



## PROJECT OVERVIEW:

Located between Austin and San Antonio, the city of San Marcos, Texas, is home to a treasured natural asset, the San Marcos River. Fed by hundreds of artesian springs in the city centre, the river supports recreation, tourism, and a unique ecological environment.

The river is home to sensitive species including the rare Texas Blind Salamander and serves as an important natural and community resource. With increasing urban activity and stormwater runoff pressures, the City of San Marcos sought a practical solution to reduce litter and pollutant loads entering the stormwater network and ultimately the river.

To better understand pollutant sources while protecting this valuable waterway, the City launched a pilot programme using **10 x EnviroPod™ LittaTrap™'s**.

**“This pilot project proved what Adam and I predicted. While every catch basin captured some debris, the bulk of the plastic, cans, and general trash was collected around the downtown square. This area has constant foot traffic, all streets are lined with parking spots, and many of the establishments are restaurants and bars.”**

*Jared Steedley*  
**GeoSolutions**

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## THE CHALLENGE:

San Marcos experiences significant pedestrian activity across commercial, residential, and entertainment areas. Like many urban environments, everyday litter goes in stormwater taking pollutants directly to waterways.

The City wanted a solution that could:

- Capture gross pollutants before they entered the stormwater network
- Help identify pollution hotspots
- Support easier maintenance operations
- Collect data to guide future management decisions

## SOLUTION:

San Marcos Public Works implemented an eight-week LittaTrap™ pilot across ten stormwater inlets at strategic locations throughout the city. To evaluate performance across varying site conditions, a range of LittaTrap™ configurations were selected including:

- *Standard units*
- *High-capacity units*
- *LittaTrap™ EMMA (Easy Maintenance Manhole Access) units*

The EMMA configuration was specifically designed to simplify maintenance by positioning the basket directly beneath manhole access points, enabling cleaning without confined space entry requirements. This feature provides maintenance teams with safer and easier access during routine servicing.

## STORM-TESTED PERFORMANCE:

Shortly after installation, the pilot experienced a significant real-world performance test. San Marcos received four major rainfall events during the eight-week pilot period, creating ideal conditions to assess the system under heavy stormwater loading. The increased rainfall generated substantial runoff volumes and pollutant transport across the catchments.

**Adam Rossing, Stormwater Systems Manager – Public Works, City of San Marcos**, commented:

*“October is one of our wettest months and so this was the perfect opportunity for the 8-week pilot. After the rainfall many of the catch baskets were at capacity and the decision was made to move to monthly cleaning during the rainy seasons.”*

As the City continues gathering operational data, maintenance programmes may be adjusted over time based on site-specific conditions and pollutant loads.

## RESULTS:

Pilot Outcomes:

- ✓ Four significant rainfall events successfully managed
- ✓ Gross pollutants captured including litter, debris, sediment, and organics
- ✓ Identification of high-pollutant generation areas
- ✓ Operational data gathered to support long-term maintenance planning
- ✓ Improved understanding of pollutant pathways entering the San Marcos River

The San Marcos pilot demonstrated how at-source stormwater treatment can provide benefits beyond pollutant capture. By intercepting contaminants before they enter waterways, LittaTrap™ helped support environmental protection goals while also providing actionable data to improve future stormwater management strategies. LittaTrap™ provides a scalable approach that protects waterways where it matters most — at the source.