Annual Inlet Report

Office of Resilience and Coastal Protection Florida Department of Environmental Protection

August 2024

ANNUAL INLET REPORT

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Introduction

Section 161.143 (5) Florida Statutes (F.S.) states: "The department shall update and maintain an annual report on its website concerning the extent to which each inlet project has succeeded in balancing the sediment budget of the inlet and adjacent beaches and in mitigating the inlet's erosive effects on adjacent beaches. The report must estimate the quantity of sediment bypassed, transferred, or otherwise placed on adjacent eroding beaches, or in such beaches' nearshore area, for the purpose of offsetting the erosive effects of inlets on the beaches of this state."

Elements of the Report:

The order of the Annual Inlet Report is listed by region, starting with inlets in the Northeast Atlantic Coast Region moving south along the east coast and then west to east in the Panhandle Region and then north to south along the Southwest Gulf Coast Region. One can view the table of contents to find a specific inlet. Elements of the Annual Inlet Report include the inlet management plan's (IMP) adoption year, IMP updated year, annual bypass numbers by year, bypass objective, annualized volume, cumulative volume, cumulative objective, surplus/deficit volume and the percentage of the bypass objective met. The Annual Inlet Report highlights the surplus and/or deficit of material that is being bypassed on an annual basis to each side of an inlet that is actively managed. The bypass objective is listed in the first table for each inlet and will state if the bypass objective is from the Strategic Beach Management Plan (SBMP). The IMP is based upon an inlet study's sediment budget that was sponsored by a local government entity, to determine how best to mitigate the erosive effects of the altered inlet in order to bypass beach quality sand to the adjacent eroded beaches. All bypass data submitted to or that is available to the department was utilized through 2022; data for some inlets may not be available at the published time of this report. Beach nourishment is another management strategy for Florida's eroded beaches and the sand volumes associated with these projects can be found in the SBMP. In some cases, beach nourishment projects adjacent to inlets have mitigated some or all of the inlet effects. The IMPs can be found on the department's web page. The department and/or local governments sponsor inlet management studies and inlet reports that can be viewed or downloaded from this OCULUS folder (use the public login tab to enter site). A full listing of Florida's inlets (66) along the Atlantic Coast and Gulf Coast can be viewed in Table's 1 through 4 of the SBMP's Introduction within the Florida Inlets section.

It should also be noted that the department recognizes the language found in section 161.142 F.S. for this report regarding inlet sand bypassing activities and historical sand deficits caused by inlets in that, "The Legislature recognizes the need for maintaining navigation inlets to promote commercial and recreational uses of our coastal waters and their resources. The Legislature further recognizes that inlets interrupt or alter the natural drift of beach-quality sand resources, which often results in these sand resources being deposited in nearshore areas or in the inlet channel, or in the inland waterway adjacent to the inlet, instead of providing natural nourishment to the adjacent eroding beaches. Accordingly, the Legislature finds it is in the public interest to replicate the natural drift of sand which is interrupted or altered by inlets to be replaced and for each level of government to undertake all reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. **Such activities cannot make up for the historical sand deficits caused by inlets but shall be designed to balance the sediment budget of the inlet and adjacent beaches and extend the life of proximate beach-restoration projects so that periodic nourishment is needed less frequently.** Therefore, in furtherance of this declaration of public policy and the Legislature's intent to redirect and recommit the state's comprehensive beach management efforts to address the beach erosion caused by inlets,"

The intent of section 161.142 F.S. and the IMP strategies is to mitigate the contemporary inlet effects, not the historical effects of an inlet.

Northeast Atlantic Coast Region

Figure 1: St. Augustine Inlet ebb shoal being dredged to bypass material south to construct the St. Augustine Beach nourishment project. Photo by Guy Weeks (DEP), February 2018.

St. Marys River Entrance

Table 1: St. Marys River Entrance Inlet Management Plan (IMP) and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (Cubic Yards)	Annual Bypass Objective South (Cubic Yards)
Nassau	St. Marys River Entrance	1998	0	554,000

Table 2: St. Marys River Entrance summary of sand bypass volumes, since 1998.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	3,883,865
Cumulative Objective:	0	14,404,000
Annualized Volume Bypassed:	0	149,379
Surplus (Deficit):	0	-10,520,135
Percent Objective Met:	N/A	26.96%

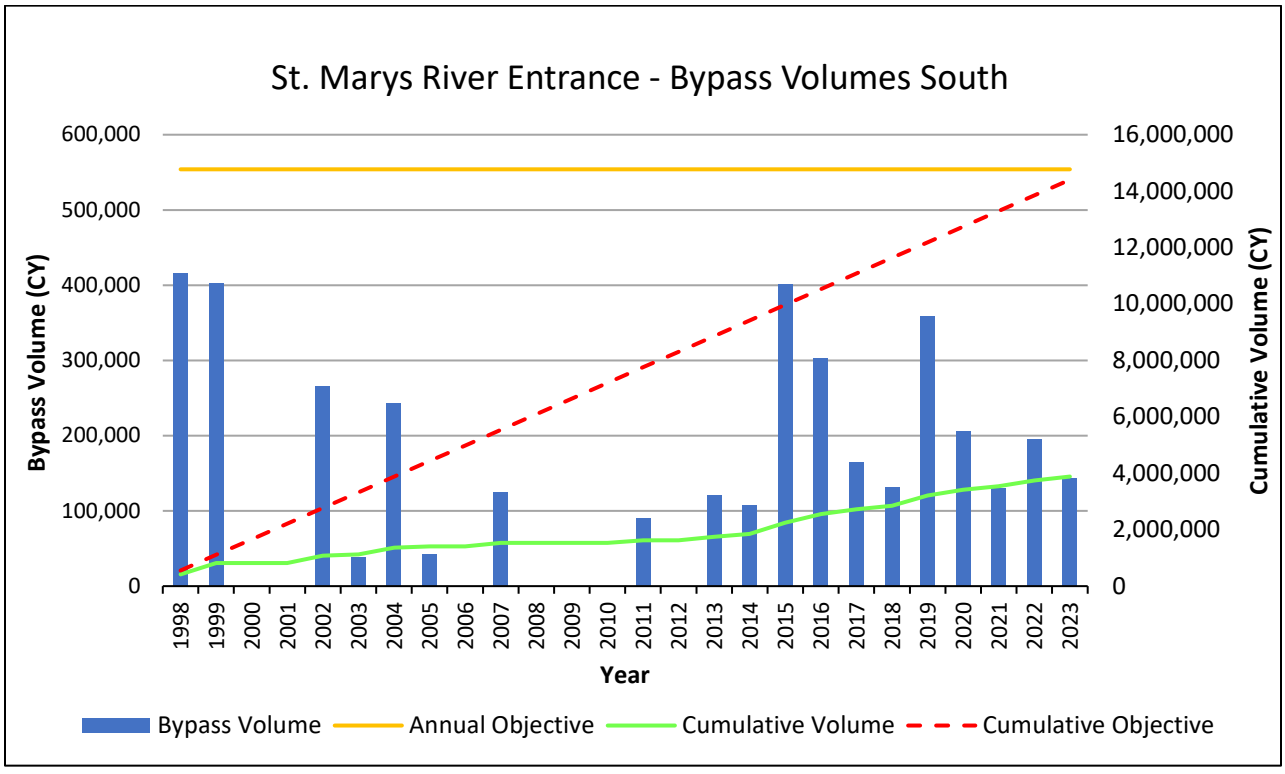

Figure 2: St. Marys River Entrance bypass volume, annual objective, cumulative volume and cumulative objective.

St. Augustine Inlet

Table 3: St. Augustine IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
St. Johns	St. Augustine	1998	0	510,000
St. Johns	St. Augustine	2014	92,667	185,333

Table 4: St. Augustine Inlet bypass summary of sand bypass volumes, since 1998 (south) and 2014 (north).

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	1,600,369	9,946,525
Cumulative Objective:	926,670	10,013,330
Annualized Volume Bypassed:	160,037	382,559
Surplus (Deficit):	673,699	-66,805
Percent Objective Met:	172.70%	99.33%

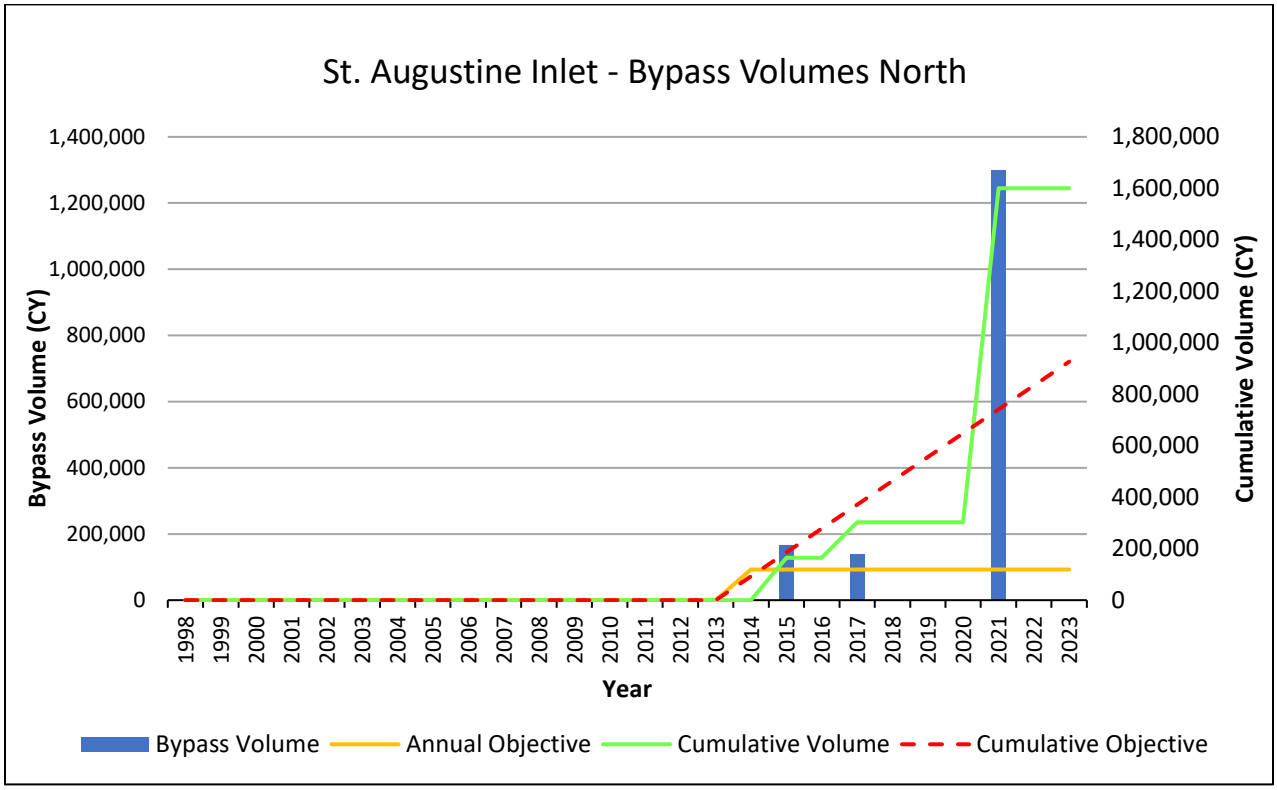

Figure 3: St. Augustine Inlet bypass volume, annual objective, cumulative volume and cumulative objective north of inlet.

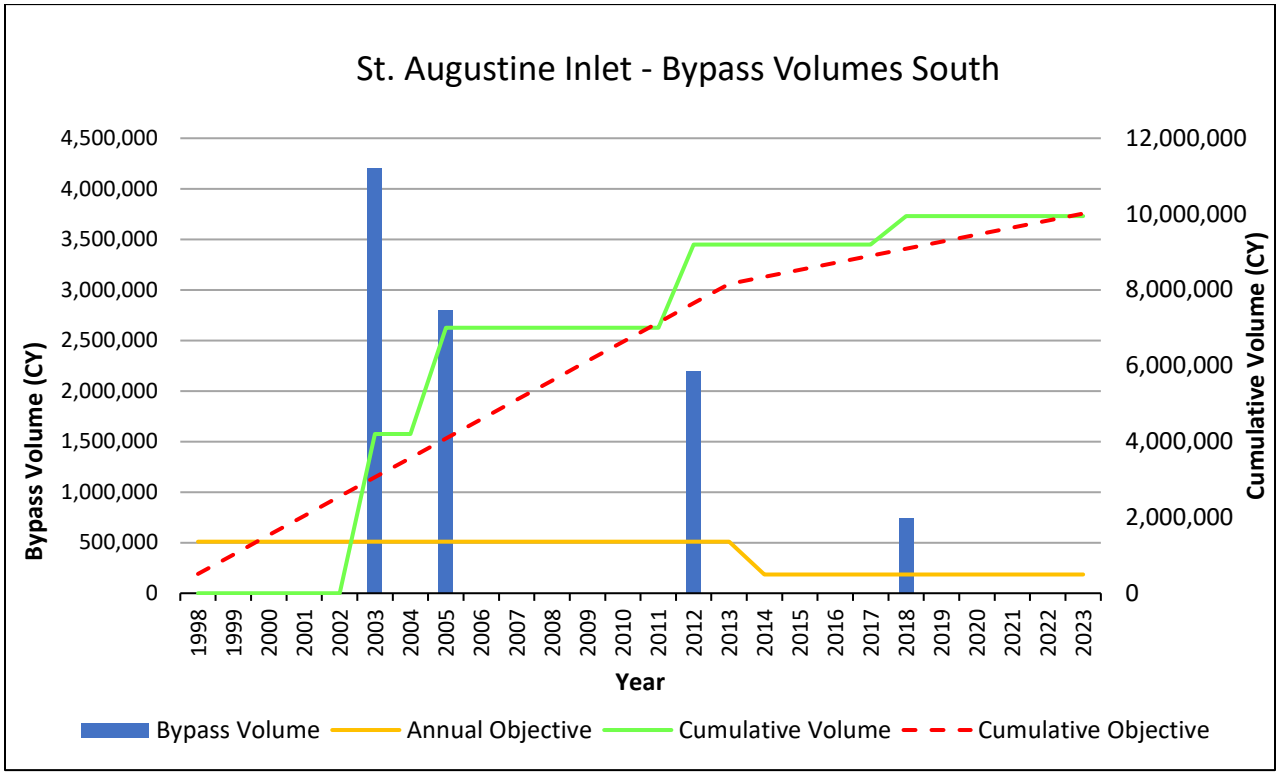

Figure 4: St. Augustine Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Ponce de Leon Inlet

Table 5: Ponce de Leon IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Volusia	Ponce de Leon	1997	0	43,000
Volusia	Ponce de Leon	2020	40,000	20,000

Table 6: Ponce de Leon Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	27,157	1,386,864
Cumulative Objective:	160,000	1,069,000
Annualized Volume Bypassed:	6,789	51,365
Surplus (Deficit):	-132,843	317,864
Percent Objective Met:	16.97%	129.74%

The North bypass objective was not established until the updated IMP in 2020.

