

## SANTA CLARA INLET PLAZA

Over time, streams shape the land. Conversely, a river in an urban setting is affected by the city around it. In the past, people didn't pay attention to how a river worked. They ignored how a river such as the Guadalupe would naturally meander. They built highways and houses, dams and reservoirs. The river was then lined with concrete to protect adjacent properties from erosion when the river flooded.

The replacement of the natural riverbed with acres of pavement has meant that the amount of rainwater the ground can absorb has been substantially decreased. While the Guadalupe River historically has flooded for thousands of years, this additional runoff created by new development has increased the potential for flooding. This Plaza overlooks a major bypass channel inlet for the flood-protection system, and is an excellent place to contemplate the more ecological approach to flood protection that is the hallmark of this park. Engineers eliminated the need to line most of the downtown Guadalupe River with concrete by building underground bypass channels that carry floodwaters and allow the riverbank to remain in a natural state. You are standing over one of those bypass channels right now. In fact, most of the park you see to your right is built over the river's bypass channels.

Where concrete must be used for the river bed a small and deeper channel, called a "low flow channel" allows for continued fish movement during the dry summer months.

An additional part of this ecological approach, are plants that improve the habitat for fish and wildlife, as well as plants that help keep the Guadalupe's banks from eroding. All of the planting in the riverbed are native to the Guadalupe. Some of the trees, such as cottonwoods, willows, and elders, will shade the river, keeping water temperatures cooler for fish and providing habitat for birds, insects, and wildlife. The leaves and roots of plants also keep the water cleaner.

Above all, the Guadalupe River Park tries to balance the character of the river with that of the city.