## <u>City of Tampa</u> <u>El Prado Stormwater Garden</u>

Green infrastructure (GI) is a resilient approach to stormwater management that can reduce urban runoff and provide water quality improvement to receiving waters downstream. GI technology is being incorporated into the City of Tampa Stormwater Division's larger projects and many of the smaller projects as well.

The garden site was previously two residential homes located near the intersection of El Prado Blvd. and S. Manhattan Ave that were built below FEMA flood levels. Consequently, the homes experienced frequent flooding. The City of Tampa purchased the lots and created this "stormwater garden" to serve as a functional means for capturing, storing, and treating the urban stormwater runoff. The site allows for the first flush of runoff (which carries the bulk of pollutants) to slowly percolate into the ground. Subsequent runoff is permitted to discharge to the stormwater system.

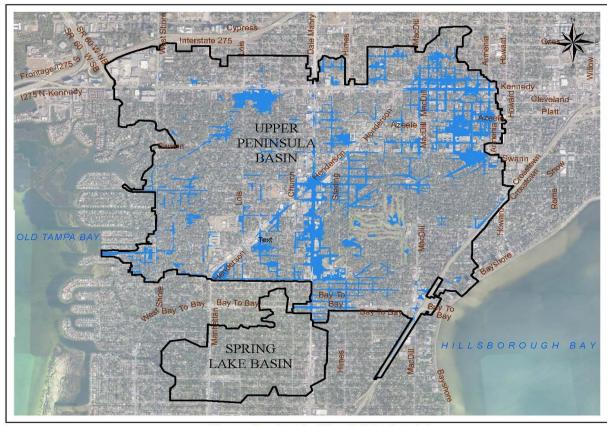
The project consists of a depressed area planted with wetland vegetation including bald cypress and sabal palm trees surrounded by cord grass and various small shrubs. Several upland species including sand live oaks surround the depressed area as well. The Florida-friendly landscaping provides biological uptake of the nutrients in a garden setting. It has an esthetic curb appeal enhanced with crushed shell, hardwood mulch and a low, ornamental aluminum fence. The site was designed to receive runoff from the urban environment and provide water quality treatment prior to discharging to the storm sewer system and ultimately to Tampa Bay. It is one of several measures that the City of Tampa's Transportation and Stormwater Services Department implements to provide water quality treatment of urban runoff in an effort to reduce nutrients and sediments discharging to the bay.

The Upper Peninsula Vasconia Outfall project was part of the Upper Peninsula phase I with a total project cost of \$11,318,622. The El Prado Stormwater Garden was completed in 2019 as a part of the Upper Peninsula Vasconia Outfall project and the total project cost was \$828,152. The City of Tampa's Upper Peninsula project was a multiphase, multi-year regional stormwater improvement project that addressed extensive flooding problems and improved water quality within a drainage basin area of ~1150 acres. The City of Tampa serves a population of 392,890 residents.

