LAKE OKEECHOBEE & THE LOWER KISSIMMEE BASIN STORMWATER TREATMENT AREA

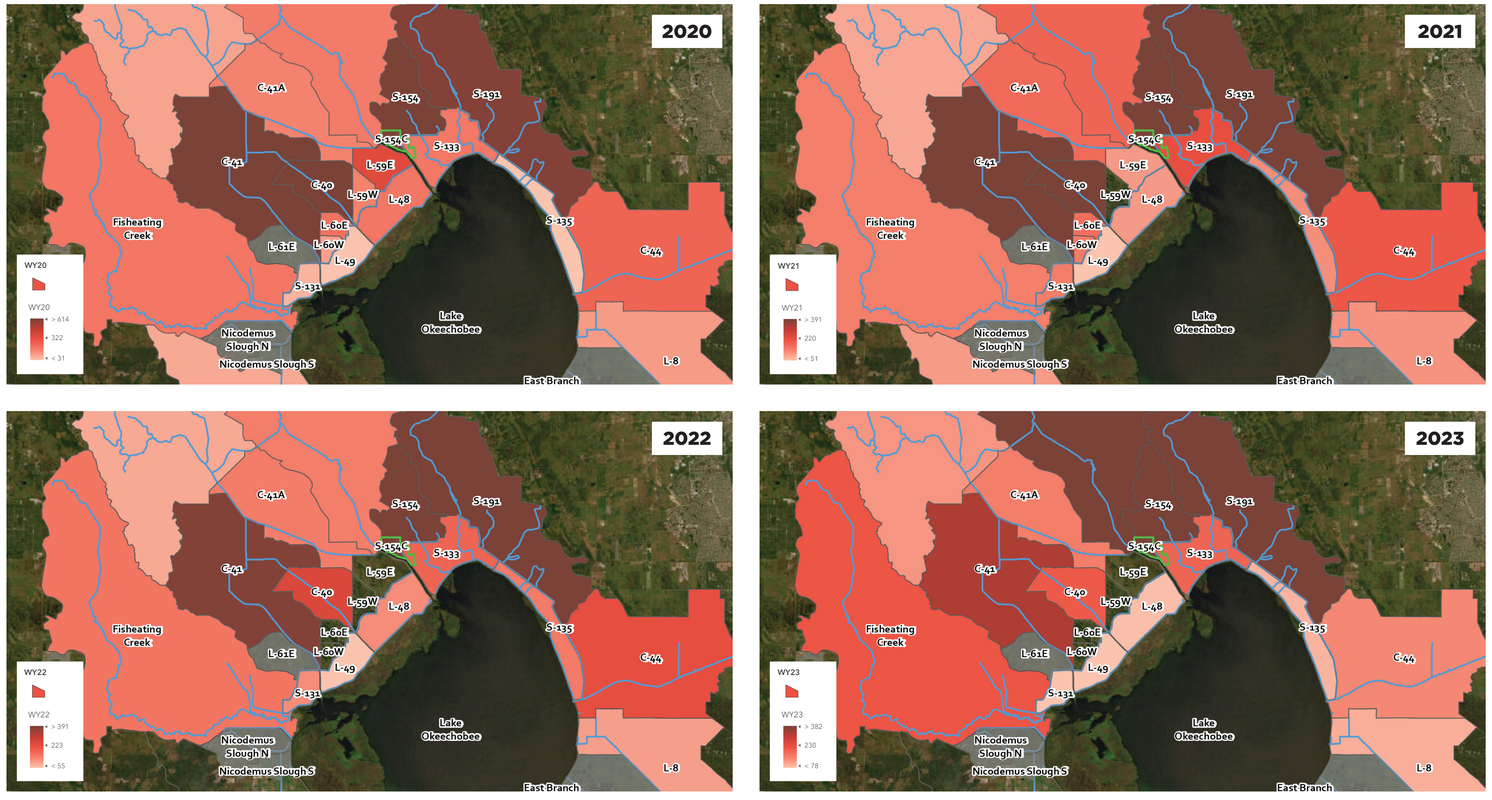
PROJECT NEED

Lake Okeechobee is an important resource that provides benefits such as flood protection, drinking water, agricultural irrigation, recreation and habitat for fish and wildlife. However, the lake has impaired water quality due to high levels of phosphorus. In 2014, the Florida Department of Environmental Protection (FDEP) adopted Lake Okeechobee's first Basin Management Action Plan (BMAP) to restore water quality in the lake through several projects, including the Lower Kissimmee Basin Stormwater Treatment Area (LKBSTA).

The BMAP was adopted to implement the Total Phosphorus (TP) Total Maximum Daily Load (TMDL) in the watershed, and Executive Order 19-12 required an update to this BMAP in 2020. The updated BMAP, adopted in February 2020, replaced the original BMAP and also included the statutorily required Five-Year Review.

The proposed facility will treat runoff from S-154 and S-154C Basins and the Lower Kissimmee and Indian Prairie subwatersheds - areas that consistently have some of the highest phosphorus concentrations and loads in the Lake Okeechobee watershed. The LKBSTA will extract ~9 to 13 metric tons (mt) of excess phosphorus from the watershed north of Lake Okeechobee before it reaches the lake.

TOTAL PHOSPHORUS CONCENTRATIONS BY WATER YEAR (MICROGRAMS PER LITER OR PARTS PER BILLION)



LAKE OKEECHOBEE TMDL COMPARISON BY WATER YEAR							
	WY 2023* (MT)	WY 2022 (MT)	WY 2021 (MT)	WY 2020 (MT)	WY 2019 (MT)	WY 2018 (MT)	WY 2017 (MT)
Lake Okeechobee Watershed Phosphorus TMDL	140	140	140	140	140	140	140
TP Loads to Lake Okeechobee by Water Year	438	285	520	324	445	1081	484
Average	**511**						
TP Loads above TMDL	**298**	**145**	**380**	**184**	**305**	**941**	**344**
Average	**371**						

C-38 (KISSIMMEE RIVER) TOTAL PHOSPHORUS LOADS BY WATER YEAR							
	WY 2023* (MT)	WY 2022 (MT)	WY 2021 (MT)	WY 2020 (MT)	WY 2019 (MT)	WY 2018 (MT)	WY 2017 (MT)
Upper Kissimmee Subwatershed (S-65)	99.3	70.2	67.7	74.8	86.7	117.9	72.7
Lower Kissimmee Subwatershed [(S-65E) - (S-65)]	113.7	17.7	120.3	54.0	94.5	304.9	101.4
Lake Istokpoga Subwatershed (S-68)	41.6	30.0	46.3	24.3	30.2	63.4	41.0
C-41A Basin [(S-84) - (S-68)]	15.6	14.7	31.7	11.0	16.0	51.9	24.4
Total	**270**	**133**	**266**	**164**	**227**	**538**	**239**
Average	**263**						

L-62 CANAL TOTAL PHOSPHORUS LOADS BY WATER YEAR							
	WY 2023* (MT)	WY 2022 (MT)	WY 2021 (MT)	WY 2020 (MT)	WY 2019 (MT)	WY 2018 (MT)	WY 2017 (MT)
S-154 Basin	2.8	12.4	14.2	7.7	13.2	30.9	16.3
S-154C Basin	0.1	1.0	0.6	0.4	1.8	5.2	2.1
Total	**2.9**	**13.4**	**14.8**	**8.1**	**15.0**	**36.1**	**18.4**
Average	**16**						

*Provisional data; subject to change

Source: South Florida Water Management District