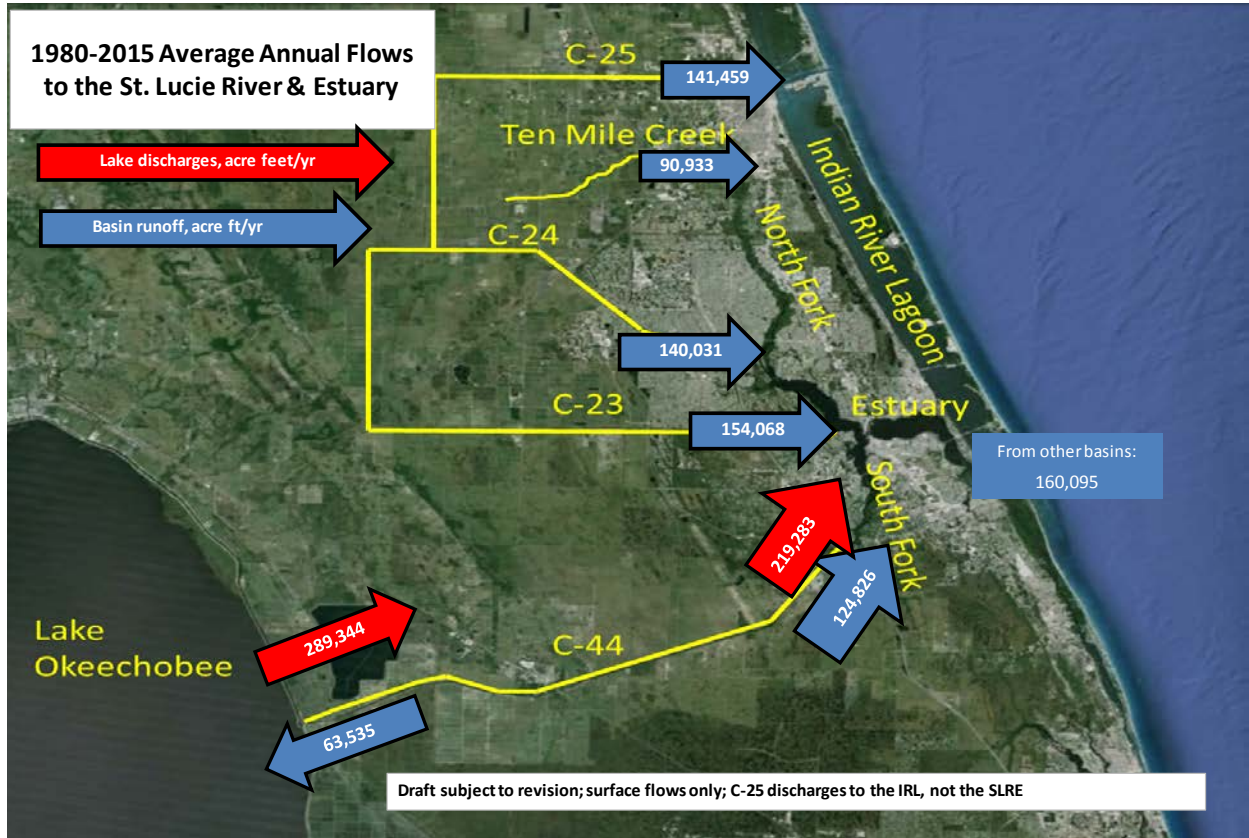


# Calendar Years 1980-2015 Summary of Flows and Loads to the St. Lucie River and Estuary

G. Goforth

Note: Caloosahatchee Estuary flows and loads begin on page 14



Calendar Year	Total into St Lucie River (omits that portion of C-25 Basin runoff that discharges into IRL)										
	Flow acre feet	Total Phosphorus		Nitrate + Nitrite		Total Kjeldahl Nitrogen		Total Nitrogen		Total Suspended Solids	
		Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg
1980	657,761	135	109,445	239	193,763	1,806	1,465,065	2,014	1,633,651	14,245	11,557,776
1981	420,651	156	81,110	98	50,781	1,537	797,599	1,630	845,880	4,583	2,378,071
1982	1,015,645	185	231,656	157	196,187	1,279	1,602,167	1,435	1,798,354	8,156	10,218,275
1983	1,862,892	181	416,153	205	470,186	1,630	3,746,554	1,835	4,216,740	41,545	95,465,589
1984	793,032	204	199,251	216	211,355	1,375	1,344,622	1,591	1,555,977	7,593	7,427,890
1985	439,222	288	156,226	169	91,521	1,336	723,948	1,505	815,469	3,259	1,765,519
1986	856,567	209	220,986	199	209,943	1,371	1,448,653	1,570	1,658,596	6,191	6,541,522
1987	708,193	188	164,443	189	165,365	1,346	1,175,397	1,535	1,340,761	2,372	2,071,754
1988	660,723	186	151,629	275	223,942	1,034	842,349	1,308	1,066,291	2,469	2,012,132
1989	376,697	203	94,412	151	70,236	1,124	522,387	1,275	592,624	3,284	1,525,929
1990	439,874	395	214,480	80	43,657	1,175	637,642	1,256	681,299	7,516	4,078,071
1991	827,399	233	237,500	138	140,652	937	956,296	1,075	1,096,948	3,480	3,552,059
1992	948,866	323	378,525	125	146,751	1,207	1,412,657	1,332	1,559,407	5,329	6,237,147
1993	901,355	232	257,626	164	182,707	1,153	1,281,491	1,309	1,455,707	3,280	3,646,602
1994	1,500,051	217	401,454	159	293,490	1,196	2,213,154	1,355	2,506,645	3,920	7,252,541
1995	2,161,508	202	538,718	181	482,638	1,426	3,800,777	1,607	4,283,414	10,938	29,163,780
1996	667,956	180	148,124	196	161,887	1,206	993,754	1,403	1,155,641	5,099	4,200,885
1997	545,636	267	180,037	100	67,438	1,436	966,475	1,513	1,018,220	3,280	2,207,578
1998	1,831,541	210	474,582	288	651,495	1,444	3,262,356	1,729	3,905,773	20,782	46,950,947
1999	1,036,651	316	404,601	183	234,138	1,305	1,669,052	1,488	1,903,190	7,482	9,567,504
2000	368,106	231	104,930	191	86,657	1,245	565,521	1,421	645,194	10,863	4,932,493
2001	605,058	395	294,677	154	114,671	1,339	999,176	1,492	1,113,847	5,551	4,142,672
2002	853,290	316	332,085	111	116,380	1,156	1,216,265	1,266	1,332,645	5,976	6,289,918
2003	1,551,967	267	510,266	156	298,237	1,115	2,133,931	1,270	2,432,034	9,192	17,597,092
2004	1,734,820	418	893,896	284	607,327	1,423	3,045,110	1,702	3,641,638	25,700	54,995,635
2005	2,392,937	293	865,003	233	688,706	1,494	4,409,291	1,727	5,097,997	23,324	68,845,934
2006	371,893	248	113,562	200	91,715	1,153	528,922	1,353	620,636	6,938	3,182,547
2007	397,990	426	209,194	110	53,758	1,277	626,772	1,413	693,799	4,697	2,305,981
2008	744,494	453	415,663	94	86,565	1,477	1,356,185	1,562	1,434,211	13,036	11,971,679
2009	444,333	301	165,213	77	42,341	1,311	718,401	1,388	760,742	4,285	2,348,624
2010	627,187	187	144,818	125	96,686	1,092	844,563	1,217	941,249	5,932	4,589,121
2011	382,731	296	139,601	145	68,531	1,372	647,752	1,517	716,284	4,327	2,042,813
2012	577,074	308	218,899	92	65,404	1,316	936,879	1,394	992,501	4,384	3,120,870
2013	1,181,044	269	391,411	129	188,360	1,280	1,864,956	1,409	2,053,316	7,162	10,433,887
2014	558,440	288	198,190	113	77,546	1,100	757,789	1,209	832,568	2,507	1,726,841
2015	568,937	254	178,352	161	113,240	1,039	729,195	1,200	842,435	3,102	2,176,697
1980-2015 Average	889,237	259	284,353	179	196,785	1,323	1,451,197	1,500	1,645,602	11,612	12,736,788

