Annual Inlet Report

Office of Resilience and Coastal Protection

Florida Department of Environmental Protection

August 2022

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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 2021; 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 Strategic Beach Management Plan. In some cases, there are ongoing beach nourishment projects adjacent to inlets that have mitigated some or all of the inlet effects. The Inlet Management Plans 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 Strategic Beach Management Plan'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. Marys River Entrance being dredged by a Manson hopper dredge to bypass material south to Fernandina Beach. Photo by Lindsay Brantley (DEP), March 2022.

St. Marys River Entrance

Table 1: St. Marys River Entrance Management Plan and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective North (CY)	Annual Bypass Objective South (CY)
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	3,544,962
Cumulative Objective:	0	13,296,000
Annualized Volume Bypassed:	0	147,706
Surplus (Deficit):	0	-9,751,038
Percent Objective Met:	N/A	26.66%

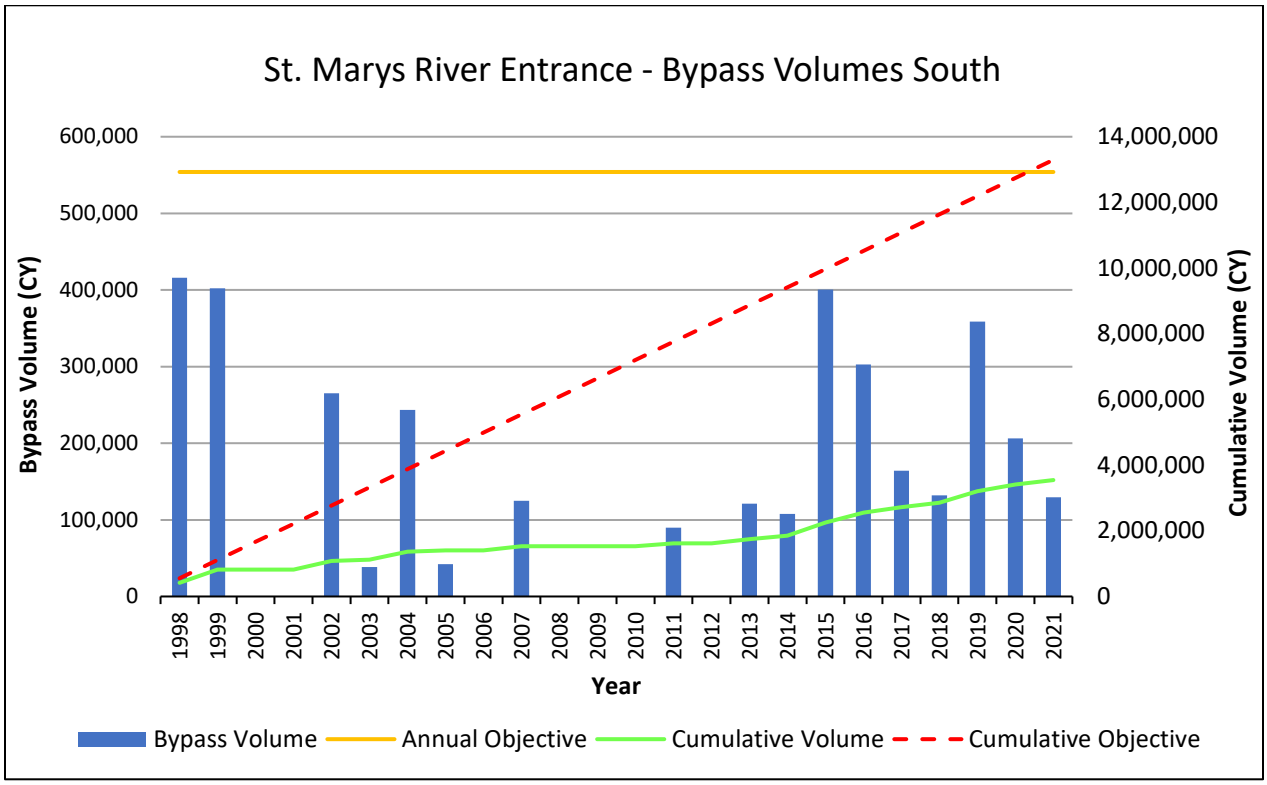

Figure 2: St. Marys River Entrance bypass volume, annual objective, cumulative volume and cumulative objective.

St. Augustine Inlet

Table 3: St. Augustine Inlet Management Plan 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:	741,336	9,642,664
Annualized Volume Bypassed:	200,046	414,439
Surplus (Deficit):	859,033	303,861
Percent Objective Met:	215.88%	103.15%

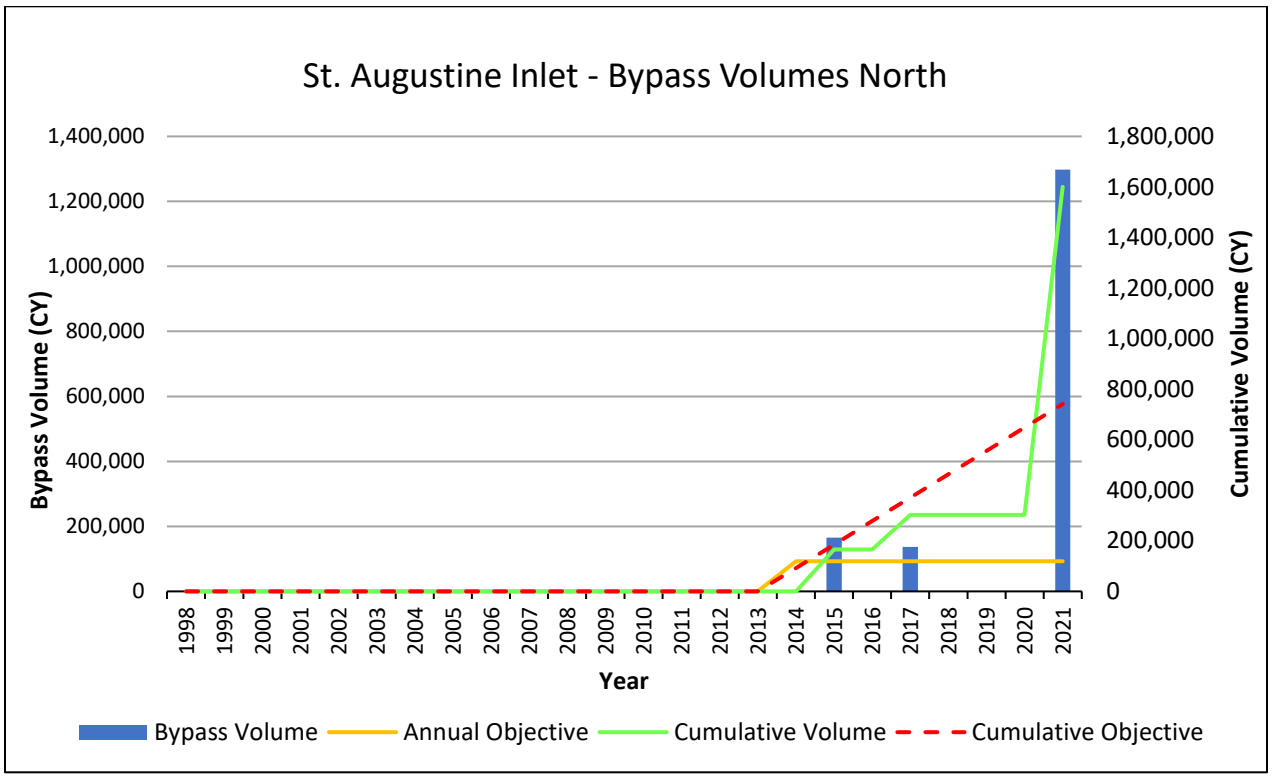

Figure 3: St. Augustine Inlet bypass volume, annual objective, cumulative volume and cumulative objective north of inlet.

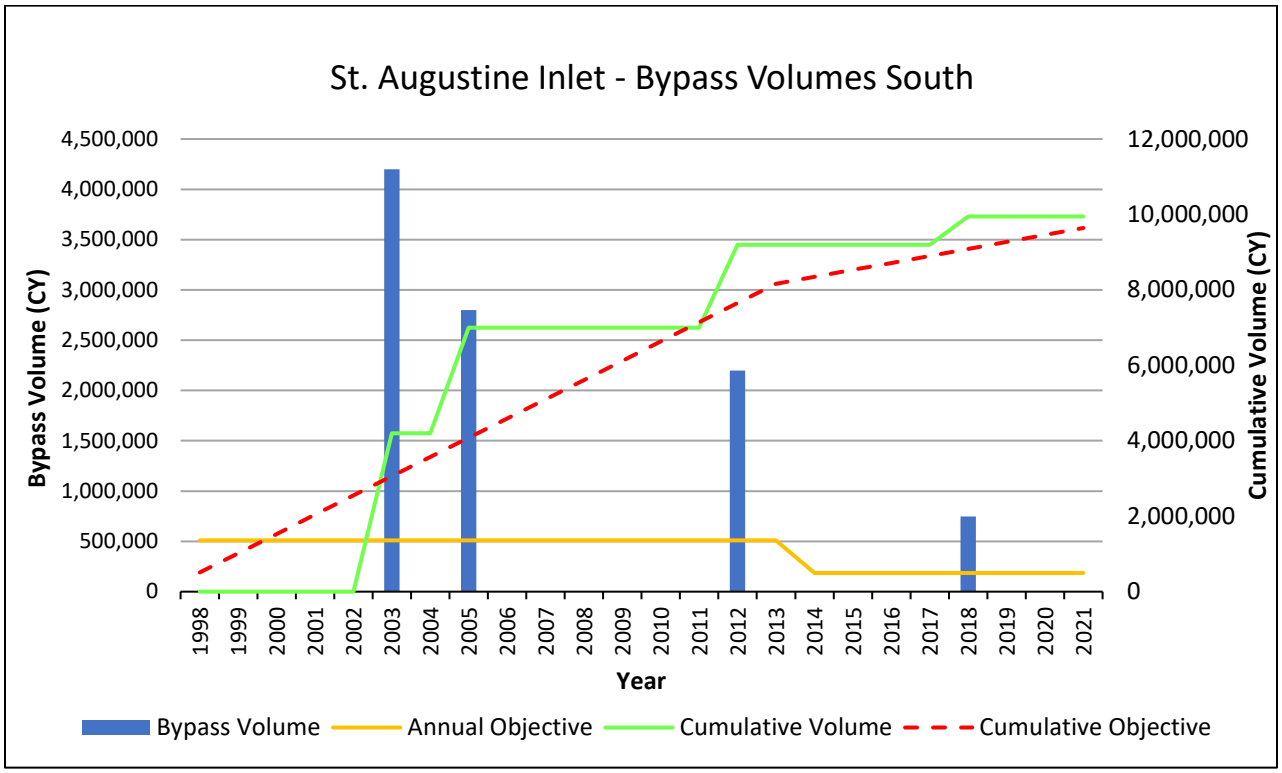

Figure 4: St. Augustine Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Ponce de Leon Inlet

Table 5: Ponce de Leon Inlet Management Plan 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:	0	1,386,864
Cumulative Objective:	80,000	1,029,000
Annualized Volume Bypassed:	0	55,475
Surplus (Deficit):	-80,000	357,864
Percent Objective Met:	0%	134.78%

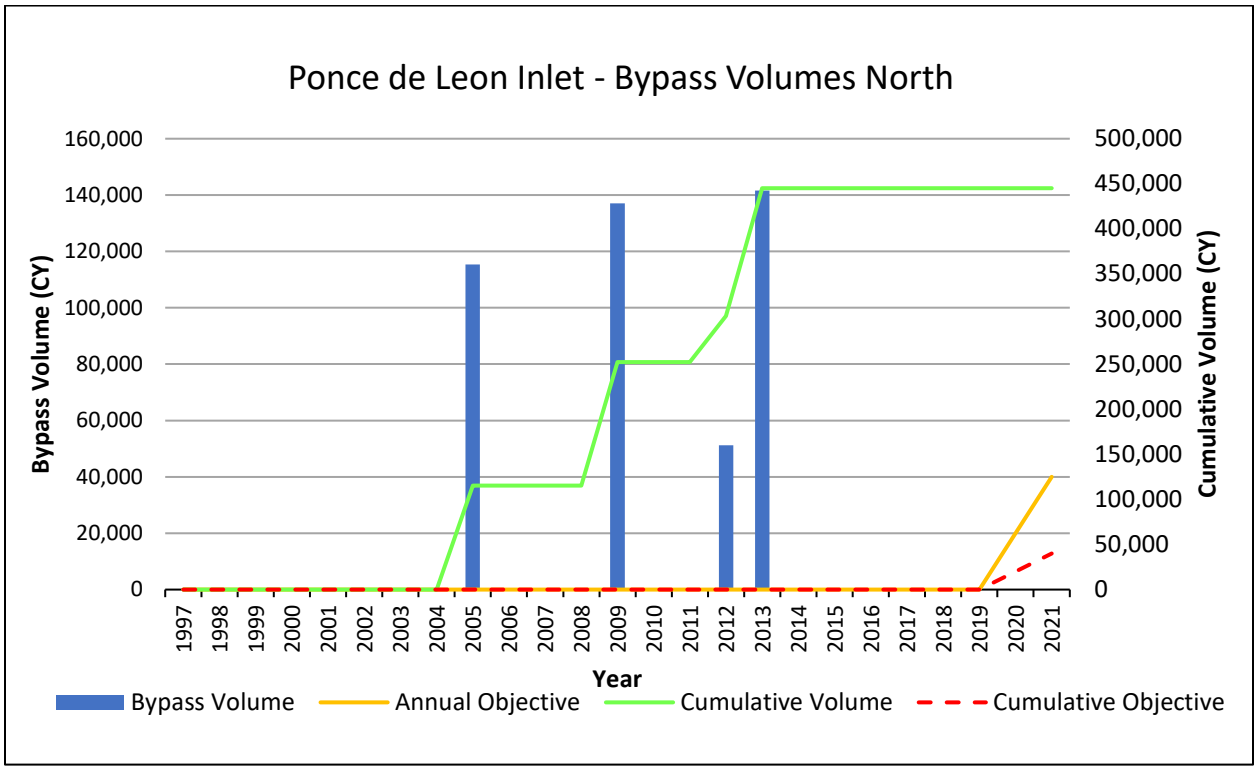

Figure 5: Ponce de Leon Inlet bypass volume, annual objective, cumulative volume and cumulative objective north of the inlet.

