



1.1 Laguna Creek Diversion Retrofit

Current Status: Construction

Project Need

The Laguna Creek Diversion Facility is one of four surface water collection/diversion sources supplying raw water to the City's North Coast water supply system. The Laguna Creek Dam and Diversion were constructed prior to modern environmental and safety requirements, resulting in reduced habitat complexity in downstream reaches and operational constraints such as insufficient site safety features. Since its early construction in 1889, the Laguna dam has intermittently impounded sediment and debris in the upstream reservoir. In more recent years, the streambed has aggraded to the crest of the dam. The Project is necessary to allow the City's continued ability to utilize the Facility for delivery of high-quality water to the City's water treatment plant. Recent assessments indicate that the facility is in "good structural condition." However, multiple deficiencies were identified including: sediment accumulation, limited remote operating & monitoring capabilities, and access & safety concerns.

Background

The City of Santa Cruz Water Department (SCWD or City) contracted with Black & Veatch in 2018 to assess the condition of the diversion and to develop and compare retrofit alternatives aimed at improving functionality and reliability. The goal of the alternatives analysis and concept development was to formulate viable improvements to achieve operational, regulatory, and performance objectives.

Project Description

The Project will change the type and orientation of the water intake using a Coanda screen so that sediment would not obstruct water intake through the screen. The new system will restore natural fluvial functions of sediment transport and deposition that benefit downstream fisheries and aquatic habitats. The Project will provide appropriate fish screening, provide a flexible approach to managing the quantity and quality of water that can be diverted, minimize the use of power, and will include improvements for safe access to the Facility. The project requires in-stream work and associated environmental protections and permitting.

The project was bid in April 2021 and awarded to Granit Rock Company.

Project Benefits

Benefits of this project include:

- Fish screening/passage improvements
- Sediment management
- Remote operation & monitoring
- Accessibility and safety improvements

Escalated Estimate

Construction	\$ 1,800,000
Other Costs*	\$ 2,010,000
Total Project	\$ 3,810,000

- Other costs may include design, engineering services during construction, construction management, construction contingency, environmental, permitting, legal, land transaction, city administration, and program management costs.

Potential Funding Source

Bonds and Pay As You Go

Current Schedule Start-Finish Dates

Planning	Design	Construction	Post Construction
JUL 2018 JUL 2019	JUL 2019 FEB 2021	MAY 2021 SEP 2021	SEP 2021 OCT 2022

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