INDIAN PRAIRIE - L-60E BASIN TECHNICAL SHEET			
Subwatershed: Indian Prairie			
Basin: **L-60E**	**Flow Issues[1]:** **MAYBE**	**Water Quality Issues[2]:** **MAYBE**	

Monitored Structure(s): G75

Inflow loads:

Acreage: 4,944

Percentage of Subwatershed Acreage: 2%

Percentage of Lake Okeechobee Watershed: 0.1%

[1]Flow Issues:

- Prior to WY1995 flows were estimated and no flow measurements were collected between WY1995 and WY2002; therefore, comparisons cannot be made between the pre and post-protection plan periods.

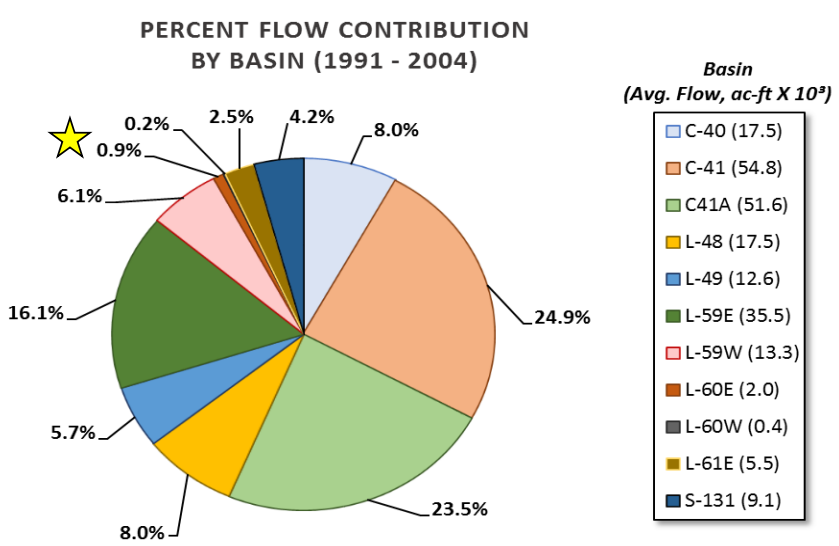
- There appeared to be an increase in flow between pre and post-protection plans periods but unable to determine if this increase is due to the missing or estimated flow measurements in the pre-protection period or another factor.

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

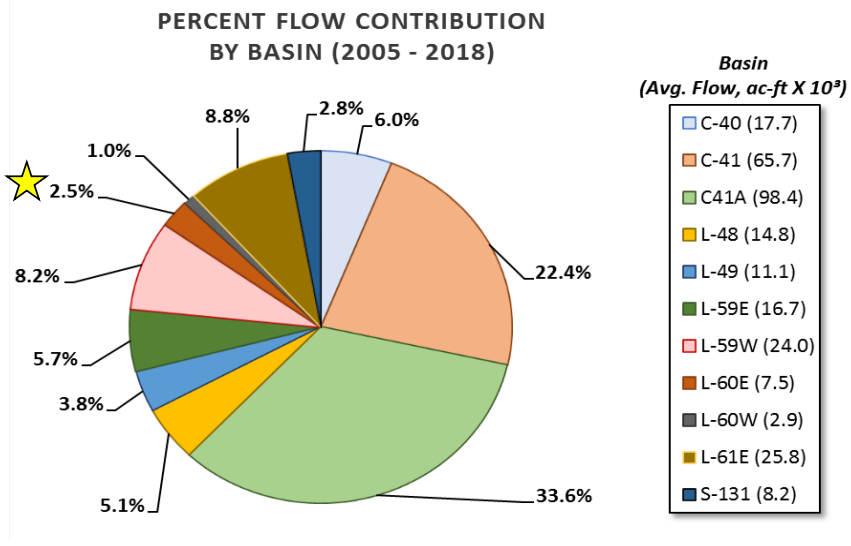
[2]Water Quality Issues:

- Increases in total phosphorus (TP) flow-weighted mean concentrations (FWMC) and loads were observed 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.