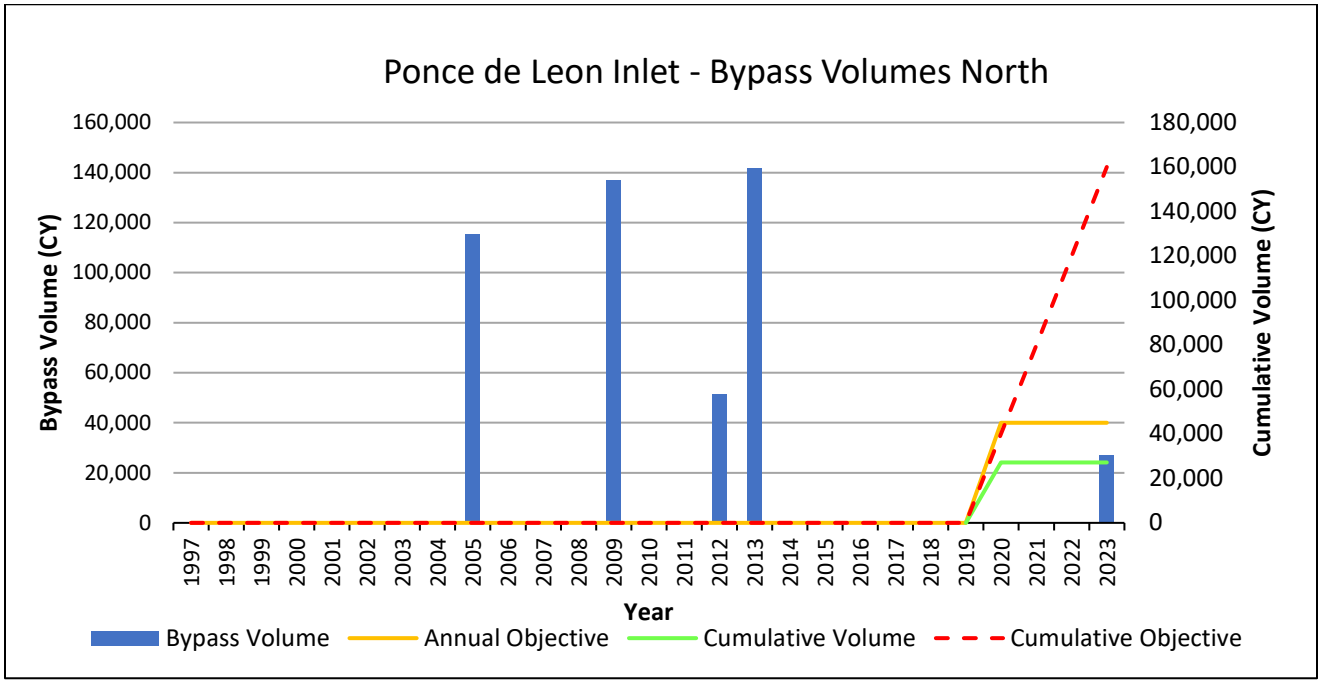

Figure 5: Ponce de Leon Inlet bypass volume, annual objective, cumulative volume and cumulative objective north of the inlet.

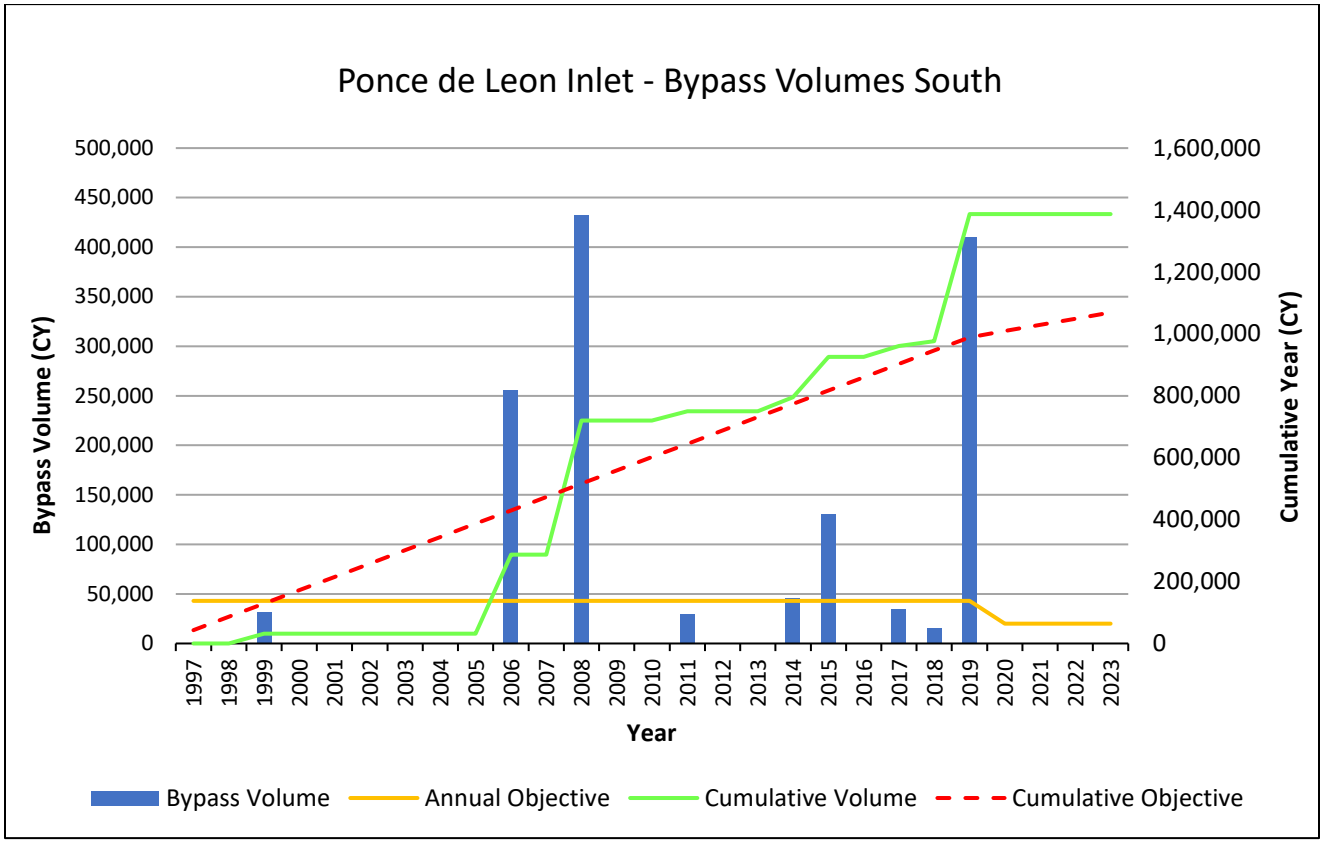

Figure 6: Ponce de Leon Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Central Atlantic Coast Region

Figure 7: Ahtna Marine and Construction with a barge and backhoe within Ft. Pierce Inlet constructing the inlet sand trap. Photo courtesy of Joshua Revord project manager with St. Lucie County, November 2021.

Port Canaveral Inlet

Table 7: Port Canaveral IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Brevard	Port Canaveral	1996	0	0
Brevard	Port Canaveral	2014	0	156,000*

*Bypass objective of 156,000 was initially established in the 2008 SBMP.

Table 8: Port Canaveral Inlet bypass summary of sand bypass volumes, since 2007.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	2,891,142
Cumulative Objective:	0	2,496,000
Annualized Volume Bypassed:	0	170,067
Surplus (Deficit):	0	395,142
Percent Objective Met:	N/A	115.83%

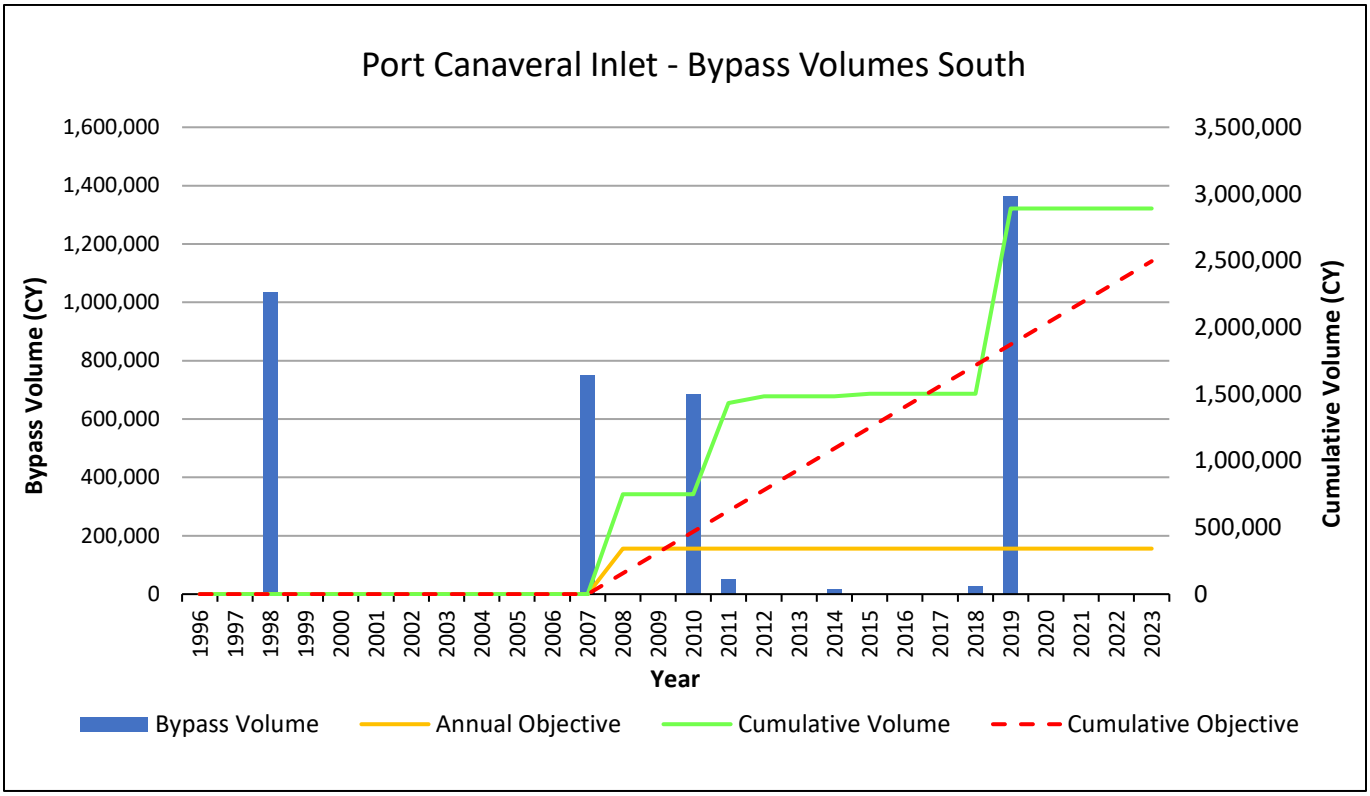

Figure 8: Port Canaveral Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Sebastian Inlet

Table 9: Sebastian Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Indian River	Sebastian	2000	0	70,000
Indian River	Sebastian	2008*	0	90,000
Indian River	Sebastian	2023	0	75,000

*2008 bypass objective was updated in SBMP 2008.

Table 10: Sebastian Inlet bypass summary of sand bypass volumes, since 2000.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	1,155,064
Cumulative Objective:	0	1,985,000
Annualized Volume Bypassed:	0	48,128
Surplus (Deficit):	0	-829,936
Percent Objective Met:	N/A	58.19%

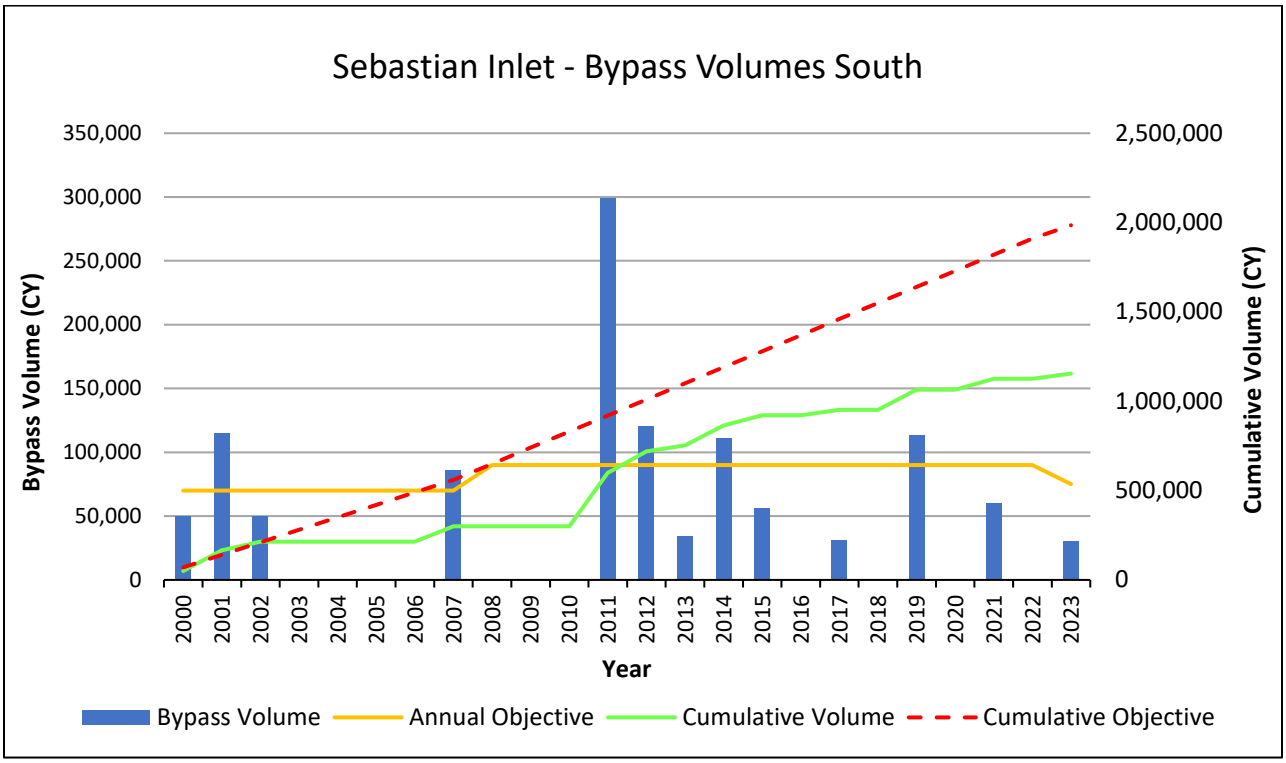

Figure 9: Sebastian Inlet bypass volume, annual objective, cumulative volume, and cumulative objective.

Ft. Pierce Inlet

Table 11: Ft. Pierce Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
St. Lucie	Ft. Pierce	1997	0	130,000
St. Lucie	Ft. Pierce	2022	0	140,000

Table 12: Ft. Pierce Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	281,126
Cumulative Objective:	0	3,530,000
Annualized Volume Bypassed:	0	10,412
Surplus (Deficit):	0	-3,248,874
Percent Objective Met:	N/A	7.96%

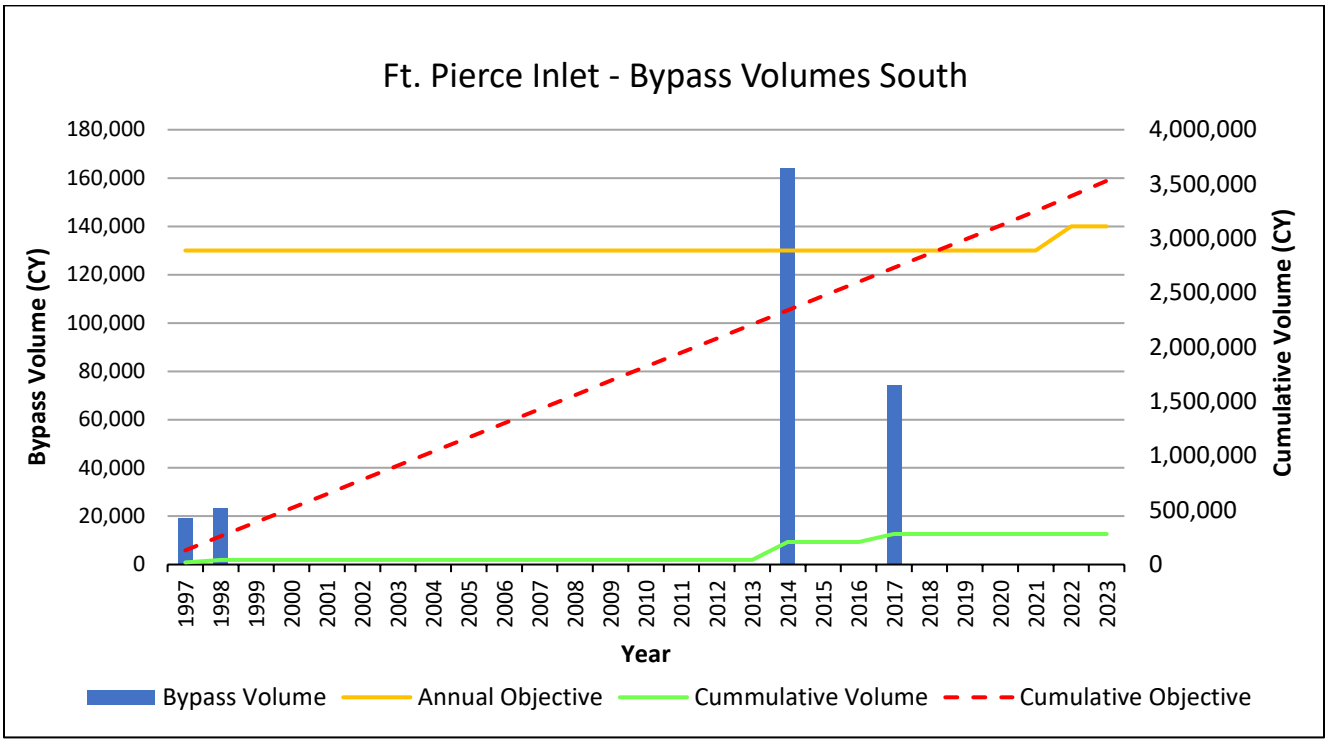

Figure 10: Ft. Pierce Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

St. Lucie Inlet

Table 13: St. Lucie Inlet IMP and bypass objective.

