Anderson Dam Seismic Retrofit Project Update

Morgan Hill Public Meeting | April 10, 2019
Agenda

► Project Components
► Key Project Impacts
► Ongoing Investigations and CEQA Studies
► Q&A
Project Components
Anderson Dam Existing Configuration

Image Source: Google Earth
Project Components

Replace Spillway

High Level Outlet Pipe

Temporary Diversion System

Low Level Outlet Pipe

Coyote Creek

Remove all liquefiable material; reconstruct embankment over the remaining dam; raise crest for additional freeboard
Key Project Impacts
Project Impacts – Adjacent to/in Reservoir

<table>
<thead>
<tr>
<th>Earthwork Activities Adjacent to the Dam</th>
<th>Approximate Total Volume (cy)</th>
<th>Period of Work Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockpiling</td>
<td>6,950,000</td>
<td>Years 3 through 5</td>
</tr>
<tr>
<td>Borrow</td>
<td>1,200,000</td>
<td>Years 4 and 5</td>
</tr>
<tr>
<td>Disposal and Haul Routes</td>
<td>1,000,000</td>
<td>Years 3 through 5</td>
</tr>
</tbody>
</table>

Reservoir Dewatered from Spring Year 3 to Fall Year 5

Legend
- Staging Areas
- Stockpile/Staging Areas
- Stockpile Areas
- Borrow Areas
- Disposal Areas
Project Impacts – Downstream

Earthwork Activities Downstream of the Dam

<table>
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<th>Approximate Total Volume (cy)</th>
<th>Period of Work Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockpiling</td>
<td>250,000</td>
<td>Years 3 through 5</td>
</tr>
</tbody>
</table>

Reservoir Dewatered from Spring Year 3 to Fall Year 5

Legend
- Staging Areas
- Stockpile/Staging Areas
- Stockpile Areas
- Borrow Areas
- Disposal Areas
Import Materials Project Impacts

Key Potential Project Impacts:
- Traffic - road closures, delays, congestion
- Air Quality - equipment, dust
- Noise - trucks, equipment, conveyor, etc.

Legend
- Red: Project Area
- Blue: Burnett Ave. Import Route
- Yellow: Cochrane Rd. Import Route
Project Impacts - Conveyor

- Approximately 250,000 cubic yards (cy) of import material to be stockpiled downstream and will need to be transported to the dam via a conveyor or trucks.

- Conveyor or trucks would be used April through October of Construction Years 4 and 5.

- Three conceptual alternatives are being considered.
Alternative 1 – Conveyor on County Property

William F. James Boys Ranch and Santa Clara County Justice Training Center to remain open

Legend
- Staging Areas
- Stockpile/Staging Areas
- Stockpile Areas
- Borrow Areas
- Disposal Areas
Alternative 1 - Impacts to County Property

Conveyor bridge over Sycamore Avenue

Conveyor Creek Crossings
Alternative 2 – Conveyor along Malaguerra

William F. James Boys Ranch and Santa Clara County Justice Training Center to remain open

Malaguerra Avenue limited to one-way traffic

Legend
- Staging Areas
- Stockpile/Staging Areas
- Stockpile Areas
- Borrow Areas
- Disposal Areas

Conveyor Alignment
Alternative 2 - Impacts to Malaguerra Avenue

Conveyor bridge over Sycamore Avenue

Malaguerra Avenue westbound lane closed from Cochrane Road to Silverwings Court
Alternative 3 – Trucks along Malaguerra

William F. James Boys Ranch and Santa Clara County Justice Training Center to remain open

Haul Road to Stockpile

Malaguerra Avenue limited to one-way traffic

Truck Alignment

Legend
- Staging Areas
- Stockpile/Staging Areas
- Stockpile Areas
- Borrow Areas
- Disposal Areas
Alternative 3 - Impacts to Malaguerra Avenue

Traffic Control at Sycamore Avenue

Malaguerra Avenue westbound lane closed from Cochrane Road to Silverwings Court
Project Impacts – Trails

- Coyote Creek Trail temporarily re-routed
- Serpentine Trail and Live Oak Trail temporarily closed
- Lakeview Trail and Rancho Laguna Seca Trail temporarily closed
- Toyon Picnic Area and Live Oak Picnic Area temporarily closed
Project Impacts – Existing Downstream Trails
Project Impacts – Proposed Downstream Trail Closures

- Nature Trail (closed)
- Coyote Creek Trailhead
- Equestrian Trail Lot (re-located)
- Equestrian Trail (closed)
- Coyote Creek Trail (open, with traffic controls and hard barriers)
Project Impacts – Existing Upstream Trails

- Lakeview Trail
- Rancho Laguna Seca Trail
- Gray Pine Trail
- Rosendin Trail
Public access to Gray Pine Trail and Rosendin Trail will be temporarily closed during blasting operations at Basalt Hill.
Project Impacts - Boating

- Potential for some boating at Anderson until construction starts, depending on the rainfall received each year.

- Once construction starts, the reservoir will be closed to recreational use as the water level will be lowered in preparation for embankment construction.

- After construction, the reservoir can be refilled to its full capacity for recreational use.
Cochrane Road Closure During Construction

Approximate Limits of Cochrane Road Closure
Post-Construction Roads and Parking

- Pedestrian access restored
- Permanently closed to vehicular traffic (pedestrian access OK)
- Expanded parking lot
- Widened to two lanes

Image Source: Google Earth
Ongoing Investigations and CEQA Studies
Topics to be Fully Evaluated by EIR

- Aesthetics
- Air Quality
- Biological Resources
- Cultural
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology, Geomorphology, and Water Quality
- Land Use Planning
- Noise and Vibration
- Recreation
- Transportation and Traffic
- Utility and Service Systems
- Cumulative Impacts
Summary of Studies Being Completed for EIR
(1 of 2)

► Visual studies – regional and local character
► Air quality – pollutants, dust, and emissions
► Biological resources – wetland delineation; plant, terrestrial, and fish species distribution, abundance, and habitat assessments; evaluating wildlife movements
► Cultural resources – surveys for historical and archeological resources throughout the proposed Area of Potential Effect (APE)
► Studies for seismic hazards and landslides
► Greenhouse gas emissions and energy use
► Studies to ascertain the occurrence of hazardous materials, naturally occurring asbestos, and wildland fire hazards
Summary of Studies Being Completed for EIR
(2 of 2)

► Hydrology studies – estimate flow rates from storms; establish baseline conditions of water quality metrics (e.g., dissolved oxygen, temperature, turbidity, etc.); effects on groundwater, etc.

► Studies of noise and vibrations from various project components

► Evaluate long-term and short-term impacts to local and regional recreation

► Traffic studies to evaluate access points; evaluate changes in level of service to transit systems and/or pedestrian and bicycle use

► Studies to evaluate effects on wastewater treatment facilities, water treatment facilities, and water supply
Upcoming Archeological Investigations

Subsurface Investigations

Visual Surveys
Upcoming Geotechnical Investigations

- Replacement Spillway
- Embankment
- Outlet Works
- In-reservoir Stockpile and Borrow Areas
- Downstream Bridges

Morgan Hill Public Meeting 4-10-2019
Reservoir Landslide Risks

HWY 101

Landslide Area
Stay Informed

www.valleywater.org/anderson-dam-project

- Sign up to receive project updates via email.
- View project reports, maps, history and other information.

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