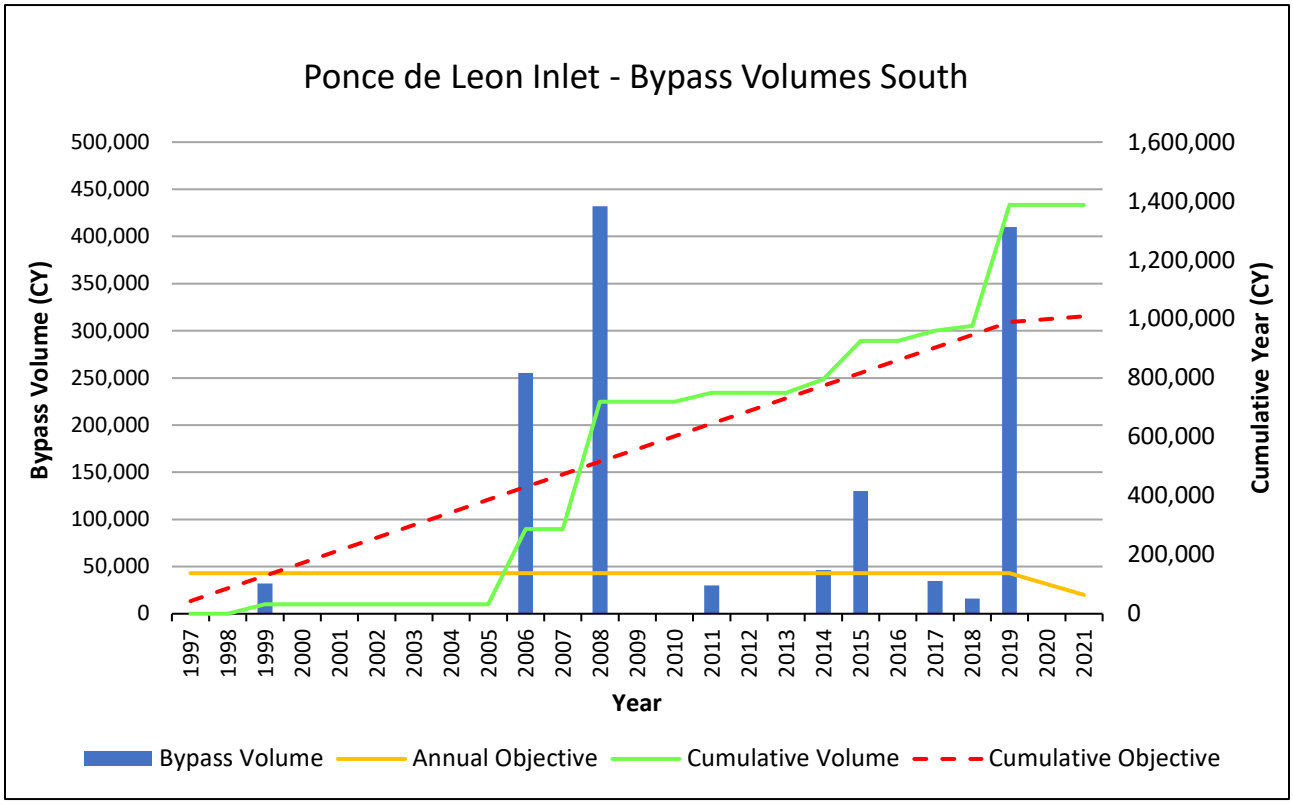

Figure 6: Ponce de Leon Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

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 and P.E with St. Lucie County, November 2021.

Port Canaveral Inlet

Table 7: Port Canaveral Inlet Management Plan 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	2,184,000
Annualized Volume Bypassed:	0	206,510
Surplus (Deficit):	0	707,142
Percent Objective Met:	N/A	132.38%

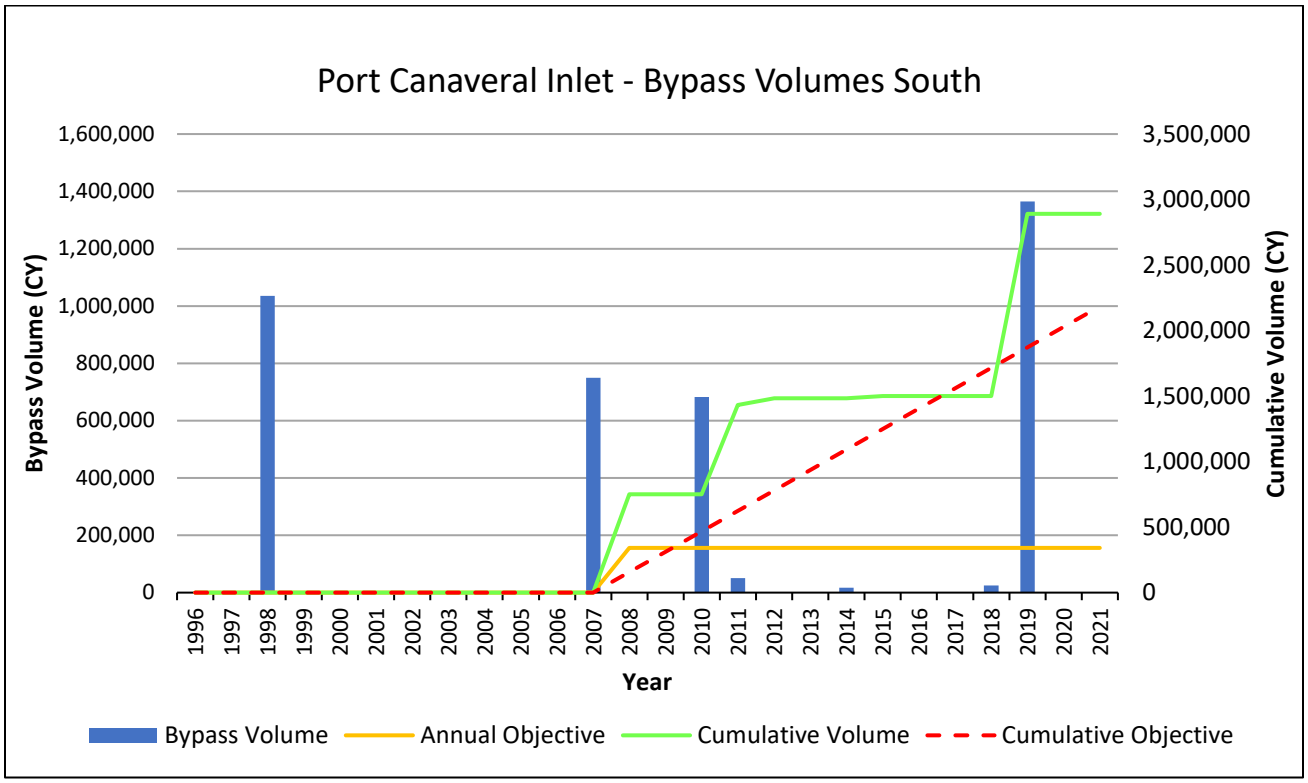

Figure 8: Port Canaveral Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Sebastian Inlet

Table 9: Sebastian Inlet Management Plan 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

*2008 bypass objective was updated in Strategic Beach Management Plan (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	1,125,045
Cumulative Objective:	0	1,820,000
Annualized Volume Bypassed:	0	51,138
Surplus (Deficit):	0	-694,955
Percent Objective Met:	N/A	61.82%

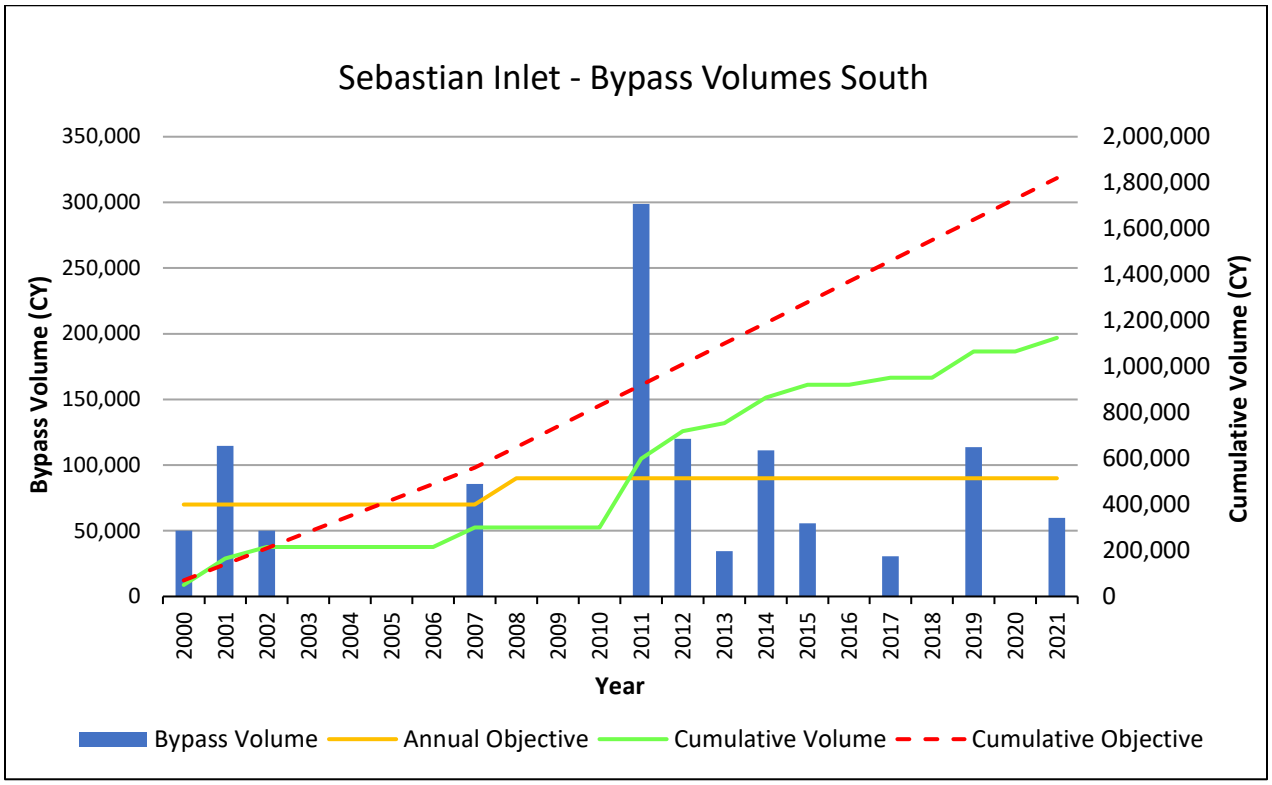

Figure 9: Sebastian Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Ft. Pierce Inlet

Table 11: Ft. Pierce Inlet Management Plan 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

*IMP was updated in 2022 with a new bypass objective and can be viewed on the department's web site.

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	3,250,000
Annualized Volume Bypassed:	0	11,245
Surplus (Deficit):	0	-2,968,874
Percent Objective Met:	N/A	8.65%

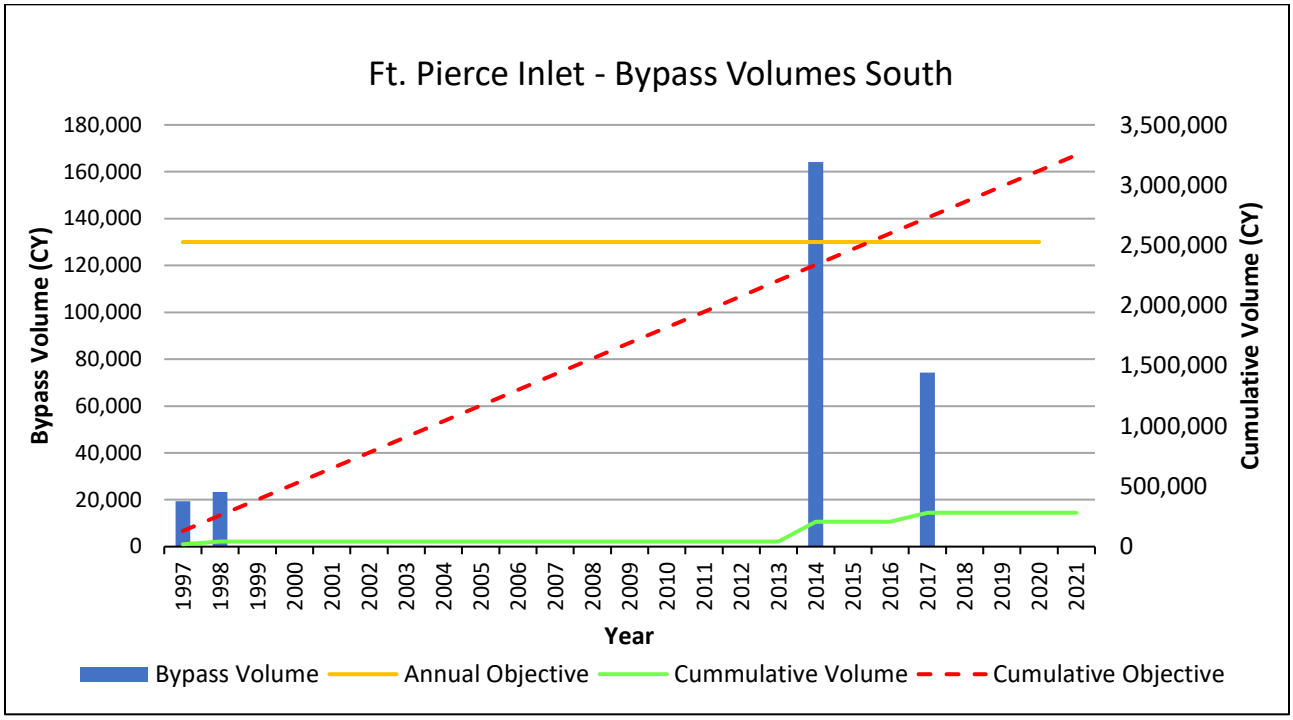

Figure 10: Ft. Pierce Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

St. Lucie Inlet

Table 13: St. Lucie Inlet - Inlet Management Plan 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	2016	34,000	161,000

*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	1,031,593
Cumulative Objective:	204,000	966,000
Annualized Volume Bypassed:	51,000	171,932
*Surplus (Deficit):	102,000	65,593
Percent Objective Met:	150.00%	106.79%

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

North of the inlet between years 2016 to 2021, 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.