County	Inlet	Year IMP Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Martin	St. Lucie	1995	0	0
Martin	St. Lucie-Updated (2)	2016	34,000	161,000
Martin	St. Lucie-Updated (3)	2023	36,000	163,000

The bypass objective of 185,000 cy to the south was initially established in the 2008 SBMP and then updated in 2016.

Table 14: St. Lucie Inlet - Updated IMP bypass summary of sand bypass volumes, since 2016.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
*Cumulative Volume Bypassed:	306,000	1,478,932
Cumulative Objective:	274,000	1,290,000
Annualized Volume Bypassed:	38,250	184,867
*Surplus (Deficit):	32,000	188,932
Percent Objective Met:	111.68%	114.65%

*The cumulative volume bypassed to the north does not include the beach nourishment volumes listed in the SBMP.
*With the updated IMP in 2016, the accounting of bypassing and any surplus/deficits pre-2016 are not shown.

North of the inlet between years 2016 to 2023, there has been a total volume of 739,483 CY of inlet dredging at St. Lucie Inlet with placement at Bathtub Beach and Sailfish Point between R34 and R40; of which, 306,000 CY has been credited by the department as inlet bypassing. The remaining volume of 433,483 CY is credited towards beach nourishment at Bathtub Beach and Sailfish Point by the department.

South of the inlet, Martin County contributed funds to the Town of Jupiter Island's 2016 beach nourishment equivalent to 500,000 CY that was credited towards inlet bypassing. Maintenance dredging of the inlet was completed in August 2018, with placement of 512,411 CY in the designated offshore borrow area. Again in 2019, Martin County contributed funds to the Town's beach nourishment equivalent to 531,593 CY that was credited towards inlet bypassing by the department. Maintenance dredging occurred in 2022 by the County that bypassed 447,339 CY from the inlet to the state park south of the inlet and was credited towards inlet bypassing by the department.

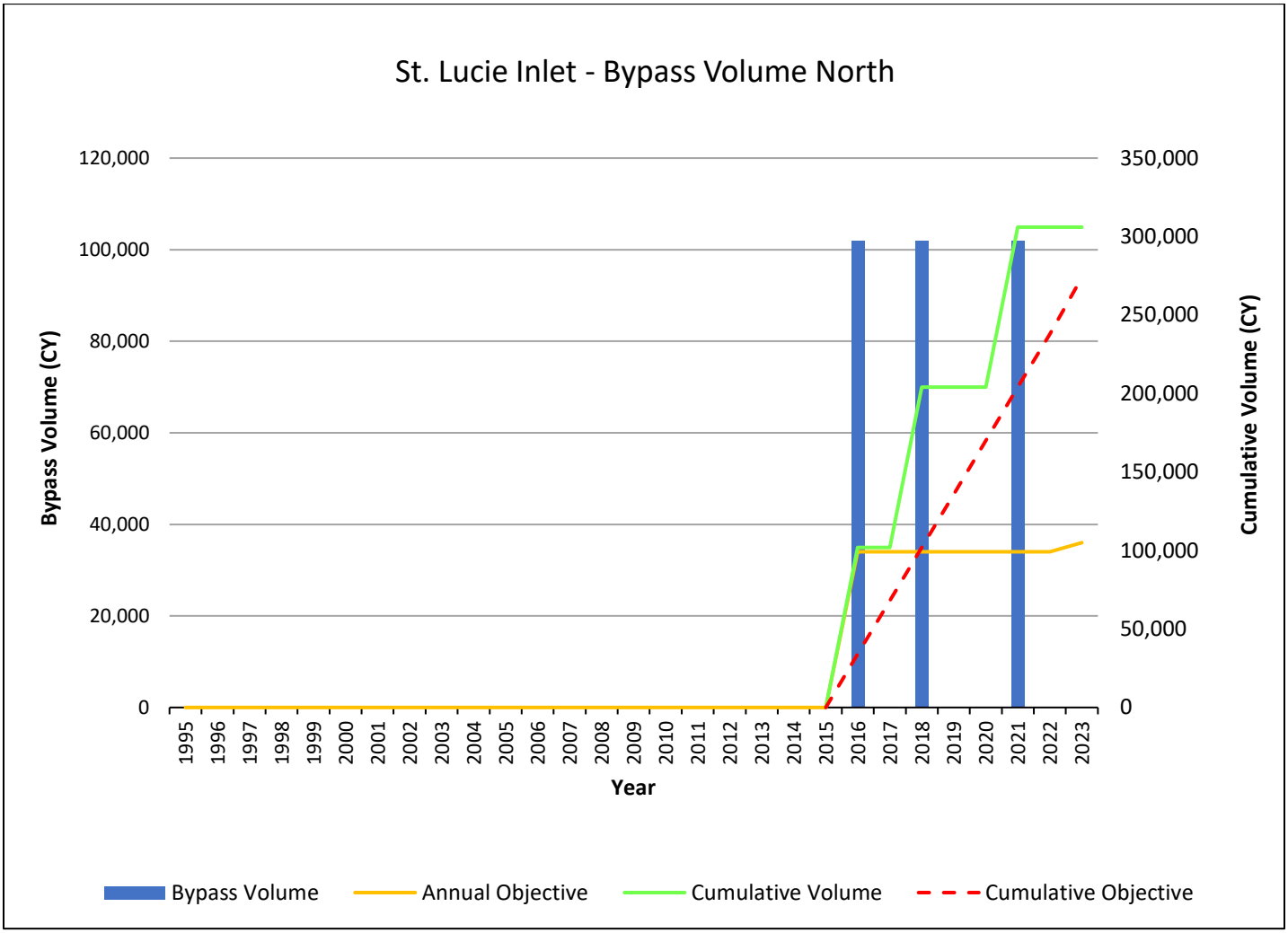

Figure 11: St. Lucie Inlet north bypass volume, annual objective, cumulative volume and cumulative objective.

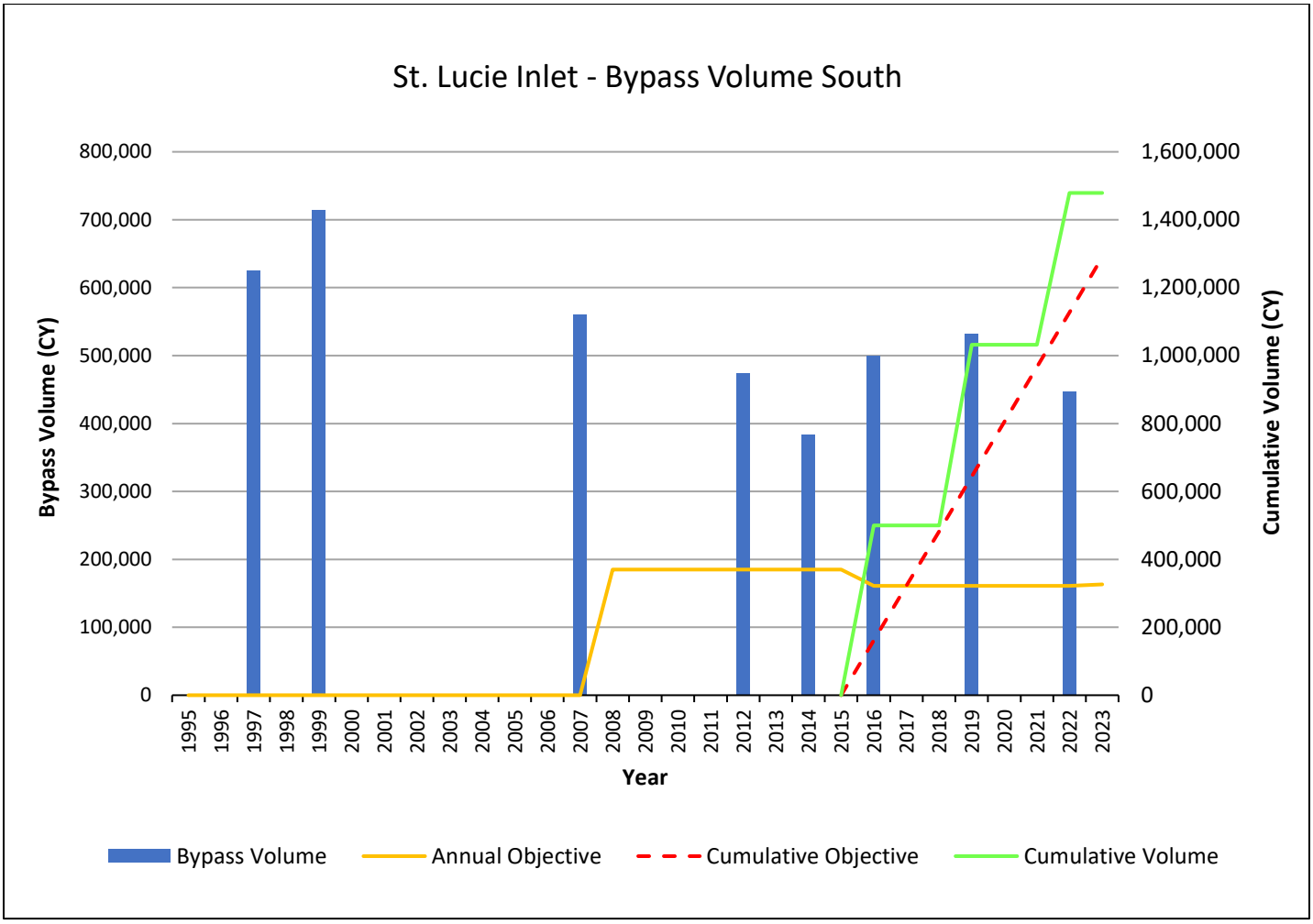

Figure 12: St. Lucie Inlet bypass south volume, annual objective, cumulative volume and cumulative objective.

Southeast Atlantic Coast Region

Figure 13: Boca Raton Inlet with City dredge bypassing sand south of the inlet. Photo courtesy of the City of Boca Raton - Zach Bihr, March 2024.

Jupiter Inlet

Table 15: Jupiter Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Palm Beach	Jupiter	1997	0	75,000

Table 16: Jupiter Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	2,195,195
Cumulative Objective:	0	2,025,000
Annualized Volume Bypassed:	0	81,304
Surplus (Deficit):	0	170,195
Percent Objective Met:	N/A	108.40%

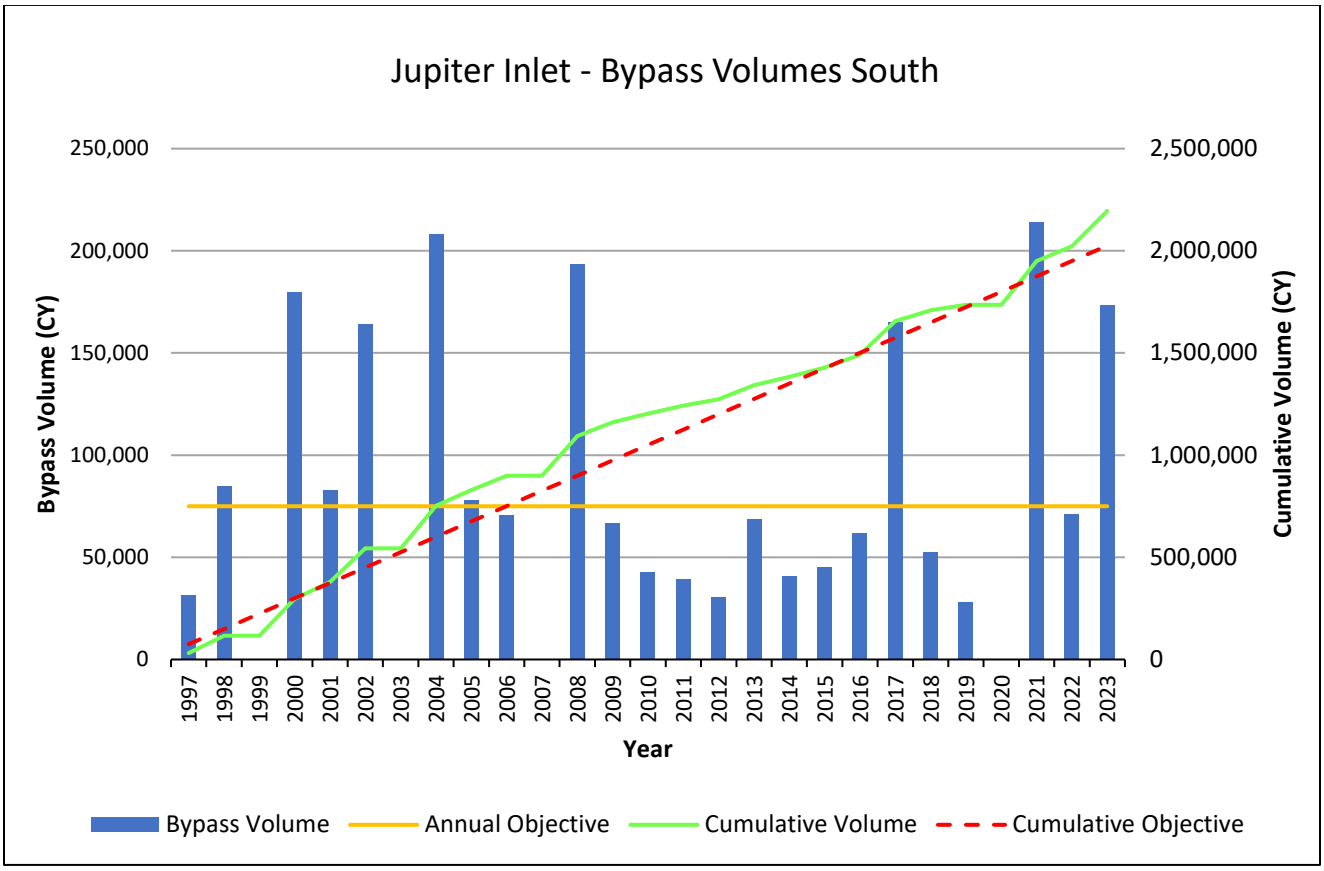

Figure 14: Jupiter Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Lake Worth Inlet

Table 17: Lake Worth Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Palm Beach	Lake Worth	1996	0	171,300
Palm Beach	Lake Worth	2008*	0	202,000

*Bypass objective of 202,000 was initially established in the 2008 SBMP.