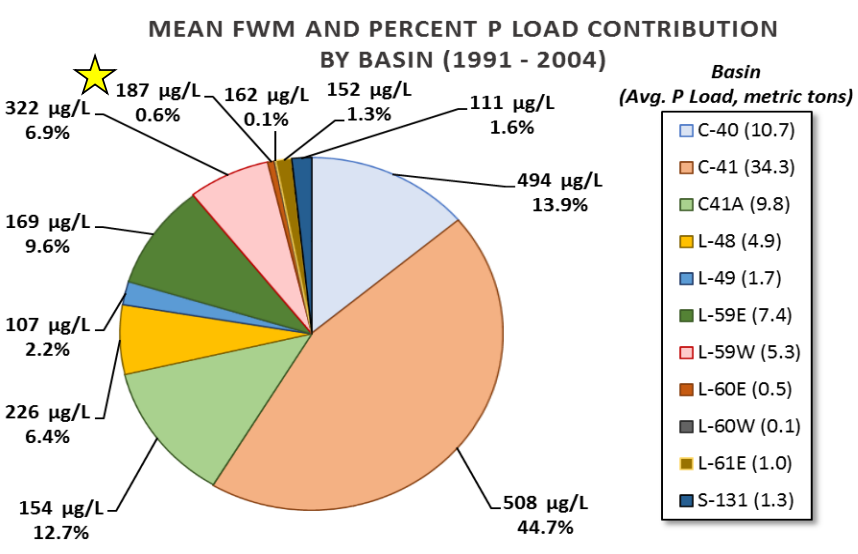
Pre-Protection Plan Flows



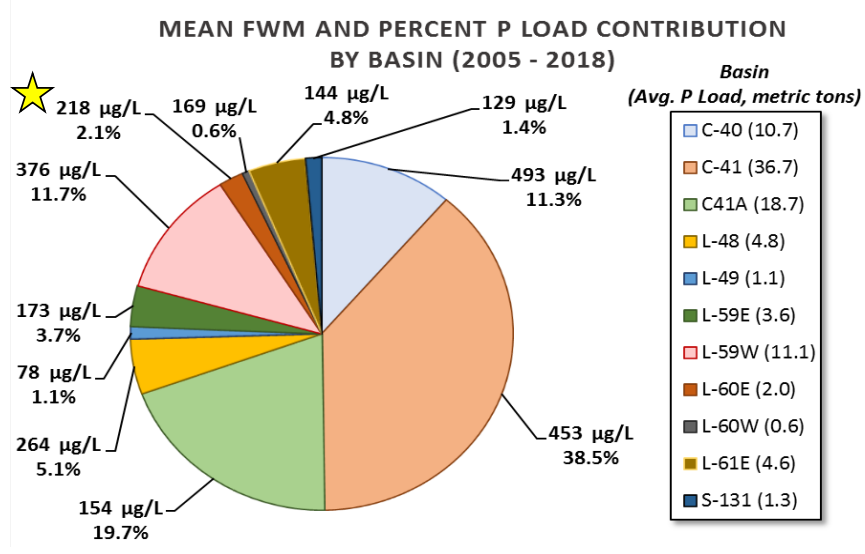
Post-Protection Plan Flows



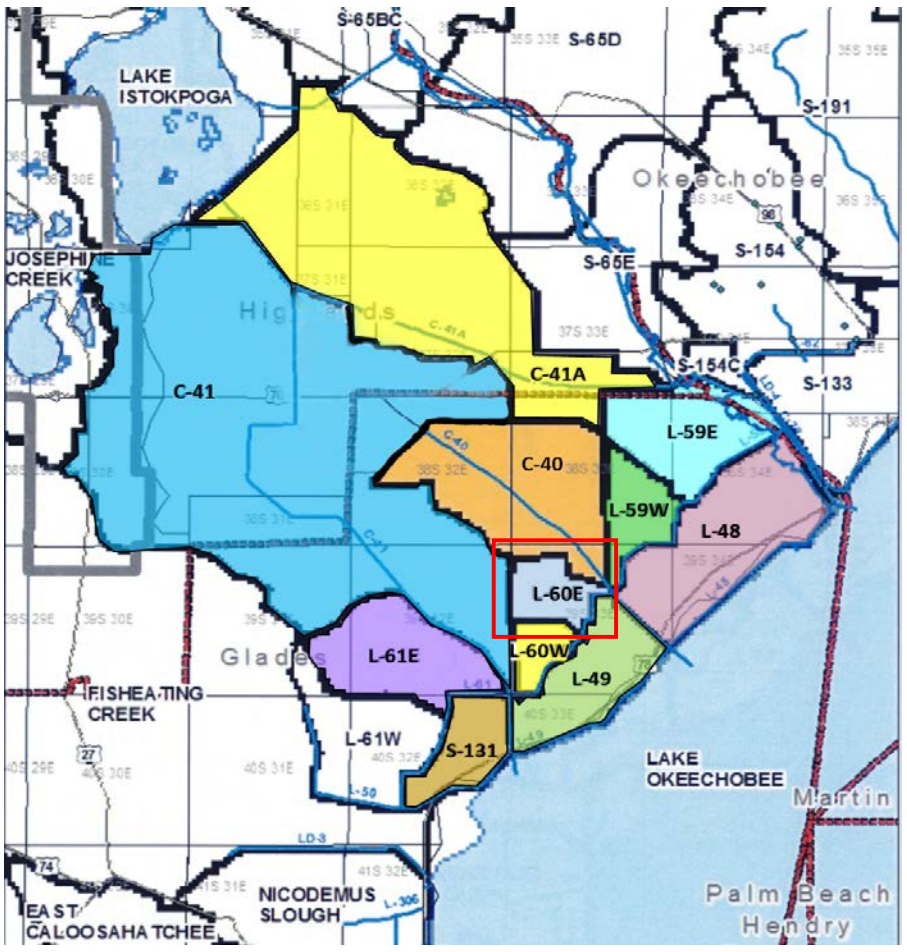
Pre-Protection Plan Loads

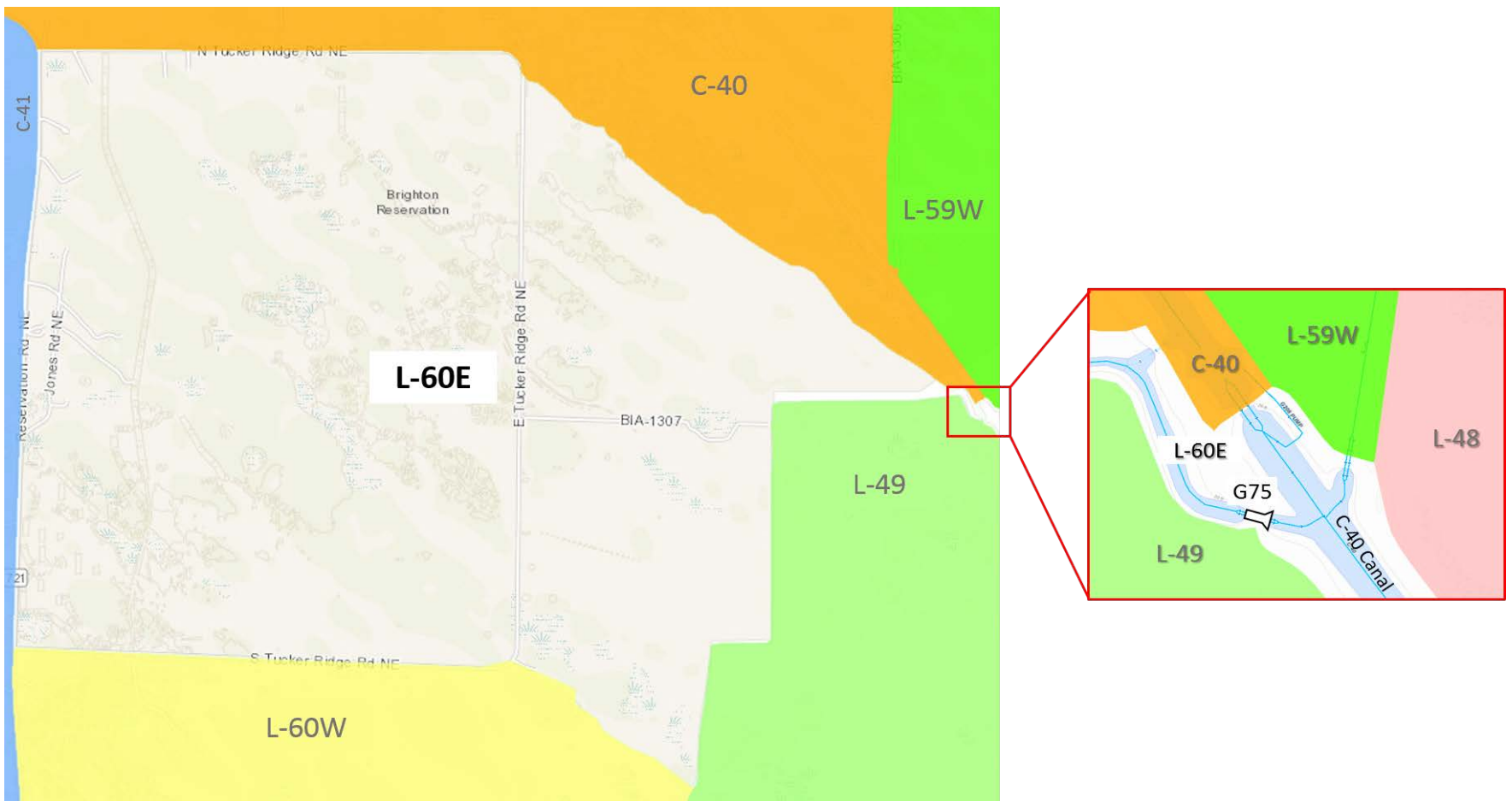


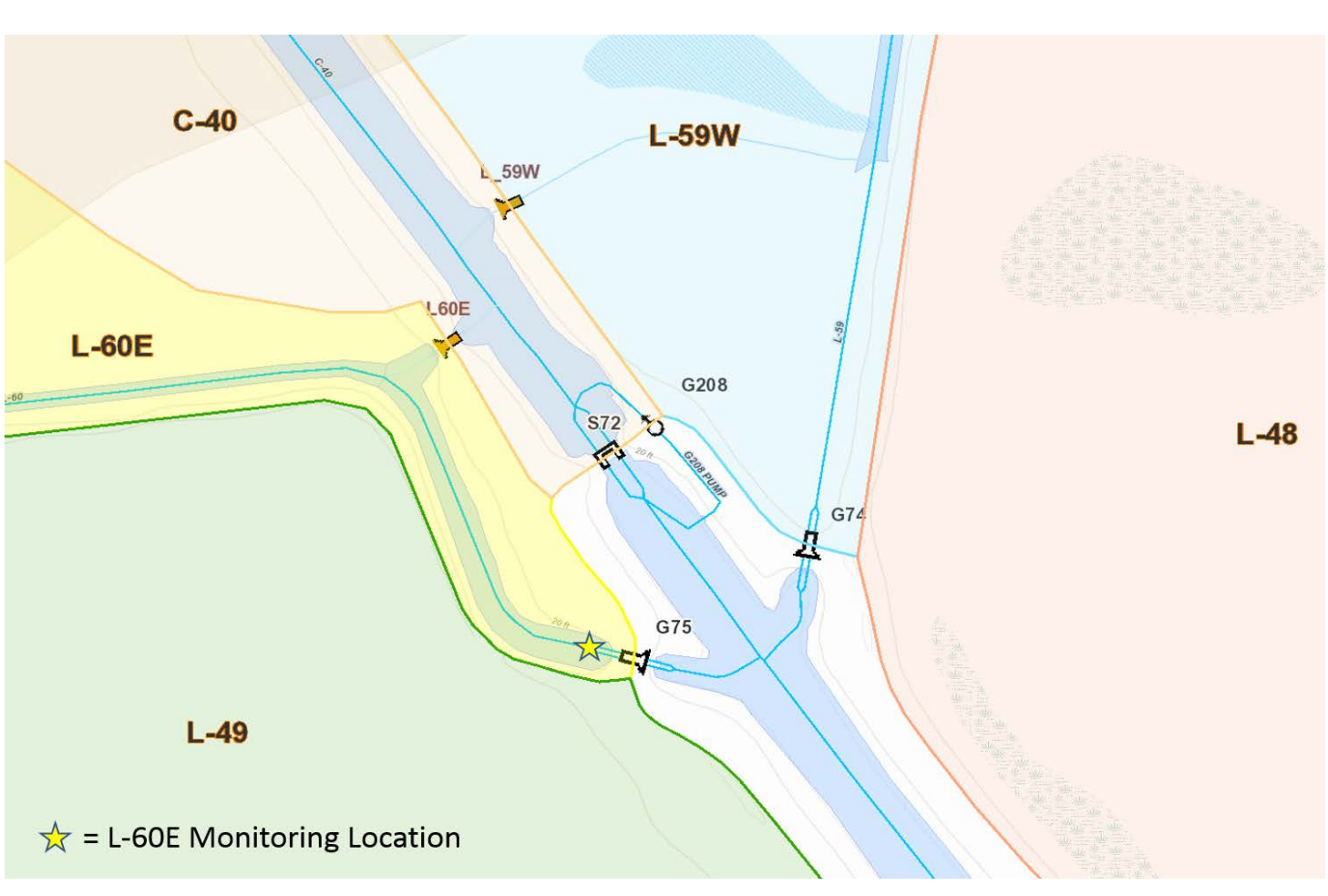
Post-Protection Plan Loads



L-60E BASIN - MAP







L-60E BASIN - STATISTICS

Summary Statistics				
	Period of Record	Pre-Protection Plan	Post-Protection Plan	