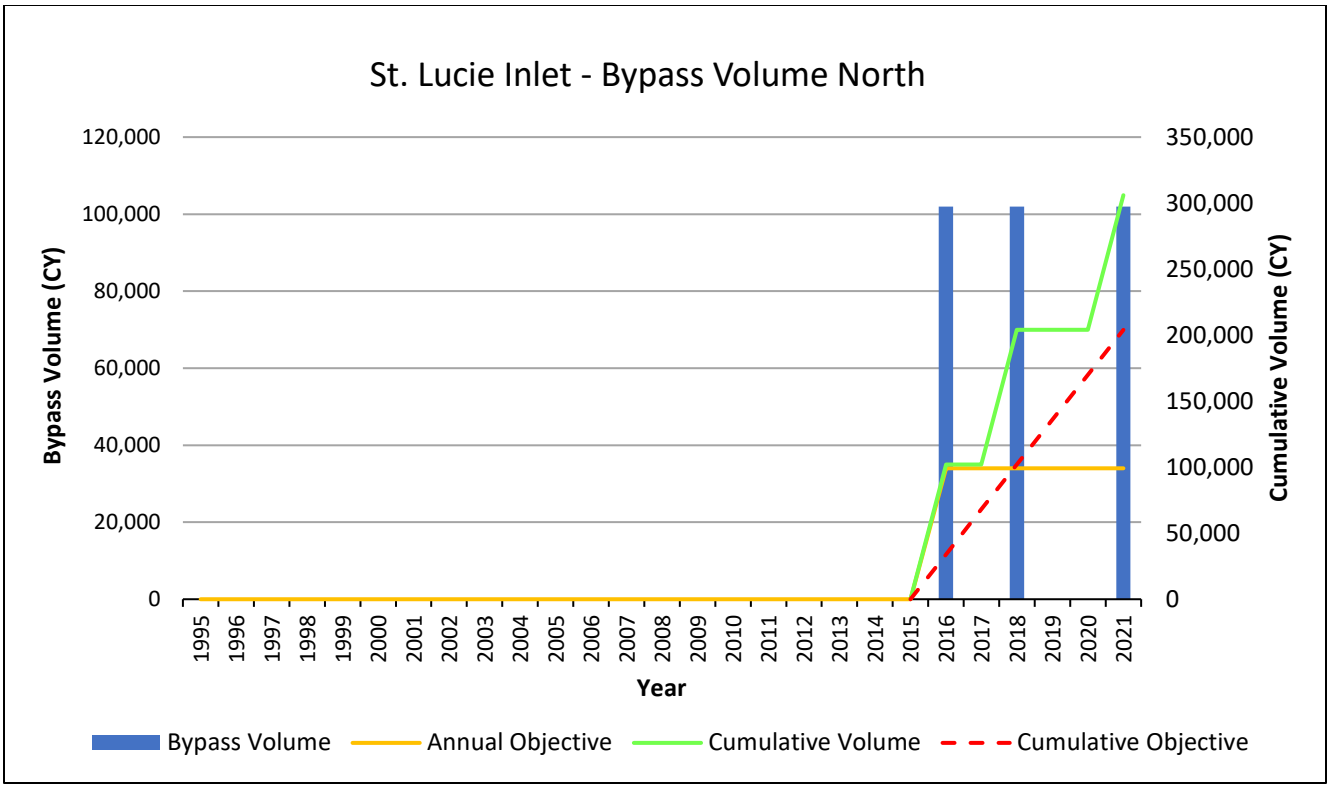

Figure 11: St. Lucie Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

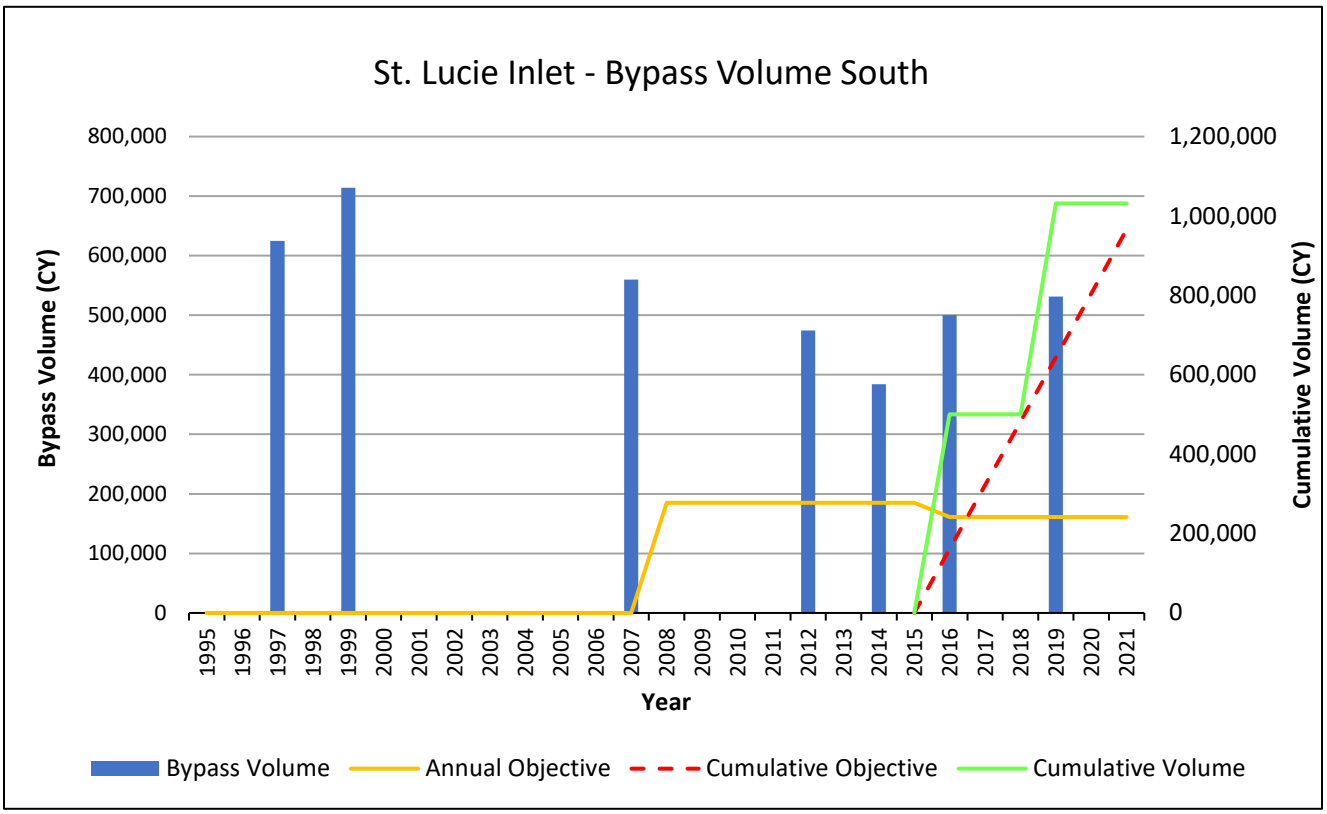

Figure 12: St. Lucie Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Southeast Atlantic Coast Region

Figure 13: Bakers Haulover Inlet bypassing sand south of the inlet to the Village of Bal Harbor. Photo courtesy of the Village of Bal Harbor, March 2022.

Jupiter Inlet

Table 15: Jupiter Inlet Management Plan 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	1,950,334
Cumulative Objective:	0	1,875,000
Annualized Volume Bypassed:	0	78,013
Surplus (Deficit):	0	75,334
Percent Objective Met:	N/A	104.02%

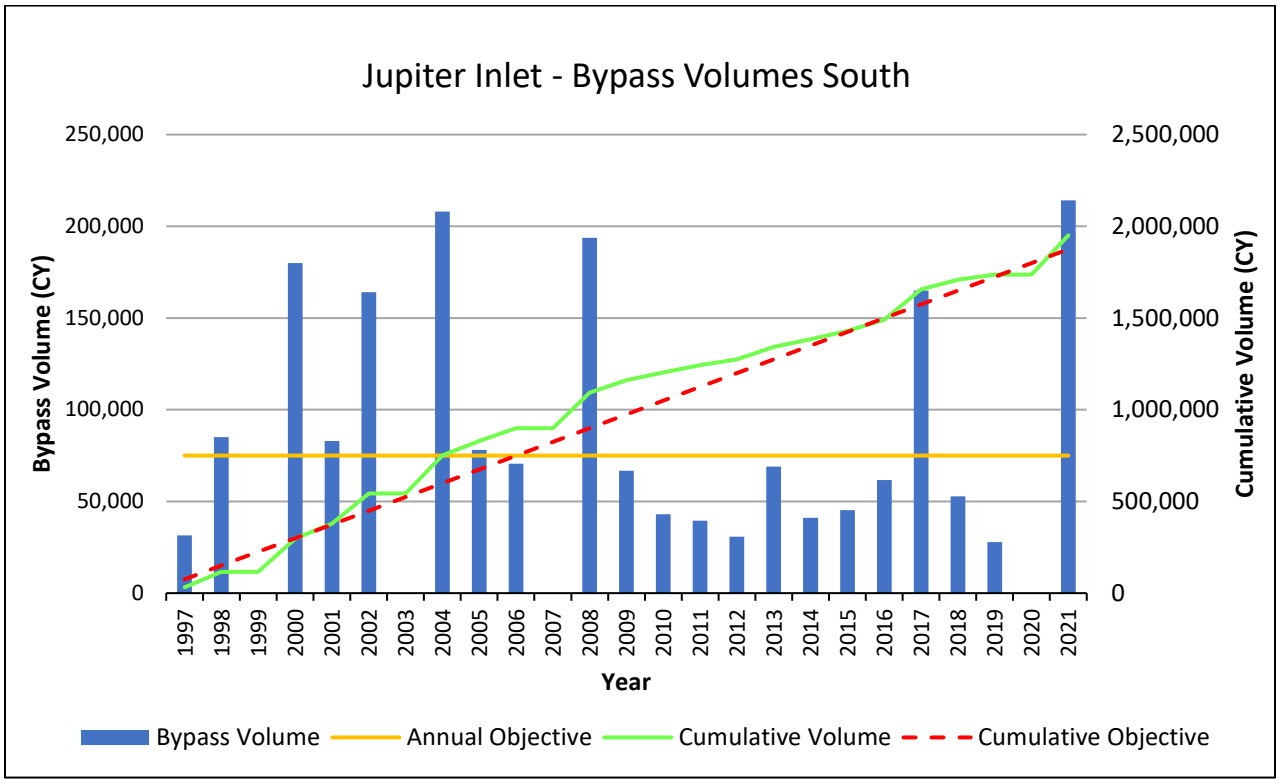

Figure 14: Jupiter Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Lake Worth Inlet

Table 17: Lake Worth Inlet Management Plan 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	6,152,348
Cumulative Objective:	0	4,883,600
Annualized Volume Bypassed:	0	236,629
Surplus (Deficit):	0	1,268,748
Percent Objective Met:	N/A	125.98%

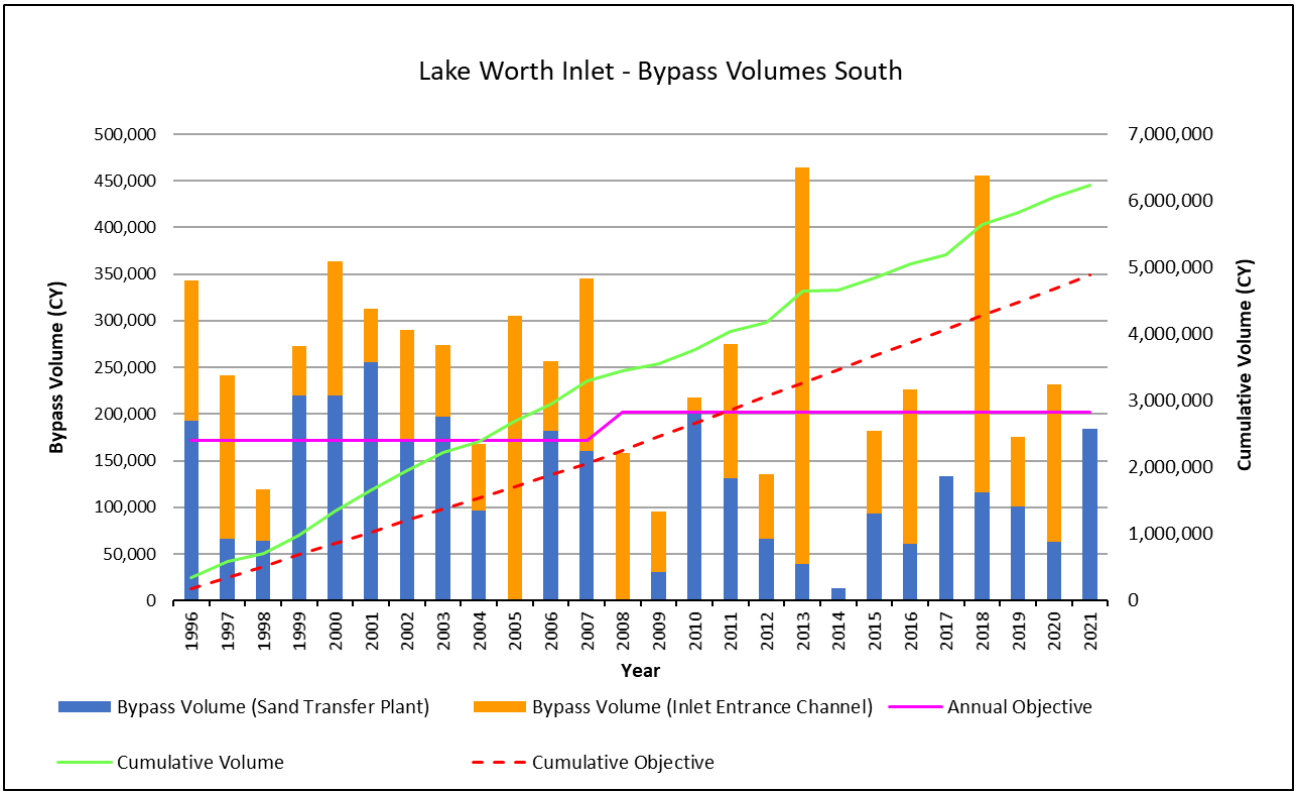

Figure 15: Lake Worth Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

South Lake Worth Inlet

Table 19: South Lake Worth Inlet Management Plan 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

*IMP was updated in 2022 with a new bypass objective and can be viewed on the department's web site.