Calendar Year	Lake Okeechobee Discharges to SLRE										
	Flow acre feet	Total Phosphorus		Nitrate + Nitrite		Total Kjeldahl Nitrogen		Total Nitrogen		Total Suspended Solids	
		Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg
1980	238,877	110	32,545	21	6,172	2,265	667,504	2,648	780,362	29,000	8,544,993
1981	36,362	81	3,633	31	1,369	1,813	81,300	2,079	93,264	5,173	232,007
1982	55,404	146	9,960	60	4,124	1,701	116,271	1,762	120,395	41,951	2,866,959
1983	951,524	189	221,754	258	302,925	1,607	1,885,984	1,865	2,188,909	46,147	54,163,369
1984	250,496	142	43,813	160	49,451	1,640	506,630	1,800	556,081	15,762	4,870,298
1985	7,444	128	1,179	159	1,459	1,744	16,015	1,903	17,474	8,417	77,287
1986	6,581	139	1,128	55	447	2,488	20,200	2,543	20,647	11,320	91,895
1987	64,912	105	8,446	125	10,007	1,900	152,169	2,025	162,177	9,087	727,595
1988	163,633	148	29,795	277	55,938	1,979	399,534	2,257	455,472	7,361	1,485,775
1989	81,871	116	11,666	261	26,364	1,323	133,581	1,584	159,945	9,215	930,561
1990	5,029	176	1,094	330	2,046	1,602	9,937	1,931	11,983	17,712	109,882
1991	4,731	136	795	321	1,875	1,472	8,592	1,794	10,466	20,658	120,550
1992	25,012	76	2,337	84	2,601	1,042	32,137	1,126	34,738	15,722	485,060
1993	117,609	181	26,193	420	60,895	1,492	216,471	2,160	313,344	9,458	1,372,101
1994	224,717	129	35,748	284	78,672	1,388	384,649	1,671	463,321	14,587	4,043,377
1995	963,958	127	151,550	236	280,647	1,241	1,475,172	1,477	1,755,819	16,674	19,826,576
1996	158,265	128	24,942	195	38,039	1,186	231,562	1,381	269,601	9,393	1,833,768
1997	38,125	128	6,027	239	11,231	1,633	76,799	1,872	88,030	10,733	504,719
1998	1,042,118	212	272,734	391	503,203	1,734	2,229,047	2,126	2,732,250	35,307	45,385,704
1999	182,071	204	45,835	535	120,059	1,589	356,809	2,123	476,868	25,356	5,694,587
2000	143,896	160	28,432	164	29,060	1,445	256,569	1,776	315,225	23,278	4,131,800
2001	2,916	369	1,328	390	1,402	2,489	8,952	2,879	10,354	32,580	117,188
2002	110,240	157	21,339	180	24,470	1,412	191,992	1,592	216,462	8,601	1,169,520
2003	511,894	151	95,544	186	117,661	1,362	859,844	1,548	977,506	22,431	14,163,348
2004	558,391	216	148,997	746	513,637	1,414	973,872	2,160	1,487,509	49,388	34,017,228
2005	863,191	237	251,855	421	448,079	1,501	1,597,689	1,921	2,045,767	59,317	63,157,848
2006	80,818	251	25,004	550	54,784	1,551	154,602	2,100	209,386	23,537	2,346,351
2007	4,609	162	924	169	961	1,210	6,880	1,394	7,928	15,826	89,972
2008	105,488	222	28,903	431	56,033	1,896	246,711	2,367	307,997	40,993	5,333,997
2009	20,152	143	3,547	186	4,627	1,405	34,936	1,592	39,563	30,244	751,779
2010	260,420	126	40,494	188	60,510	1,161	372,890	1,349	433,400	11,405	3,663,649
2011	4,168	114	586	291	1,494	1,244	6,396	1,535	7,890	11,416	58,692
2012	74,591	122	11,250	301	27,715	1,063	97,839	1,365	125,554	13,654	1,256,307
2013	420,770	138	71,376	68	35,129	1,214	630,085	1,282	665,214	16,914	8,778,900
2014	6,620	161	1,311	94	771	1,274	10,402	1,368	11,173	22,980	187,653
2015	107,294	153	20,231	319	42,247	1,126	149,044	1,445	191,290	8,852	1,171,543
1980-2015 Average	219,283	173	46,730	306	82,670	1,499	405,530	1,824	493,427	30,168	8,160,079

Calendar Year	C-44 Basin Runoff to the SLRE (C-44 Basin runoff to Lake not shown here) Note: Value of 0 indicates all load came from the Lake										
	Flow	Total Phosphorus		Nitrate + Nitrite		Total Kjeldahl Nitrogen		Total Nitrogen		Total Suspended Solids	
	acre feet	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg	Conc, ppb	Load, kg
1980	33,804	150	6,247	2,559	106,686	0	0	0	0	30,492	1,271,442
1981	3,014	0	0	2,850	10,595	0	0	0	0	0	0
1982	136,703	185	31,138	172	29,071	1,402	236,355	1,574	265,426	3,020	509,250
1983	242,525	129	38,684	124	36,997	2,342	700,566	2,465	737,563	94,932	28,399,382
1984	170,426	183	38,567	331	69,487	1,327	279,065	1,658	348,552	0	0
1985	10,499	65	842	202	2,620	521	6,743	723	9,363	0	0
1986	61,248	171	12,934	316	23,883	1,107	83,633	1,423	107,515	0	0
1987	118,592	151	22,075	364	53,246	1,225	179,248	1,589	232,494	1,666	243,689
1988	222,226	159	43,526	387	106,200	418	114,510	805	220,710	0	0
1989	75,902	126	11,772	78	7,341	991	92,800	1,070	100,141	0	0
1990	11,483	97	1,376	127	1,799	462	6,545	589	8,344	0	0
1991	154,750	155	29,624	147	28,022	462	88,248	609	116,270	1,221	233,009
1992	253,965	193	60,462	195	61,173	1,127	353,130	1,323	414,303	806	252,488
1993	117,290	90	13,001	249	35,979	0	0	0	0	0	0
1994	300,720	149	55,373	155	57,394	1,041	386,204	1,196	443,598	0	0
1995	312,141	177	68,216	279	107,393	2,220	854,595	2,499	961,989	0	0
1996	135,824	152	25,529	309	51,800	1,407	235,718	1,716	287,518	0	0
1997	60,781	137	10,306	219	16,440	1,051	78,783	1,270	95,223	0	0
1998	204,558	0	0	242	60,988	416	104,947	658	165,935	0	0
1999	166,240	200	40,912	114	23,473	855	175,361	970	198,834	0	0
2000	27,716	0	0	1,033	35,302	0	0	167	5,707	0	0
2001	30,300	175	6,545	290	10,844	853	31,870	1,143	42,715	0	0
2002	90,345	225	25,043	194	21,667	654	72,846	848	94,513	0	0
2003	229,991	249	70,519	306	86,846	669	189,732	975	276,577	0	0
2004	155,129	442	84,648	95	18,114	2,158	413,029	2,253	431,143	0	0
2005	375,493	240	111,092	229	105,899	2,047	948,222	2,276	1,054,122	0	0
2006	53,308	34	2,239	203	13,381	239	15,685	442	29,066	0	0
2007	1,655	38	77	42	87	0	0	0	0	0	0
2008	64,872	504	40,350	0	0	1,015	81,248	950	75,995	0	0
2009	48,835	224	13,523	53	3,215	1,201	72,336	1,254	75,551	504	30,348
2010	95,327	299	35,213	43	5,010	1,157	136,031	1,199	141,041	0	0
2011	3,166	126	491	28	110	421	1,644	449	1,754	0	0
2012	80,895	352	35,166	65	6,439	1,518	151,425	1,582	157,864	0	0
2013	259,994	331	106,156	238	76,408	1,404	450,238	1,642	526,646	0	0
2014	100,453	292	36,228	229	28,338	1,086	134,561	1,315	162,899	456	56,459
2015	83,573	211	21,750	209	21,521	696	71,700	904	93,221	0	0
1980-2015 Average	124,826	198	30,545	239	36,771	1,217	187,417	1,422	218,961	5,592	861,002