Table 18: Lake Worth Inlet bypass summary of sand bypass volumes, since 1996.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	6,900,358
Cumulative Objective:	0	5,287,600
Annualized Volume Bypassed:	0	246,441
Surplus (Deficit):	0	1,612,758
Percent Objective Met:	N/A	130.50%

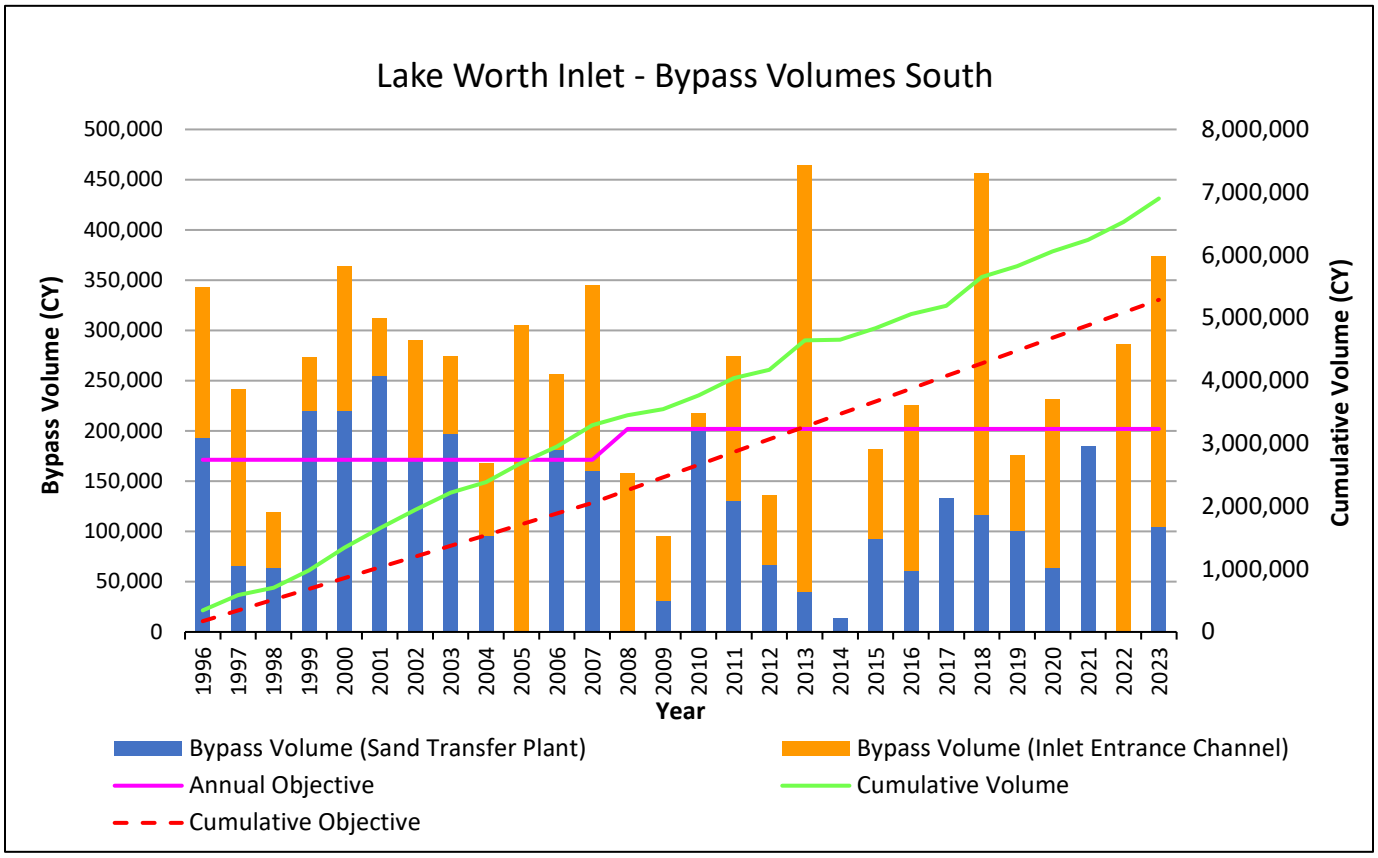

Figure 15: Lake Worth Inlet south bypass volume, annual objective, cumulative volume and cumulative objective.

South Lake Worth Inlet

Table 19: South Lake Worth Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Palm Beach	South Lake Worth	1999	0	88,000
Palm Beach	South Lake Worth	2022	0	115,000

Table 20: South Lake Worth Inlet bypass summary of sand bypass volumes, since 1999.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	2,466,668
Cumulative Objective:	0	2,254,000
Annualized Volume Bypassed:	0	98,667
Surplus (Deficit):	0	212,668
Percent Objective Met:	N/A	109.44%

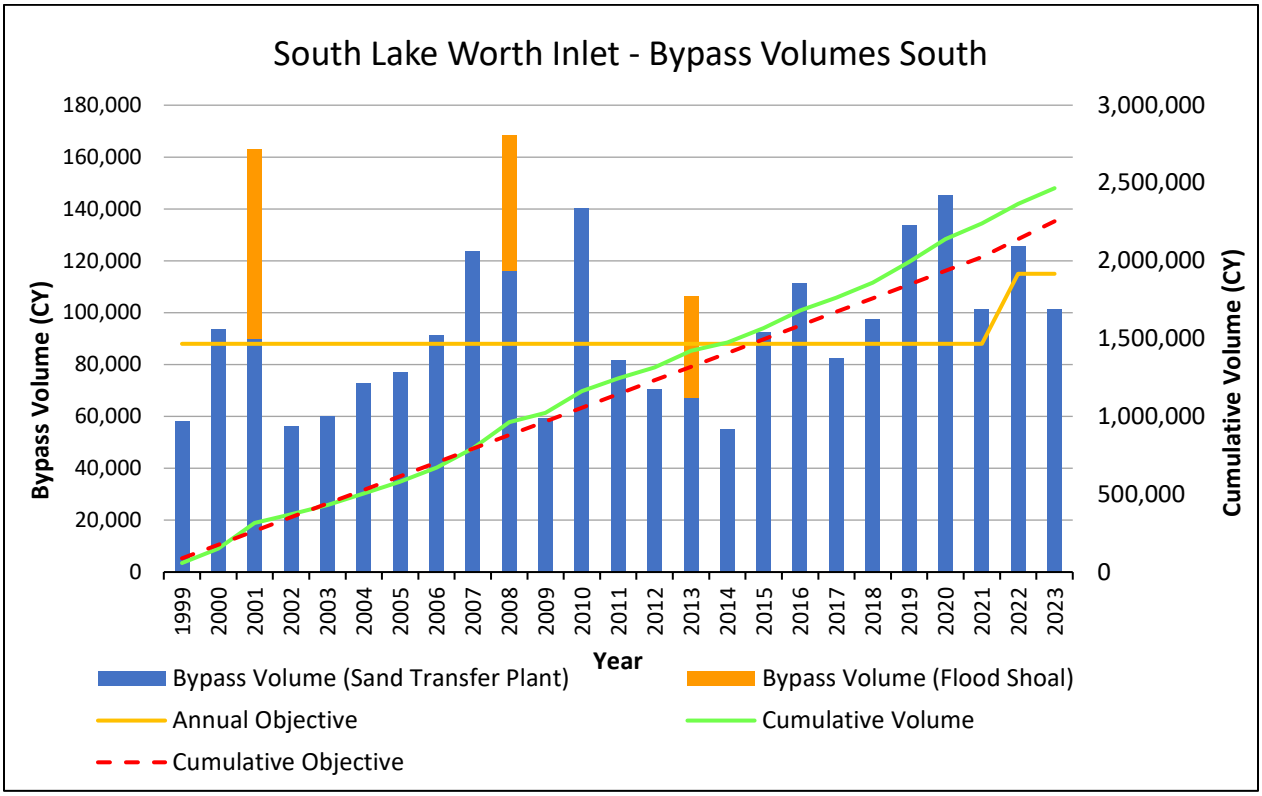

Figure 16: South Lake Worth Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Boca Raton Inlet

Table 21: Boca Raton Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Palm Beach	Boca Raton	1997	0	71,300
Palm Beach	Boca Raton	2005	0	83,000

Table 22: Boca Raton Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	2,253,237
Cumulative Objective:	0	2,147,400
Annualized Volume Bypassed:	0	83,453
Surplus (Deficit):	0	105,837
Percent Objective Met:	N/A	104.93%

Boca inlet bypassing is counted at the local level in fiscal years from July 1 to June 30 each year. The numbers below are showing the final volume from June 30 for that year shown, even though work began in previous year.

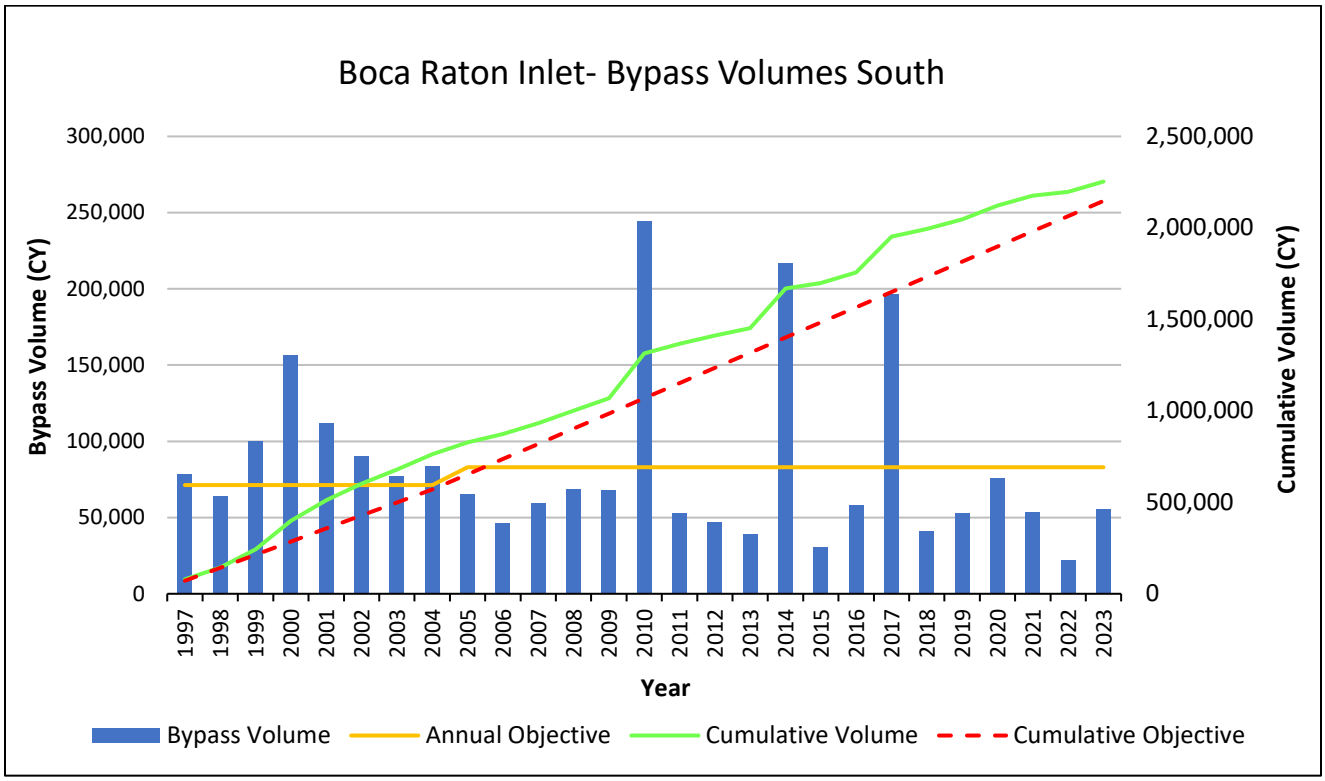

Figure 17: Boca Raton Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Hillsboro Inlet

Table 23: Hillsboro Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Broward	Hillsboro	1997	0	120,000

Table 24: Hillsboro Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	2,929,131
Cumulative Objective:	0	3,240,000
Annualized Volume Bypassed:	0	108,486
Surplus (Deficit):	0	-310,869
Percent Objective Met:	N/A	90.41%

Hillsboro bypassing is counted at the local level in fiscal years from July 1 to June 30 each year. The numbers below are showing the final volume from June 30 for that year, even though work began in previous year.

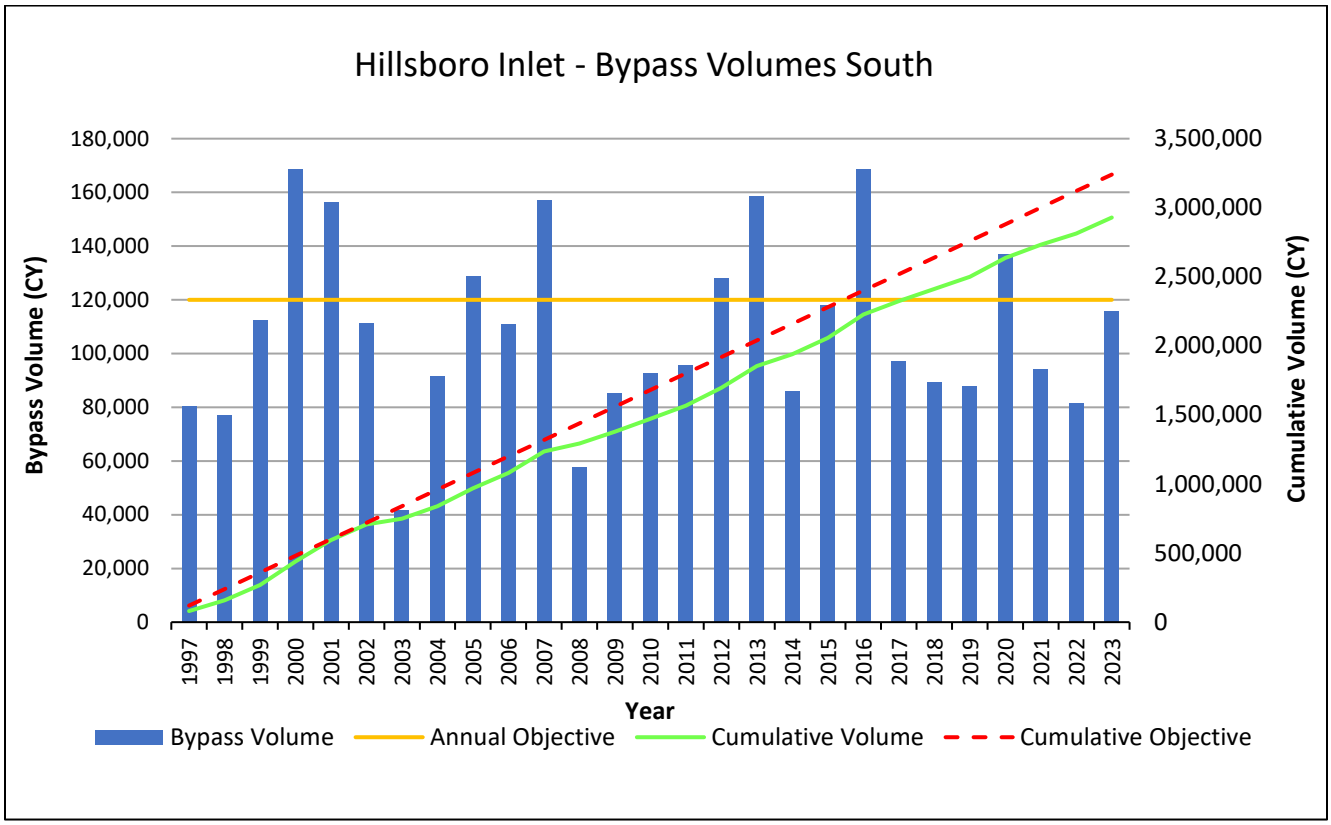

Figure 18: Hillsboro Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Port Everglades Inlet

Table 25: Port Everglades IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Broward	Port Everglades	1999	0	44,000
Broward	Port Everglades	2018	0	41,700

Table 26: Port Everglades Inlet bypass summary of sand bypass volumes, since 1999.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	234,439
Cumulative Objective:	0	1,086,200
Annualized Volume Bypassed:	0	9,378
Surplus (Deficit):	0	-851,761
Percent Objective Met:	N/A	21.58%

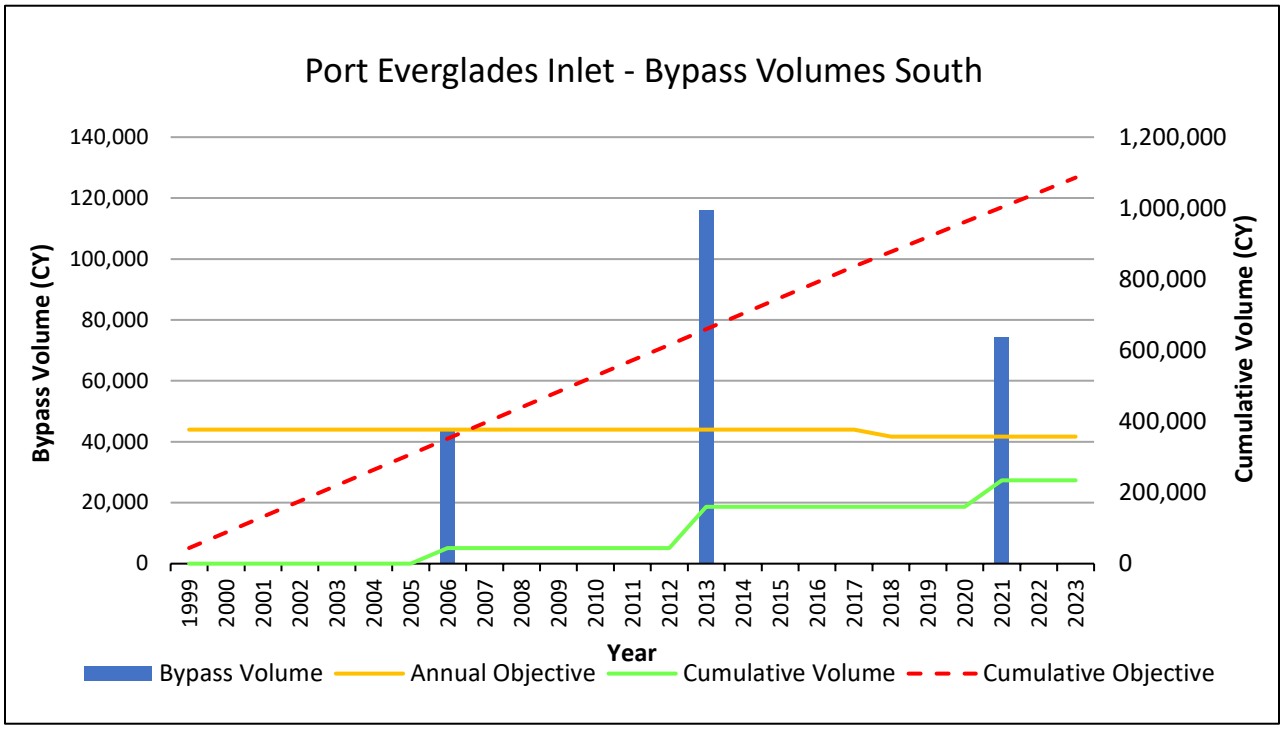

Figure 19: Port Everglades Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Bakers Haulover Inlet

Table 27: Bakers Haulover Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Dade	Bakers Haulover	1997	0	26,700
Dade	Bakers Haulover	2021	0	36,900

Table 28: Bakers Haulover Inlet bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	1,044,927
Cumulative Objective:	0	751,500
Annualized Volume Bypassed:	0	38,701
Surplus (Deficit):	0	293,427
Percent Objective Met:	N/A*	139.05%

*Percent objective met to the North is N/A due to the monitoring-based objective.