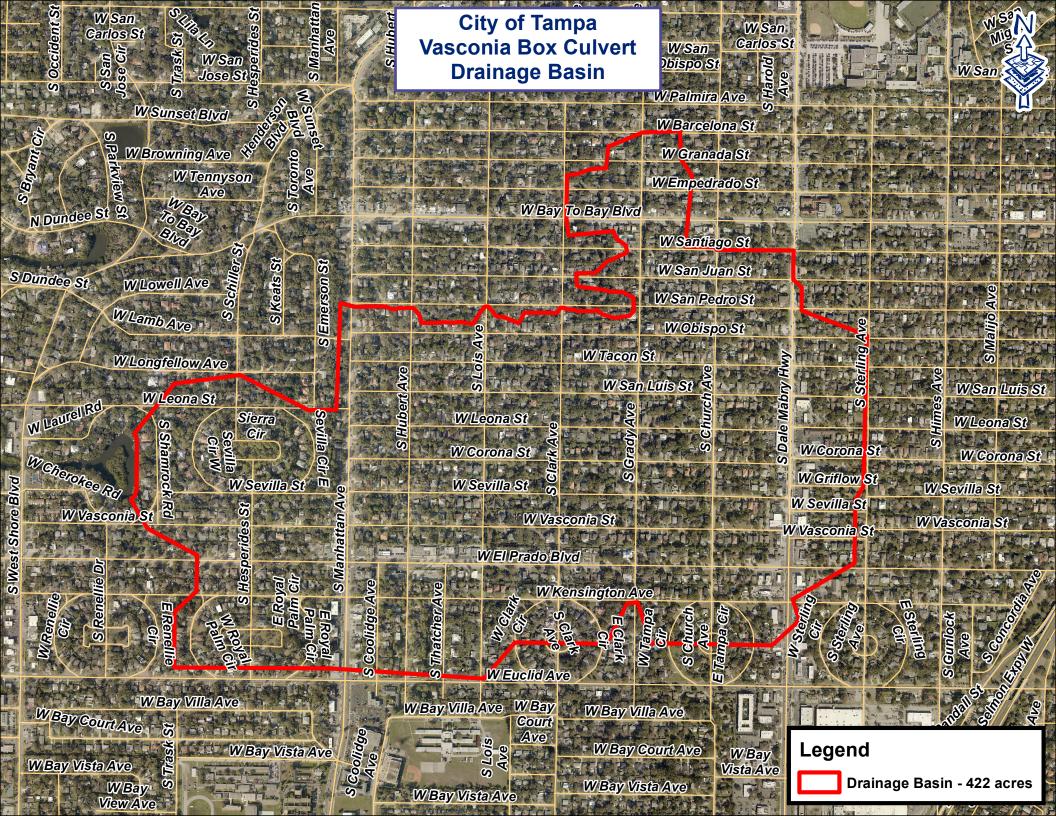




City of Tampa Stormwater Engineering
Upper Peninsula Phase 1: Vasconia Project Area



Upper Peninsula Floodplain Model

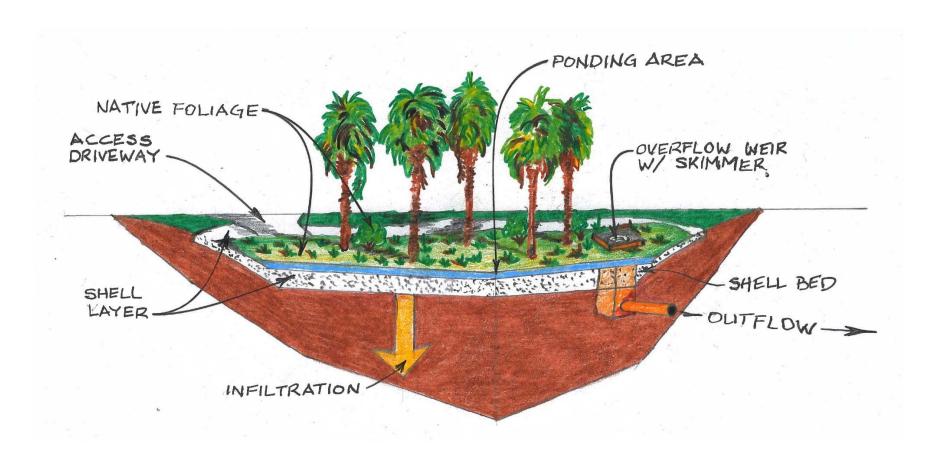


### Co-funded by the City of Tampa and Southwest Florida Water Management District

These two properties are at the bottom of the bowl of the subbasin, and the houses incurred repeated structural flooding. SWFWMD and the City purchased the properties with the stipulation that the City would construct a water quality improvement feature.



This stormwater garden has been specially designed to capture and treat runoff from the surrounding urban environment. By choosing native plant species, this garden helps remove harmful pollutants from urban runoff before entering Tampa Bay.



## <u>City of Tampa</u> <u>El Prado Stormwater Garden</u>

Green infrastructure (GI) is a resilient approach to stormwater management that can reduce urban runoff and provide water quality improvement to receiving waters downstream. GI technology is being incorporated into the City of Tampa Stormwater Division's larger projects and many of the smaller projects as well.

The garden site was previously two residential homes located near the intersection of El Prado Blvd. and S. Manhattan Ave that were built below FEMA flood levels. Consequently, the homes experienced frequent flooding. The City of Tampa purchased the lots and created this "stormwater garden" to serve as a functional means for capturing, storing, and treating the urban stormwater runoff. The site allows for the first flush of runoff (which carries the bulk of pollutants) to slowly percolate into the ground. Subsequent runoff is permitted to discharge to the stormwater system.

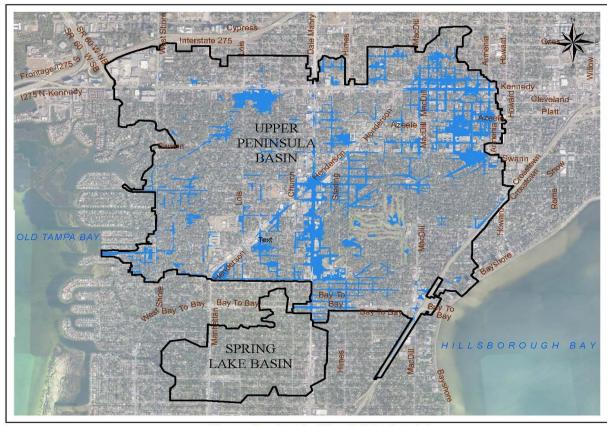
The project consists of a depressed area planted with wetland vegetation including bald cypress and sabal palm trees surrounded by cord grass and various small shrubs. Several upland species including sand live oaks surround the depressed area as well. The Florida-friendly landscaping provides biological uptake of the nutrients in a garden setting. It has an esthetic curb appeal enhanced with crushed shell, hardwood mulch and a low, ornamental aluminum fence. The site was designed to receive runoff from the urban environment and provide water quality treatment prior to discharging to the storm sewer system and ultimately to Tampa Bay. It is one of several measures that the City of Tampa's Transportation and Stormwater Services Department implements to provide water quality treatment of urban runoff in an effort to reduce nutrients and sediments discharging to the bay.