Calendar Year	C-23 Basin Runoff (missing flow estimated from S-97 flows)										
	Flow AF	TP conc ppb	TP load kg	NOx Conc ppb	NOx Load kg	TKN Conc ppb	TKN Load kg	TN Conc ppb	TN Load kg	TSS Conc ppb	TSS Load kg
1980	244,183	135	40,564	114	34,414	1,767	532,175	1,881	566,589	2,477	746,050
1981	223,590	110	30,469	84	23,083	1,380	380,645	1,464	403,728	4,303	1,186,832
1982	241,252	149	44,328	234	69,552	1,281	381,157	1,515	450,709	5,765	1,715,686
1983	177,504	178	38,924	195	42,714	1,348	295,121	1,543	337,835	5,532	1,211,200
1984	92,810	175	20,083	151	17,314	1,174	134,425	1,325	151,739	12,042	1,378,587
1985	133,033	229	37,562	250	41,094	1,354	222,129	1,604	263,224	3,532	579,572
1986	441,336	179	97,522	205	111,385	1,382	752,401	1,587	863,785	2,048	1,114,648
1987	242,975	152	45,650	179	53,745	1,422	426,068	1,601	479,813	801	240,085
1988	77,857	190	18,264	212	20,391	1,246	119,664	1,458	140,055	1,069	102,628
1989	56,620	244	17,076	131	9,174	1,107	77,284	1,238	86,458	1,552	108,403
1990	120,259	332	49,191	115	17,082	1,180	175,031	1,295	192,113	7,786	1,154,966
1991	175,042	278	60,120	130	27,966	1,341	289,567	1,471	317,533	4,862	1,049,732
1992	216,490	495	132,123	104	27,889	1,385	369,927	1,490	397,816	10,749	2,870,289
1993	194,401	283	67,923	110	26,308	929	222,679	1,038	248,987	2,758	661,275
1994	286,306	331	116,871	152	53,577	1,462	516,476	1,614	570,053	3,113	1,099,356
1995	264,421	433	141,102	86	28,177	1,545	503,998	1,632	532,176	17,583	5,735,063
1996	95,968	256	30,315	212	25,076	1,185	140,324	1,397	165,400	4,668	552,567
1997	104,574	343	44,191	94	12,133	1,524	196,524	1,618	208,657	2,745	354,136
1998	138,362	435	74,206	172	29,295	1,387	236,743	1,559	266,038	2,479	423,110
1999	174,986	547	118,115	161	34,656	1,544	333,249	1,704	367,905	6,049	1,305,647
2000	40,154	355	17,564	91	4,483	1,705	84,439	1,795	88,922	5,063	250,792
2001	133,956	548	90,579	146	24,086	1,508	249,205	1,654	273,290	12,444	2,056,225
2002	118,347	405	59,177	73	10,658	1,465	213,935	1,539	224,593	7,561	1,103,722
2003	147,302	459	83,346	85	15,478	1,435	260,796	1,521	276,274	6,495	1,180,128
2004	206,788	691	176,246	89	22,590	1,331	339,541	1,420	362,131	39,199	9,998,685
2005	316,423	461	179,782	81	31,587	1,530	597,106	1,611	628,693	2,888	1,127,222
2006	51,020	342	21,533	122	7,668	1,709	107,541	1,831	115,209	4,634	291,656
2007	91,639	521	58,851	97	10,978	1,595	180,297	1,692	191,275	6,551	740,477
2008	118,940	564	82,733	41	6,066	1,682	246,786	1,723	252,851	10,069	1,477,272
2009	81,976	351	35,515	69	6,935	1,518	153,541	1,587	160,477	4,026	407,149
2010	64,304	271	21,466	94	7,470	1,299	103,020	1,393	110,490	3,853	305,649
2011	59,557	372	27,335	277	20,346	1,502	110,377	1,779	130,722	3,953	290,374
2012	84,597	496	51,797	84	8,735	1,565	163,286	1,648	172,021	2,881	300,649
2013	156,205	468	90,218	147	28,325	1,611	310,329	1,758	338,653	3,867	745,122
2014	114,737	407	57,595	106	15,019	1,418	200,643	1,524	215,661	2,989	422,969
2015	58,531	444	32,034	163	11,794	1,500	108,332	1,664	120,126	2,941	212,346
1980-2015 Average	154,068	338	64,177	137	26,035	1,423	270,410	1,560	296,445	6,504	1,236,119

Calendar Year	C-24 Basin Runoff to SLRE (C-24 runoff to C-25 not shown here; includes some C-25 runoff)										
	Flow	TP conc	TP load	NOx Conc	NOx Load	TKN Conc	TKN Load	TN Conc	TN Load	TSS Conc	TSS Load
	AF	ppb	kg	ppb	kg	ppb	kg	ppb	kg	ppb	kg
1980	28,135	296	10,275	256	8,889	2,788	96,754	3,044	105,642	6,000	208,226
1981	45,413	403	22,561	61	3,420	3,079	172,498	3,140	175,918	6,035	338,064
1982	243,311	233	69,958	138	41,341	1,477	443,300	1,615	484,640	9,294	2,789,254
1983	188,646	229	53,389	188	43,652	1,719	400,020	1,907	443,672	5,895	1,371,837
1984	103,203	367	46,776	296	37,646	1,607	204,534	1,902	242,179	2,527	321,638
1985	127,625	389	61,230	134	21,059	1,713	269,736	1,847	290,795	2,546	400,783
1986	99,501	380	46,624	227	27,919	2,134	261,860	2,361	289,779	28,976	3,556,382
1987	88,264	373	40,657	120	13,105	1,573	171,254	1,693	184,359	3,018	328,622
1988	53,942	382	25,431	89	5,914	1,394	92,749	1,483	98,663	2,544	169,270
1989	63,342	339	26,451	192	14,964	1,378	107,682	1,570	122,646	2,478	193,591
1990	137,364	515	87,214	36	6,075	1,455	246,464	1,490	252,540	9,073	1,537,282
1991	204,323	275	69,429	172	43,336	1,072	270,219	1,244	313,555	3,338	841,342
1992	160,425	391	77,344	88	17,392	1,519	300,658	1,607	318,050	4,407	872,069
1993	196,380	302	73,196	98	23,815	2,167	524,886	2,265	548,701	2,482	601,234
1994	283,982	255	89,246	139	48,804	1,279	448,162	1,419	496,966	2,327	815,220
1995	252,267	242	75,416	52	16,223	1,338	416,400	1,390	432,623	3,000	933,362
1996	105,518	219	28,524	124	16,199	1,347	175,321	1,471	191,520	7,536	980,802
1997	156,763	317	61,370	41	7,869	1,871	361,728	1,846	356,900	3,113	601,981
1998	186,202	277	63,632	85	19,599	1,749	401,819	1,806	414,883	1,691	388,313
1999	206,765	346	88,155	77	19,744	1,650	420,919	1,728	440,663	4,310	1,099,183
2000	50,256	318	19,740	22	1,337	1,587	98,408	1,609	99,745	4,054	251,314
2001	197,444	346	84,211	95	23,201	1,552	377,896	1,647	401,097	2,708	659,559
2002	153,570	344	65,252	43	8,239	1,486	281,470	1,529	289,709	7,846	1,486,305
2003	159,269	312	61,241	44	8,677	1,428	280,578	1,472	289,146	3,772	740,951
2004	219,327	596	161,270	38	10,148	1,749	473,040	1,754	474,451	15,980	4,323,245
2005	280,006	361	124,650	75	25,853	1,368	472,653	1,443	498,506	3,397	1,173,336
2006	50,002	440	27,134	46	2,834	1,757	108,345	1,803	111,180	2,184	134,691
2007	108,717	425	56,973	64	8,647	1,500	201,168	1,645	220,567	3,623	485,866
2008	142,918	474	83,628	32	5,625	1,596	281,325	1,594	281,045	9,028	1,591,480
2009	117,464	386	55,938	63	9,094	1,593	230,867	1,656	239,961	2,647	383,501
2010	53,468	197	12,968	124	8,188	1,245	82,083	1,369	90,271	4,192	276,507
2011	140,542	315	54,637	125	21,746	1,730	299,975	1,856	321,721	5,226	906,042
2012	125,779	330	51,122	45	7,004	1,598	247,884	1,592	246,974	4,526	702,182
2013	91,921	352	39,927	86	9,781	1,433	162,452	1,519	172,233	1,817	206,049
2014	109,814	290	39,296	41	5,584	1,329	179,996	1,354	183,342	3,811	516,268
2015	109,264	293	39,460	64	8,638	1,362	183,563	1,426	192,201	2,649	357,007
1980-2015 Average	140,031	337	58,176	97	16,710	1,568	270,796	1,659	286,579	5,233	903,965