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	2,239,955
Cumulative Objective:	0	2,024,000
Annualized Volume Bypassed:	0	97,389
Surplus (Deficit):	0	215,955
Percent Objective Met:	N/A	110.67%

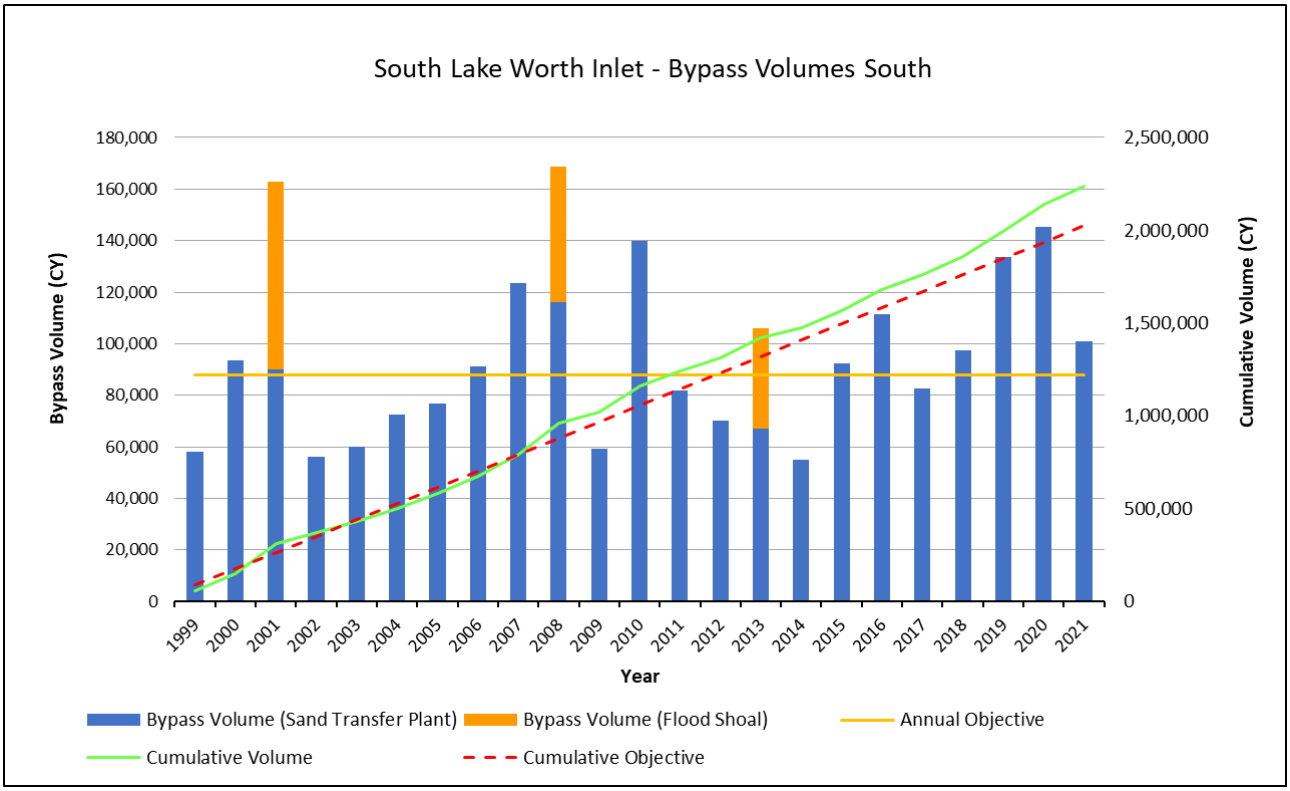

Figure 16: South Lake Worth Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Boca Raton Inlet

Table 21: Boca Raton Inlet Management Plan 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

*Bypass objective updated in 2005.

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	2,175,637
Cumulative Objective:	0	1,981,400
Annualized Volume Bypassed:	0	87,025
Surplus (Deficit):	0	194,237
Percent Objective Met:	N/A	109.80%

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

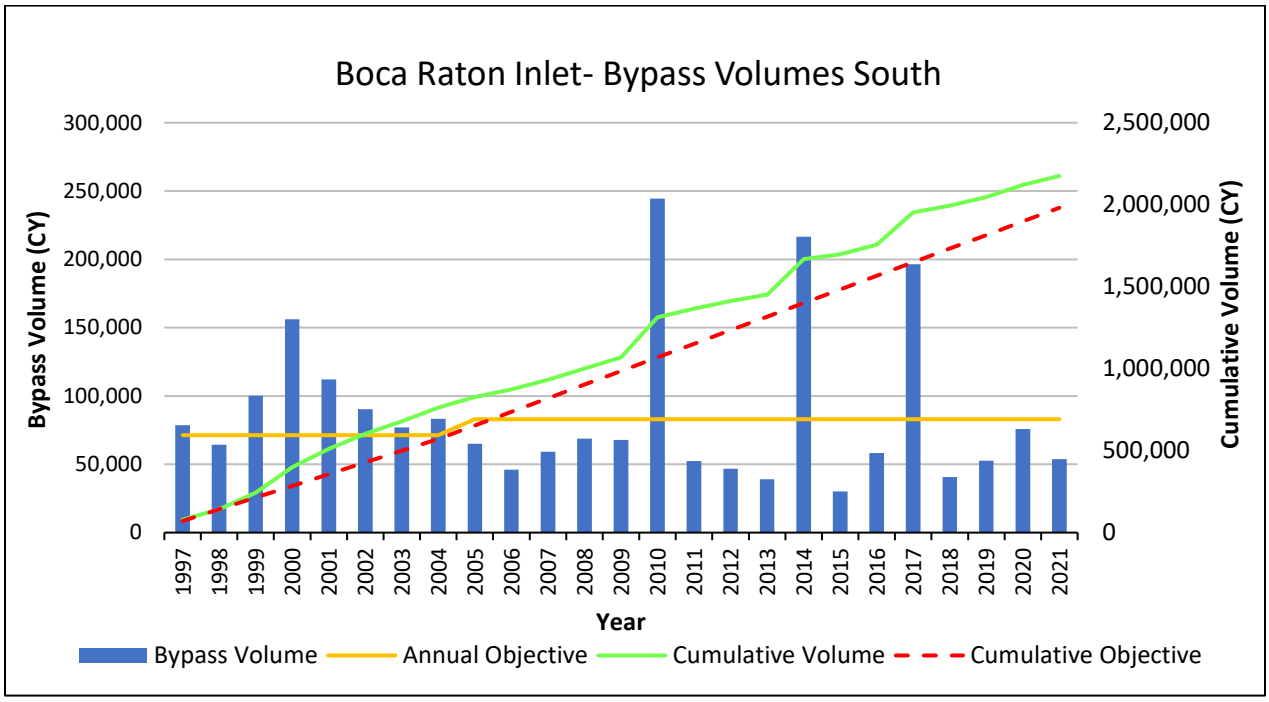

Figure 17: Boca Raton Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Hillsboro Inlet

Table 23: Hillsboro Inlet Management Plan 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	2,729,483
Cumulative Objective:	0	3,000,000
Annualized Volume Bypassed:	0	109,179
Surplus (Deficit):	0	-270,517
Percent Objective Met:	N/A	90.98%

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

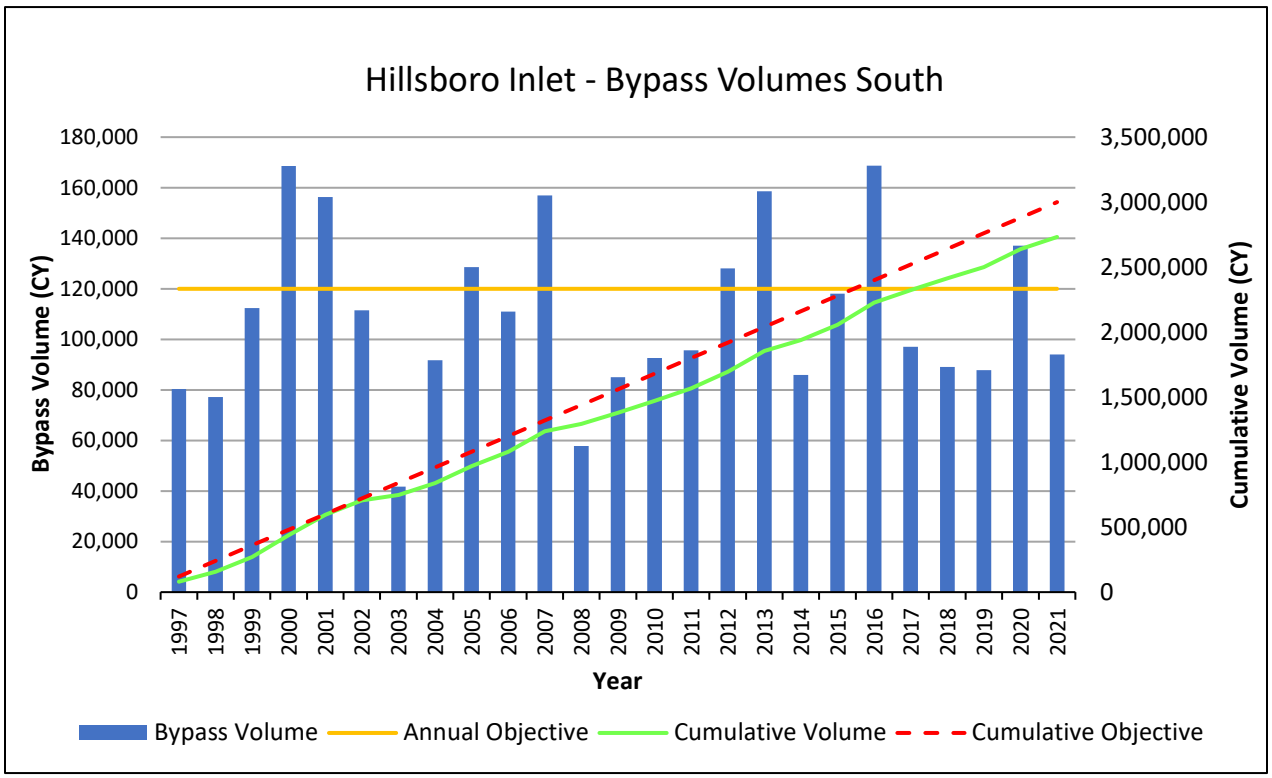

Figure 18: Hillsboro Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Port Everglades Inlet

Table 25: Port Everglades Inlet Management Plan 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	1,002,800
Annualized Volume Bypassed:	0	10,193
Surplus (Deficit):	0	-768,361
Percent Objective Met:	N/A	23.38%

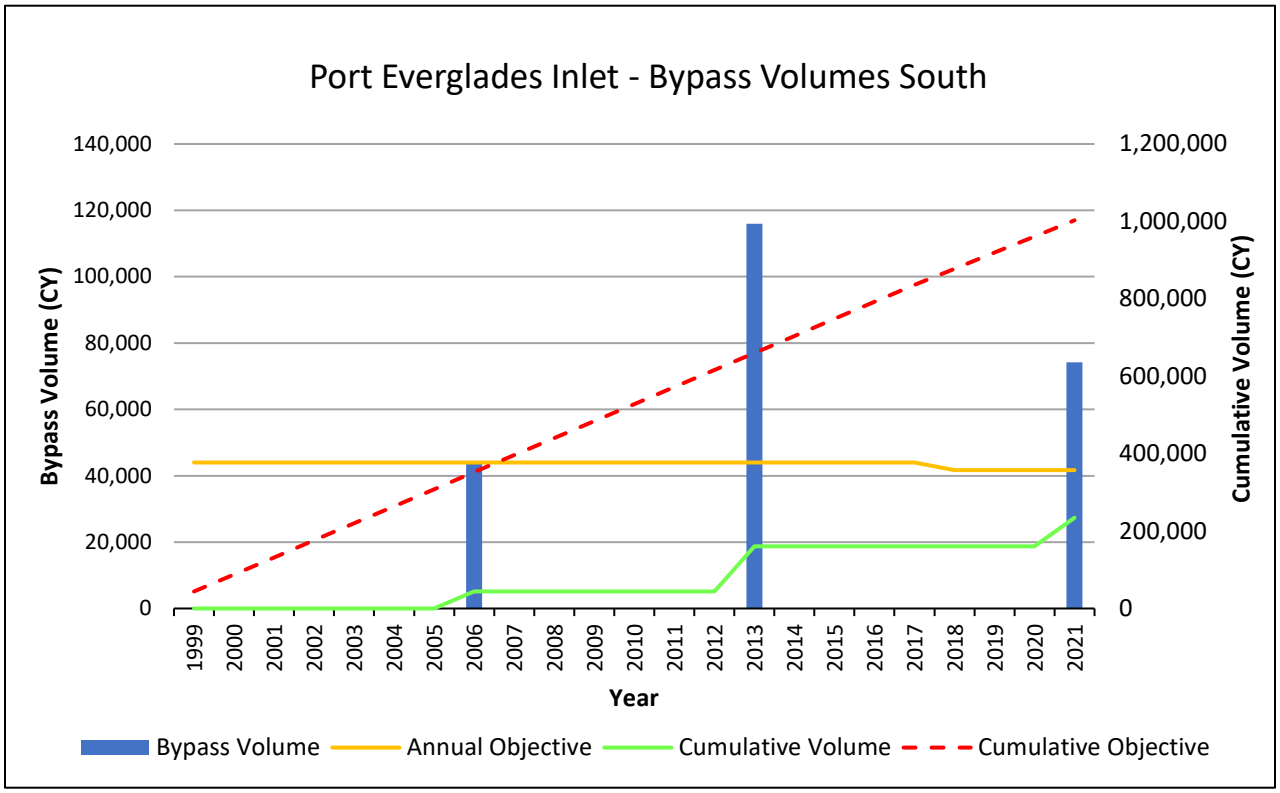

Figure 19: Port Everglades Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Bakers Haulover Inlet

Table 27: Bakers Haulover Inlet Management Plan 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

*IMP was updated in 2021 with a new bypass objective and can be viewed on the department's web site.

