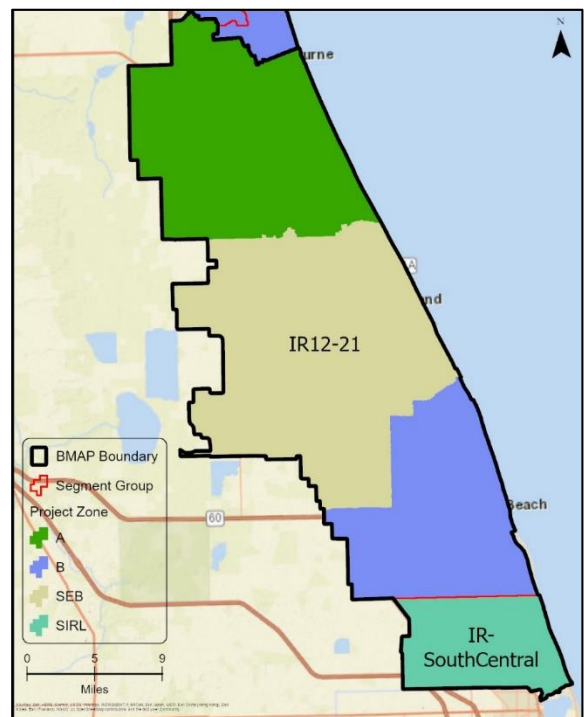
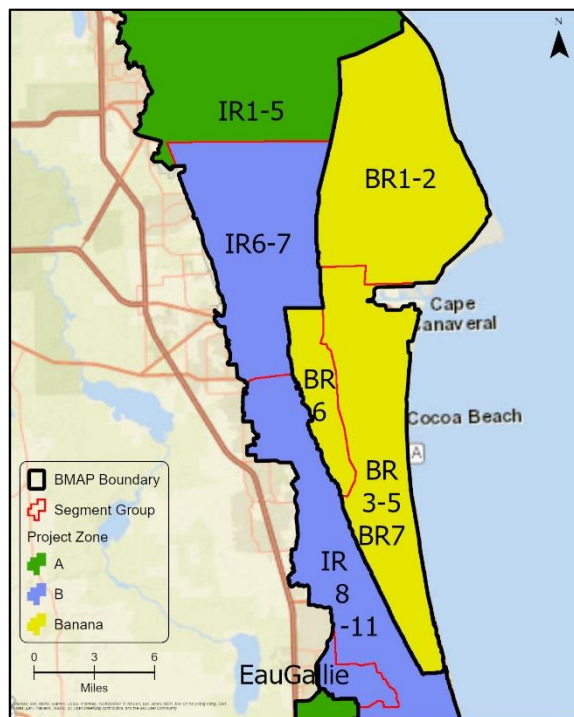


Cape Canaveral Air Force Station and Patrick Air Force Base Banana River Lagoon and Central Indian River Lagoon Basin Management Action Plans (BMAPs) Draft Allocations March 2020

Summary:

- Used load estimation tool (LET) developed from Spatial Watershed Iterative Loading (SWIL) Model to calculate total nitrogen (TN) and total phosphorus (TP) starting loads for each total maximum daily load (TMDL) “Segment Group”
- Applied percent reduction from TMDL for each Segment Group (see tables below) to calculate total TN and TP load reduction required for each Segment Group
- Used LET to calculate total anthropogenic starting load in each Segment Group and determine the percent each entity contributed to the total anthropogenic starting load.
- Multiplied the load reduction required in the Segment Group by the percent each entity contributed to the total anthropogenic starting load to calculate each entity’s required reductions within each Segment Group.

Note: Numbers have been rounded for display in this document but were not rounded during the full calculation process.