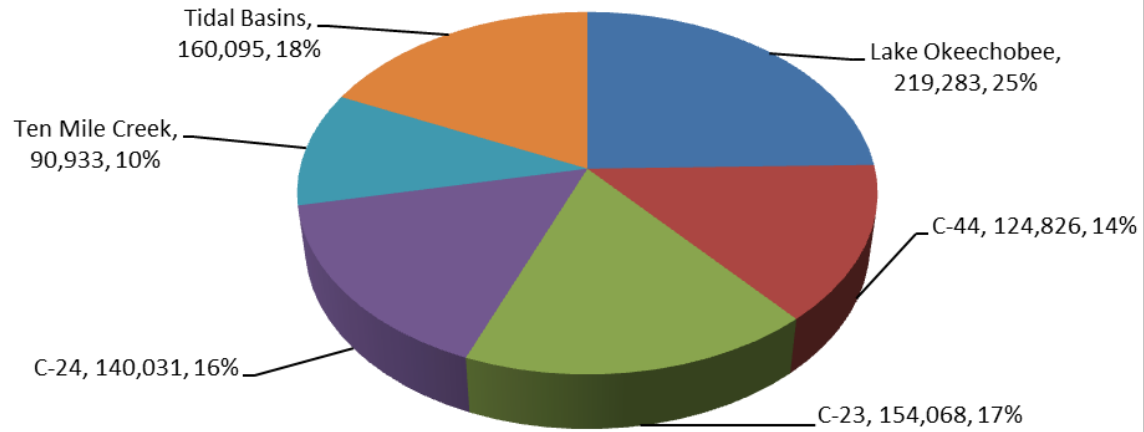
Calendar Year	Ten Mile Creek Basin Runoff (missing data estimated from nearby stations)										
	Flow	TP conc	TP load	NOx Conc	NOx Load	TKN Conc	TKN Load	TN Conc	TN Load	TSS Conc	TSS Load
	AF	ppb	kg	ppb	kg	ppb	kg	ppb	kg	ppb	kg
1980	12,663	278	4,337	114	1,784	1,047	16,347	1,161	18,131	4,297	67,116
1981	20,440	351	8,852	114	2,880	1,047	26,386	1,161	29,266	4,297	108,334
1982	109,511	234	31,649	114	15,428	1,047	141,370	1,161	156,797	4,297	580,420
1983	84,907	232	24,274	114	11,962	1,047	109,608	1,161	121,570	4,297	450,016
1984	46,450	327	18,725	114	6,544	1,047	59,963	1,161	66,507	4,297	246,191
1985	57,442	342	24,205	114	8,092	1,047	74,153	1,161	82,245	4,297	304,449
1986	44,784	335	18,526	114	6,309	1,047	57,813	1,161	64,122	4,297	237,361
1987	39,727	331	16,216	114	5,597	1,047	51,284	1,161	56,880	4,297	210,556
1988	24,279	337	10,091	114	3,420	1,047	31,342	1,161	34,762	4,297	128,679
1989	28,509	307	10,792	114	4,016	1,047	36,803	1,161	40,819	4,297	151,102
1990	61,826	428	32,656	114	8,710	1,047	79,812	1,161	88,522	4,297	327,682
1991	91,964	263	29,888	114	12,956	1,047	118,717	1,161	131,673	4,297	487,415
1992	72,205	343	30,542	114	10,172	1,047	93,211	1,161	103,383	4,297	382,694
1993	88,388	282	30,730	114	12,452	1,047	114,102	1,161	126,554	4,297	468,466
1994	99,567	249	30,608	114	14,027	1,047	128,532	1,161	142,558	4,297	527,711
1995	82,549	241	24,506	114	11,629	1,047	106,563	1,161	118,192	4,297	437,515
1996	50,582	225	14,019	114	7,126	1,047	65,297	1,161	72,423	4,297	268,091
1997	64,116	292	23,119	114	9,033	1,047	82,768	1,161	91,800	4,297	339,819
1998	71,656	265	23,383	114	10,095	1,047	92,501	1,161	102,596	4,297	379,781
1999	102,375	312	39,373	114	14,422	1,047	132,157	1,161	146,579	4,297	542,595
2000	52,506	367	23,796	85	5,477	1,036	67,114	1,121	72,591	1,656	107,251
2001	96,551	445	52,969	281	33,511	1,194	142,181	1,475	175,691	2,920	347,750
2002	203,226	394	98,728	135	33,798	1,039	260,448	1,174	294,246	5,213	1,306,775
2003	254,970	369	116,141	112	35,096	953	299,709	1,065	334,805	2,201	692,121
2004	314,061	446	172,803	64	24,949	1,162	450,148	1,226	475,098	4,242	1,643,373
2005	192,268	313	74,211	132	31,343	1,083	256,777	1,215	288,121	8,552	2,028,274
2006	67,188	239	19,827	72	5,995	860	71,276	932	77,271	2,534	210,027
2007	97,366	420	50,449	192	23,004	1,000	120,066	1,191	143,070	3,831	460,118
2008	159,577	519	102,203	66	13,011	1,465	288,274	1,531	301,285	10,073	1,982,756
2009	74,541	263	24,151	123	11,269	1,046	96,221	1,169	107,490	4,288	394,257
2010	66,024	168	13,680	106	8,600	743	60,478	848	69,079	1,500	122,160
2011	84,834	273	28,571	115	12,035	1,022	106,901	1,137	118,936	2,997	313,570
2012	91,137	247	27,769	74	8,315	1,034	116,240	1,108	124,555	3,702	416,167
2013	70,474	222	19,318	109	9,460	875	76,067	984	85,527	3,547	308,332
2014	94,949	206	24,133	112	13,174	764	89,483	877	102,657	1,500	175,680
2015	99,959	268	33,050	126	15,486	858	105,782	984	121,268	1,586	195,604
1980-2015 Average	90,933	329	36,897	114	12,810	1,047	117,386	1,161	130,196	4,297	481,950

Calendar Year	Other Basins (aka Tidal or Coastal Basins) - all values estimated from adjacent basins										
	Flow AF	TP conc ppb	TP load kg	NOx Conc ppb	NOx Load kg	TKN Conc ppb	TKN Load kg	TN Conc ppb	TN Load kg	TSS Conc ppb	TSS Load kg
1980	100,098	125	15,478	290	35,818	1,233	152,285	1,320	162,926	5,831	719,950
1981	91,832	138	15,594	83	9,435	1,207	136,769	1,269	143,703	4,527	512,834
1982	229,464	158	44,622	130	36,672	1,002	283,715	1,132	320,387	6,206	1,756,707
1983	217,785	146	39,128	119	31,937	1,322	355,254	1,441	387,191	36,740	9,869,785
1984	129,647	196	31,286	193	30,914	1,001	160,005	1,194	190,919	3,822	611,175
1985	103,180	245	31,208	135	17,196	1,062	135,172	1,197	152,368	3,170	403,428
1986	203,117	177	44,253	160	40,001	1,089	272,747	1,248	312,748	6,152	1,541,235
1987	153,722	166	31,399	156	29,664	1,030	195,373	1,187	225,037	1,694	321,207
1988	118,787	167	24,523	219	32,079	577	84,550	796	116,629	858	125,781
1989	70,453	192	16,655	96	8,377	854	74,238	951	82,615	1,637	142,272
1990	103,913	335	42,950	62	7,945	935	119,853	997	127,798	7,398	948,258
1991	196,589	196	47,643	109	26,498	746	180,953	855	207,451	3,382	820,010
1992	220,769	278	75,718	101	27,524	968	263,594	1,069	291,118	5,048	1,374,548
1993	187,288	202	46,582	101	23,259	880	203,353	944	218,121	2,353	543,526
1994	304,760	196	73,609	109	41,017	929	349,132	1,038	390,149	2,040	766,878
1995	286,172	221	77,928	109	38,568	1,258	444,048	1,367	482,615	6,321	2,231,265
1996	121,798	165	24,794	157	23,647	969	145,532	1,126	169,179	3,765	565,658
1997	121,277	234	35,024	72	10,732	1,136	169,873	1,187	177,609	2,720	406,924
1998	188,644	175	40,628	122	28,315	848	197,298	963	224,071	1,607	374,038
1999	204,215	287	72,212	86	21,782	995	250,558	1,081	272,340	3,674	925,492
2000	53,579	233	15,397	166	10,997	893	58,991	953	63,004	2,895	191,338
2001	143,891	333	59,045	122	21,627	1,065	189,072	1,187	210,699	5,420	961,950
2002	177,563	286	62,546	80	17,549	893	195,573	973	213,122	5,587	1,223,596
2003	248,541	272	83,474	112	34,479	794	243,272	906	277,725	2,676	820,545
2004	281,125	432	149,932	52	17,889	1,140	395,479	1,186	411,306	14,457	5,013,105
2005	365,556	274	123,413	102	45,945	1,191	536,843	1,292	582,788	3,014	1,359,253
2006	69,557	208	17,825	82	7,051	833	71,472	915	78,523	2,329	199,822
2007	94,004	362	41,920	87	10,081	1,021	118,361	1,129	130,959	4,567	529,549
2008	152,700	413	77,846	31	5,830	1,125	211,841	1,142	215,038	8,421	1,586,174
2009	101,364	260	32,540	58	7,201	1,044	130,500	1,101	137,701	3,052	381,590
2010	87,645	194	20,998	64	6,907	833	90,061	897	96,968	2,046	221,155
2011	90,463	251	27,981	115	12,800	1,097	122,460	1,212	135,260	4,249	474,135
2012	120,076	282	41,795	49	7,196	1,082	160,205	1,118	165,534	3,008	445,565
2013	181,679	287	64,416	131	29,258	1,052	235,784	1,183	265,042	1,765	395,484
2014	131,866	244	39,628	90	14,659	877	142,705	964	156,836	2,261	367,812
2015	110,317	234	31,826	100	13,555	814	110,773	914	124,329	1,765	240,197
1980-2015 Average	160,095	242	47,828	110	21,789	1,011	199,658	1,114	219,995	5,538	1,093,673