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	900,708
Cumulative Objective:	0	677,700
Annualized Volume Bypassed:	0	36,028
Surplus (Deficit):	0	223,008
Percent Objective Met:	N/A	132.91%

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

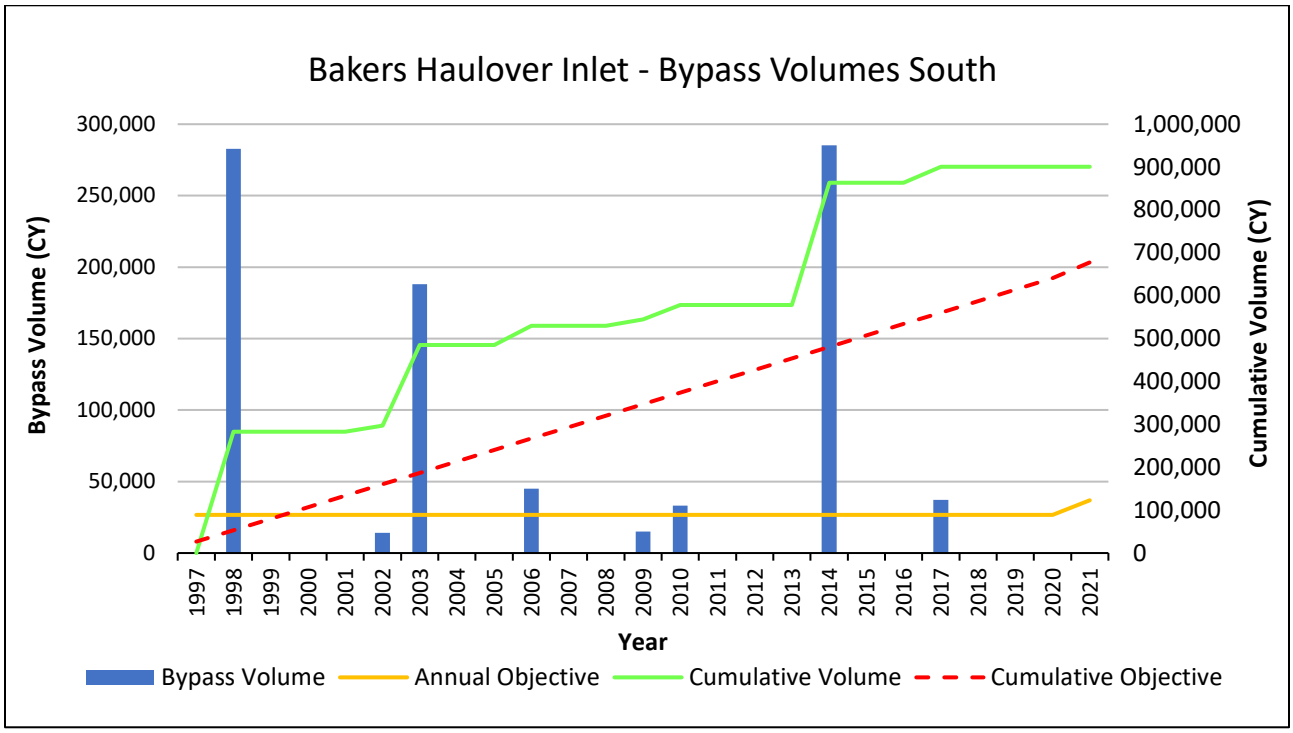

Figure 20: Bakers Haulover Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Panhandle Gulf Coast Region

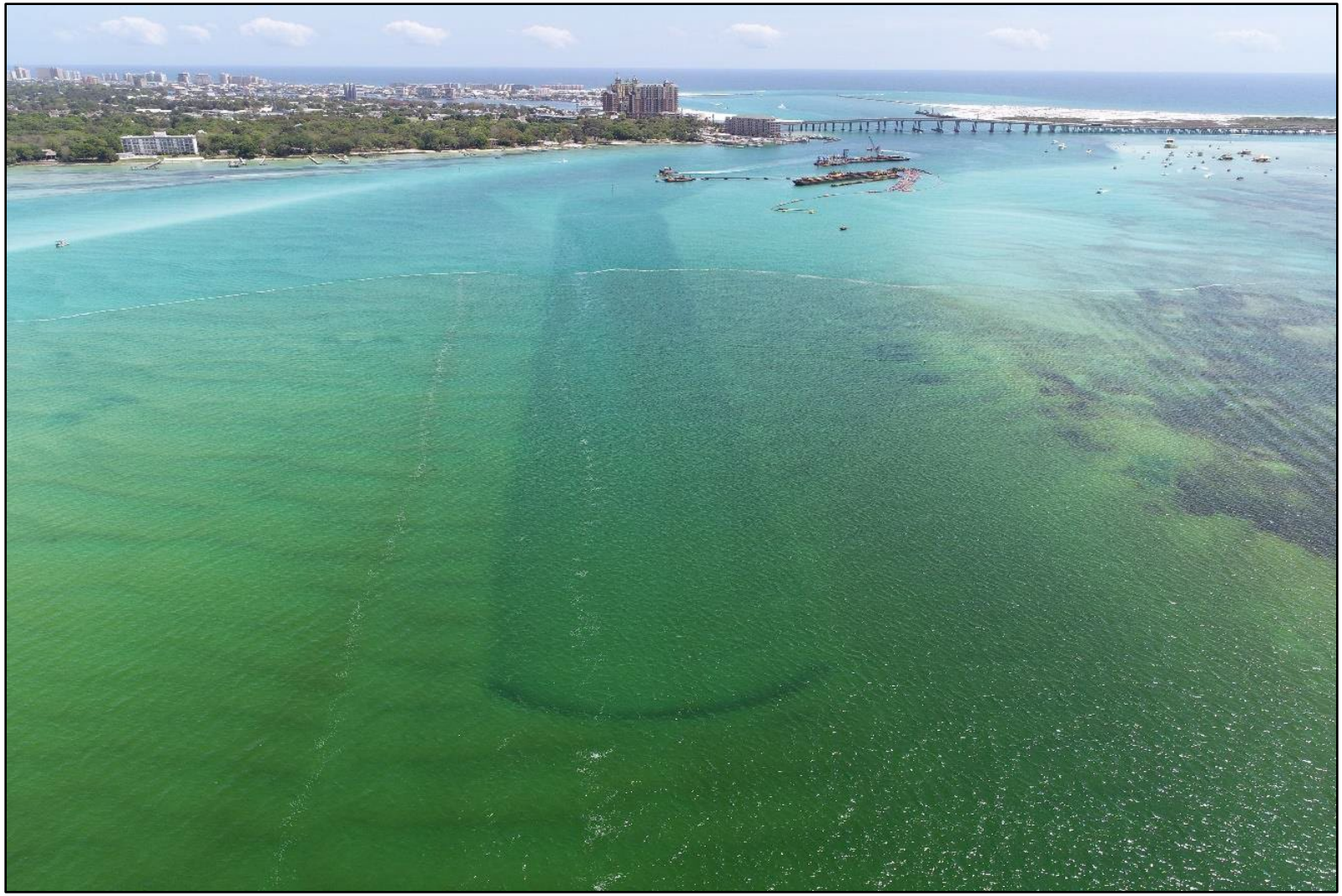

Figure 21: East Pass Federal Navigation Channel being dredged to place material at Norriego Point, photo courtesy of Taylor Engineering, April 2018.

East Pass

Table 29: East Pass Management Plan 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

*Bypassing to the west for the time period of 2000 to 2012 (IMP of 2000) has a percent objective met of 54%.

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:	22,567	15,111
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.

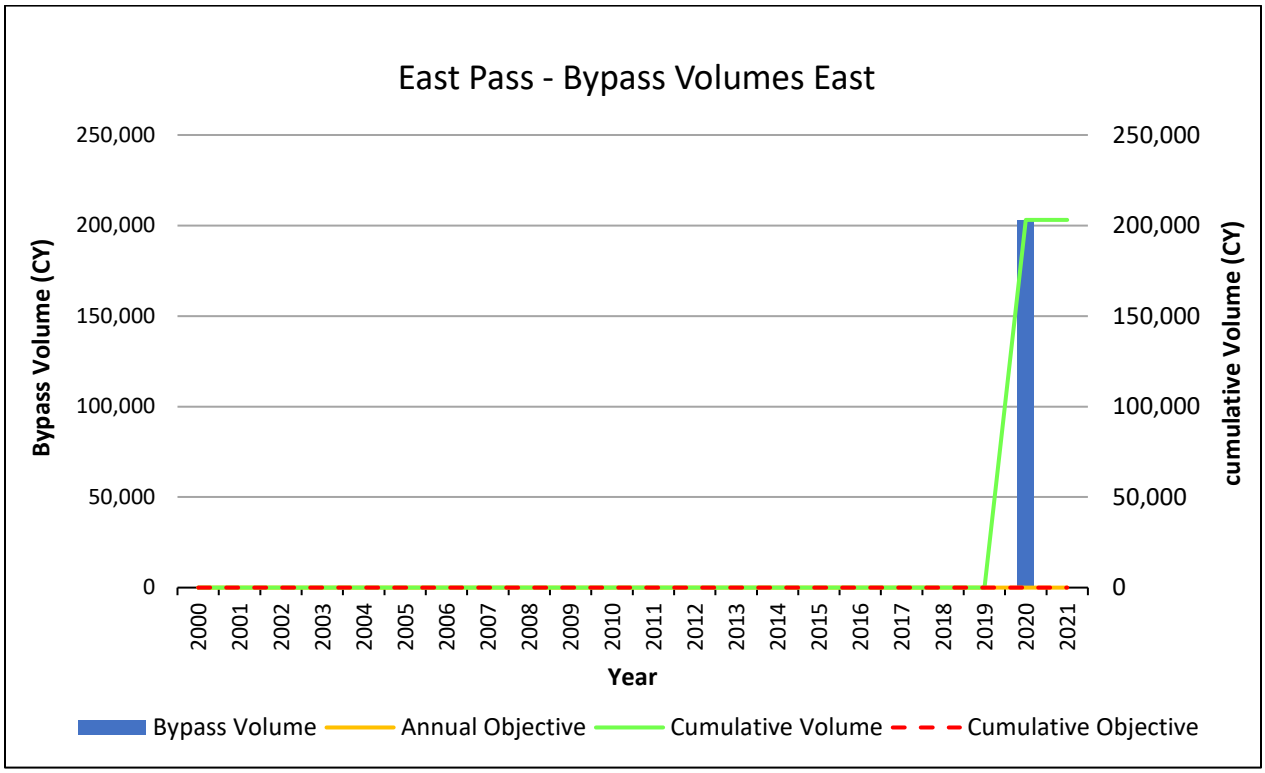

Figure 22: East Pass bypass volume, annual objective, cumulative volume and cumulative objective.

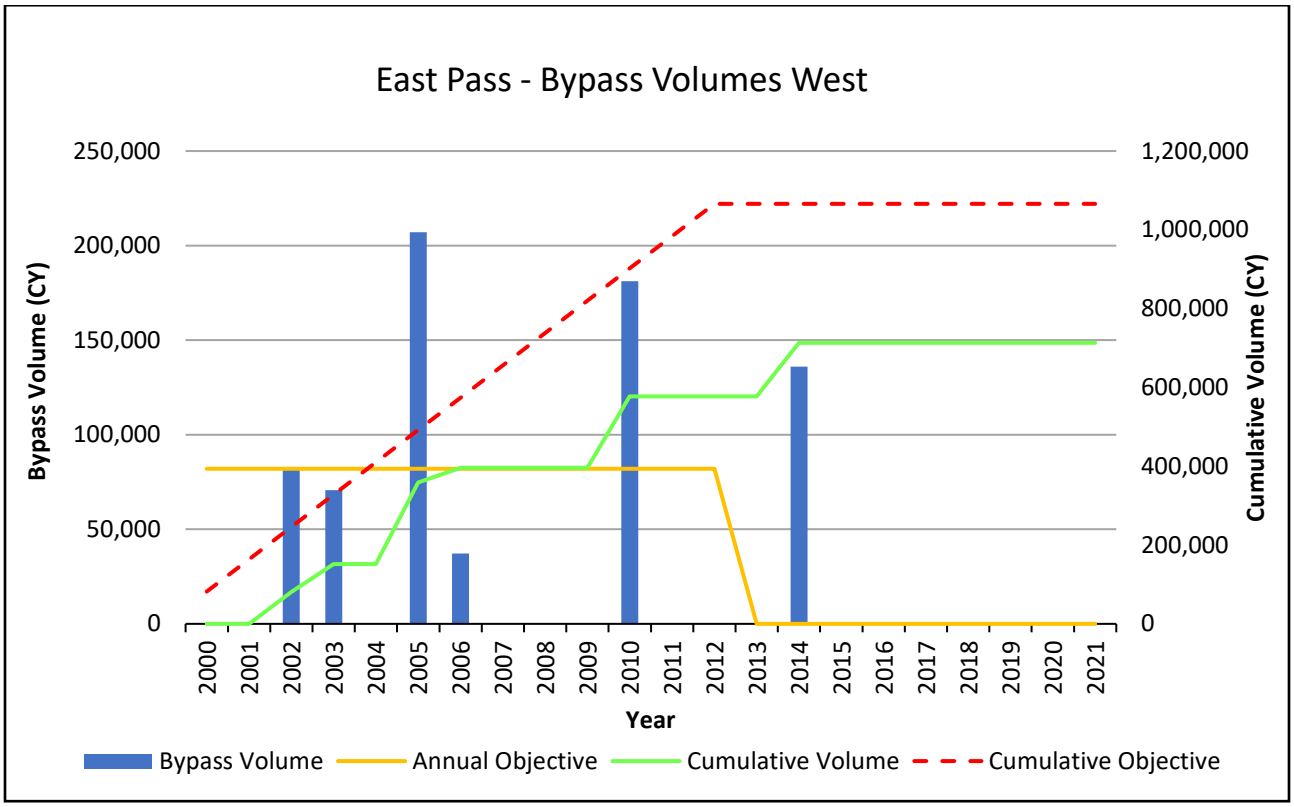

Figure 23: East Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Mexico Beach Inlet

Table 31: Mexico Beach Inlet Management Plan and bypass objective.

County	Inlet	Year IMP Adopted or Updated	Annual Bypass Objective East (CY)	Annual Bypass Objective West (CY)
Bay	Mexico Beach	2008	32,400	0

*Strategy adopted originally in the 2008 Strategic Beach Management Plan.

Table 32: Mexico Beach Inlet bypass summary of sand bypass volumes, since 2008.