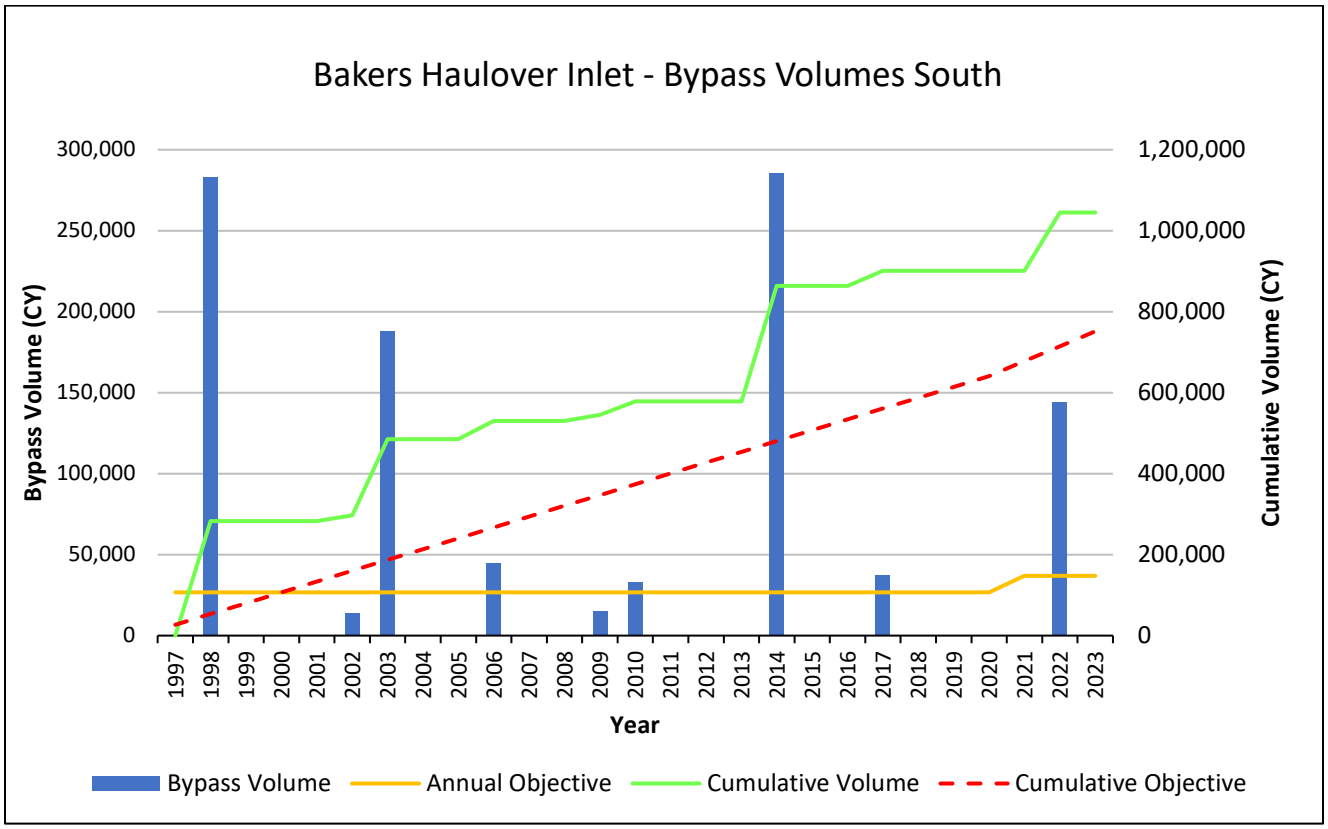

Figure 20: Bakers Haulover Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Panhandle Gulf Coast Region

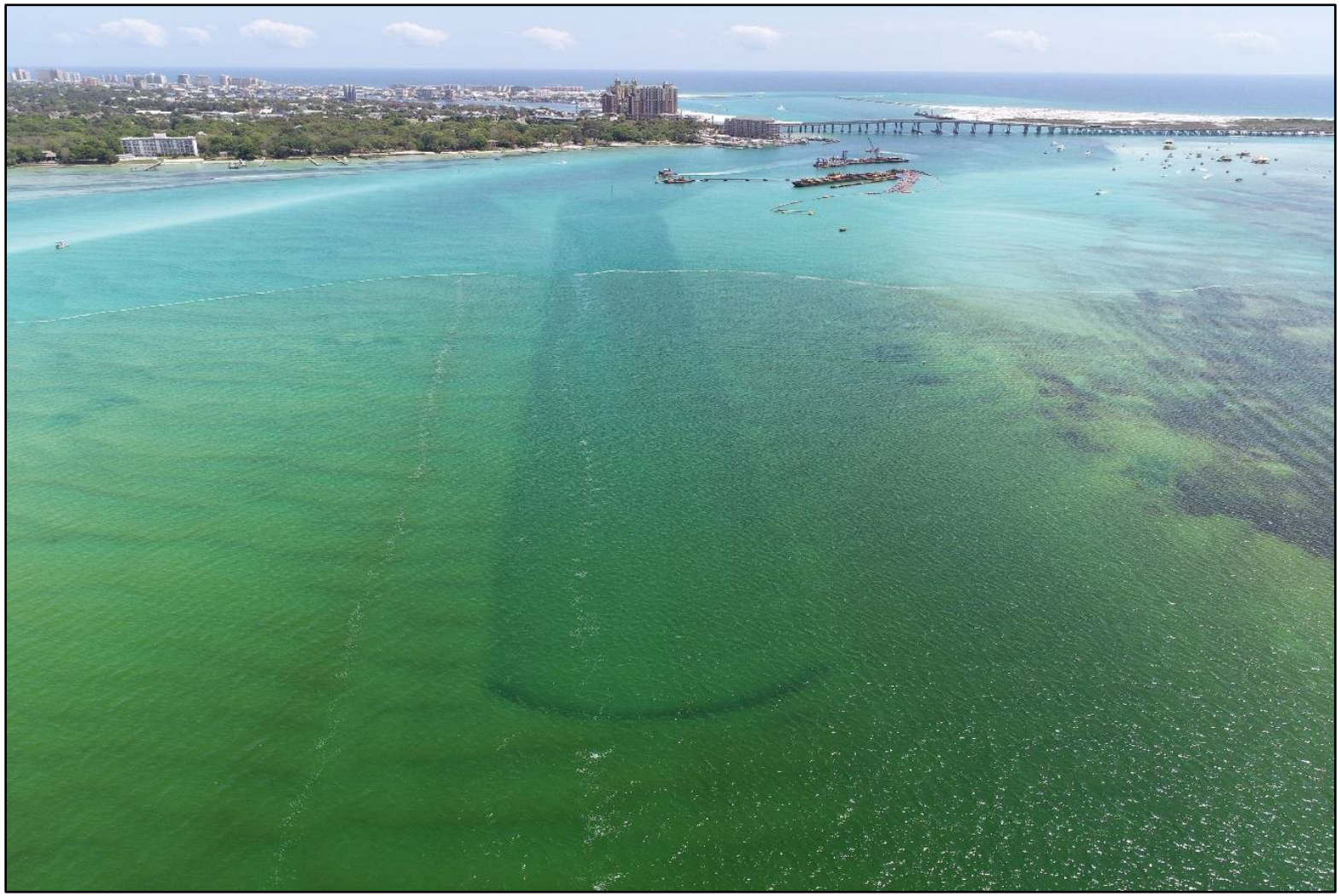

Figure 21: East Pass Federal Navigation Channel being dredged to place material at Norriego Point, photo courtesy of Taylor Engineering, April 2018.

East Pass

Table 29: East Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective East (CY)	Annual Bypass Objective West (CY)
Okaloosa	East Pass	2000	0	82,000
Okaloosa	East Pass	2013	Monitoring Based	Monitoring Based

Table 30: East Pass bypass summary of sand bypass volumes, since 2013.

Bypassing Matrix	East Bypass (CY)	West Bypass (CY)
Cumulative Volume Bypassed:	203,100	136,000
Cumulative Objective:	0	0
Annualized Volume Bypassed:	18,464	12,364
Surplus (Deficit):	0	0
Percent Objective Met:	N/A*	N/A* **

*Percent objective met is N/A due to the monitoring based objective of the updated 2013 IMP.
**Bypassing to the west for the time period of 2000 to 2012 (IMP of 2000) has a percent objective met of 54%.

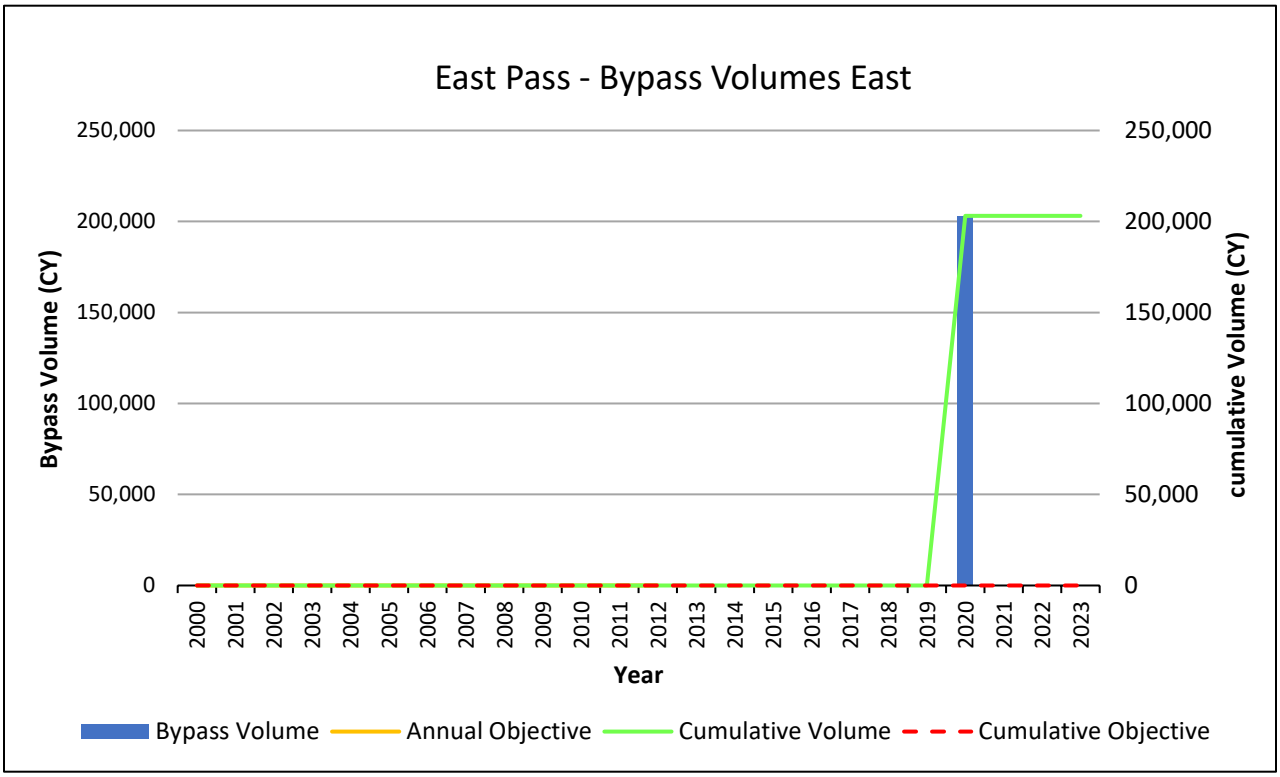

Figure 22: East Pass bypass volume, annual objective, cumulative volume and cumulative objective.

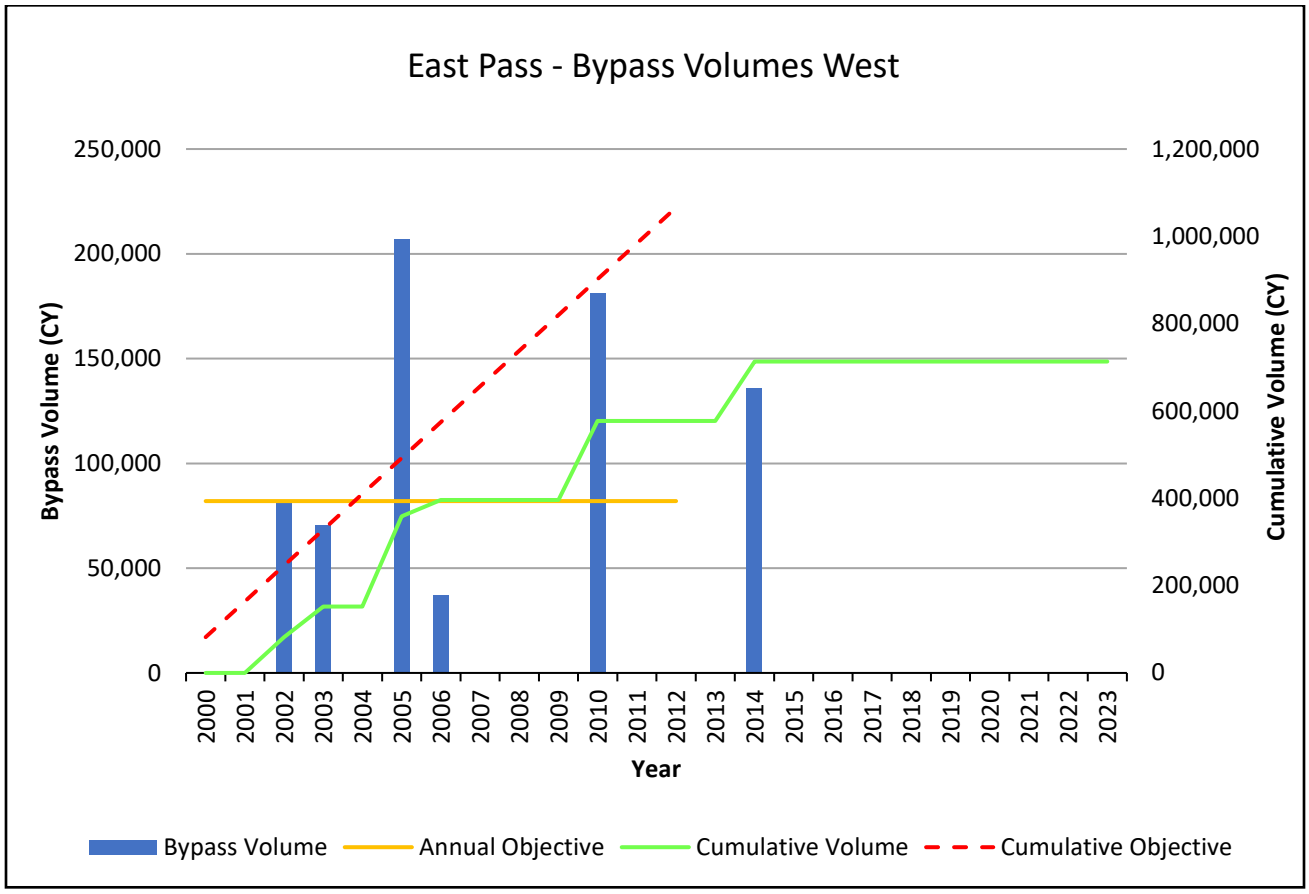

Figure 23: East Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Mexico Beach Inlet

Table 31: Mexico Beach Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective East (CY)	Annual Bypass Objective West (CY)
Bay	Mexico Beach	2015*	32,400	0
Bay	Mexico Beach	2024	32,400	0

*Strategy adopted originally in the 2015 Strategic Beach Management Plan.

