is the downstream impact of that flow rate? What about places like the dam at Metcalf, where the dam panels have to be removed if Anderson is going to spill?

The pipe will never be able to flow at its full capacity. If fully unrestricted, the pipe, could flow as high as 6,000 CFS. However, two fixed cone valves will cap the capacity of the pipe right around 2,000-2,100 CFS, but even that flow rate could cause some issues downstream. In those situations, houses within the potential flooding area of the discharge will be remediated. Metcalf is the Coyote Perc Dam, where flashboard dams are present. Panels do have to be removed if Anderson is going to spill and to remedy that, an inflatable dam has been proposed to provide better control.

Anderson Reservoir

1. Will the reservoir be kept at full capacity after the dam is reconstructed?

Valley Water will restore the 89,900-acre feet capacity of the reservoir for water supply and flood protection purposes. The reservoir could be filled with local water, imported water or both.

2. How often does Valley Water inspect the dams and the reservoirs? Why did the Federal Energy Regulatory Commission (FERC) have to come and mandate that Anderson be drained?

The reservoir is inspected annually and after any seismic event. Valley Water is designing the dam to withstand a 6.5 magnitude earthquake on the Coyote Creek fault and a 7.2 magnitude earthquake on the Calaveras Fault. Staff also visually inspects the dam on an ongoing basis. Valley Water has kept FERC updated on the project for a long time. As the project expanded, they determined that lowering the water levels was the best way to lower the risk to public health. With its order and federal emergency declaration, there is the opportunity to expedite permitting and compress the review times.

3. The levels of water were being drained before Oct. 1. Why is the plan being carried out early? Where is the water going?

Valley Water began lowering reservoir water levels in advance to timely comply with FERC's directive. There is currently a net drawdown of about 200-acre feet a day. With limited or no significant rainfall, the reservoir could be down to 3 percent by the end of 2020. With significant rainfall, it could be as late as May 2021. No water goes to waste. Valley Water is sending water to its treatment plants and recharge ponds. Water discharge to the bay is also not wasted as it supports environmental habitat and ecological habitat restoration.

4. Are there still plans for a coffer dam?

A coffer dam is in the design phase and is expected to be constructed in 2025. It will be about 800-feet upstream of the existing Anderson Dam with about 465-foot elevation so there will be some water upstream.

5. Does Anderson Dam have electro-hydraulic power generation?

Anderson has a small hydro power facility, about 800 kilowatts or 1 megawatt, at the base of the dam. Before improving that facility, however, retrofitting the dam is the main priority.

6. Will there be any lake swell analysis done when the lake is drawn down?

A geotechnical exploration of the lake bottom completed. The contractor will do soil testing when the site is accessible to them. Valley Water has monitored the water quality in the area where the UTC site drains into the reservoir and it has not detected perchlorate.

7. Will any removal of silt from the lake bottom be required?

No silt removal is planned. Any unsuitable embankment material along the reservoir bottom itself will be disposed of, which may help to stabilize the area.

Assembly Bill 3005

1. What was the outcome of Assembly Bill 3005?

Gov. Newsom vetoed AB 3005 in September 2020. The bill would have helped expedite and resolve any judicial challenge.

Fire safety

1. For many residents, fire suppression remains an ongoing concern for the area. With Anderson Reservoir empty, what's the impact?

Fire risk will be included in the Environmental Impact Report (EIR) for the full seismic retrofit project. Anderson will not be completely drained and will have water for fire protection, about 3,000-acre feet for water drops. This level is bigger than many of Valley Water's reservoirs, which are all accessible and available for Cal Fire to pull water as necessary. Cal Fire hasn't indicated any concerns with sources of water for fire suppression. Valley Water is also looking at managing vegetation in the area.

Funding

1. How much will this project cost and where is the funding coming from?

The Anderson Dam Seismic Retrofit Project is estimated to be about \$576 million. About \$335 million is slated for construction of the dam embankment, spillway and outlets. All mitigation is funded. The tunnel portion will cost a certain amount that will be subtracted from the overall project cost. Funding comes from the Safe, Clean Water initiative estimated at approximately \$45 million. That escalates over time and may be up to \$65 million at this point. The rest is borne on the back of water rates.

