FREQUENTLY ASKED QUESTIONS

El Dorado Forebay Dam Modification Project

What is El Dorado Forebay Dam and Reservoir?

The El Dorado Forebay Dam and Reservoir was constructed in 1923 as a key part of the El Dorado Hydroelectric Project which stores water diverted from the South Fork of the American River and four upper watershed reservoirs for drinking water and renewable hydroelectric power generation. These four upper reservoirs include: Caples and Silver Lakes accessible from Highway 88 and, Echo Lake and Lake Aloha accessible from Highway 50. From Forebay water is delivered to Reservoir 1 Water Treatment Plant through the Main Ditch for subsequent treatment and distribution to our customers. Water is also goes into the penstock for conveyance to the El Dorado Powerhouse for power generation.

Why is the work required?

Forebay Dam has been well-maintained and has performed reliably over its 94-year operating history. While Forebay Dam's condition still meets the standards applicable at the time of its construction in 1923, dam safety standards have changed, and thus it is necessary for the dam to undergo design and construction improvements. The project will improve the Dam's overall stability, strength to withstand an earthquake, ability to operate safely during flooding conditions, as well as add other safeguards.

What work will be done to Forebay Dam?

In summary, the Project will include:

- Installation of an earth-fill buttress against the dry-side of the Dam (which requires tree and vegetation removal below Forebay Dam and in the soil borrow area)
- Adding rock to the water-side of the Dam to reduce wave erosion
- Repairing the unstable channel at the inlet to the reservoir
- Raising the Dam crest 10 feet to provide more space between the reservoir level and top of the dam (freeboard), emergency water supply, and renewable hydroelectric power generation flexibility
- Repairing slope erosion below the emergency spillway
- Relocating and/or replacing various facilities associated with the Dam
- Enhancing recreation facilities including updates to the day-use areas, the shoreline trail adjacent to Forebay Road, restrooms, and parking area

When will construction begin and how long will it last?

Project construction activities are currently scheduled as follows:

- September – November 2017: Timber harvesting below Forebay Dam, at the inlet to the reservoir, and in the soil borrow area across Forebay Road.
- May – September 2018: Installing the lower portion of the buttress on Forebay Dam
- August – September 2018: Conducting the balance of timber harvesting including a strip around the Forebay shoreline (to clear trees within the higher reservoir operating range)
- October – December 2018: Conducting work that needs to be accomplished with Forebay Reservoir dewatered that includes installation of new slide gates on the power and drinking water intake structures, modifying the water supply intake, performing maintenance/improvements to the penstock (pipeline through the dam for conveying water to El Dorado Powerhouse), and repairing the unstable channel at the inlet to the reservoir
- 2019: Installing the upper portion of the buttress, raising the crest of the dam, replacing the drinking water supply control building, and repairing slope erosion below the emergency spillway

What government agencies regulate dam safety?

California Department of Water Resources - Division of Safety of Dams (DSOD) oversees the safety of all non-federal dams in California above a certain height and storage volume, which includes Forebay Dam. Forebay Dam is also part of EID's El Dorado Hydroelectric Project licensed as Project No. 184, which is also overseen by the Federal Energy Regulatory Commission (FERC) and their dam safety regulations.

Why is the Project starting now?

Since 2003, EID has been working with DSOD and FERC to assess the dam's condition compared to modern standards, evaluate alternatives for accomplishing the necessary improvements, and develop the detailed plans and specifications that support their design and construction. The Project has also involved an extensive environmental review and permitting process in which the final permit was received in July 2017. With all permits in-hand, initiating timber harvesting in September 2017 is EID's first opportunity to start construction.

Why is the Forebay reservoir level lower that it was in the past?

As a result of DSOD's and FERC's findings, in 2009 they imposed a safety restriction of lowering the water level in Forebay by three feet. This safety restriction will remain in effect until the Project is completed.

What will the reservoir level be during the construction?