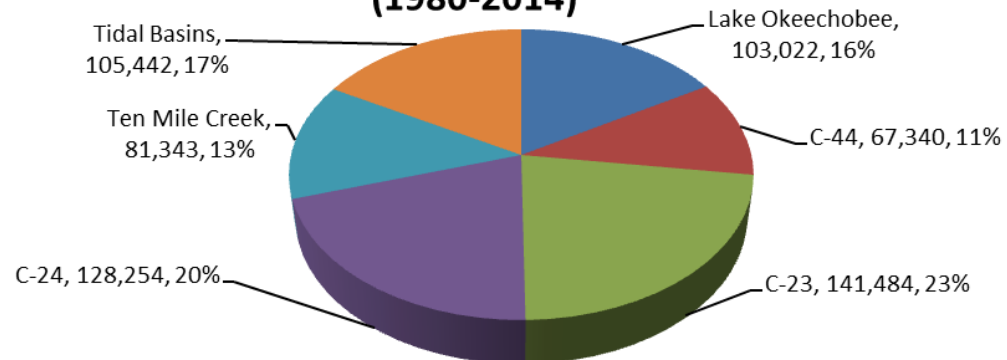
Calendar Year	C-25 Basin Runoff to IRL (discharges to IRL - not SLRE; some C-24 runoff included)										
	Flow	TP conc	TP load	NOx Conc	NOx Load	TKN Conc	TKN Load	TN Conc	TN Load	TSS Conc	TSS Load
	AF	ppb	kg	ppb	kg	ppb	kg	ppb	kg	ppb	kg
1980	33,524	64	2,652	55	2,255	1,449	59,937	1,504	62,192	4,832	199,797
1981	51,489	226	14,380	117	7,416	1,516	96,305	1,633	103,720	9,326	592,312
1982	180,724	206	45,863	153	34,049	1,398	311,544	1,550	345,593	4,957	1,104,940
1983	191,813	101	23,838	175	41,485	1,150	272,130	1,326	313,615	6,387	1,511,188
1984	99,591	135	16,619	160	19,662	1,224	150,343	1,384	170,005	3,672	451,100
1985	121,228	263	39,331	231	34,559	1,467	219,387	1,698	253,945	933	139,565
1986	122,579	145	21,907	199	30,112	1,385	209,377	1,584	239,489	1,388	209,942
1987	90,056	112	12,479	263	29,248	1,549	172,052	1,812	201,299	1,220	135,517
1988	69,956	89	7,714	146	12,557	994	85,752	1,139	98,309	1,434	123,748
1989	66,509	178	14,566	176	14,415	1,018	83,532	1,194	97,946	2,191	179,785
1990	124,012	149	22,762	207	31,715	1,106	169,239	1,314	200,954	16,232	2,483,034
1991	183,418	136	30,668	222	50,251	859	194,293	1,081	244,544	30,808	6,970,252
1992	148,958	143	26,247	164	30,043	1,039	190,849	1,202	220,893	4,009	736,639
1993	171,877	127	26,896	161	34,214	954	202,265	1,115	236,478	1,771	375,381
1994	221,425	155	42,406	117	31,988	1,083	295,920	1,201	327,908	2,710	740,082
1995	202,124	182	45,384	95	23,759	1,222	304,614	1,317	328,373	4,404	1,098,122
1996	106,657	141	18,568	212	27,933	1,005	132,188	1,217	160,120	6,031	793,410
1997	146,739	204	36,903	110	19,912	1,474	266,778	1,582	286,302	2,686	486,160
1998	172,308	240	51,064	99	21,058	1,482	314,953	1,580	335,911	2,295	487,771
1999	189,889	320	75,051	154	35,987	1,487	348,217	1,640	384,205	15,188	3,557,337
2000	40,898	167	8,432	106	5,369	1,249	63,015	1,354	68,323	6,093	307,374
2001	180,358	303	67,343	280	62,252	1,513	336,666	1,793	398,915	15,070	3,352,625
2002	150,999	273	50,897	128	23,905	1,099	204,659	1,227	228,565	4,794	892,922
2003	118,393	245	35,754	79	11,547	1,262	184,269	1,341	195,815	6,483	946,820
2004	239,464	620	183,015	34	10,143	1,840	543,497	1,874	553,640	9,183	2,712,527
2005	251,707	368	114,136	108	33,532	1,320	409,980	1,428	443,512	3,499	1,086,217
2006	39,042	202	9,713	49	2,370	1,521	73,269	1,571	75,640	2,161	104,059
2007	128,234	374	59,108	52	8,222	1,465	231,761	1,587	251,035	3,362	531,857
2008	156,094	466	89,673	36	6,932	1,665	320,552	1,685	324,411	8,230	1,584,570
2009	143,574	263	46,585	74	13,160	1,453	257,276	1,527	270,436	3,144	556,866
2010	105,864	157	20,540	26	3,396	1,158	151,221	1,184	154,617	3,601	470,202
2011	166,279	310	63,665	133	27,220	1,516	311,038	1,649	338,258	17,514	3,592,211
2012	196,600	245	59,511	83	20,027	1,342	325,430	1,425	345,457	4,207	1,020,216
2013	214,315	226	59,724	106	27,994	1,423	376,073	1,483	392,070	3,566	942,587
2014	124,362	214	32,803	93	14,259	1,305	200,192	1,394	213,803	2,812	431,312
2015	119,609	237	35,015	50	7,365	1,298	191,437	1,347	198,802	2,686	396,301
1980-2015 Average	140,852	242	41,978	130	22,509	1,321	229,445	1,449	251,808	6,604	1,147,354

### Flows to St. Lucie River & Estuary (1980-2015)



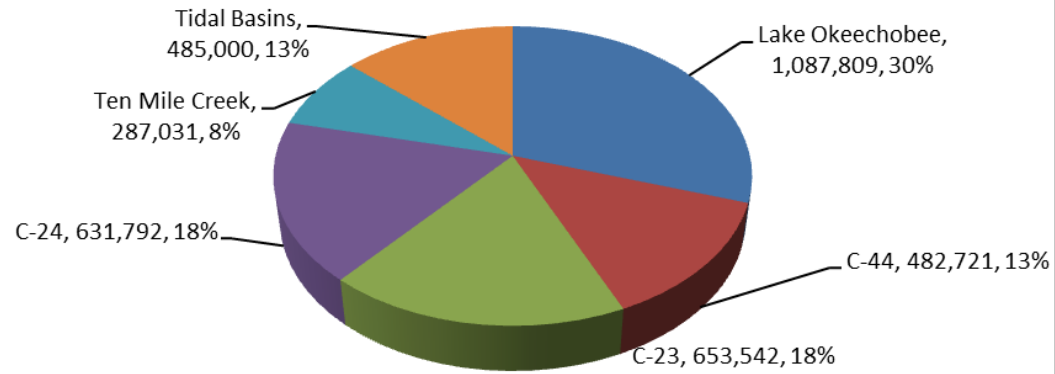
Draft - subject to revision; Flows in acre feet per year; Missing flows for C-23 Basin are estimated from C-24 flows prior to 1996. Missing flows for Ten Mile Creek estimated from C-24 flows prior to 2000; Tidal Basin flows estimated as 31% of (C23+C24+C44+Ten Mile Cree)k inflow.

