PROJECT OVERVIEW **PROJECT AREA**

FISH AND AQUATIC HABITAT COLLABORATIVE EFFORT (FAHCE)

Fish Habitat Restoration Plan Project Area

UT



Santa Clara Valley Water District **FAHCE Fish Habitat Restoration Plan EIR**

PROJECT OVERVIEW

DOCUMENTS

Settlement Agreement Regarding Water Rights of the Santa Clara Valley Water District on Coyote, Guadalupe, and Stevens Creek B Fish Habitat Restoration Plan: Stevens Creek, Coyote Creek and Guadalupe River

Chapter 1: Introduction

Chapter 2: Three Creeks Common Elements

Chapter 3: Stevens Creek Watershed (Phase 1 Measures)

Chapter 4: Coyote Creek Watershed (Phase 1 Measures)

Chapter 5: Guadalupe River Watershed (Phase 1 Measures)

Chapter 6: Monitoring Program

Chapter 7: Adaptive Management Program

Chapter 8: Plan Implementation

Chapter 9: Bibliography

Three Creeks Points of Diversion/Water Rights





EIR MEASURES: PROPOSED RULE CURVES AND WATER OPERATIONS

WINTER BASE FLOWS

Reservoir releases, made between November 1 and April 30, to improve winter and springtime spawning and incubation habitat for salmonids. Winter base flows combined with stormwater runoff provide flow cues to immigrating salmonids.

ATTRACTION FLOWS

If sufficient storage is available, pulse flows are reservoir releases of 50 cfs for a period of five consecutive days made between February 1 and April 30. Upstream passage for adults will be enhanced by providing a greater volume of water over potential barriers. These short-term pulse events will also benefit emigrating juveniles by facilitating their downstream migration from the upper watershed to San Francisco Bay.

ANDERSON/COYOTE RESERVOIRS OPERATION RULE CURVES





ANDERSON/COYOTE RESERVOIRS LOW STORAGE RULE CURVES



NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV

MONTH

SUMMER BASE FLOWS

Summer base flows will be made between May 1 and October 31, based on each reservoir's reoperation rule curve, to enhance summer rearing conditions. Below Anderson, Guadalupe, and Stevens Creek dams, the District will maintain cold water management zones (CWMZs) along designated lengths of stream to provide over-summer refugia for rearing steelhead based on available cold water in the reservoirs.

FLOW RAMPING

Flow ramping manages changes in the rate of flow reductions in a slow, stepwise fashion, helping fish and other aquatic life avoid stranding. Ramping will occur whenever District-controlled flows will be changed by 50 percent or more from the existing flow condition.

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EIR MEASURES: FISH & AQUATIC HABITAT

EXAMPLES OF COMPLETED MEASURES

STEVENS CREEK Stevens Creek corridor





GUADALUPE RIVER Hillsdale Avenue Bridge



COYOTE CREEK Penitencia Creek **Unscreened Mabury-**





Noble Avenue



EIR MEASURES: FISH & AQUATIC HABITAT

EXAMPLE OF REACHES OF INTEREST

Stevens Creek





ADDITIONAL STEVENS CREEK HABITAT RESTORATION MEASURES

OVERALL MANAGEMENT OBJECTIVE

Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed, by providing:

Suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone through the development of an operations plan

STEVENS CREEK FISH BARRIERS



B Adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles

OTHER SETTLEMENT AGREEMENT PHASE 1 MEASURES FOR STEVENS CREEK WATERSHED

- Enhance Spawning and Rearing Habitats for Steelhead Trout
- 2 Enhance Fish Passage to Suitable Spawning and Rearing Habitat
- 3 Prepare a Geomorphic Functions Study
- Install and Operate a Portable Multi-port Outlet at Stevens Creek
- "W:\3 Creeks HCP\Fisheries Habitat Restoration Plan\2016_AdminDraft\Figures\Figure 3-3.jpg"
- 5 Install and Operate a Hypolimneal Aeration Device at Downstream End of Reservoir Outlet
- 6 Feasibility Study of Trap and Truck at Stevens Creek Reservoir



ADDITIONAL COYOTE CREEK HABITAT RESTORATION MEASURES

OVERALL MANAGEMENT OBJECTIVE

Restore and maintain a healthy steelhead trout and salmon population in the Coyote Creek watershed, by providing:

Approximately five miles of spawning and rearing habitat below Anderson Dam and in Upper Penitencia Creek

OTHER SETTLEMENT AGREEMENT PHASE 1 MEASURES FOR COYOTE CREEK

- Enhance Spawning and Rearing Habitats for Steelhead Trout and Chinook Salmon
- 2 Enhance Fish Passage to Suitable Spawning and Rearing Habitat
- **3** Prepare a Geomorphic Functions Study
- **4** Complete a Coyote Creek Facilities Plan
- Adequate passage for adult steelhead trout and salmon to reach suitable spawning and rearing habitat and for out-migration of juveniles
- 5 Best Effort to Develop Cherry Flat Reservoir Operations Agreement with City of San Jose
- 6 Feasibility Study of Trap and Truck at Anderson Reservoir





ADDITIONAL GUADALUPE RIVER HABITAT RESTORATION MEASURES

OVERALL MANAGEMENT OBJECTIVE

Restore and maintain healthy steelhead trout and salmon populations in the Guadalupe River watershed, by providing:

Suitable spawning and rearing habitat for steelhead trout and

GUADALUPE RIVER FISH BARRIERS



- salmon in Guadalupe Creek from below Guadalupe Dam to its confluence with the Guadalupe River
- B Suitable spawning and rearing habitat for salmon below Calero and Almaden Dams to their confluence with Lake Almaden
- C Suitable spawning and rearing habitat for salmon in Los Gatos Creek from Camden Avenue to its confluence with Guadalupe River
- Adequate passage for adult steelhead trout and salmon to reach suitable spawning and rearing habitat and for out-migration of juveniles

OTHER SETTLEMENT AGREEMENT PHASE 1 MEASURES FOR GUADALUPE RIVER WATERSHED

1 Enhance Spawning and Rearing

- Habitats for Steelhead Trout and Chinook Salmon
- 2 Enhance Fish Passage to Suitable Spawning and Rearing Habitat
- 3 Prepare a Geomorphic Functions Study
- Complete and Implement an Alamitos Creek Facilities Plan



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