**Requesting Agency:** **Lehigh Acres Municipal Services Improvement District (formerly East County Water Control District)**

**Agency Summary:** Lehigh Acres Municipal Services Improvement District (Lehigh Acres MSID) is a multi-county Chapter 189 District created by the state, on June 10, 2015, to provide drainage and flood control; conservation and mitigation; irrigation; navigation services to Lehigh Acres and western Hendry County.Moving water to meet varying conditions and needs is essential to sustaining the local environment. Lehigh Acres MSID manages and maintains an expansive water management system comprised of 311 miles of canals, 20 lakes, 1298 preserves acres, several parks and a variety of infrastructure within 70,000 acres of land.

**Issue Statement:** At full-build out, Lehigh Acres MSID would be 15,000 acre-feet short of storage. Lehigh Acres MSID’s stormwater system outfalls to the Caloosahatchee River – an impaired waterbody of the state.

**LA-MSID is seeking funding support for two projects to help meet water storage and water quality needs of the area:**

**Project:** Engineering Design for Greenbriar/Section-10 (GS-10) Caloosahatchee Cross link Project

**Project Summary:** The proposed GS-10 Connection would help create a functional, stormwater system connection between to two basins; it would allow for more water storage and improved water quality opportunities. The project can provide several benefits: A) Flood Control: the discharges from Section 10 to Greenbriar Swamp will create storage within Section 10 that will alleviate flooding in the Bedman Creek Basin, B) Natural Systems/Water Quality: the project essentially stores an additional 600 acre-feet of stormwater within Greenbriar Swamp that prevents its stored nutrients from reaching the Hickey’s Creek and the Caloosahatchee River. Greenbriar Swamp is owned by Lehigh Acres MSID and operates with severely limited hydro-periods. Storage of additional water in Greenbriar Swamp will reduce discharges to the Caloosahatchee River which will help reduce fresh water discharges to the estuary in the wet season and will provide additional freshwater to the Caloosahatchee River estuary in the dry season. As an ancillary benefit, the project could also provide wildlife enhancement similar to another district-owned impoundment, Harns Marsh. Harns Marsh started vary similarly to the Section 10 project and in addition to its water management functions has grown to be a community resource and enhanced wildlife habitat with more than 160 identified species.

**Outcome and Benefits:** This project could provide 600 -2,000 acre-feet/year of storage and will reduce nutrient loads by 114 lb. TP/yr. and 1,200 lb. TN/yr., which is an additional water quality treatment benefit for the Non-tidal Caloosahatchee River. This will help Lehigh Acres MSID close the gap in its deficit of 15,000-acre feet in water storage and assist SFWMD in reaching its goal of adding 50,000 acre-feet of water storage.

**Estimated Design Cost:** $750,000

**Project: Purchase of Section 10:**  Section 10 is the largest, undeveloped, single-owner parcel in Lehigh Acres Municipal Services Improvement District (Lehigh Acres MSID) boundaries; it is a full-section-plus (640-acre +) that lays just south or upstream of the district-owned Greenbriar Swamp and sits between two of Lehigh Acres MSID ’s major basins that are functionally not connected. This would be one of the last opportunities to add a significant storage opportunities without having to piece together numerous, quarter-acre lots from multiple owners to achieve a similar impact.

The major benefit to acquiring Section 10 is that the parcel could function as a minor impoundment and diversion to either of these major basins in the rainy season, while discharging when possible to Greenbriar Swamp to achieve better water quality. This project is outlined in Lehigh Acres MSID’s 2015/2016 Capital Improvement Plan. The project is consistent with South Florida Water Management District’s (SFWMD) 2012-2017 Strategic Plan; Lehigh Acres MSID’s Strategic Plan; and is included on SFWMD Caloosahatchee River and Estuary Project list as the CRE 144 project.

**Project Summary**: During heavy rain events, some of Lehigh Acres MSID’s basins are overfull, while another may be under-utilized. The 640+ acre parcel known as Section 10 has one owner; in relation to existing Lehigh Acres MSID facilities, Section 10 is in a perfect location to provide to help alleviate these stated problems.

Greenbriar

A berm could be constructed to create a minor impoundment in Section 10 that could store additional stormwater in the wet season, discharging the water necessary to help Greenbriar Swamp operate properly. Water could be introduced to Section 10 from the Bedman Creek Basin (which includes Bedman Creek Basin) to the east and the Hickey’s Creek basin to the west, thus diverting it from discharging into the non-tidal portion of the Caloosahatchee River. Stormwater can also be diverted from one basin to the other during heavy rainfall events.

During the dry season, excess water could be discharged from Section 10 to Greenbriar Swamp to extend its hydro-periods, enhance water quality and discharge fresh water during the dry season to the Caloosahatchee River via Hickey’s Creek.

The project though not fully planned, could involve excavation, pump stations and new water control structures, etc. Planning would take place in 2016 and purchase could happen as early as 2017. Following the purchase, design and permitting would commence followed by construction in approximately 2020.

**Estimated Land Acquisition Cost:** $3 million