



Bridge on  
Aliso Creek

**LEGEND**

-  Brine Wastewater Line
-  Water Collection Line
-  RO Water Product Line
-  Water Treatment Equipment
-  Aliso Woods Park

0 150 300 Feet

0 0.025 0.05 Miles



Aliso Creek Initial Study  
South Coast Water District

**Figure 1-2**

Aerial View of Project Location and Site Arrangement

## 2.0 PROJECT DESCRIPTION

### 2.1 PROJECT LOCATION AND SETTING

The Project will be located adjacent to Aliso Creek inland from the Pacific Coast Highway in the City of Laguna Beach, California (Figure 1-1). The Project is within the Aliso Creek Watershed downstream of the Aliso and Wood Canyons Wilderness Park and approximately 1.5 miles from the confluence of the creek with the Pacific Ocean at Aliso Beach County Park. Aliso Beach County Park is a popular beach destination and water sport location.

The Coastal Treatment Plant is located within the Aliso and Wood Canyons Wilderness Park. The Aliso Creek Inn and Golf Course is located adjacent to Aliso Creek between Pacific Coast Highway and AWT system at the Coastal Treatment Plant.

### 2.2 RUNOFF WATER RECOVERY, TREATMENT, AND REUSE

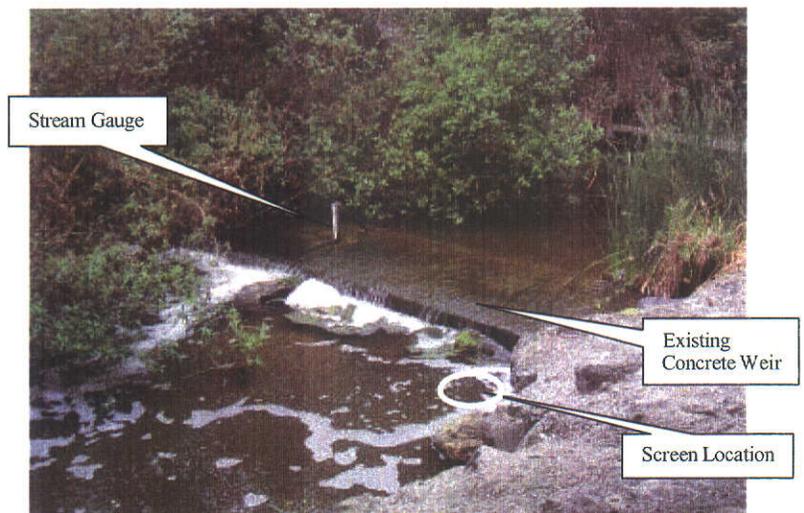
This Project proposes to use a portion of abandoned urban runoff water recovered from Aliso Creek and treated with a reverse osmosis (RO) and a filtration package system to provide a low total dissolved solids/salts (TDS) addition to existing recycled water supplies. Concentrated effluent from the RO system and backwash from the filtration package will be discharged in the ocean outfall for the Coastal Treatment Plant.

#### Runoff Recovery

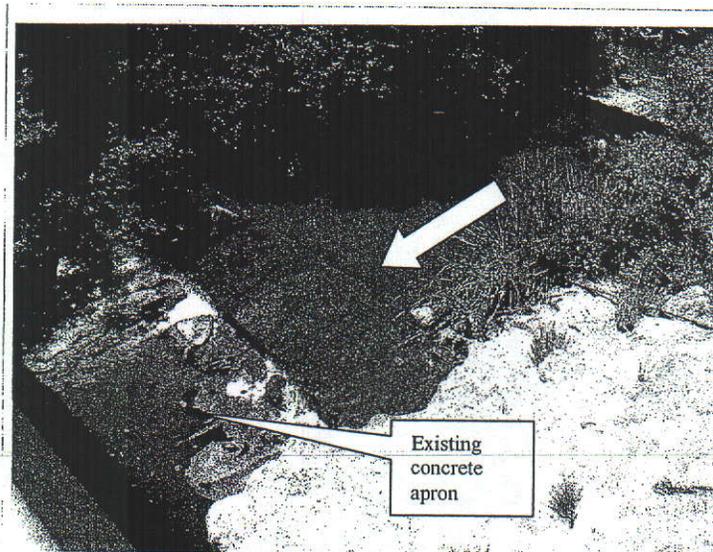
The water intake equipment will be located next to the existing concrete weir near the bridge that provides access to the Coastal Treatment Plant as illustrated in Figure 2-1. Urban runoff water will be recovered from Aliso Creek using a self-priming centrifugal pump with a self-cleaning intake screen mounted next to the

existing concrete apron. The stream banks at this location are protected from erosion by concrete and rip-rap. The water intake pump will be secured by bolts to the existing concrete apron and will not require alteration of the streambed.

A 7.5 horsepower float controlled self-priming centrifugal pump will deliver water to the treatment facility via a 4" PVC pipeline. The pump suction screen will be approximately 16" high by 24" diameter, (Figure 2-2). The suction screen will prevent unwanted material from passing into the pump.



**Figure 2-1. Location of Submersible Pump Drop into Aliso Creek**



**Figure 2-2. Depiction of Self-Cleaning Pump Suction Screen  
Actual Size 2 feet long by 1 foot wide**