### Total Phosphorus Loads to St. Lucie River & Estuary (1980-2014)



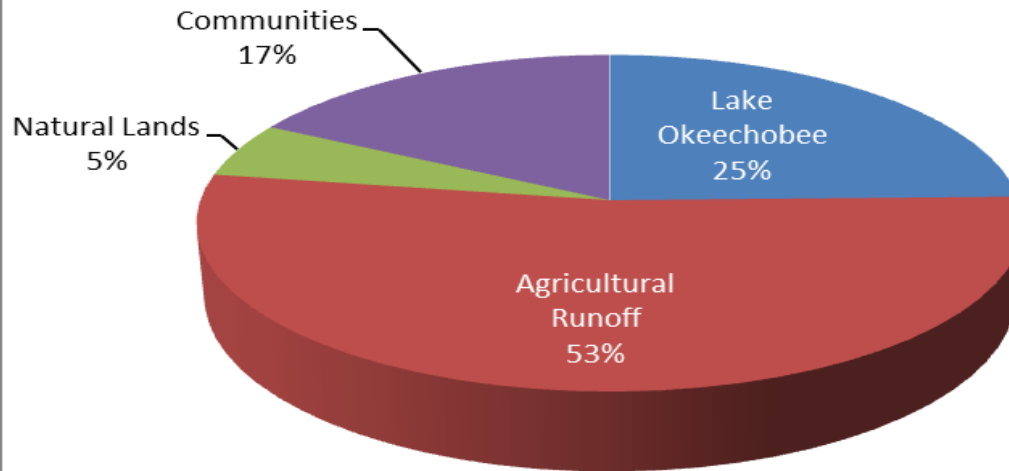
Draft subject to revision; Loads in pounds/yr; Tidal Basin loads estimated from SFWMD

### Total Nitrogen Loads to St. Lucie River & Estuary (1980-2014)



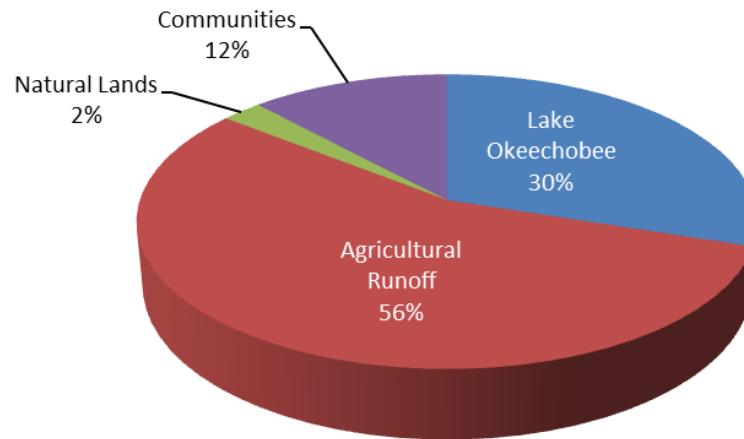
Draft subject to revision; Loads in pounds/yr; Tidal Basin loads estimated from SFWMD Protection Plan

### Flow to SLE: 1980-2015 Average Annual



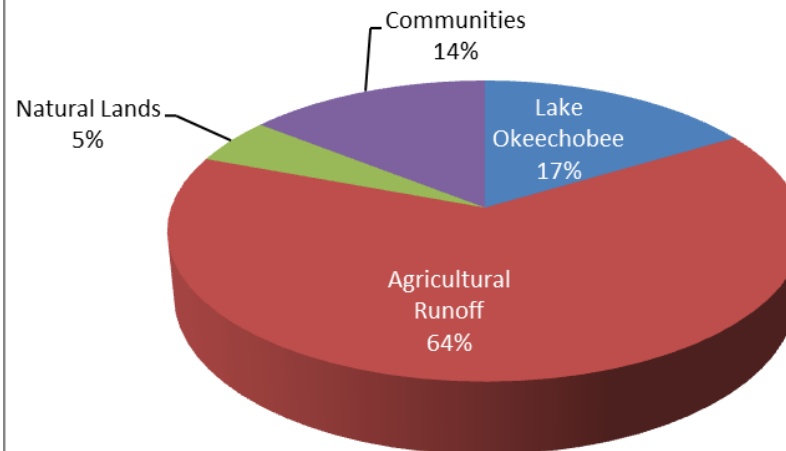
Data are provisional and subject to revision

### Nitrogen Load to SLE: 1980-2015 Average Annual



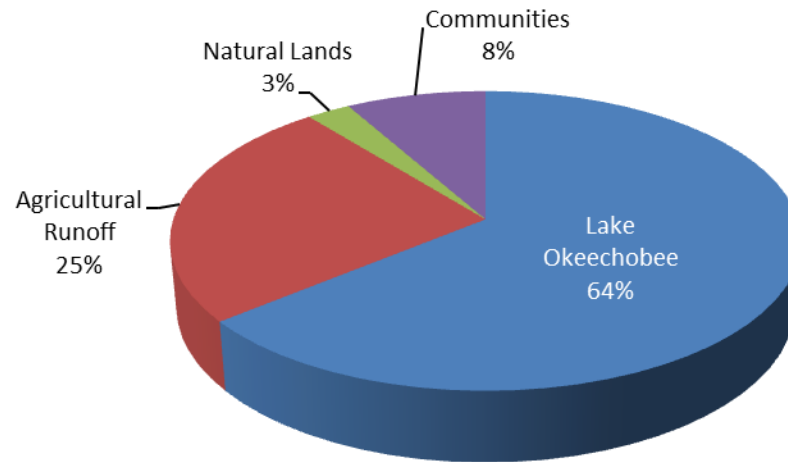
Data are provisional and subject to revision

### Phosphorus Load to SLE: 1980-2015 Average Annual



Data are provisional and subject to revision

### Suspended Solids Load to SLE: 1980-2015 Average Annual



Data are provisional and subject to revision

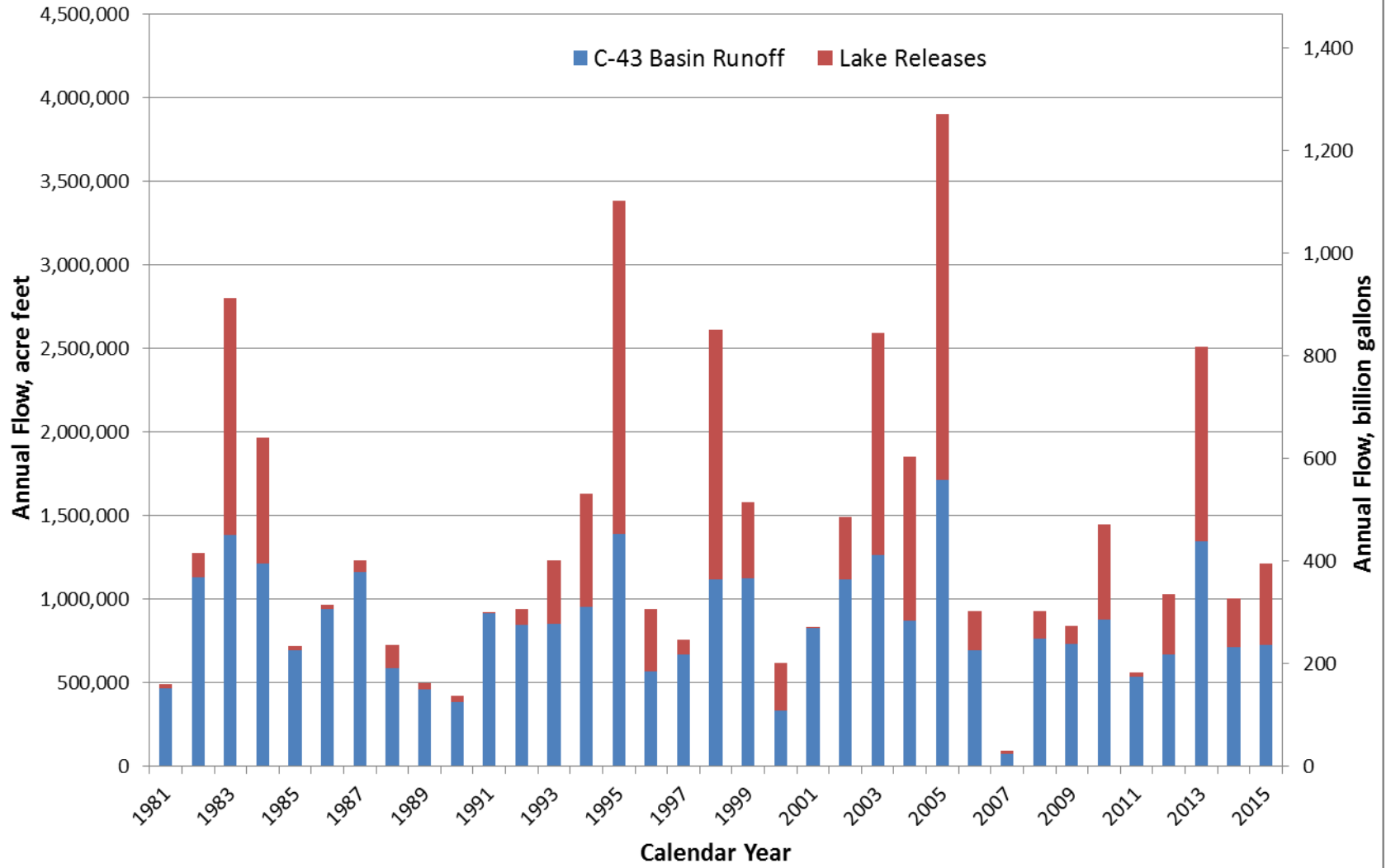
## 1981-2015 Flows and Loads to the Caloosahatchee Estuary Through S-79

