

Case Study

NDS StormChamber[®] System

A CITY'S STORMWATER DIVISION COLLABORATES WITH NDS TO IMPROVE WATER QUALITY AND CURB RUNOFF AT REVITALIZED PARK

A neighborhood park in a suburb of southwestern California was undergoing revitalization efforts to enhance some of the park's key features, as well as improve urban stormwater runoff capture and treatment to help sustain the local ecosystem. The current drainage system at the park directly discharges into a nearby creek so the project specifier needed a comprehensive stormwater management solution that would address these two key issues.

The specifier was looking for a solution that would improve the treatment of urban stormwater runoff as well as eliminate any excess water in the park. After a heavy rainfall, the park often experienced flooding, which made the park less usable.

The park already had two storm drains and water quality units that covered about six acres of local neighborhoods, but the water from these drains would eventually flow into a nearby creek – and then make its way into the ocean – so it was critical to find a solution that could ensure water quality improvements.

NDS STORMCHAMBER[®] SYSTEM ADDRESSES WATER QUALITY

The NDS Design Worx[®] team recommended an underground drainage solution that included the installation of approximately 100 NDS StormChamber units, which equated to 11,212 cf. of storage beneath the surface of the park. The system is highly effective at improving water quality and would help eliminate the excess water in the park, allowing the city to utilize the space above ground for recreation.



Because NDS StormChamber units are engineered to mimic natural environmental processes, they also help to protect the water and aquatic animals. The specifier cited that treating stormwater was important to their ecosystem to help ensure the health of the animals and fish species in the creek, including an endangered species of steelhead trout. The NDS StormChamber units ensured that this would be accomplished, which is why the specifier and the city chose to utilize this system.

PROJECT SUMMARY

PROJECT TYPE

Storage & Infiltration

PROPERTY

Municipality

NDS PRODUCTS USED

100 qty. StormChamber[®] system units

LOW IMPACT DESIGN CREATES MORE USABLE SPACE

While the NDS StormChamber system did help save time and money, more importantly, its low impact design allowed the city to capture, treat and improve runoff from storm events and protect the fish population. It also eliminated the issue of flooding the park would experience after heavy rainfall, providing more usable recreational space for area residents, including highly sought after picnic table seating and a level ground to play ball on.