Impacts: Homes and people

1. Homeowners in the Holiday Lake Estates neighborhood are concerned about home foundation issues resulting from soil subsidence during the reservoir lowering.

Valley Water monitored the historic landslides downslope of the Holiday Lake estates prior to the reservoir lowering. It placed monitoring equipment on the slopes to measure any subsidence or lateral slope movement. Pre-drawdown condition assessments of residences were done and there will be continuous inspections and monitoring of the area during drawdown. Landslide movement is expected at the lower elevations and at a safe distance from

the homes. No slope movement in and around the vicinity of the homes is anticipated. Homeowners who feel the project has caused damage can submit a claim by contacting David Cahen at dcahen@valleywater.org.

2. When will homes encroaching into the floodway in downtown San José be removed so they will not be inundated while the reservoir is being drained?

Valley Water reviewed the impacts from the 2017 flood and identified, in the planning phase, a few homes in the San José area that will need to be acquired or elevated on a case-by-case basis. Property owners' input will be taken into account, as well as coordination with design consultants and staff to determine appropriate solutions for each property.

3. What about the homeless along the creek trail? Will dewatering bring creek levels up?

Dewatering will raise the creek intermittently, but the homeless population is not expected to be affected unless they are in the creek.

Impacts: Recreation

1. What does an empty reservoir mean for recreation, such as hiking, biking, boating, fishing and even mud bogging?

No recreational activities are allowed in and around the reservoir, dam site and anywhere heavy construction equipment and stockpiled equipment is present. Starting Oct. 1, 2020, the following recreation areas are closed:

- Toyon Group picnic and parking areas.
- Serpentine Trail and dam crest.
- Woodchoppers Flat.
- Anderson Lake Park's boating and fishing, boat and vehicle parking areas and boat ramp.
- Coyote Road from the toe of the dam to the boat and vehicle parking areas.
- Lakeview Trail from the Anderson launch ramp parking lot trailhead to the westernmost junction with the Rancho Laguna Seca Trail.

The Live Oak Picnic Area will remain open and can be accessed from Cochrane Road.

Downstream, the Coyote Creek Trail will be open. However, this trail tends to flood in winter when Coyote Creek flows are higher at low flow crossings. During construction, that will continue to be the case. Fishing information will be posted when available, but steelhead fishing is not permitted due to its federally listed endangered species status.

4. Will the Rosendin side of the county park have trails available that are not near the dam, but that we can access, especially if we live in Holiday Lake Estates?

The Rosendin Park and Trail is open, but access from the park to the parking lot will be closed at the property line. Access to the park will be from Holiday Drive and not the Anderson Dam site.

- 5. The current 500 cubic CFS causes flooding to sections of the Coyote Creek Trail. The additional 5,000 CFS release will cause much more trail flooding. Will the trail be upgraded to make it available even when the dam releases large outflows?**

Valley Water does not intend to release 5,000 CFS through the new outlet. There is no decision as to what will happen with the low flow crossings, but discussions with the county continue.

Impacts: Traffic and noise

- 1. What impacts will residents see to Cochrane and Malaguerra roads?**

The contractor for the Anderson Dam Tunnel Project will determine the traffic control plan for both roads when hired, although we do not expect traffic impacts on Malaguerra Road. There are no plans to close Cochrane Road during the tunnel project from March 2021 to December 2023. For the dam deconstruction and reconstruction from January 2023 to 2030, there may be three short periods when Cochrane Road closure is needed.

- 2. How much vehicle and construction noise should residents by Anderson Dam expect?**

At least through the Anderson Dam Tunnel Project, the construction will be on the opposite side of the reservoir. Valley Water will do its best to control noise, including raising noise control structures that help keep project noise away from certain areas. Contact the project's neighborhood liaison Tony Mercado at tmercado@valleywater.org or 408-630-2342 if you are being bothered by construction noise so that appropriate measure is taken.