Calendar Year	Lake Releases to C-43				C-43 to Lake Okeechobee				Lake Releases to Caloosahatchee Estuary				C-43 Basin runoff to Caloosahatchee Estuary			
	Flow, AF	TP Load, kg	TN Load, kg	TSS Load, kg	Flow, AF	TP Load, kg	TN Load, kg	TSS Load, kg	Flow, AF	TP Load, kg	TN Load, kg	TSS Load, kg	Flow, AF	TP Load, kg	TN Load, kg	TSS Load, kg
1981	153,507	10,646	532,473	1,744,437	77,780	19,609	212,320	492,814	21,072	1,482	72,647	251,372	467,901	101,884	1,092,437	2,936,351
1982	198,379	26,518	447,881	1,223,747	22,695	2,885	67,691	185,971	144,196	21,389	312,214	632,191	1,130,102	314,646	2,282,194	6,852,127
1983	1,484,516	122,900	3,044,533	18,249,151	0	0	0	0	1,413,373	116,938	2,900,818	16,971,165	1,386,881	229,131	2,044,231	7,010,539
1984	832,772	102,639	1,817,801	7,328,848	0	0	0	0	757,837	95,453	1,651,798	6,667,925	1,210,417	268,478	1,345,332	6,542,957
1985	91,799	6,572	185,108	423,647	0	0	0	0	20,421	1,489	39,395	107,341	696,976	172,830	2,066,484	764,565
1986	100,566	7,268	193,765	448,465	0	0	0	0	20,699	1,346	39,580	72,960	943,801	207,034	2,318,279	2,653,217
1987	107,740	8,412	203,889	499,578	0	0	0	0	67,909	5,704	126,267	285,702	1,162,850	204,151	3,016,623	1,885,796
1988	235,386	18,548	375,381	852,615	0	0	0	0	138,939	7,871	205,879	147,584	588,238	132,050	1,154,906	531,982
1989	151,866	13,428	264,020	875,588	659	183	1,100	2,667	31,978	2,510	50,077	107,357	463,543	114,926	940,050	2,046,632
1990	120,575	13,947	238,257	3,614,065	18,081	2,082	43,717	73,738	37,036	5,199	87,841	2,177,962	386,915	95,858	849,762	1,364,696
1991	63,594	7,285	136,244	536,214	0	0	0	0	7,709	1,041	18,946	77,078	914,555	192,174	1,809,746	3,339,441
1992	193,275	22,891	344,805	1,017,901	0	0	0	0	95,203	15,452	185,137	504,715	848,288	391,080	2,013,672	9,477,624
1993	500,243	30,744	1,365,893	3,893,852	0	0	0	0	379,360	22,916	1,164,612	2,845,675	851,227	159,090	1,169,504	0
1994	770,253	50,664	1,398,797	3,718,993	0	0	0	0	678,712	44,902	1,239,555	3,016,247	954,701	171,691	1,812,102	1,466,894
1995	2,110,115	113,464	4,311,356	15,544,254	0	0	0	0	1,989,084	106,827	4,115,663	14,794,525	1,390,797	207,244	1,366,865	1,124,209
1996	474,489	46,981	801,430	6,549,267	0	0	0	0	372,607	37,739	631,208	1,741,102	568,402	91,767	1,058,240	0
1997	158,049	16,180	393,537	2,605,387	0	0	0	0	85,157	8,577	251,378	1,399,364	671,154	106,212	1,210,490	0
1998	1,618,472	135,551	2,988,851	23,622,779	0	0	0	0	1,492,991	124,729	2,761,130	4,836,039	1,120,732	172,047	1,547,925	0
1999	564,103	52,429	945,273	9,514,739	0	0	0	0	456,906	43,278	764,843	8,051,644	1,121,914	192,218	2,050,805	0
2000	477,520	104,667	1,786,720	38,579,542	2,055	174	3,928	23,634	287,065	73,086	839,555	5,607,118	332,811	52,719	0	0
2001	72,771	9,027	171,973	980,139	85,470	13,668	201,231	1,289,087	10,313	1,329	21,957	77,463	825,501	197,834	1,725,523	2,442,981
2002	466,051	57,360	974,795	6,406,382	0	0	0	0	373,142	48,237	787,402	5,436,618	1,117,978	246,617	2,323,149	4,352,838
2003	1,396,712	101,480	2,454,036	19,189,543	0	0	0	0	1,326,564	95,442	2,328,923	18,263,812	1,263,196	238,361	1,917,855	1,777,956
2004	1,120,738	127,286	2,146,737	20,264,965	0	0	0	0	982,733	113,636	1,891,958	14,245,928	869,575	97,969	1,321,639	0
2005	2,266,434	384,646	4,606,886	66,816,899	0	0	0	0	2,188,263	370,748	4,440,045	51,664,949	1,710,998	314,431	2,739,402	0
2006	363,546	67,552	756,173	11,651,499	0	0	0	0	232,890	43,629	487,286	4,582,105	693,938	149,866	1,337,048	0
2007	92,364	11,900	170,592	2,084,520	101,514	14,676	193,666	733,435	18,167	2,591	33,588	355,289	76,496	21,153	133,269	0
2008	223,244	56,948	522,654	2,261,309	66,129	10,377	134,576	363,376	167,760	49,515	408,517	1,460,761	761,650	227,412	1,465,501	1,195,073
2009	234,848	30,182	506,307	4,265,718	10,312	1,793	22,911	118,923	107,153	14,897	241,592	1,803,797	730,247	158,155	1,303,018	554,399
2010	661,930	76,656	1,333,227	25,273,632	0	0	0	0	572,185	69,354	1,174,069	5,887,610	877,541	139,741	1,226,246	0
2011	94,848	9,053	168,775	843,161	128,021	26,165	266,073	467,314	26,363	2,734	46,877	188,461	535,742	101,460	869,003	1,579,643
2012	485,072	50,030	908,684	3,353,371	0	0	0	0	362,054	40,047	693,032	2,227,295	669,120	130,567	1,195,367	971,853
2013	1,225,618	110,261	2,003,604	9,319,993	0	0	0	0	1,163,569	105,679	1,906,437	8,927,552	1,344,519	268,567	2,344,287	3,395,037
2014	372,583	35,977	648,865	2,507,788	0	0	0	0	293,546	29,288	514,242	1,927,114	713,158	140,640	1,094,926	176,048
2015	592,609	65,746	975,194	8,819,293	0	0	0	0	486,946	54,434	798,150	3,193,987	726,561	114,719	1,049,481	0

Notes: 1. Loads associated with Lake releases to estuary are based on concentrations measured at S-77. C-43 Basin runoff loads are calculated as loads from S-79 minus loads from Lake releases, which may result in some negative annual values if the concentration at S-79 is less than the concentration at S-77; in those cases the negative annual values are replaced by 0 and the Lake loads reduced by an equal amount.

