INDIAN PRAIRIE - L-61E BASIN TECHNICAL SHEET			
Subwatershed: Indian Prairie			
Basin: **L-61E**	**Flow Issues[1]:** **Maybe**	**Water Quality Issues[2]:** **Maybe**	

Monitored Structure(s): L61COEHP5

Inflow loads:

Acreage: 14,407

Percentage of Subwatershed Acreage: 5%

Percentage of Lake Okeechobee Watershed: 0.4%

[1]Flow Issues:

- The flow measurement data for this basin may not be reliable. Prior to WY1995 flows were estimated and no flow measurements were collected between WY1995 and WY2007.

- There appeared to be an increase in flows between pre and post-protection plans periods but unable to determine if this increase is due to the missing or estimated flow measurements in the pre-protection period or another factor.

- No statistically significant trends in flows were observed in the post-protection plan period.

- Flow and load estimates were based on samples and measurements taken at major structures within the regional system.

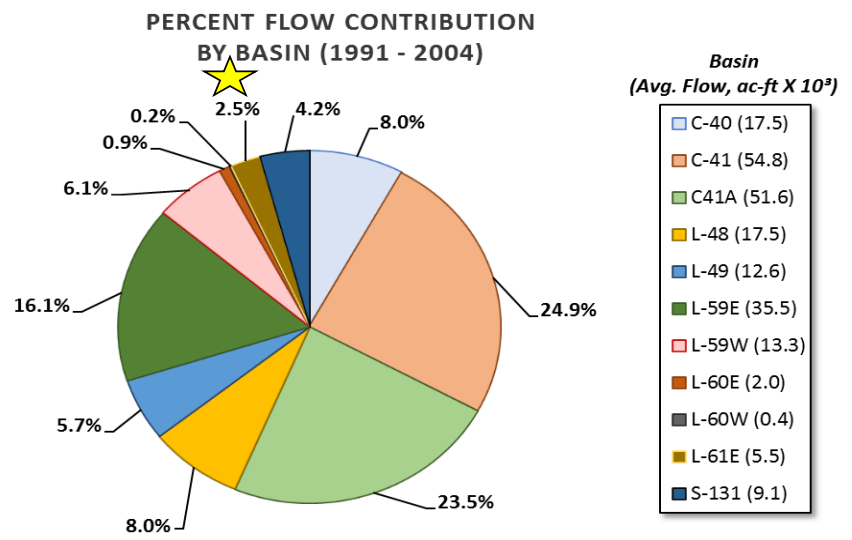
[2]Water Quality Issues:

- There appeared to be an increase in total phosphorus (TP) loads between pre and post-protection plans periods but unable to determine if this increase is due to the missing or estimated flow measurements in the pre-protection period or another factor.

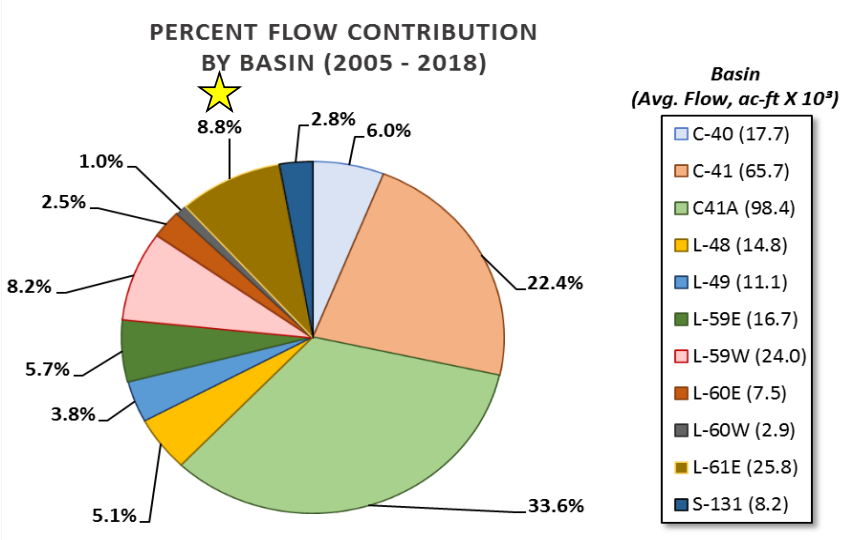
- A decrease in TP flow-weighted mean concentrations (FWMC) between pre and post-protection plan periods was noted but it was not statistically significant.