Impacts: Wildlife

- 1. How will wildlife and habitat be protected during construction?**

Habitat downstream of Anderson will be maintained by using imported water and potentially replacing the percolation dam. While the reservoir will be significantly smaller, it will still provide some habitat for fish and drinking sources throughout construction. At the level of the lowest intake port referred to as "Deadpool," it is the size of a pond about 3,000-acre feet, which is about the size of Stevens Creek Reservoir.

- 2. What are the project's biological impacts and how are they mitigated?**

Valley Water has worked with wildlife agencies to lessen impacts to biological resources and provide mitigations to benefit fish habitats and species. Valley Water is a co-permittee of the Santa Clara Valley Habitat Agency and will be paying impact fees for the construction related

impacts. For the larger retrofit project, Valley Water is analyzing additional biological impacts from that project and will have an Environmental Impact Report for public review in late 2021.

Public Outreach

1. How long will you be having update meetings about the project?

Valley Water will strive to hold a public meeting in the fall and spring and when needed to address any pressing topics. All meetings are recorded and posted to Valley Water's web site within two to three days. Valley Water updates the Morgan Hill City Council about three times a year, in addition to providing information via the project web page, Facebook and Nextdoor.

Safety

1. Are any warning systems in place for residents in case of an emergency?

There are emergency action plans with the city of San José regarding Coyote Creek and for Anderson Dam. During construction, an interim emergency action plan will be developed to include different notifications to the different municipalities. This potentially includes radio, satellites, cell phones, lights, sirens and cellular emergency alert systems. It is up to the municipality whether to call for an evacuation. Talks with agencies like FERC, Division of Safety of Dams and cities will ensure coordination for any potential failures.

Timeline

1. Why does it take so long to build a dam in these modern times?

Construction, seismic and environmental and permitting standards are different today than in the 1950s when Anderson Dam was originally built. With each project modification, Valley Water started from scratch with permitting agencies at the state and federal level. Valley Water is also consulting and coordinating with the National Marine Fisheries Service, which did not exist in 1950, on construction and post construction operation. Construction of a low-level outlet tunnel was scheduled as part of the seismic retrofit project to begin in fall, perhaps October 2022. The FERC order and emergency declaration allows Valley Water to begin construction early in 2021 and target completion by 2030.

2. Are there any incentives for completing the project on time or even ahead of time?

There is always an incentive to finish construction early or on time. There is also a damage clause if delays caused by the contractor cause them to finish behind schedule.

Water supply

1. How is regional water demand going to survive for 10 years without the county's largest reservoir? Should a moratorium be placed on new construction until the retrofit is complete?

Resources are available to make up for the loss of Anderson, including imported water, groundwater and a groundwater bank in Kern County called the Semitropic Groundwater Storage Bank. The Coyote Perc Ponds, one of the more productive recharge systems on Coyote Creek, will be kept full through work on the Cross Valley Pipeline. The Madrone Channel, Main Avenue Ponds and San Pedro Ponds will also continue their normal operation and will be fed from the Santa Clara Conduit, which receives its water from San Luis Reservoir. It does not appear that a moratorium will be necessary from a water supply perspective, but approval of large projects is purely up to them.

2. Will the water levels at Coyote Creek go dry all the way to San José once Anderson Reservoir's level decrease to the 488 level?

No. Valley Water is working with the National Marine Fisheries Service, US Fish and Wildlife Service, California Department of Fish and Wildlife to determine appropriate levels of discharge into Coyote Creek.

3. Will Coyote Reservoir's water levels be affected to coordinate with the Anderson Project?

Coyote Reservoir's operations will remain the same.

4. Will Metcalf Perc Pond also be supplied with perc water?

Metcalf Perc Pond, also known as Coyote Perc Pond, is one of the key percolation features along the creek and will continue to be used and supplemented with imported water. There are plans to extend the Cross Valley Pipeline to that area as another source of imported water to ensure continued recharging for a sustainable groundwater.