Bypassing Matrix	East Bypass (CY)	West Bypass (CY)
Cumulative Volume Bypassed:	470,431	0
Cumulative Objective:	453,600	0
Annualized Volume Bypassed:	33,602	0
Surplus (Deficit):	16,831	0
Percent Objective Met:	103.71%	N/A

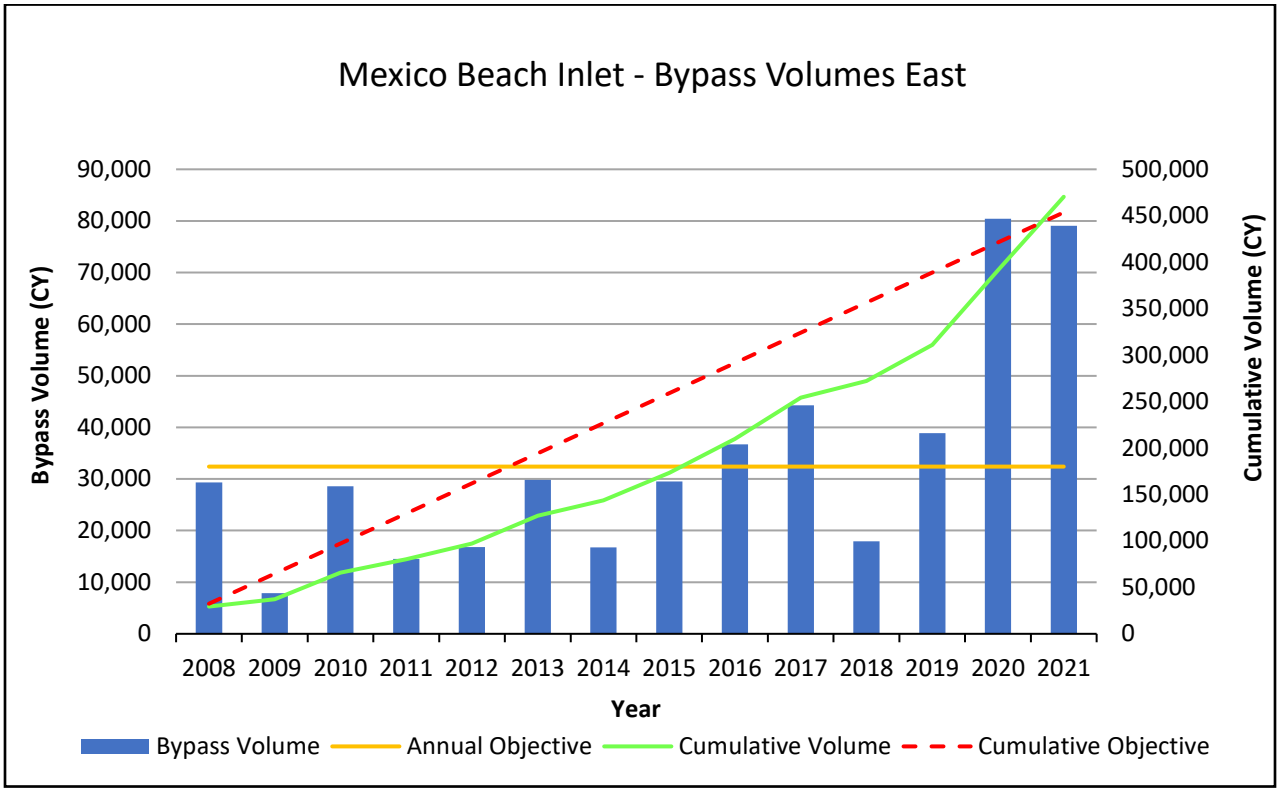

Figure 24: Mexico Beach Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

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 - Inlet Management Plan 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	84,000
Annualized Volume Bypassed:	0	27,500
Surplus (Deficit):	0	26,000
Percent Objective Met:	N/A	130.95%

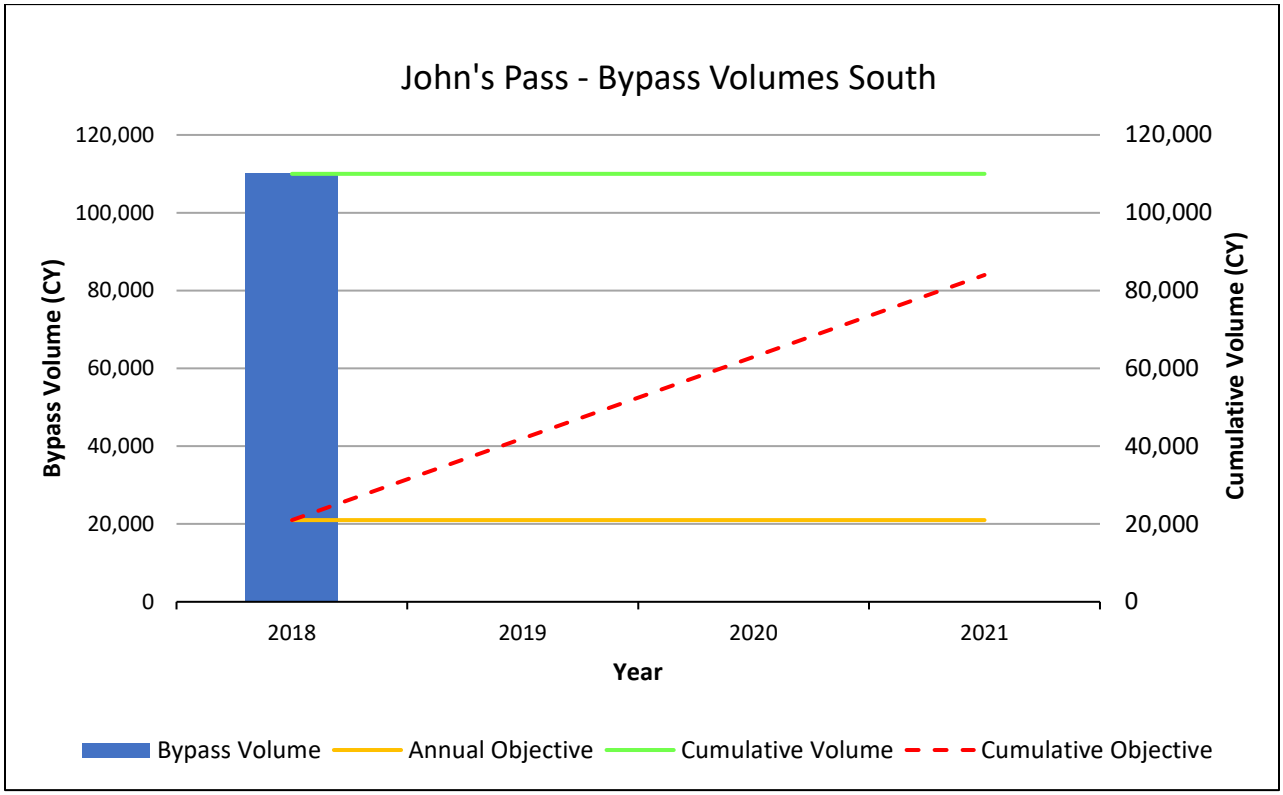

Figure 26: John's Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Blind Pass (Pinellas County)

Table 35: Blind Pass Management Plan 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:	60,000	155,000
Annualized Volume Bypassed:	0	30,171
Surplus (Deficit):	-60,000	-4,146
Percent Objective Met:	0%	97.33%

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

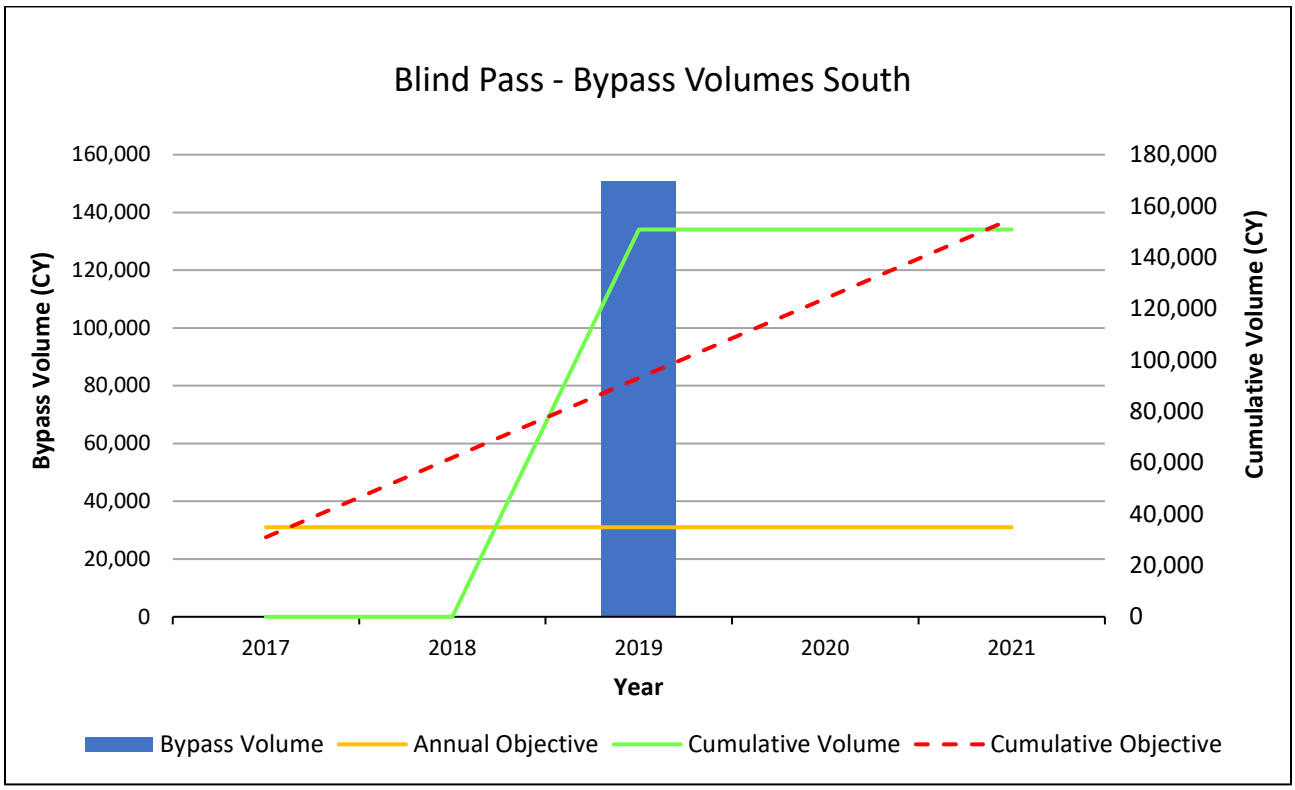

Figure 27: Blind Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Pass-a-Grille Inlet

Table 37: Pass-a-Grille Inlet Management Plan 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:	42,000	0
Annualized Volume Bypassed:	0	0
Surplus (Deficit):	-42,000	0
Percent Objective Met:	0%	N/A

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

Longboat Pass

Table 39: Longboat Pass Management Plan 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	809,200
Annualized Volume Bypassed:	7,021	35,086
Surplus (Deficit):	0	-318,000
Percent Objective Met:	N/A	60.70%