The reservoir level is expected to be near normal levels throughout the construction period except for a three month period, during the fall of 2018, when the reservoir must be completely drawn-down to perform work within the reservoir bed.

What will the reservoir level be after construction?

After construction and the stabilization is complete, the current water level restriction will be lifted. The dam will safely store and operate with an additional 10 feet of water.

Water levels will, as they have in the past, fluctuate according to drinking water needs and hydropower generation.

What parts of the reservoir will be closed-off during the construction?

The entire site will be closed for the duration of the construction period due to the level of construction activities that could make for unsafe conditions to the public.

EID offers a variety of other recreational opportunities for the public which will not be affected by this Project. The nearest, and largest, is Sly Park Recreation Area (Jenkinson Lake), located approximately five miles south of the Project.

What recreational activities will be allowed after construction?

The same opportunities that exist today will continue to be available after construction. The Project includes updating and enhancing the recreation areas along with the restrooms and parking.

After construction activities are completed, visitors to Forebay will be able to resume passive recreation such as fishing and picnicking opportunities provided at the reservoir. The Project will not change the current restriction on swimming or boating, which is regulated by the California Department of Public Health because the reservoir serves public drinking water.

Where is the repair material coming from?

The majority of the earth fill will be obtained from an area designated as the “Soil Borrow Area” on EID’s property near the Dam. All other construction materials will be imported.

What local roads will be utilized during construction?

Personnel, equipment, and imported materials will reach the site via Highway 50, Sly Park Road, Pony Express Road, and Forebay or Blair Road, which are paved, all-weather roads suitable for the anticipated loads. To access the southwestern portion of the reservoir and the Dam’s left abutment, vehicles will utilize Pony Express Road, Polaris Road, and Drop-off Road. The

transportation of the earth fill material will primarily occur over an access road on EID's property also using a short section of Forebay Road near the dam.

In order to safely and efficiently transport material and equipment to and from the construction site, a traffic control plan will be employed which meets El Dorado County Department of Transportation (DOT) requirements. EID will work with the construction contractor to minimize temporary traffic control impacts.

How many people will the Project employ?

The number of employees directly working on the Project will vary during different construction phases with an average of 20 to 40 workers. There will likely be increased demand for services and goods from local vendors during the construction activities.

Why are there paint marks and colored flags on trees at the Project site?

The paint marks and colored flags placed on trees are intended to assist field personnel in identifying area boundaries for various environmental surveys. Paint marks and colored flags are also being placed to identify areas where tree removal is necessary. These areas include, but are not limited to, the borrow area, below the dam, and within the new high water mark of the reservoir.

How will the park benches and trail between the main day use area and fishing access be affected by the new maximum water level?

There are currently two park benches located near the shoreline and an informal trail that connects the day use areas near the dam and reservoir inlet that will be inundated at the new maximum water surface level. As a part of the Project, the District will install two new replacement benches and realign the trail to maintain access and recreational use between the two areas.

Will there be any changes to the day use areas?

The new maximum water level will bring the shoreline closer to the day use areas. Following completion of construction activities, the day use areas will be reopened. In addition, the main day use area will be updated to meet current American with Disabilities Act (ADA) standards.

Is there any connection between the Project and the recreation property east of Forebay Road?

There is no connection between the Forebay Dam Remediation Project and the recreation property located east of the Forebay Road now owned by El Dorado County.

What is included in e-mail notifications?

Project updates will be posted on the El Dorado Forebay Dam Remediation Project webpage located on EID's website such as estimated/anticipated construction schedules, public meetings, links to Board agenda items, and other pertinent information throughout the duration of the Project.

You may sign up for e-mail updates by going to "eNews Sign Up" on EID's website at www.eid.org. Or, you may access this information at any time by going directly to the front page of EID's website at www.eid.org and selecting Project Updates and then the El Dorado Forebay Dam Remediation Project link.

How do I contact someone directly if I have questions?

You may call our main line at (530) 622-4513 and ask for a Forebay Dam project representative. Or, e-mail us at ForebayProject@eid.org.