

SAN ELIJO STORMWATER CAPTURE AND TREATMENT

DESIGN SUMMARY

The basin consists of baffles placed along the entire length of the basin, per the County of San Diego Design specifications. Aquatic planters will be placed in place of the baffles. This will allow native aquatic plants to be planted within them. They will work to filter out heavy metals that maybe present in the stormwater. The plants will also add to the esthetics of the basin which will sit along the bike path. Native plants will help with environmental impact mitigation.

COST ANALYSIS

Throughout our cost estimate research, we have determined that the most suitable design would be a standard sedimentation basin. Our design will consist of a Phytoremediation form of bioremediation that includes various native plants that effectively remove heavy toxic metals. This addition would cost about \$37.7/m. The excavation phase is estimated at \$15,000 - \$75,000 including labor. All pipes within the piping network will be made of commercial steel pipe 8" ASTM A53, with a total cost of \$588 - \$1,471. We are expecting that the project cost will not exceed the state grant.

BACKGROUND

SEJPA currently serves about 19 square miles of land within the Cardiff area which includes both the City of Solana Beach and parts of the City of Encinitas and Rancho Santa Fe. With an inflow of 5.25 million gallons per day, the SEJPA wastewater treatment plant has been able to manage and treat up to 2.48 million gallons per day of tertiary treated wastewater for recycling use and 5.25 million gallons per day of secondary treated wastewater that gets distributed to the Pacific Ocean. SEJPA has been able to make a lasting impact within the City of Cardiff by providing approximately 1,400 to 1,600 acre-feet of reuse water to local parks, golf courses, schools, businesses, irrigation public landscaping and much more.

OUR TEAM



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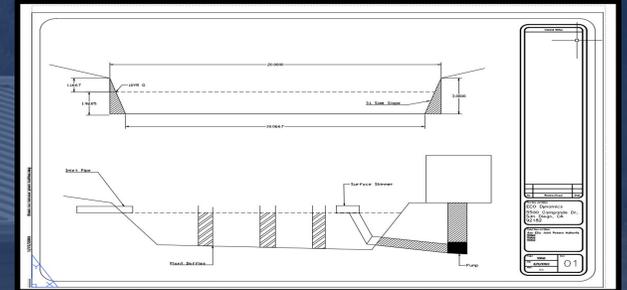


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BASIN DESIGN



SCOPE OF WORK

Working with San Elijo Joint Powers Authority (SEJPA), Eco Dynamics will implement a new stormwater collection and treatment facility that will provide the necessary means of effectively and efficiently capturing stormwater inflow where it will then be pretreated for sediment and pumped to the existing San Elijo Water Reclamation site for further treatment and for the purpose of water reuse.