The Upper Peninsula Vasconia Outfall project was part of the Upper Peninsula phase I with a total project cost of \$11,318,622. The El Prado Stormwater Garden was completed in 2019 as a part of the Upper Peninsula Vasconia Outfall project and the total project cost was \$828,152. The City of Tampa's Upper Peninsula project was a multiphase, multi-year regional stormwater improvement project that addressed extensive flooding problems and improved water quality within a drainage basin area of ~1150 acres. The City of Tampa serves a population of 392,890 residents.

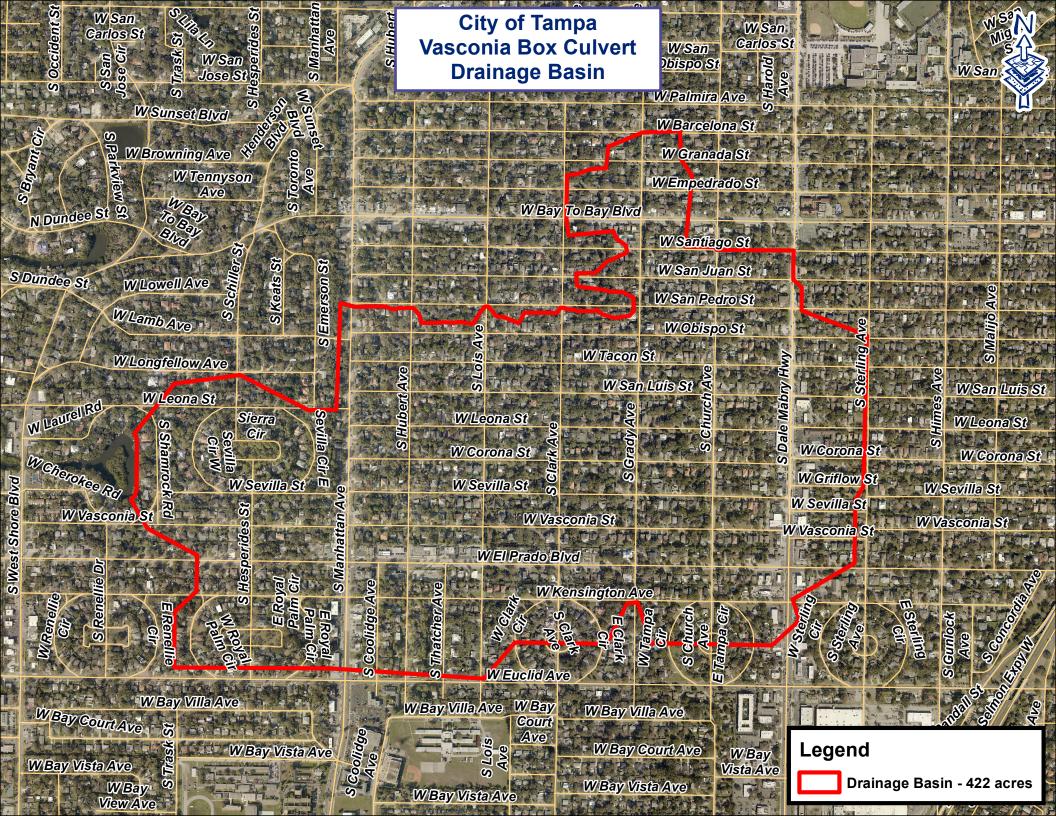




City of Tampa Stormwater Engineering
Upper Peninsula Phase 1: Vasconia Project Area



Upper Peninsula Floodplain Model



### Co-funded by the City of Tampa and Southwest Florida Water Management District

These two properties are at the bottom of the bowl of the subbasin, and the houses incurred repeated structural flooding. SWFWMD and the City purchased the properties with the stipulation that the City would construct a water quality improvement feature.



This stormwater garden has been specially designed to capture and treat runoff from the surrounding urban environment. By choosing native plant species, this garden helps remove harmful pollutants from urban runoff before entering Tampa Bay.