- There were no statistically significant trends in TP loads or FWMC in the post-protection plan period.

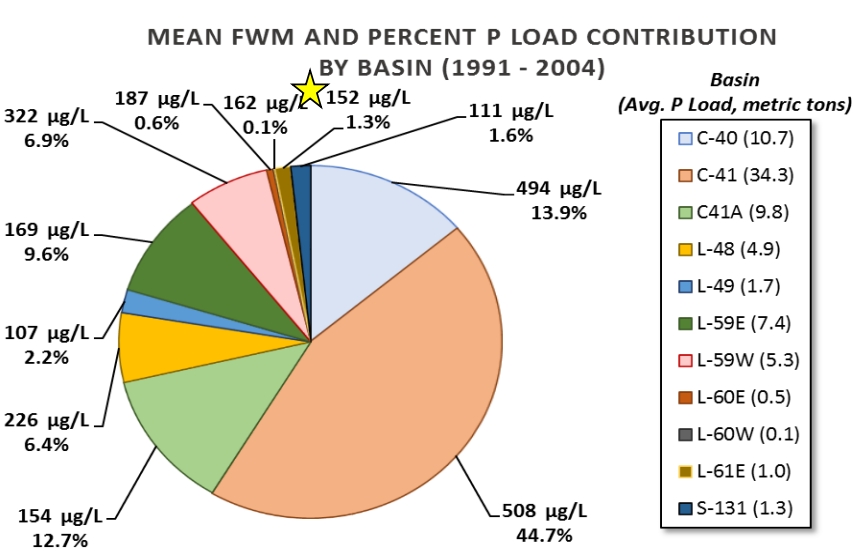
Pre-Protection Plan Flows



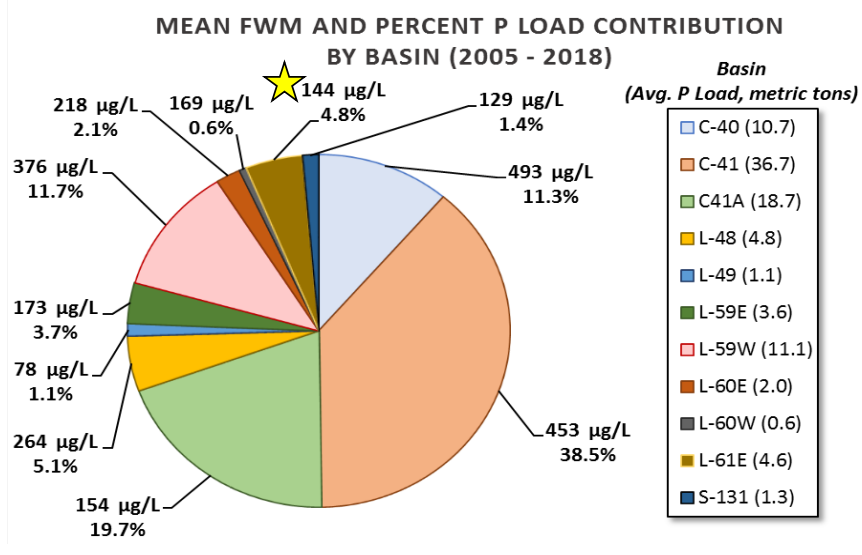
Post-Protection Plan Flows



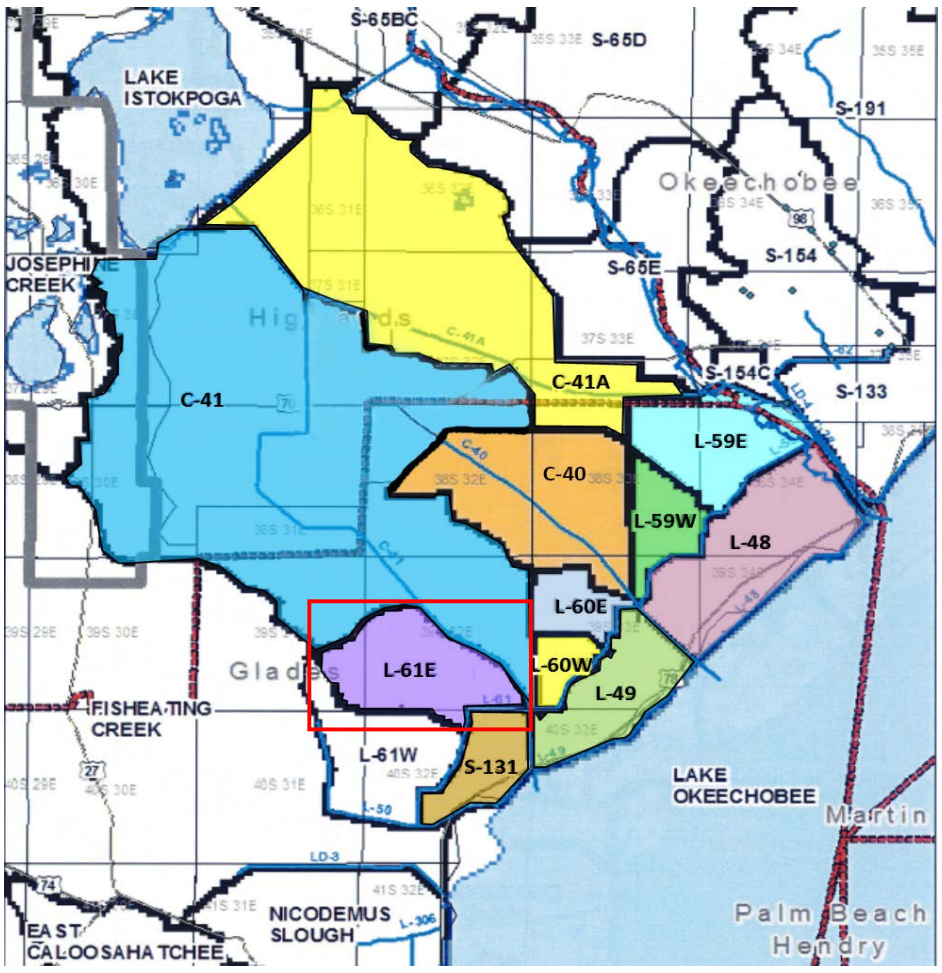
Pre-Protection Plan Loads

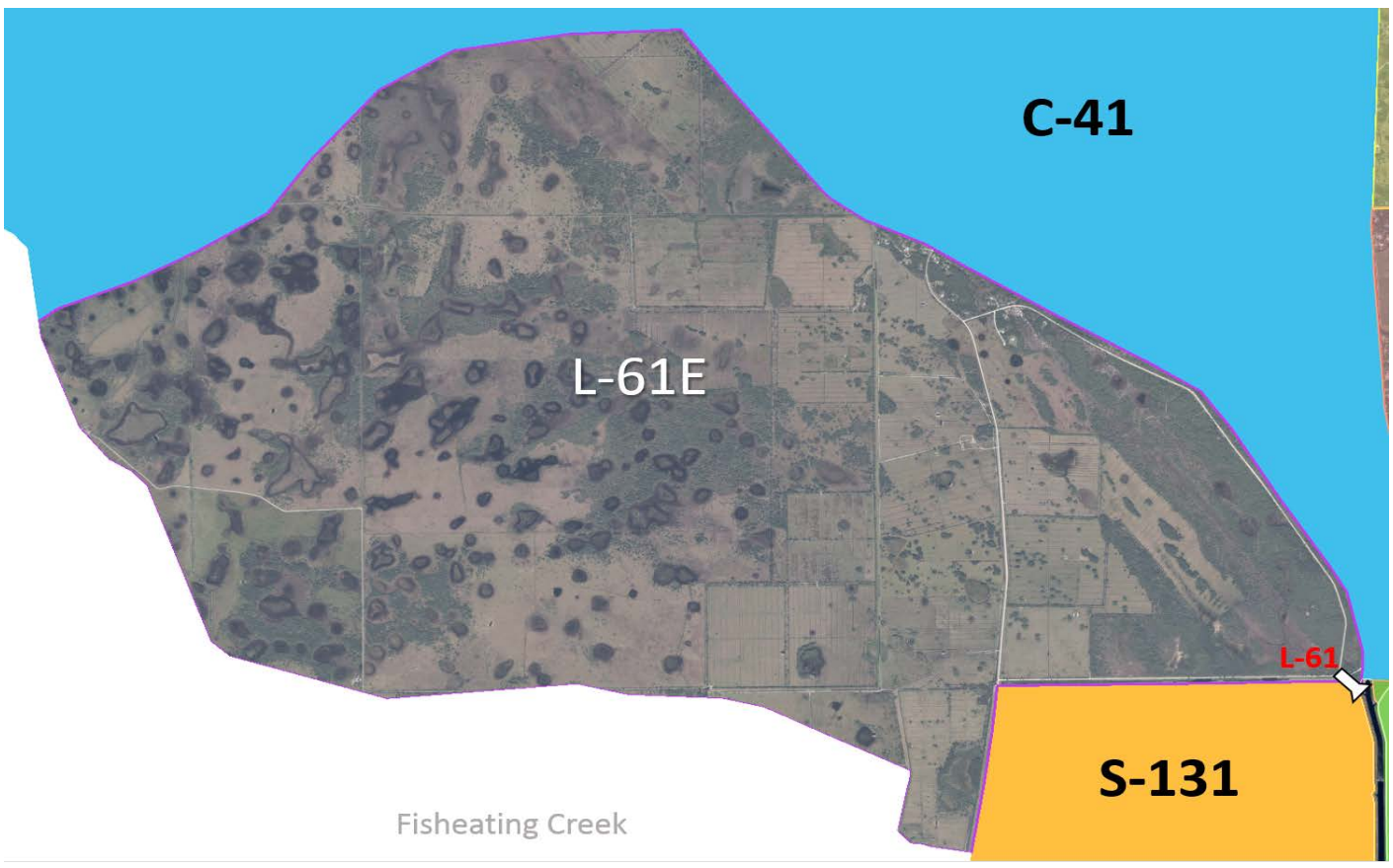


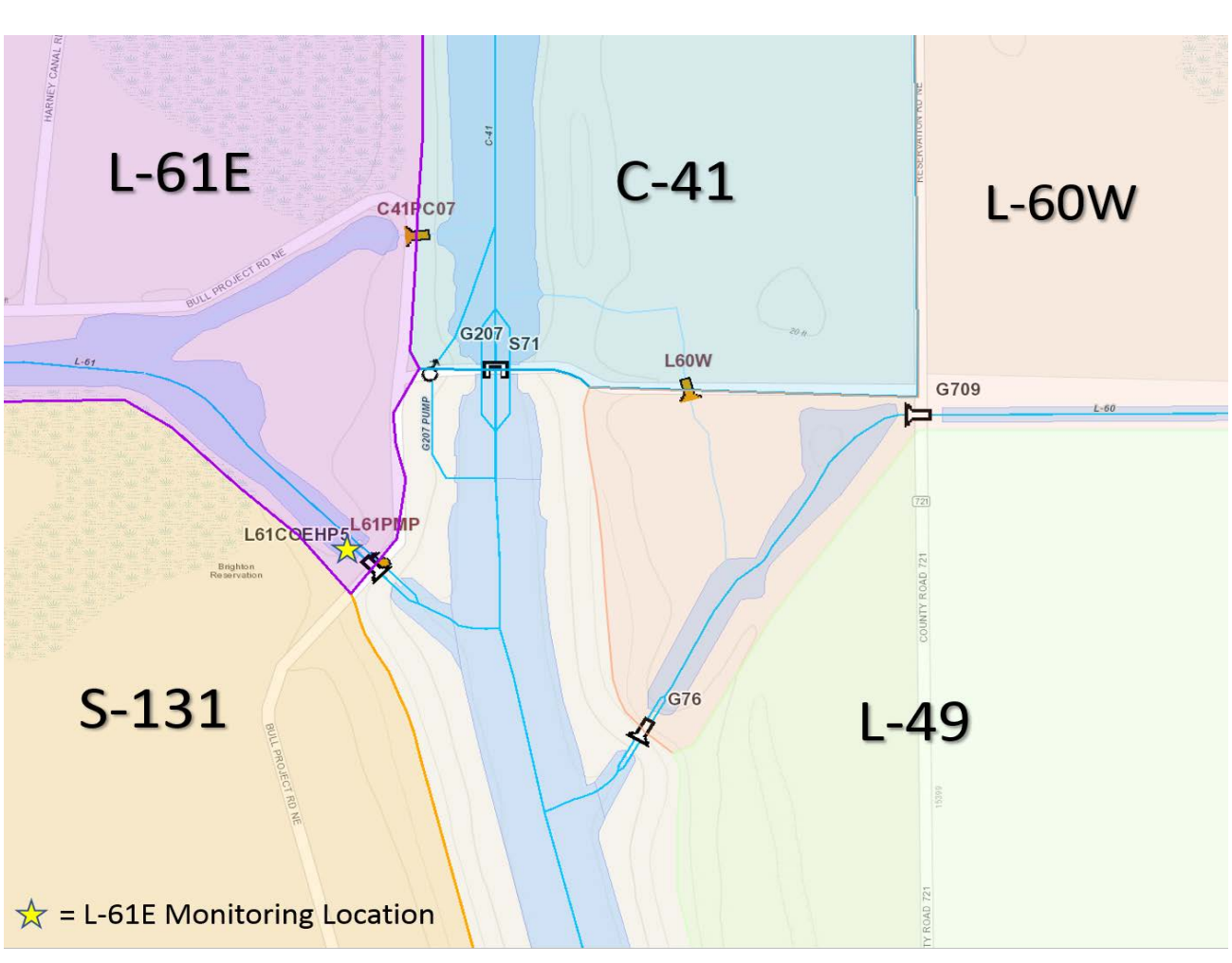
Post-Protection Plan Loads



L-61E BASIN - MAP







L-61E BASIN - STATISTICS

Summary Statistics				
	Period of Record	Pre-Protection Plan	Post-Protection Plan	
	WY1991-WY2018	WY1991-WY2004	WY2005-WY2018	
Averages				
Avg. Flow (acft/yr)	20,403	5,510	25,819	
Avg. Load (mt/yr)	3.64	1.04	4.58	
FWMC (ug/L)	145	152	144	
Avg. UAL (lbs/acre/yr)	0.56	0.16	0.70	
Medians				**Mann-Whitney Results p-values[3]**