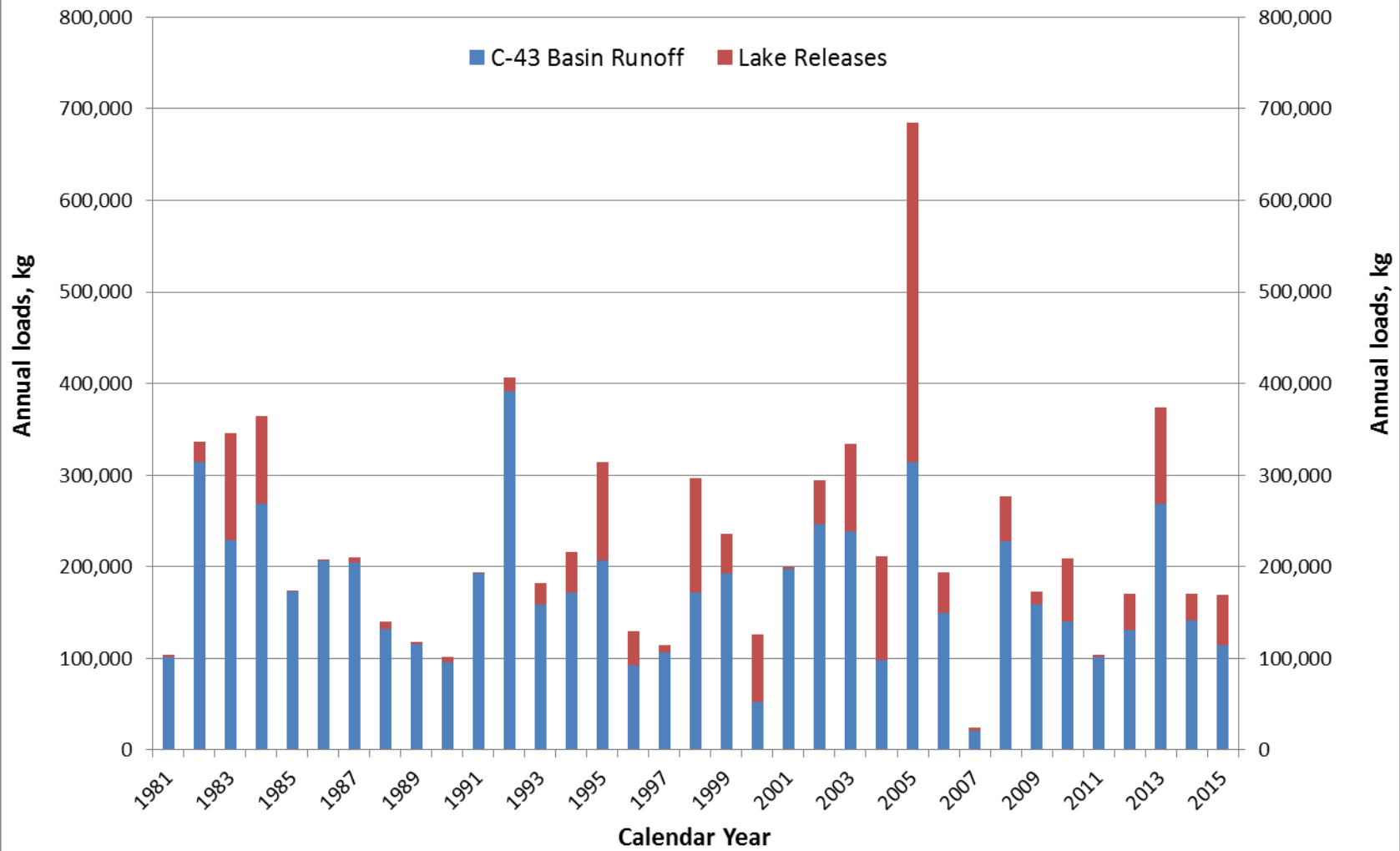
## Flows to the Caloosahatchee Estuary

For the 35-year period 1981-2015, Lake releases made up 36% of flows through S-79 into the Caloosahatchee Estuary.



## Phosphorus Loads to the Caloosahatchee Estuary

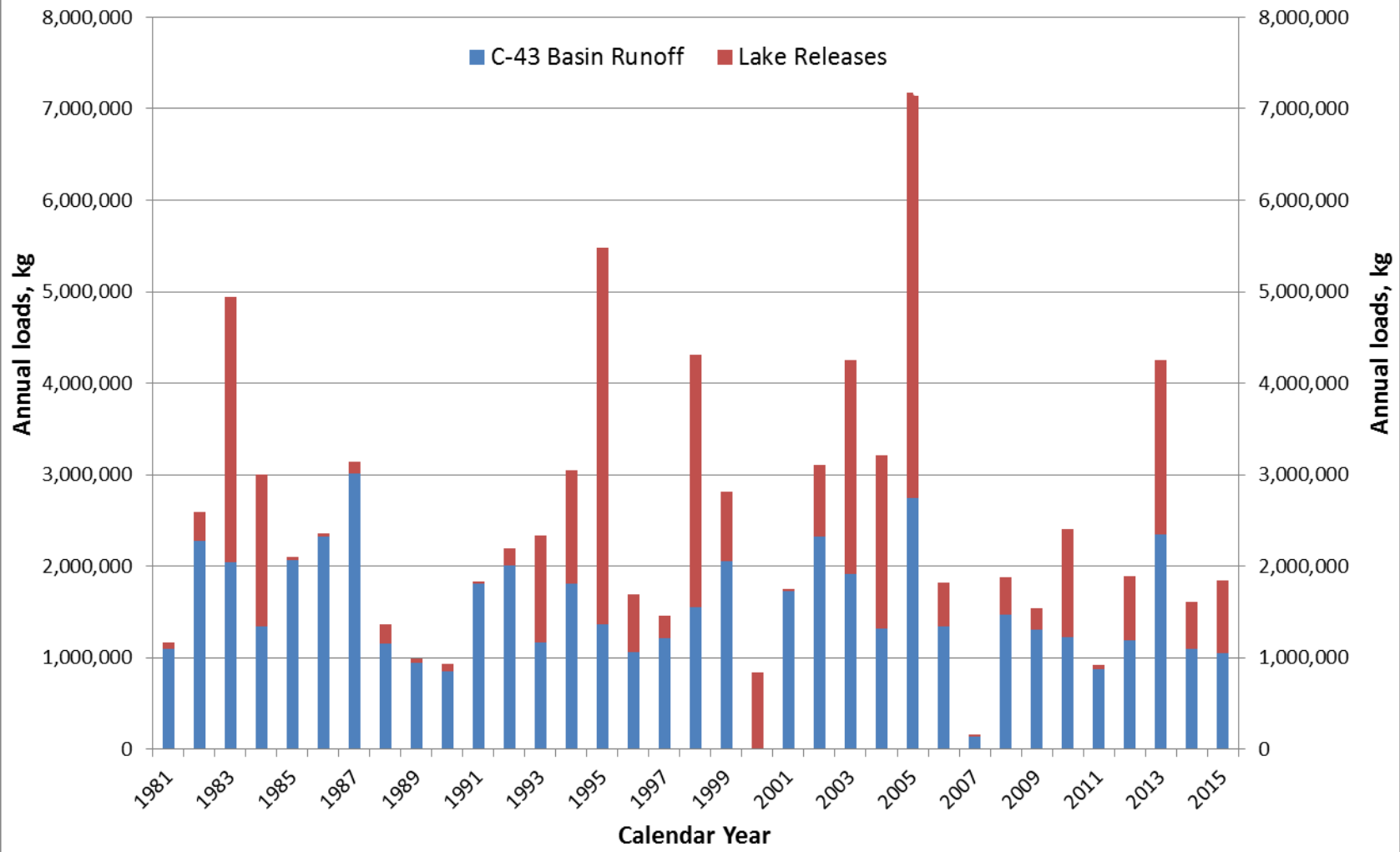
For the 35-year period 1981-2015, Lake releases made up 23% of total phosphorus loads through S-79 into the Caloosahatchee Estuary.





# Nitrogen Loads to the Caloosahatchee Estuary

For the 35-year period 1981-2015, Lake releases made up 38% of total nitrogen loads through S-79 into the Caloosahatchee Estuary.



## Total Suspended Solids Loads to the Caloosahatchee Estuary

For the 35-year period 1981-2015, Lake releases made up 75% of total suspended solids loads through S-79 into the Caloosahatchee Estuary.

