

Brady Ranch Stormwater Treatment Area (STA)



Location:	Martin County
Subwatershed:	Taylor Creek/Nubbin Slough
Basin:	S-191
Purpose:	Treat water and remove phosphorus before it enters Lake Okeechobee. The 1,800-acre STA will receive flows from L-63 and will discharge to Lake Okeechobee.
Project Operation Start:	TBD
Considerations/Update:	<p>The Brady Ranch Property is currently under a lease agreement for cattle grazing operation with a hunting preserve. The lease agreement will expire on May 1, 2029. However, the SFWMD may elect to terminate the lease if a 3-year notification is provided to the lessee.</p> <p>The SFWMD has coordinated with the lessee to enhance water storage onsite. Both, the lessee and the SFWMD have implemented measures to store additional surface water onsite through use of portable pumps consistent with cattle grazing lands. The site is operated in accordance with Florida Department Agriculture and Consumer Services (FDACS) Cow/Calf BMP.</p> <p>Construction of the Lakeside Ranch Stormwater Treatment Area (STA) located to the west of Brady Ranch was completed in 2019. Due to its proximity, the Brady Ranch site could provide operational flexibility to the Lakeside Ranch STA.</p> <p>A planning level hydrological assessment of the Brady Ranch property would be necessary to provide useful information as to the effectiveness of the site as a STA or other water feature. Currently, no planning for the of the Brady Ranch site as a STA has been performed. However, the site has been identified for interim storage by the Dispersed Water Management (DWM) Unit.</p> <p>The DWM project-concept involves construction of two (2) above ground impoundments (AGIs) and other new infrastructure on the 1,831 acres. Initial water budget analyses performed for the Brady Ranch Interim Storage project-concept estimated a net water quantity benefit of 5,900 acre-feet per year with an average pump volume of 4,000 acre-feet per year. Limited preliminary activities have been performed in support of the Brady Ranch Interim Storage project. Therefore, environmental assessments, topographical surveys, a cultural resource assessment survey, a threatened and endangered species survey, geotechnical investigations, and a hydrology and hydraulics study are recommended to fully vet and refine the project-concept prior to design development.</p>

LOWCP MM#	Project Name	Project Area (ac)	2011 LOWCP Estimated Annual Water Quality Benefits (mt/yr) ¹	2011 LOWCP Estimated Annual Water Quantity Benefit (ac-ft/yr) ²	Total Cost
66	Brady Ranch STA	1,831	Min = 5.0 Max = 9.0 Min Most Likely	2,430	\$100,000,000

¹ BMPs in place for minimum estimate, not in place for maximum estimate. Most likely assumes BMPs in place. Period of record: 1965-2005. Inflow concentration: 332 ppb without BMPs, 118 ppb with BMPs. Cultural resource mitigation is assumed to not impact treatment area. BMP estimate based on 2007 LOPP update. Load reduction adjusted down from 5 mt/yr to 2 mt/yr due to concentration limitation.

² Period of record: 1965-2005. STA storage volume based on 90% footprint area of 1,800 x 1.5 feet standard operating depth.