Work begins on \$10 million Alameda Creek fish ladders

By JOSEPH GEHA April 26, 2018

FREMONT — Denied access to their natural spawning grounds in the Alameda Creek watershed for roughly 50 years, threatened fish species will soon be able to migrate upstream when two multi-million dollar fish ladders are completed.

A groundbreaking for the first of two ladders — which have been in the conceptual and planning stages for 20 years — was held this week along the banks of Alameda Creek in Fremont with officials from the Alameda County Water District, as well as other local and state agencies present.

The grant-funded ladder is one of two scheduled to be built in the creek by late 2021, allowing steelhead trout and chinook salmon to move upstream, where they have historically been denied access by rubber dams and a concrete structure built to control flooding in 1972.

This digital rendering shows what a fish ladder planned for Alameda Creek west of a railroad overcrossing in Fremont will look like when complete. (Image courtesy Alameda County Water District)

The ladder construction represents a shift in priorities for local and state agencies, which have aggressively pursued ways to restore Alameda Creek, where it may have been written off in the past, said Jeff Miller, founder of the advocacy group Alameda Creek Alliance.

"It's kind of a start of a new pretty exciting chapter for restoring Alameda Creek. ... We're going to have salmon and steelhead back in the watershed," he said.

"Despite the delay, and how long it's taken to get these ... I think we're set up really well for the next phase of trying to restore the creek."

The first ladder the water district is building is just west of the Mission Boulevard overcrossing in the Niles district of Fremont, allowing passage around a rubber dam. The second ladder, which should start construction in 2019, is about a mile downstream at the concrete structure, called a weir.

The two ladders are funded by nearly \$10 million in grants from several agencies, including \$5.36 million from the California Wildlife Conservation Board and \$3 million from the California Natural Resources Agency, the district said.

Steelhead trout and Chinook salmon, in their natural rhythm, are born in freshwater areas, spend their early years there, and then migrate to the Pacific Ocean to live as adults before eventually returning to their home stream to spawn.

"A fish ladder is actually a series of pools which go up about one foot in height, and that allows them to get up and around our dam," said Shane O'Nesky, project engineer with the water district.

The fish will use the shorter "jumps" to access the upper watershed in the eastern foothills of Alameda County, where they can spawn.

Steelhead trout are a federally listed threatened species in the Central California Coast region, which includes the local population.

Sean Cochran, an environmental scientist with the California Department of Fish and Wildlife, said Monday the return of the trout to the upper reaches of the watershed habitat could have a significant impact on the ability of the fish to rebound locally and regionally.

"This is kind of one of the key watersheds that has been identified that could potentially serve as a great restoration opportunity," he said of the creek. "This is going to essentially allow them to re-establish a population where they are able to naturally migrate back and forth."

The benefits are not just for the fish, however.

Because the ladders will be built to allow the rubber inflatable dams to stay, the water district will be able to continue water management in the creek, including monitoring groundwater levels.

The Alameda Creek watershed supplies about 40 percent of the water to the district's 351,000 residential and business customers in Fremont, Newark and Union City.

Other improvements have been made along the creek over the years leading up to the building of these ladders, according to Evan Buckland, a water supply supervisor for the district.

Fish screens have been installed in several locations to help shield fish from being pulled away from the stream into holding ponds, and the San Francisco Public Utilities Commission as well as East Bay Regional Park District have removed some rubber dams farther upstream.

Miller, of the alliance, said while there is still plenty of work to be done, he is optimistic about the changes, which will benefit fish, other wildlife and people.

"Alameda Creek, for an urban stream, has a pretty unique opportunity to bring these kinds of fish, these ocean ambassadors that kind of tie together everything," he said.

"What happens in the ocean, what happens in the stream, up on the landscape, all affects the creek habitat. So it really ties together a lot of issues about sustainability and whether we can coexist with nature in an urban watershed like this," Miller said.