Rolling Meadows/Catfish Creek Wetland Restoration Phase 1

Location:	-
Subwatershed:	Upper Kissimmee
Basin:	-
Purpose:	Restore a sod farm back to historic lake littoral wetlands connected to Lake Hatchineha.
Project Operation Start:	April 2017
Considerations/Update:	Restoration of more than 2,000 acres of former lake floodplain wetlands along Lake Hatchineha, and restoration of Catfish Creek which has been channelized through the property. The project will be implemented in two phases. Phase I will facilitate hydration and restoration of approximately 1,900 acres of previously impacted floodplain on Lake Hatchineha. Phase II of the project involves further restoration of approximately 580 acres. Under Phase I, restoration is being accomplished primarily through re-establishing connectivity between Parcel B and Lake Hatchineha and the diversion of most of the flows from the historically diverted Catfish Creek into Parcel B (SFWMD 2014). The project is anticipated to retain approximately 3,100 acre-feet of water onsite and will raise water levels from the current elevation of 50 feet (ft) North American Vertical Datum of 1988 (NAVD88) up to approximately 50.5 ft NAVD88. Discharges through the outflow structure will be continuous except during drought conditions when water is retained onsite. The extreme rainfall conditions in water year 2018 (WY2018) and the first season of flow-through operation likely affected initial water quality benefits. During WY2018, orthophosphate, total phosphorus (TP), and total nitrogen (TN) concentrations exhibited a substantial decreasing trend at the project discharge location. Nutrient concentrations during the same period at the project inflow site were more stable.

Parameter	2011 LOWCP Update	Built/Observed
Project Acreage	**2,000**	**Phase I: 1,900**
Estimated Annual Water Quality Benefits (mt/yr)	**Unknown**	**TP: from 479 µg/L to 102 µg/L TN: from 3.51 mg/L to 1.93 mg/L Orthohosphate: from 300 µg/L to 18 µg/L**
Estimated Water Quantity Benefits (ac-ft)	**Min. = 1,456 Max. = 2,915 Most Likely = 1,456**	**NA**
Planning, design, and engineering	**$1,300,000[1]**	**$840,000**
Construction Cost (Phase I)	**$4,400,000**	**$4,632,801**
Annual Cost	**$1,500,000**	**NA**

NA: Not available

Notes:
[1] Includes $250,000 for contamination remediation