Table 32: Mexico Beach Inlet bypass summary of sand bypass volumes, since 2015.

Bypassing Matrix	East Bypass (CY)	West Bypass (CY)
Cumulative Volume Bypassed:	404,941	0
Cumulative Objective:	291,600	0
Annualized Volume Bypassed:	44,993	0
Surplus (Deficit):	113,341	0
Percent Objective Met:	138.87%	N/A

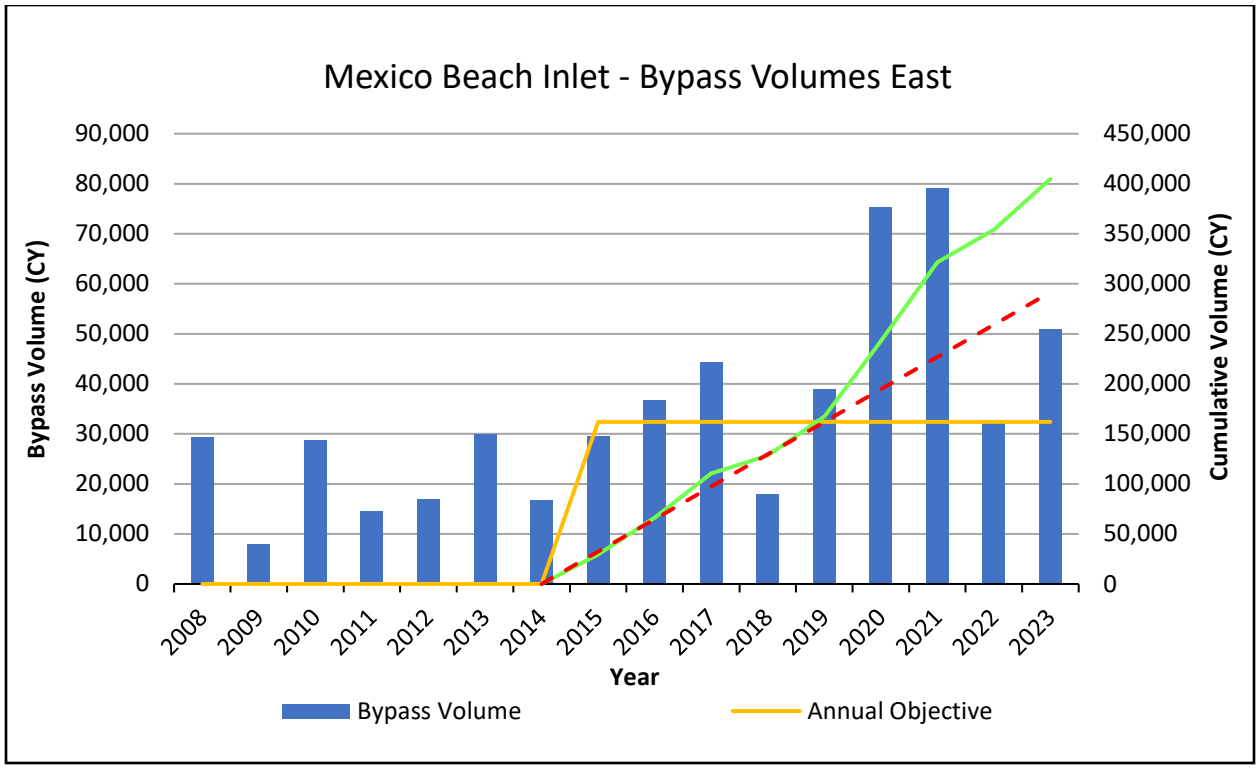

Figure 24: Mexico Beach Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Southwest Gulf Coast Region

Figure 25: Longboat Pass post-construction showing bypassed material placed to the north at Coquina Beach (R33 to R41) by CPE for Manatee County and south to North Longboat Key (R42 to R44.4) by Olsen Associates for the Town of Longboat Key. Photo courtesy of Al Browder with Olsen Associates, December 2021.

John's Pass

Table 33: John's Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Pinellas	John's Pass	2018	0	21,000

Table 34: John's Pass bypass summary of sand bypass volumes, since 2018.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	110,000
Cumulative Objective:	0	126,000
Annualized Volume Bypassed:	0	18,333
Surplus (Deficit):	0	-16,000
Percent Objective Met:	N/A	87.30%

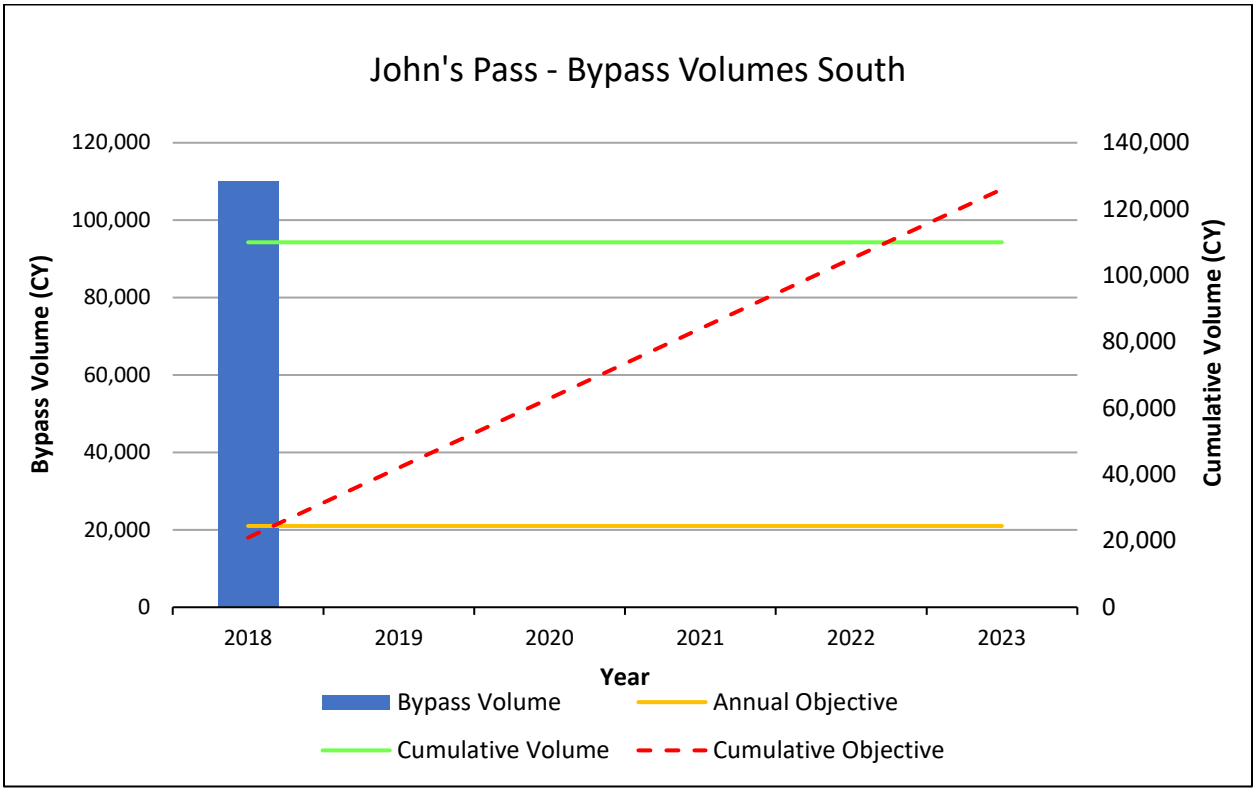

Figure 26: John's Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Blind Pass (Pinellas County)

Table 35: Blind Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Pinellas	Blind Pass	2017	12,000	31,000

Table 36: Blind Pass Inlet bypass summary of sand bypass volumes, since 2017.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0 *	150,854
Cumulative Objective:	84,000	217,000
Annualized Volume Bypassed:	0	21,551
Surplus (Deficit):	-84,000	-66,146
Percent Objective Met:	0%	69.52%

*No bypass numbers to the north to justify a bar graph.

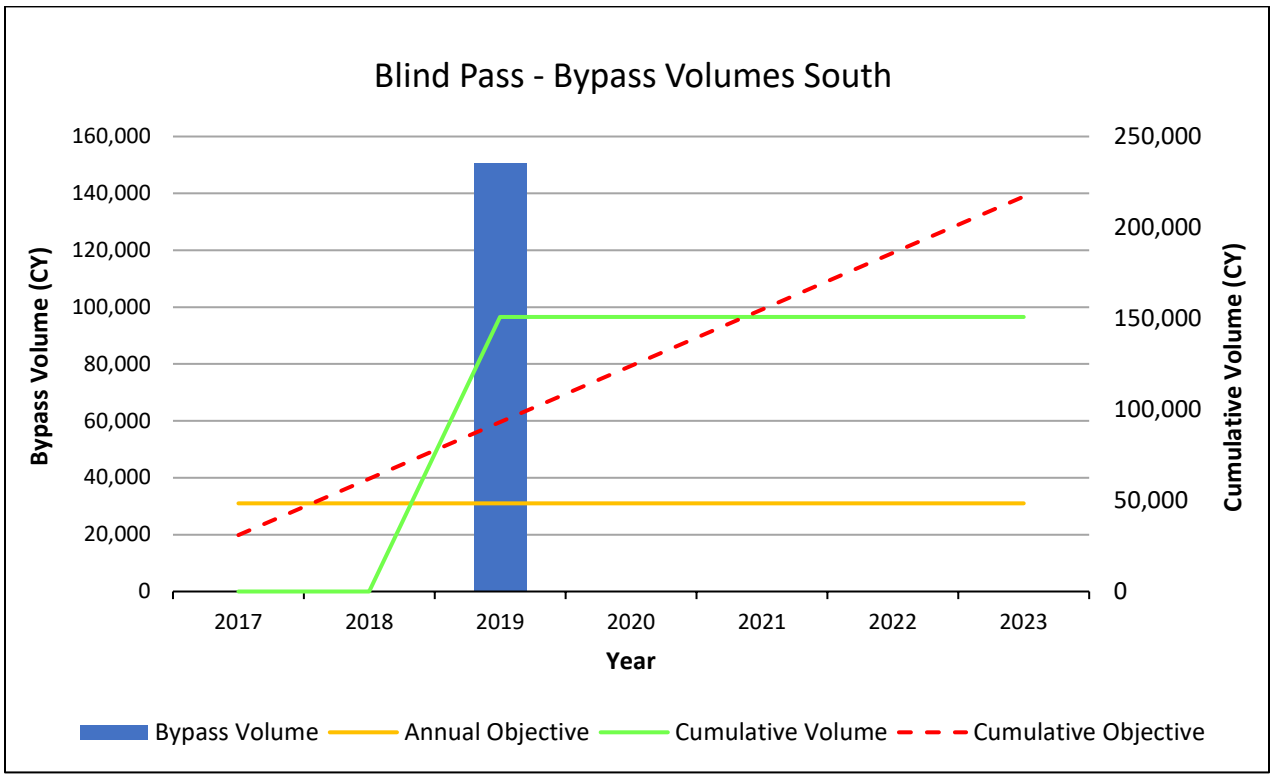

Figure 27: Blind Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Pass-a-Grille Inlet

Table 37: Pass-a-Grille IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Pinellas	Pass-a-Grille	2019	14,000	0

Table 38: Pass-a-Grille Inlet bypass summary of sand bypass volumes, since 2019.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0 *	0
Cumulative Objective:	70,000	0
Annualized Volume Bypassed:	0	0
Surplus (Deficit):	-70,000	0
Percent Objective Met:	0%	N/A

*No bypass numbers to the north to justify a bar graph.

Longboat Pass

Table 39: Longboat Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Manatee	Longboat Pass	2008*	0	57,800

*Bypass objective is from the Strategic Beach Management Plan (2008).

Table 40: Longboat Pass bypass summary of sand bypass volumes, since 2008.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	98,300	491,200
Cumulative Objective:	0	924,800
Annualized Volume Bypassed:	6,144	30,700
Surplus (Deficit):	0	-433,600
Percent Objective Met:	N/A	53.11%