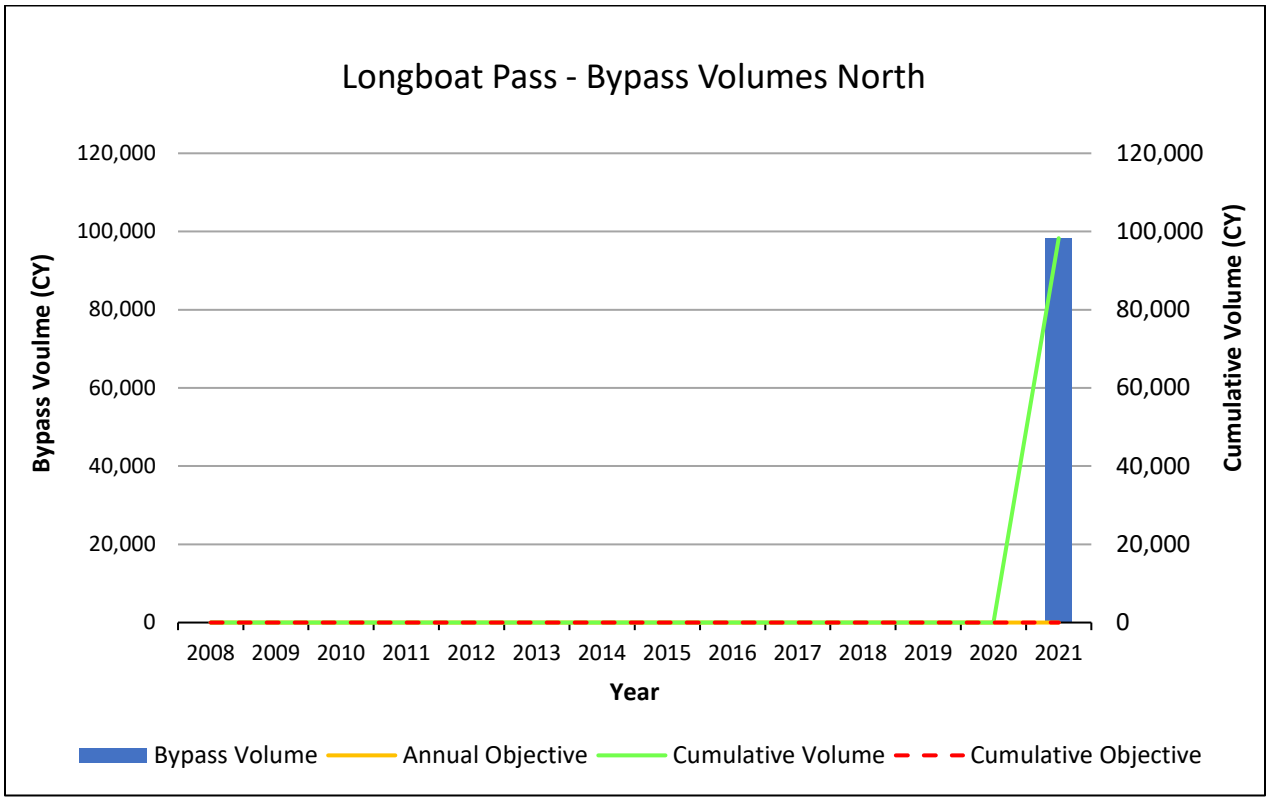

Figure 28. Longboat Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

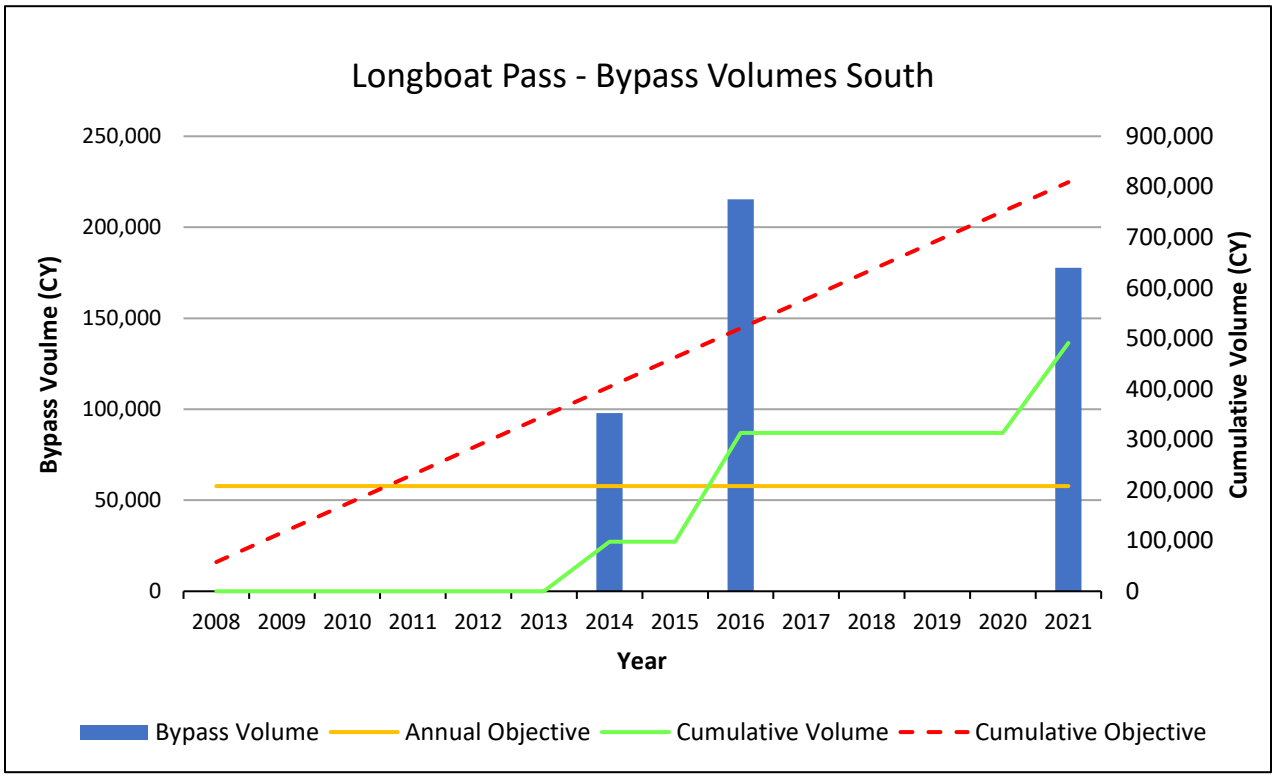

Figure 29: Longboat Pass bypass volume, annual objective, cumulative volume and cumulative objective to the south.

Venice Inlet

Table 41: Venice Inlet Management Plan 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	1,550,880
Annualized Volume Bypassed:	0	1,206
Surplus (Deficit):	0	-1,521,948
Percent Objective Met:	N/A	0.02%

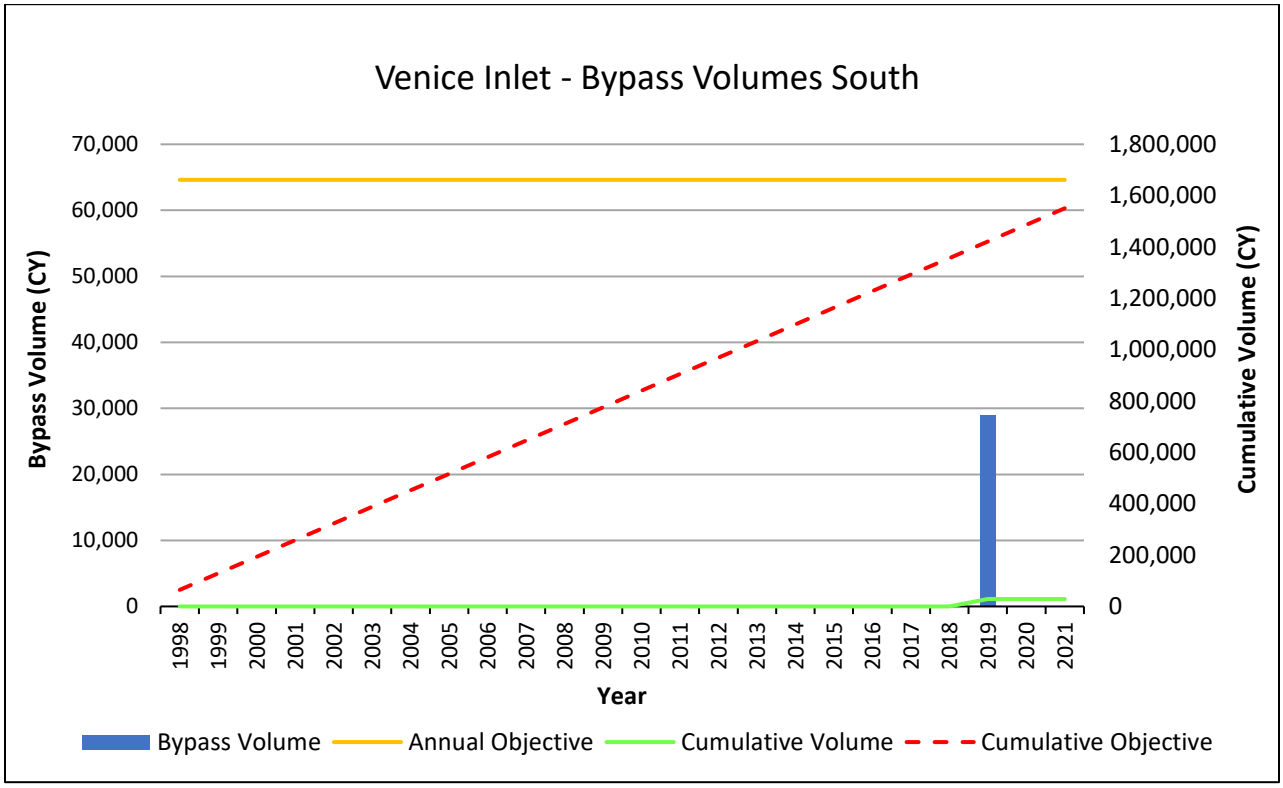

Figure 30: Venice Inlet bypass volume, annual objective, cumulative volume and cumulative objective.

Stump Pass

Table 43: Stump Pass Inlet Management Plan 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*	88,100
Cumulative Objective:	36,000	150,000
Annualized Volume Bypassed:	8,000	14,683
Surplus (Deficit):	12,000	-61,900
Percent Objective Met:	133.33%	58.73%

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

North of the inlet between years 2016 to 2021, there has been a total inlet dredge volume of 145,380 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 (97,380 cy) is credited towards beach nourishment at Manasota Key by the department.

South of the inlet between years 2016 to 2021, there has been a total inlet dredge volume of 81,100 cy at Stump Pass with approximate placement at Knight Island/ Don Pedro Island at R22 area; of which, the entire 81,100 cy has been credited for inlet bypassing.

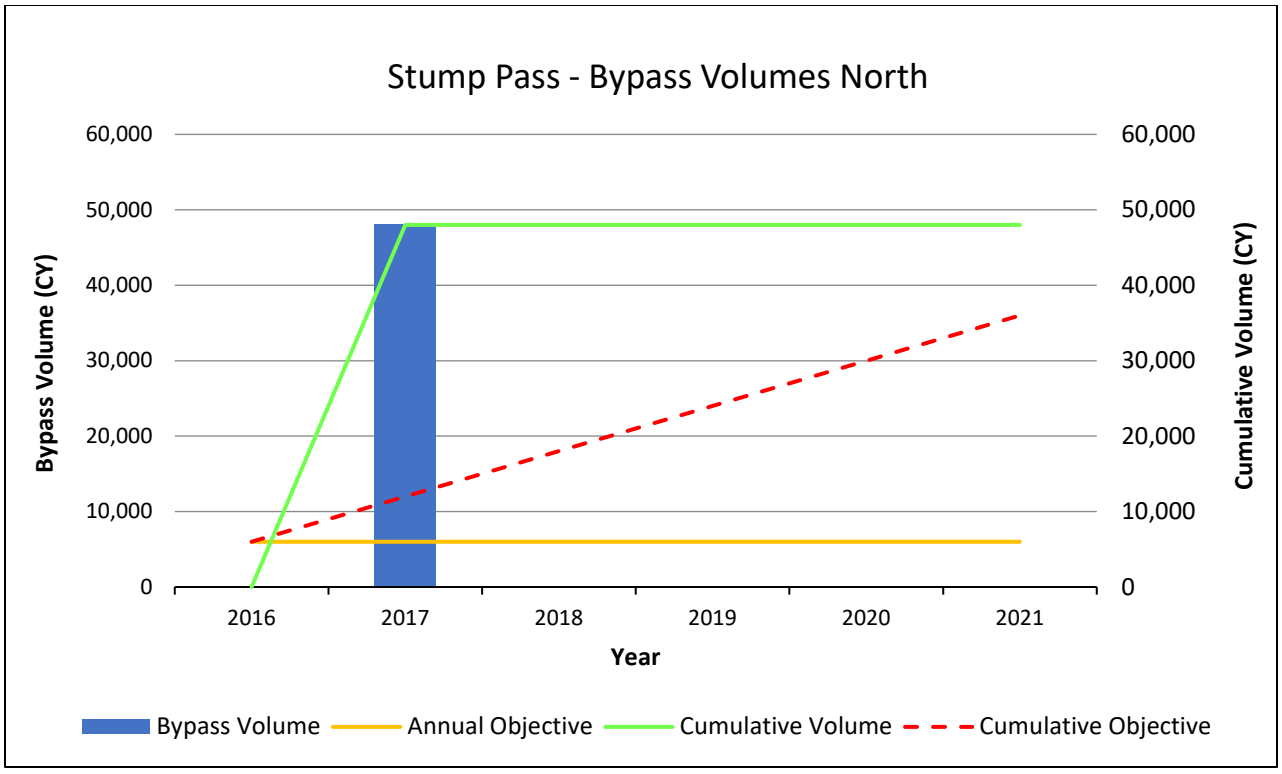

Figure 31: Stump Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

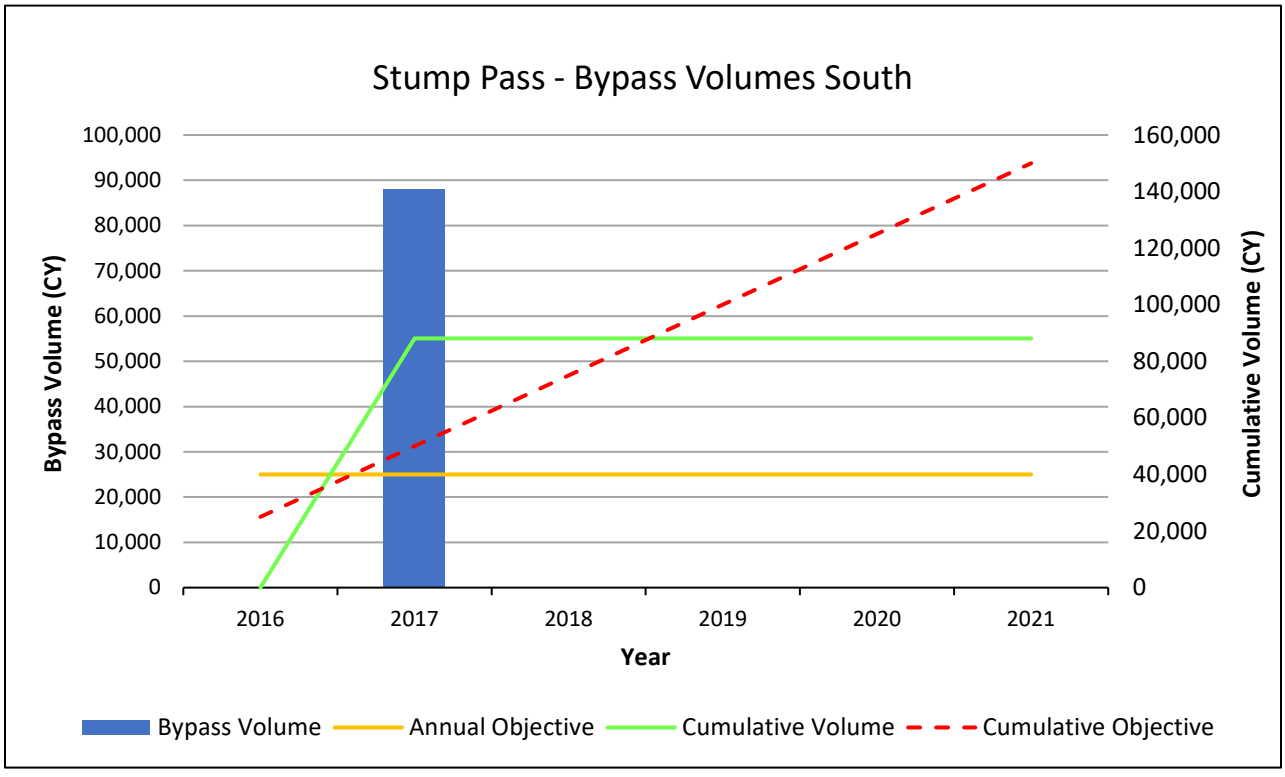

Figure 32: Stump Pass bypass volume, annual objective, cumulative volume and cumulative objective to the south.