Median Flow (acft/yr)	20,392	6,900	24,421	0.0130
Median Load (mt/yr)	2.95	1.29	4.54	0.0260
Median FWMC (ug/L)	143	152	139	0.5139
Median UAL (lbs/acre/yr)	0.45	0.20	0.69	0.0265

Highlighted cells indicate statistical significance

[3]The Mann-Whitney test is a non-parametric test alternative to the two sample t-test. It is used to test the equality around the central tendency of two data sets (pre-protection plan period and post-protection plan period). A p-value of less than 0.05 indicates that a significant difference between pre-protection plan period and post-protection plan period exists. A comparison of the median values identifies which period is higher. A median is a value at the mid-point of a distribution of observed data.

Sub-watershed Indian Prairie - Seasonal Kendall τ Results for Total Monthly Flow (ac-ft) by Basin over Three Water Year Ranges

Sub-watershed/*Basin*	1991-2018					1991-2004					2005-2018				
	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value
L-61E Basin	***51.8%***	***0.187***	***45.79***	***137***	***0.025***	77.4%	-0.095	-4.46	591	0.453	26.2%	0.124	0.00	1766	0.179

Sub-watershed Indian Prairie - Seasonal Kendall τ Results for Total Monthly P Load (kg) by Basin over Three Water Year Ranges

Sub-watershed/*Basin*	1991-2018					1991-2004					2005-2018				
	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value
L-61E Basin	51.8%	0.119	1.91	119	0.158	77.4%	0.000	-0.35	99	1.000	26.2%	0.040	0.00	258	0.564

Sub-watershed Indian Prairie - Seasonal Kendall τ Results for Monthly FWM TP (µg/L) by Basin over Three Water Year Ranges

Sub-watershed/*Basin*	1991-2018					1991-2004					2005-2018				
	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value	% Missing Months	Kendall's τ	Sen Slope	Intercept	p-value
L-61E Basin	64.6%	-0.133	-1	136	0.175	77.4%	0.143	5	107	0.321	51.8%	-0.132	-2	121	0.171

Italic red font cells indicate statistical significance

Note: The Seasonal Kendall Tau analyzes data for monotonic trends (consistent upward or downward trend) and accounts for seasonality. Typically monthly data are used to identify seasons. Probability values (p-values) are derived from the tau-statistic which identifies the direction of the trend. A p-value less than 0.05 detects statistically significant trends for a period of interest. The Sen Slope provides an indication of the magnitude of the observed trend.