

## Facilities Description

The following facilities have been identified as part of this project:

- Provide a pump station with intake structure at the Suwannee River near Branford. Treatment facilities for the surface water withdrawals could be co-located with the pump station to treat water prior to transmission.
- Provide transmission mains from the pump station at Branford to the target recharge area.
- Provide recharge wells at the recharge site.

## Project Benefits to the LSFIR MFLS

The benefits calculated for this project are based on representative NFSEG influence factors for the Ichetucknee and Santa Fe River gages within the target recharge area. A recharge efficiency of 100% was assumed for this project based on using recharge wells discharging directly to the Upper Floridan Aquifer.

	Ichetucknee River US Highway 27	Santa Fe River US Highway 441
Influence Factors	0.25	0.30
Recovery Target (cfs)	6.3	1.0
Prevention Target (cfs)	13.2	17.3
MFL Benefit Provided (cfs)	3.4	4.1

The graph below demonstrates the project's ability to address MFLs at the Santa Fe River US Highway 441 gage near High Springs and the Ichetucknee River gage near Highway 27 in Hildreth.

## Ancillary Benefits

- This project could be used in conjunction with other projects to provide additional benefits at either or both MFL sites.

## Potential for Regional Benefits

In recognition that there are additional MFLs under development in the same geographic area as the Ichetucknee and Santa Fe, the project was evaluated for potential to positively impact surrounding water bodies. Implementation of the project resulted in an average increase of approximately 0.3 cfs at the Suwannee River Ellaville gage.

## Source Water Reliability

Unlike reclaimed water sources, this project is targeted at capturing a portion of the Lower Suwannee River flow during periods of peak discharge. In conjunction with the SRWMD, three minimum flow thresholds were established. These thresholds are outlined below.

- A minimum of 3,190 cfs at Branford to provide access to shoals for sturgeon
- A minimum of 6,600 cfs at Wilcox between May-Oct to maintain low salinities for submerged aquatic vegetation (SAV)
- A minimum of 7,600 cfs at Wilcox Nov-Apr for manatee access

A 30-year period of record for Suwannee River flows was analyzed to see how often peak flows exceeded these minimum flow thresholds, and could therefore be available for diversion to MFL recharge sites. Over the period of record, flows exceeded the minimum flow thresholds approximately 45% of the time. When minimum flow thresholds are met, peak discharges are sufficient to supply up to 20 MGD flow. Over the 30-year period of record recharge flows

**Lower Suwannee at Branford:  
20MGD ~45% of time = 8.9MGD Avg**