Blind Pass (Lee County)

Table 45: Blind Pass Management Plan 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 46: 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	63,000
Annualized Volume Bypassed:	0	0
Surplus (Deficit):	0	-63,000
Percent Objective Met:	N/A	0%

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

Wiggins Pass

Table 47: Wiggins Pass Management Plan 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 48: Wiggins Pass bypass summary of sand bypass volumes, since 2018.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	74,784	35,597
Cumulative Objective:	54,932	27,468
Annualized Volume Bypassed:	18,696	8,899
Surplus (Deficit):	19,852	8,129
Percent Objective Met:	136.14%	129.59%

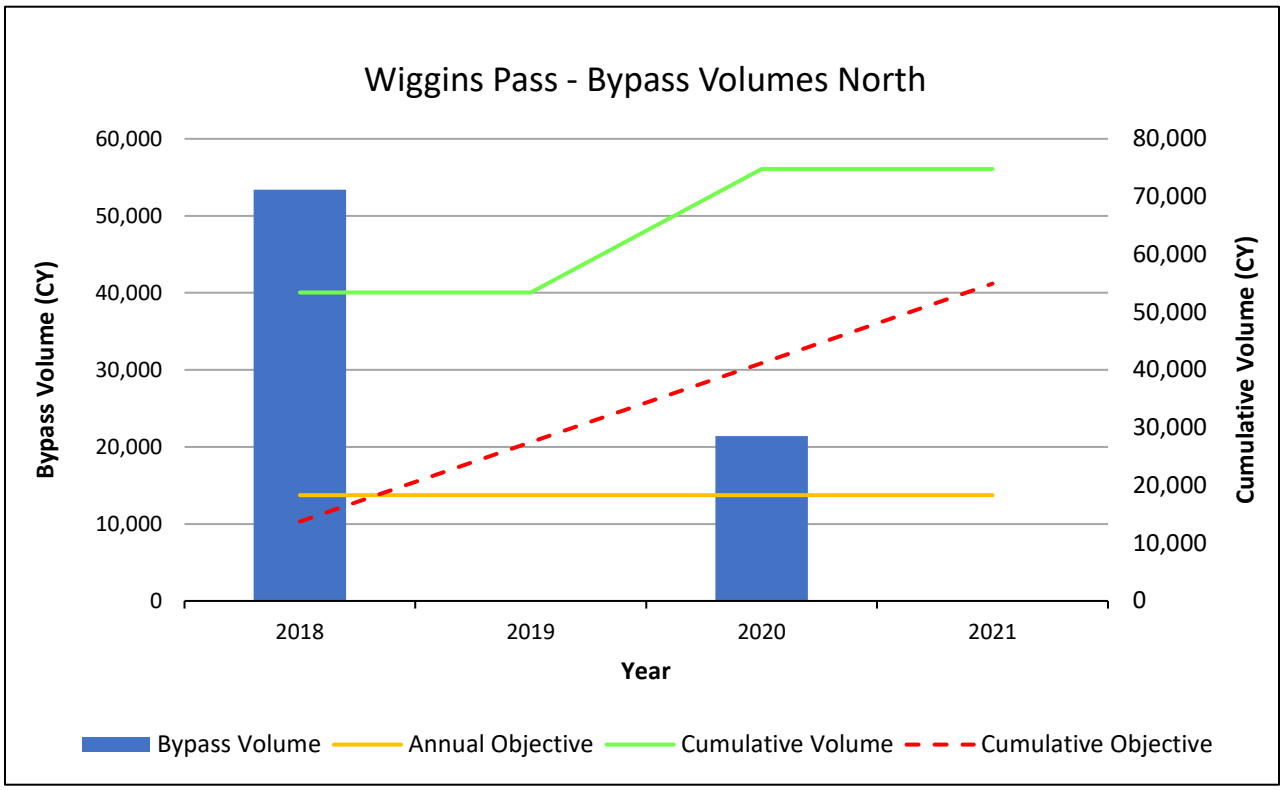

Figure 33: Wiggins Pass bypass volume, annual objective, cumulative volume and cumulative objective to the north.

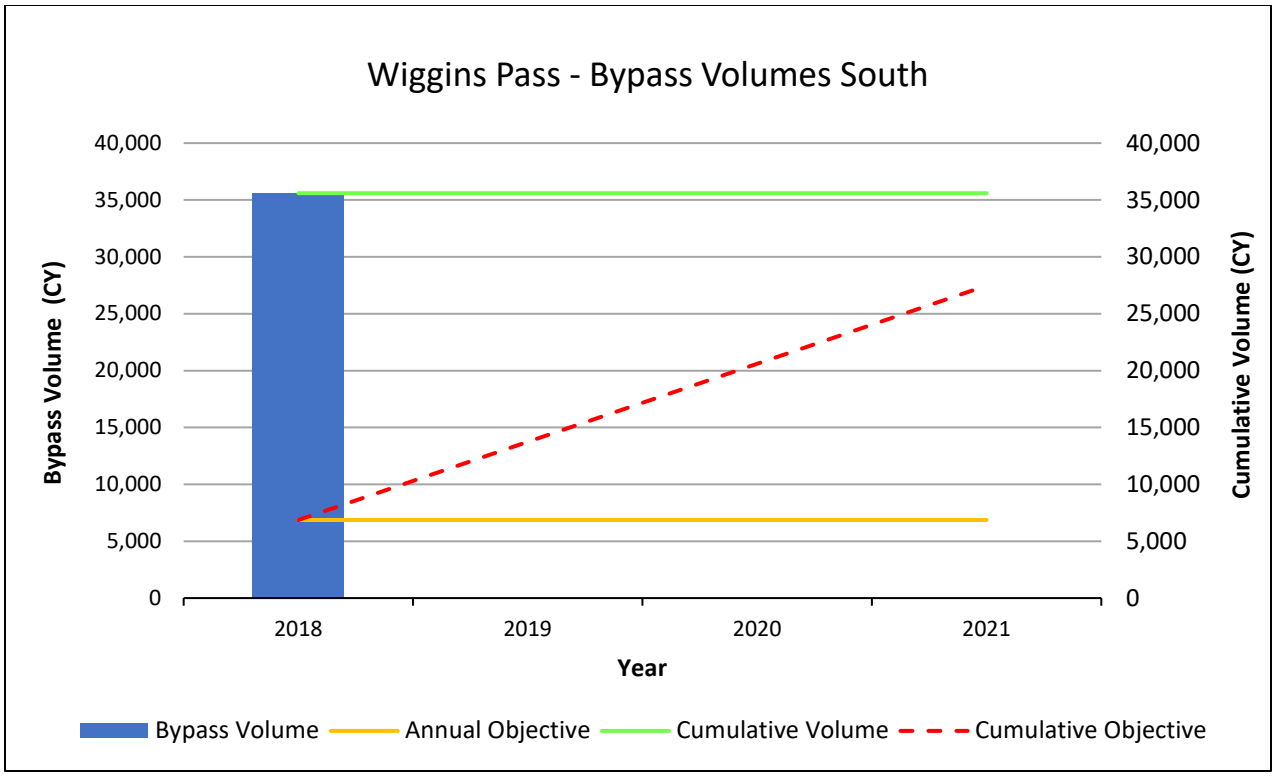

Figure 34: Wiggins Pass bypass volume, annual objective, cumulative volume and cumulative objective.

Doctors Pass

Table 49: Doctors Pass Inlet Management Plan 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 50: Doctors Pass bypass summary of sand bypass volumes, since 1997.

Bypassing Matrix	North Bypass (CY)	South Bypass (CY)
Cumulative Volume Bypassed:	0	176,626
Cumulative Objective:	0	250,000
Annualized Volume Bypassed:	0	7,065
Surplus (Deficit):	0	-73,374
Percent Objective Met:	N/A	70.65%

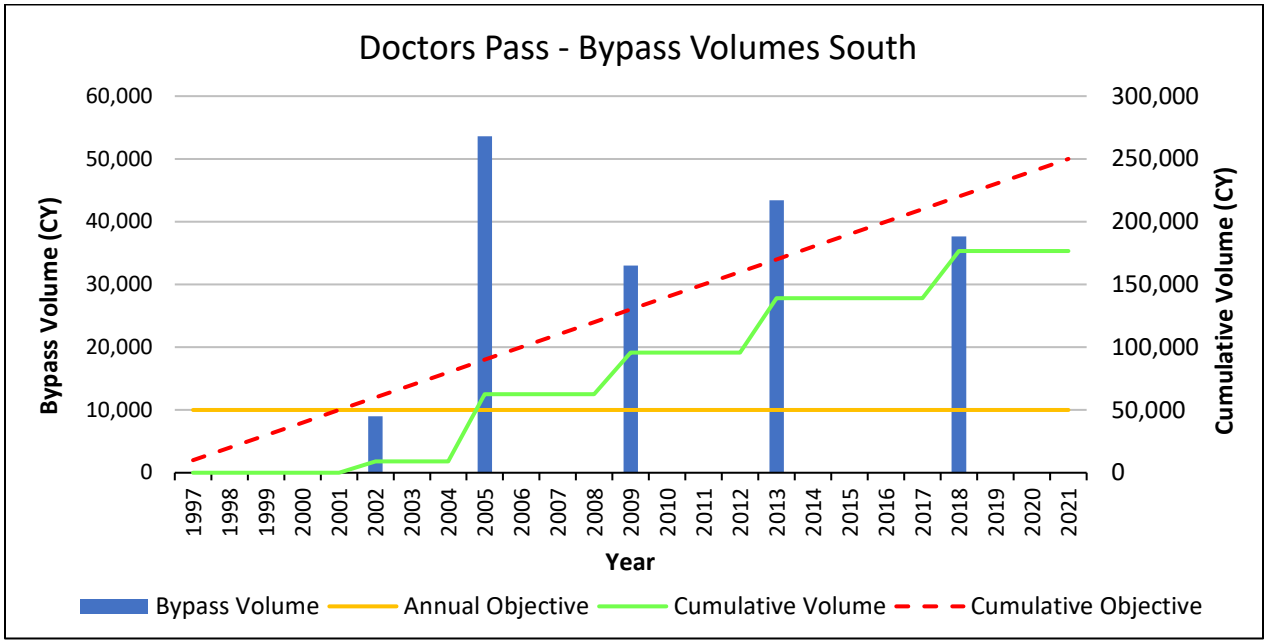

Figure 35: Doctors Pass bypass volume, annual objective, cumulative volume and cumulative objective.

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.

Current studies or plans that are being conducted for year 2022:

1.) Ft. Pierce Inlet has an updated inlet management plan in 2022.
2.) South Lake Worth Inlet is projected to have an updated inlet management plan in 2022.
3.) St. Lucie Inlet has an updated inlet sediment budget/ study in 2021/2022.
4.) Sebastian Inlet is currently having Technical Advisory Committee (TAC) meetings to develop an updated sediment budget and an inlet management plan.
5.) Estero Barriers is currently having TAC meetings to develop a final study and new inlet management plans for Big Carlos Pass, New Pass and Big Hickory Pass.
6.) Pensacola Pass is currently having TAC meetings to develop an inlet study and new inlet management plan.
7.) Passage Key Inlet is currently having TAC meetings to develop an inlet study and new inlet management plan.
8.) Longboat Pass, Manatee County is conducting an inlet study with an updated sediment budget.

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 25 altered inlets that are listed within the Annual Inlet Report and 24 have an inlet management plan with the department. Within the second edition of the Annual Inlet Report; 11 of the 25 altered inlets are meeting their bypass objective at 100% or greater, 2 inlets are between 91% and 100%, 1 inlet is between 71%, and 80%, 3 inlets are between 60% and 70%, 1 inlet is between 41% and 50%, 6 inlets are below 40% and 1 inlet is classified as not applicable (NA), see **Figure 36**. In total, 44% of the inlets are

above 100% in meeting their bypass objectives and 12% 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.

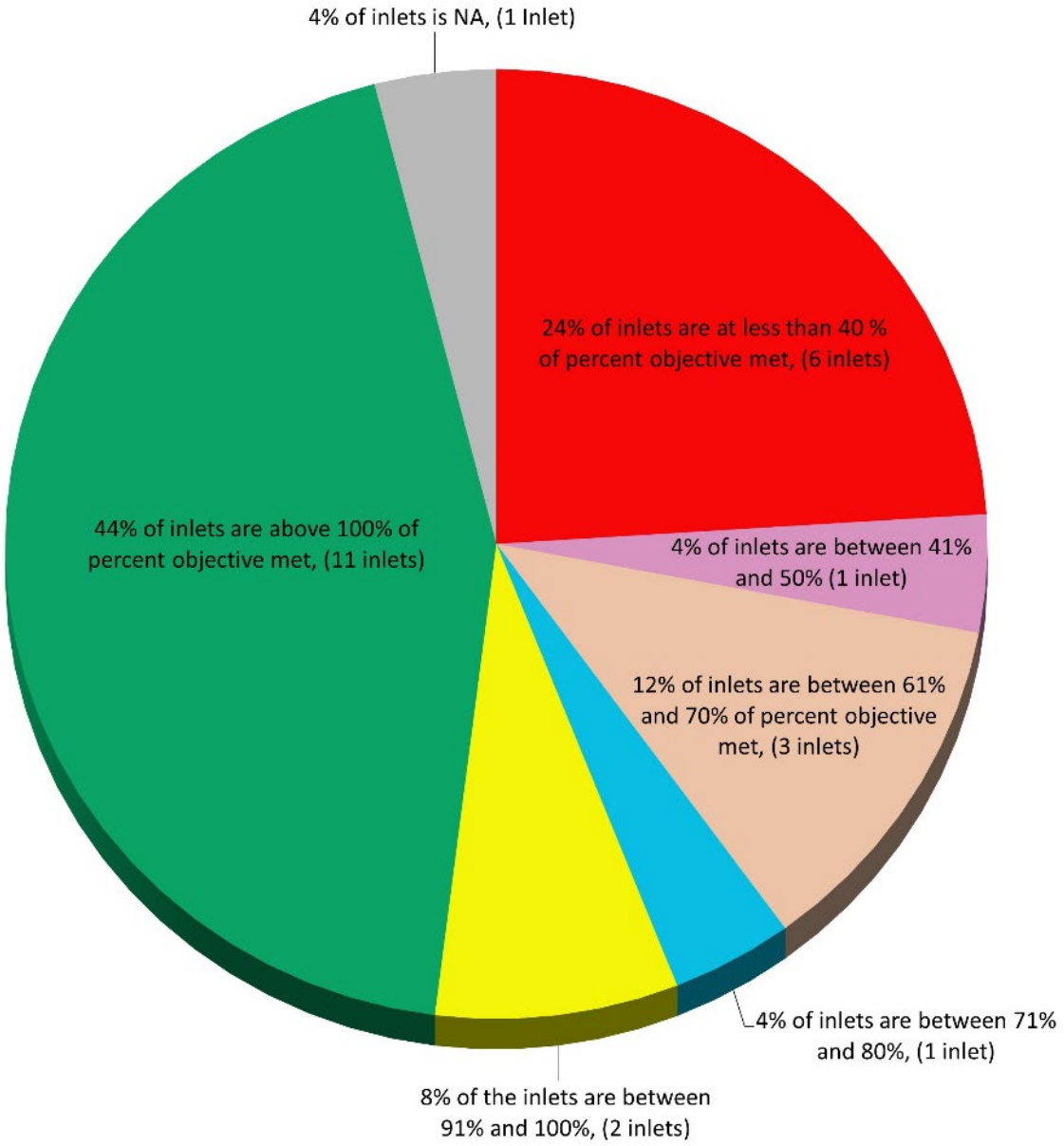

Figure 36. Summary pie chart of the 25 altered inlets that are listed within the annual inlet report and what percentage they have met their bypass objective. **Note:** 30 inlet bypass objectives vs. 25 inlets that are listed in the report; i.e., six inlets have two bypass objectives (north and south) and one that has a monitoring based bypass objective.

References

Florida Department of Environmental Protection, 2020. *Strategic Beach Management Plan,* Office of Resilience and Coastal Protection, 380 p.

Florida Department of Environmental Protection, 2022. *Annual Inlet Bypassing Numbers,* Office of Resilience and Coastal Protection, 36 p.