	WY1991-WY2018	WY1991-WY2004	WY2005-WY2018	
Averages				
Avg. Flow (acft/yr)	5,822	2,003	7,459	
Avg. Load (mt/yr)	1.54	0.46	2.00	
FWMC (ug/L)	215	187	218	
Avg. UAL (lbs/acre/yr)	0.69	0.20	0.89	
Medians				**Mann-Whitney Results p-values[3]**
Median Flow (acft/yr)	5,879	1,275	6,818	0.0060
Median Load (mt/yr)	1.68	0.24	1.88	0.0080
Median FWMC (ug/L)	204.31	183	224	0.0833
Median UAL (lbs/acre/yr)	0.75	0.11	0.84	0.0073

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

	1991-2018					1991-2004					2005-2018				
Sub-watershed/*Basin*	**% 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-60E Basin	31.8%	-0.006	0.00	92	0.904	***63.7%***	***-0.288***	***-5.52***	***131***	***0.015***	0.0%	0.054	0.00	83	0.579

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

	1991-2018					1991-2004					2005-2018				
Sub-watershed/*Basin*	**% 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-60E Basin	31.8%	0.007	0.00	15	0.930	63.7%	-0.216	-0.66	18	0.241	0.0%	0.059	0.00	16	0.543

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

	1991-2018					1991-2004					2005-2018				
Sub-watershed/*Basin*	**% 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-60E Basin	42.9%	0.108	2	157	0.277	64.3%	0.182	3	127	0.421	21.4%	-0.030	-1	195	0.820

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.