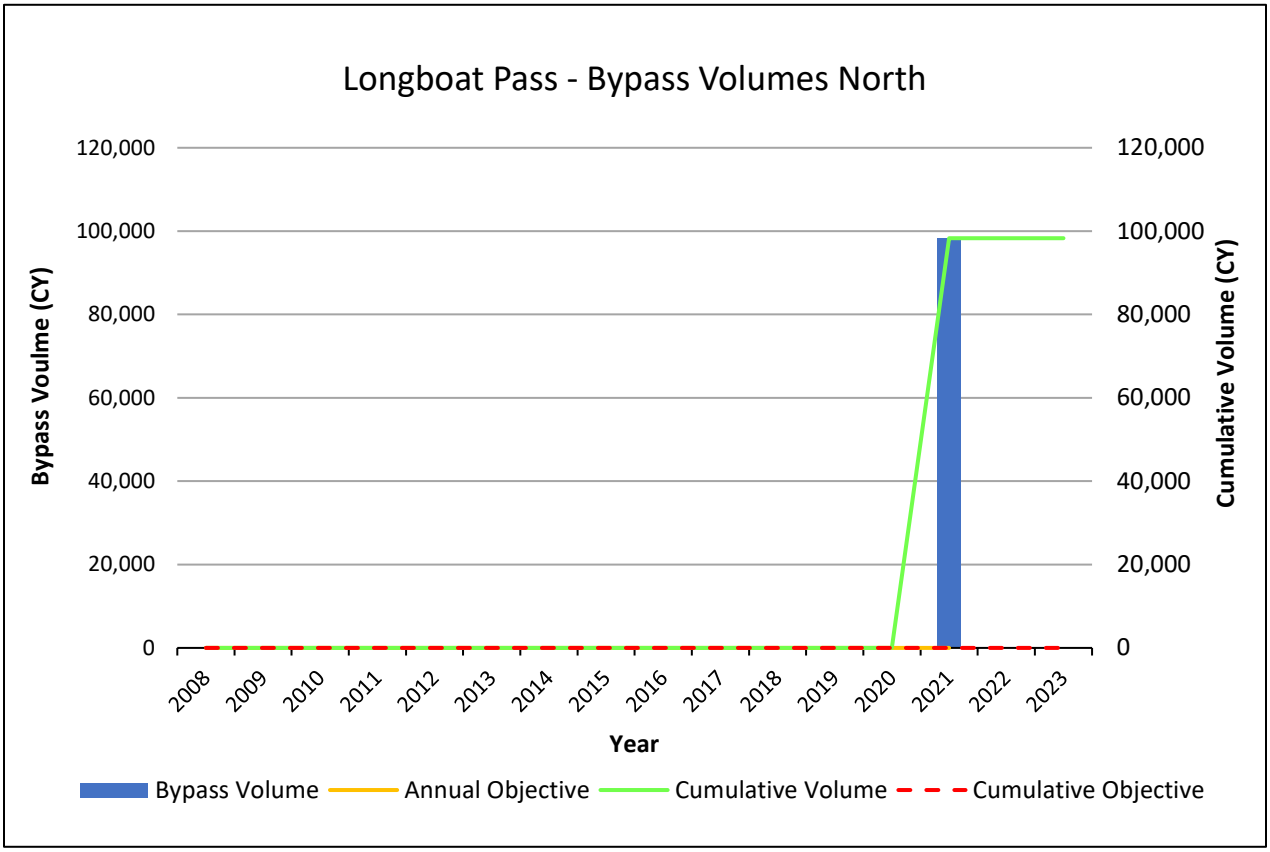

Figure 28. Longboat Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

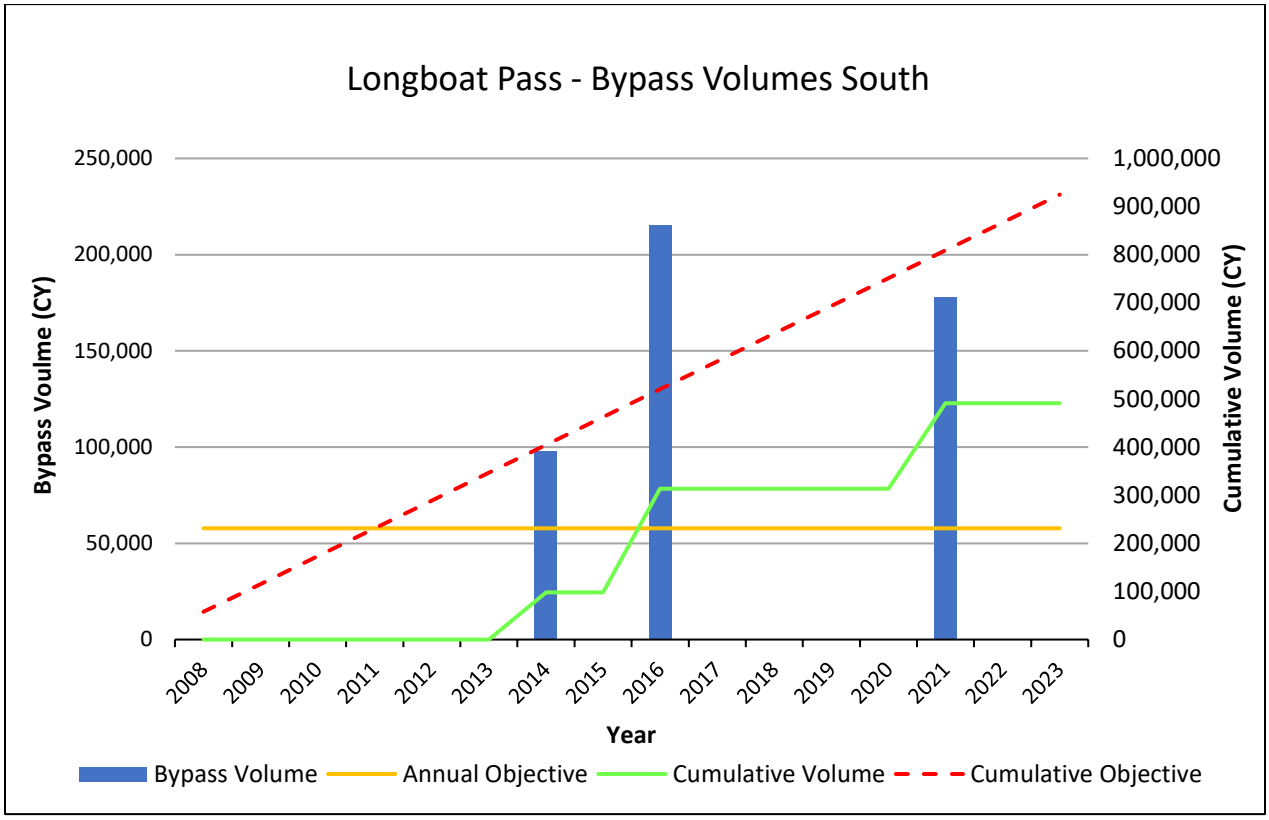

Figure 29: Longboat Pass bypass volume, annual objective, cumulative volume and cumulative objective to the south.

Venice Inlet

Table 41: Venice Inlet IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Sarasota	Venice Inlet	1998	0	64,620

Table 42: Venice Inlet bypass summary of sand bypass volumes, since 1998.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	28,932
Cumulative Objective:	0	1,680,120
Annualized Volume Bypassed:	0	1,113
Surplus (Deficit):	0	-1,651,188
Percent Objective Met:	N/A	1.72%

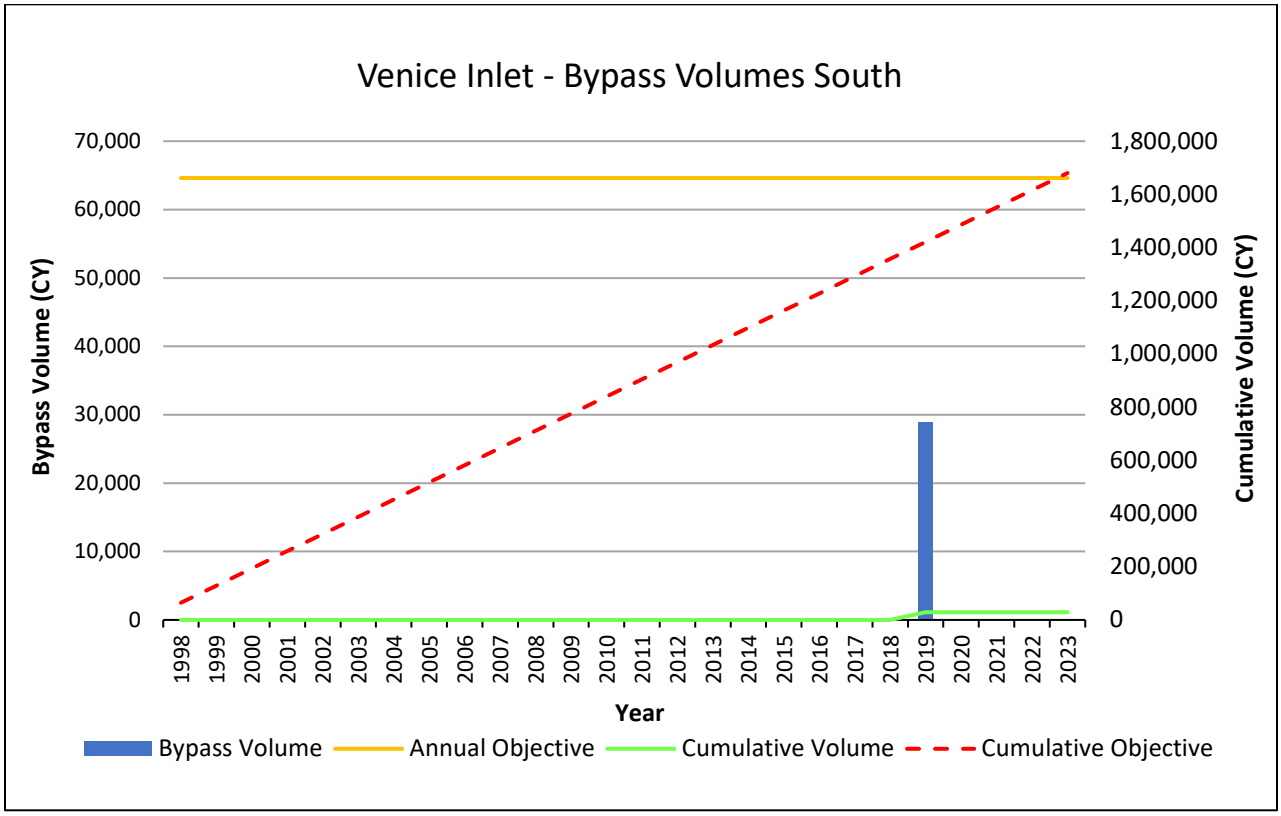

Figure 30: Venice Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Stump Pass

Table 43: Stump Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Charlotte	Stump Pass	2016	6,000	25,000

Table 44: Stump Pass Inlet bypass summary of sand bypass volumes, since 2016.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	48,000*	188,100
Cumulative Objective:	48,000	200,000
Annualized Volume Bypassed:	12,000	23,513
Surplus (Deficit):	0	-11,900
Percent Objective Met:	100.00%	94.05%

*Cumulative volume to the north is based upon nourishment interval of eight years for bypassing and does not include beach nourishment volume listed in the SBMP.

North of the inlet between years 2016 to 2023, there has been a total inlet dredge volume of 245,380 CY at Stump Pass with placement at Manasota Key between R18 and R21; of which, 48,000 CY has been credited towards inlet bypassing. The remainder volume (197,380 CY) is credited towards beach nourishment at Manasota Key by the department.

South of the inlet between years 2016 to 2023, there has been a total inlet dredge volume of 188,100 CY at Stump Pass with approximate placement at Knight Island/Don Pedro Island at R22 area; of which, the entire 188,100 CY has been credited for inlet bypassing.

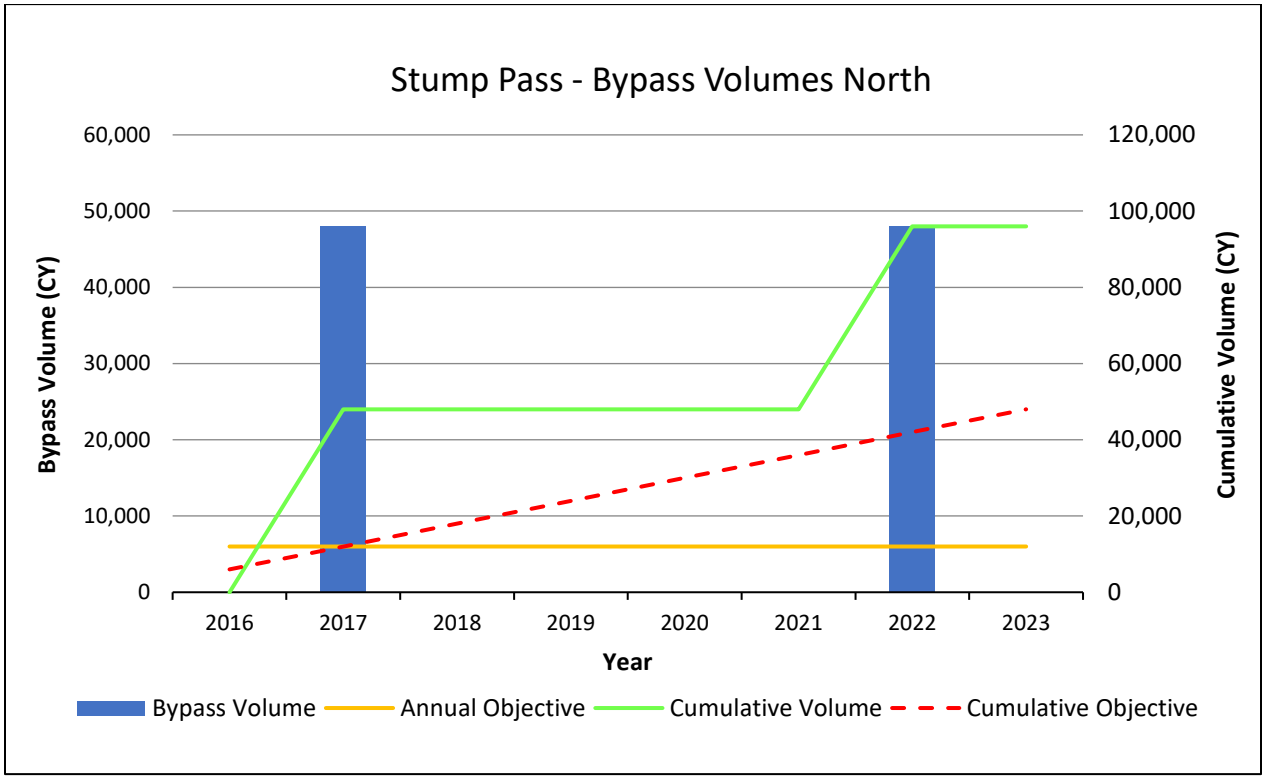

Figure 31: Stump Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

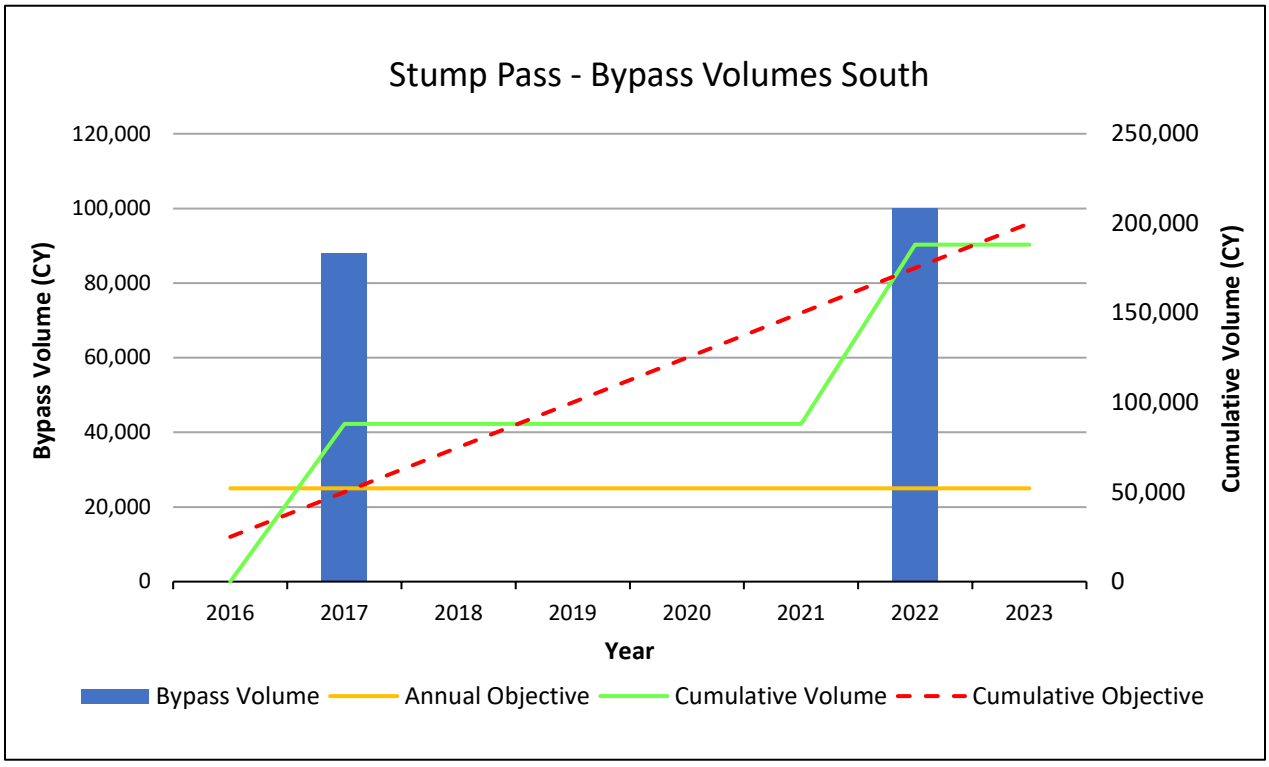

Figure 32: Stump Pass bypass volume, annual objective, cumulative volume and cumulative objective to the south.

Redfish Pass

Table 45: Redfish Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Lee	Redfish Pass	2022	0	30,000

Table 46: Redfish Pass Inlet bypass summary of sand bypass volumes, since 2019.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0*	0*
Cumulative Objective:	0	60,000
Annualized Volume Bypassed:	0	0
Surplus (Deficit):	0	-60,000
Percent Objective Met:	N/A	0%

*No bypass numbers to the north or south to justify a bar graph.

Blind Pass (Lee County)

Table 47: Blind Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Lee	Blind Pass	2019	0	21,000

Table 48: Blind Pass bypass summary of sand bypass volumes, since 2019.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0*	0*
Cumulative Objective:	0	105,000
Annualized Volume Bypassed:	0	0
Surplus (Deficit):	0	-105,000
Percent Objective Met:	N/A	0%

*No inlet bypassing numbers to report to justify a bar graph.

Wiggins Pass

Table 49: Wiggins Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Collier	Wiggins Pass	2018	13,733	6,867

Table 50: Wiggins Pass bypass summary of sand bypass volumes, since 2018.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	145,543	64,404
Cumulative Objective:	82,398	41,202
Annualized Volume Bypassed:	24,257	10,734
Surplus (Deficit):	63,145	23,202
Percent Objective Met:	176.63%	156.31%

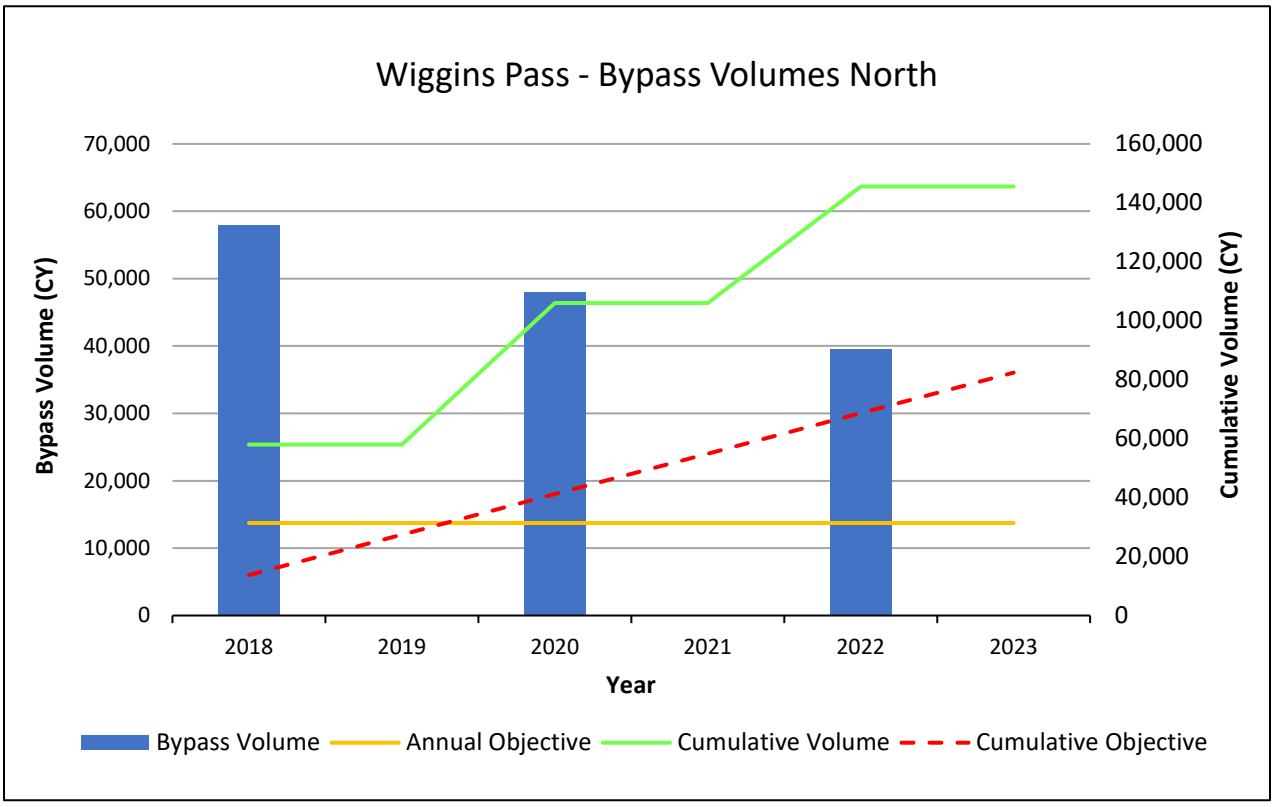

Figure 33: Wiggins Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

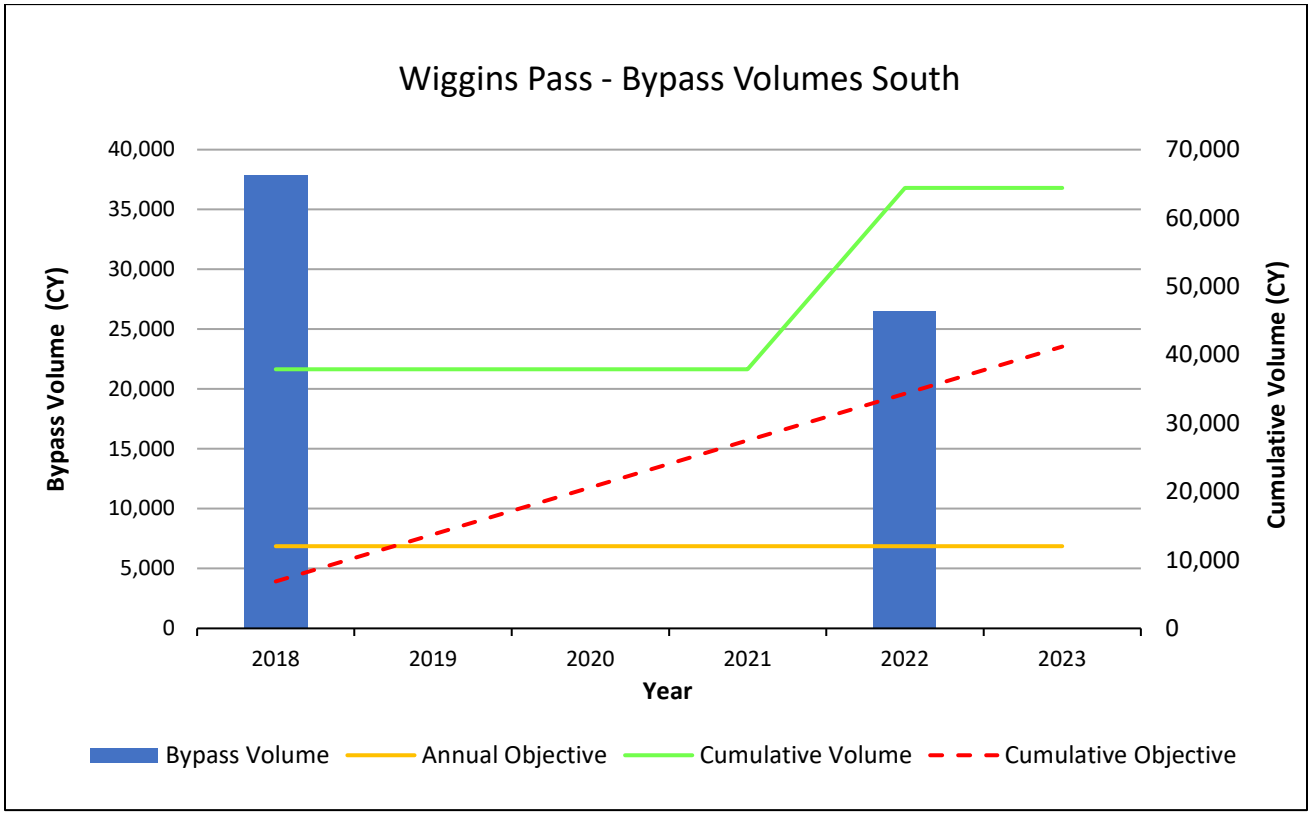

Figure 34: Wiggins Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Doctors Pass

Table 51: Doctors Pass IMP and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
Collier	Doctors Pass	1997	0	10,000

Table 52: Doctors Pass bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	190,269
Cumulative Objective:	0	270,000
Annualized Volume Bypassed:	0	7,047
Surplus (Deficit):	0	-79,731
Percent Objective Met:	N/A	70.47%

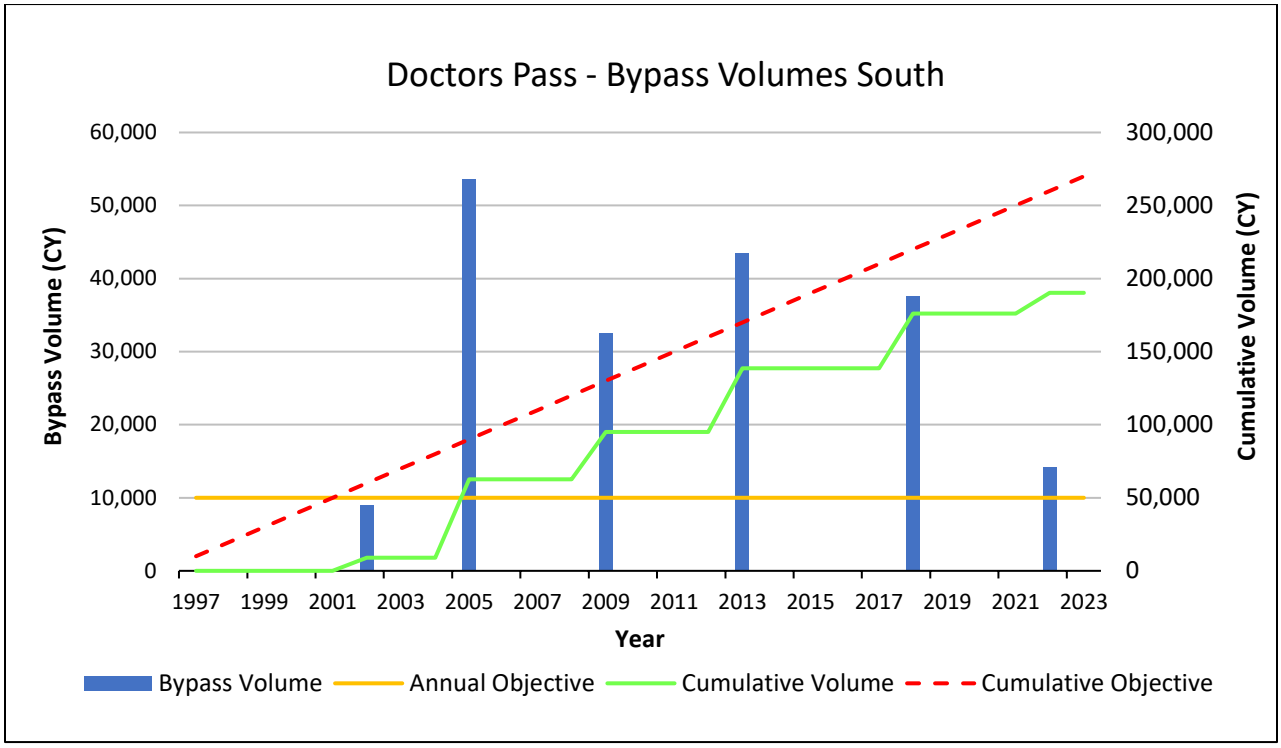

Figure 35: Doctors Pass bypass volume, annual objective, cumulative volume and cumulative objective.

New Inlet Studies and New or Updated Inlet Management Plans

The department, local governments and coastal engineering consultants continually work to conduct inlet studies that develop best management practices to bypass beach quality sand to adjacent eroding beaches with the goal of balancing the sediment budget, per the requirements of section 161.142 F.S.

Recent plans that were already incorporated into this document and, new plans (published) and current studies or new plans that are being drafted for year 2024 for potential inclusion in the 2025 report are listed below:

Recent Plans that have been included in the 2023 Annual Inlet Report:

1.) Ft. Pierce Inlet has an updated IMP, 05-2022.
2.) South Lake Worth Inlet has an updated IMP, 09-2022.
3.) St. Lucie Inlet has an updated IMP, 09-2023.
4.) Sebastian Inlet has an updated IMP, 11-2023.

New Plans (published) that were not included in this report but will be in the 2025 report:

5.) Mexico Beach Inlet has a new IMP, 04-2024.

New Studies / Plans (in draft):

6.) Pensacola Pass has a finalized inlet study, and the department has developed a new inlet management plan that will be published in summer of 2024.
7.) Estero Barriers through Lee County has finalized the study and new inlet management plans will be developed for Big Carlos Pass, New Pass and Big Hickory Pass in 2024/2025. The department has developed a DRAFT IMP for Big Carlos Pass in summer of 2024.
8.) Passage Key Inlet has a finalized inlet study, and a new IMP is projected to be finalized in the summer of 2024.
9.) Longboat Pass through the Town and County have conducted an inlet study (2019) and is projected to have a new IMP in the summer of 2024.

Summary

Of the 66 inlets in the State of Florida, 43 are considered managed inlets as listed within the Strategic Beach Management Plan's Introduction. There are a total of 26 altered inlets that are listed within the Annual Inlet Report and 26 have an inlet management plan with the department. Within the fourth edition of the Annual Inlet Report; 10 of the 26 altered inlets are meeting their bypass objective at 100% or greater, 2 inlets are between 90% and 99%, 2 inlets are between 71%, and 89%, 1 inlet is between 60% and 70%, 2 inlets are between 50% and 59%, 8 inlets are below 49%, and 1 inlet is classified as not applicable (NA), see Figure 36. In total, 45% of the inlets are above 100% in meeting their bypass objectives and 58% are between 71% and 100%. The Annual Inlet Report assists the department, local governments and inlet entities in tracking and providing accountability in how well inlet management activities are meeting the bypass objective listed in their respective inlet management plans.

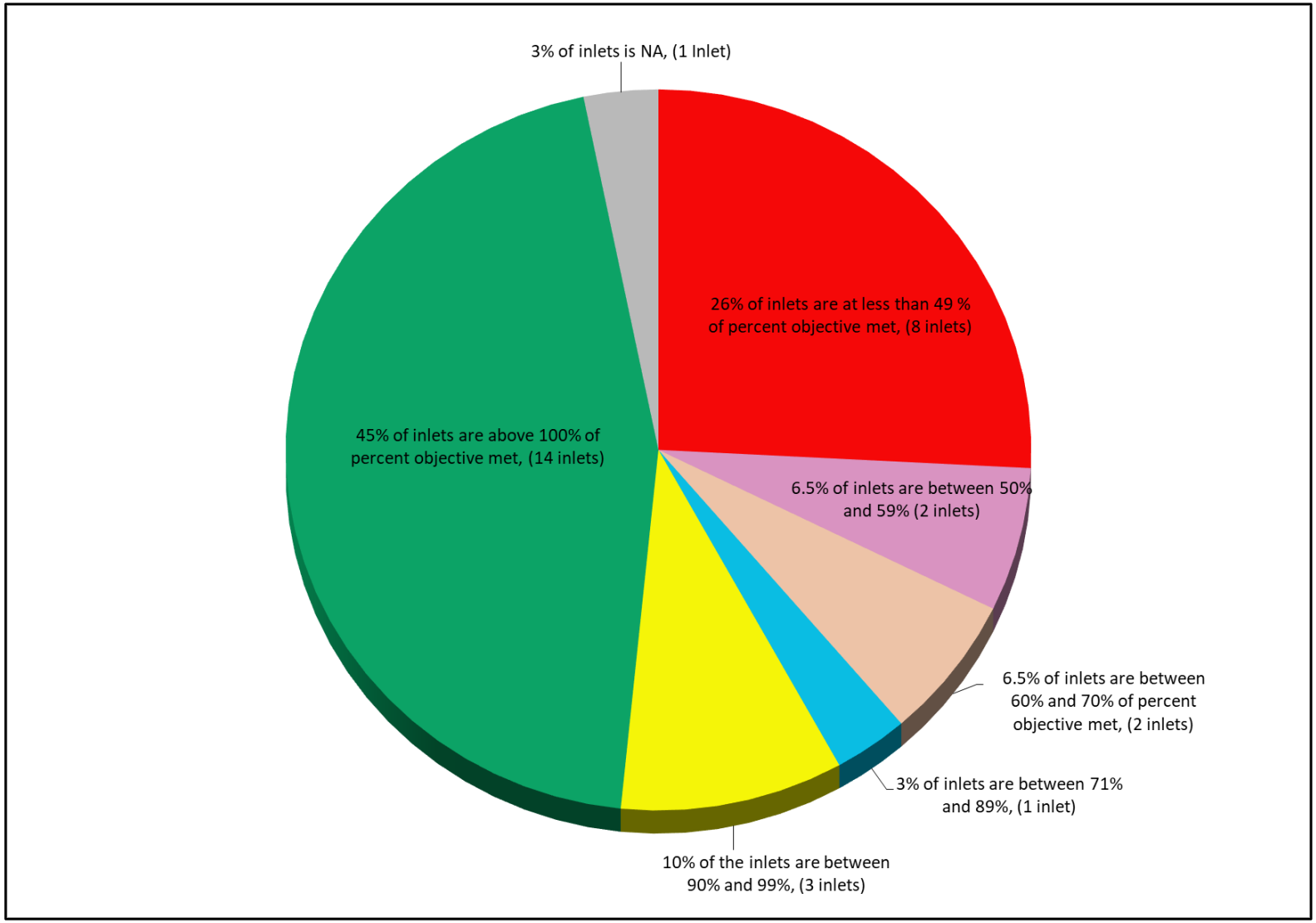

Figure 36. Summary pie chart of the 26 altered inlets that are listed within the annual inlet report and what percentage they have met their bypass objective. **Note:** 31 inlet bypass objectives vs. 26 inlets that are listed in the report, i.e., six inlets have two bypass objectives (north and south) and one that has a monitoring-based bypass objective.

References

Florida Department of Environmental Protection, 2023. *Strategic Beach Management Plan,* Office of Resilience and Coastal Protection, 420 p.

Florida Department of Environmental Protection, 2024. *Annual Inlet Bypassing Numbers,* Office of Resilience and Coastal Protection, 36 p.