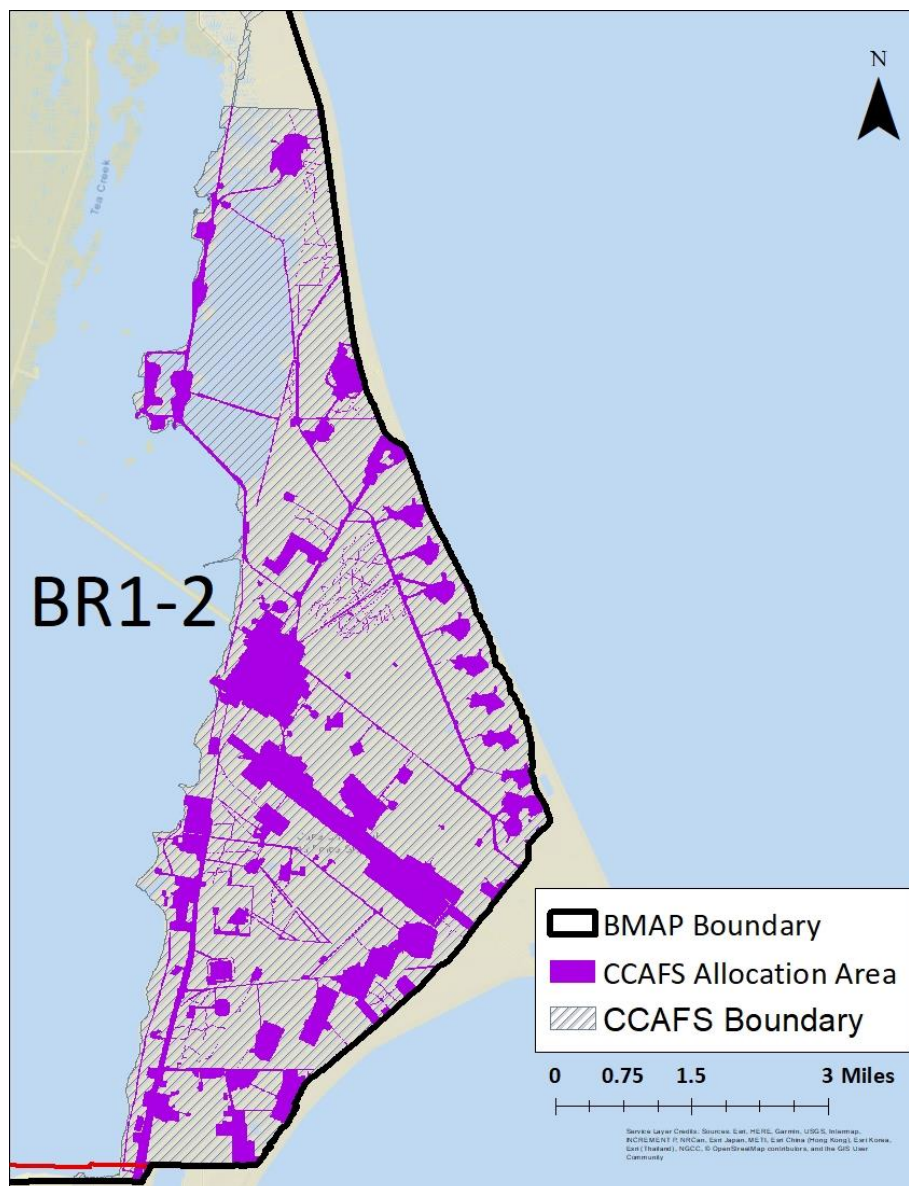


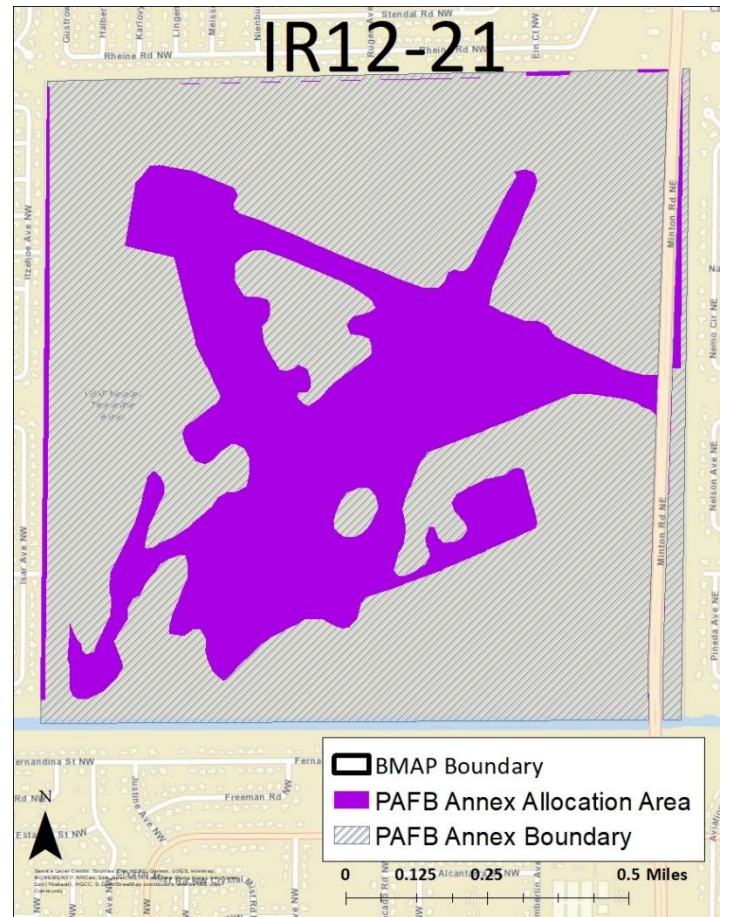
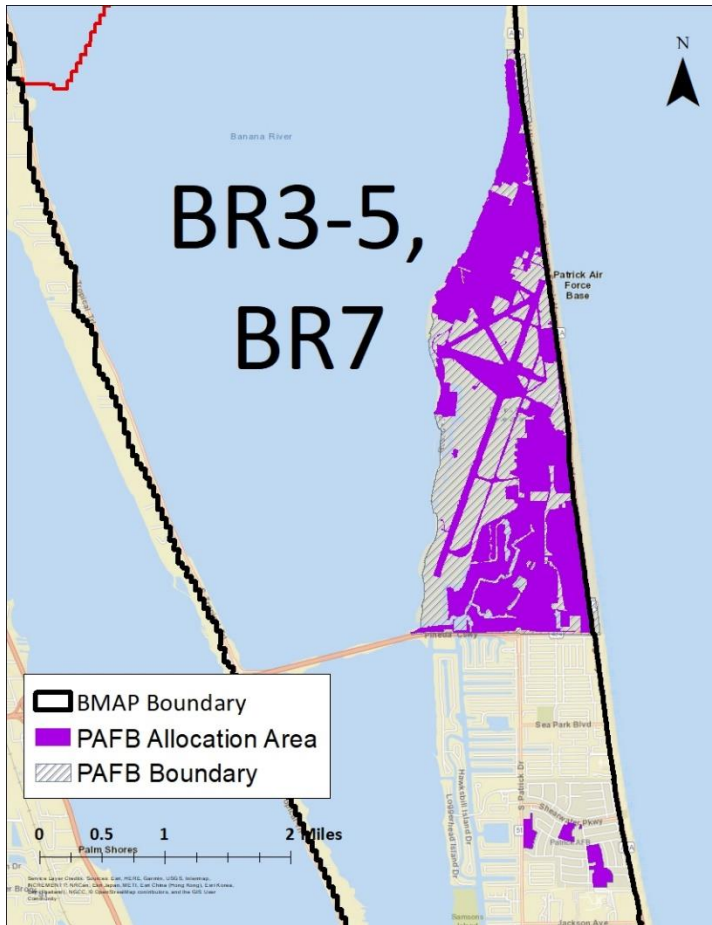
Required Reductions Per TMDL Segment Group

BMAP	Project Zone	TMDL Segment Group	% TN TMDL Total Reduction	% TP TMDL Total Reduction
Banana River	Banana	BR1-2	67%	72%
Banana River	Banana	BR3-5, BR7	59%	64%
Banana River	Banana	BR6	66%	70%
Central IRL	A, B, SEB	IR12-21	56%	48%
Central IRL	SIRL	IR-SouthCentral	36%	58%

BMAP	Project Zone	TN (lbs/yr)			TP (lbs/yr)		
		Starting Load	Required Reductions (Adjusted)	Allocation	Starting Load	Required Reductions (Adjusted)	Allocation
Banana River	Banana	31,779	31,779	0	4,338	4,338	0
Total (Adjusted)		31,779	31,779	0	4,338	4,338	0

BMAP	Project Zone	TN (lbs/yr)			TP (lbs/yr)		
		Starting Load	Required Reductions	Allocation	Starting Load	Required Reductions	Allocation
Central IRL	A	1,539	1,102	437	190	111	79
Total		1,539	1,102	437	190	111	79





Draft Project Credit Recalculations

Using the LET and geographic information systems (GIS) tools, base loads for the project treatment areas were updated for all projects that require a base load for credit calculations. This allowed the project credits to be recalculated using the same foundation that was used for the updated allocations.

Current verified and completed projects:

Banana River Lagoon Adjusted

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
31,779	4,156	13%	4,338	589	14%

Central Indian River Lagoon Project Zone A

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
1,102	0	0%	111	0	0%

These credits represent the Cape Canaveral Air Force Station's and Patrick Air Force Base's status as of March 2020 – there will continue to be opportunities to submit new projects and obtain additional credits.

Notes:

- There were large acreage differences between the shapefiles and project table acres for 7 projects: **CCAFS-03, CCAFS-04, PAFB-06, PAFB-08, PAFB-09, PAFB-12, PAFB-13**
- There were 2 projects that may have the incorrect project type based on the project description: PAFB-11 & PAFB-12.
- For **CCAFS-01**, only 1 % TN and TP reduction efficiency was applied for fertilizer ordinance; if there are additional components of an overall education/regulatory program, the efficiency would increase.
- Several projects (**PAFB-11, PAFB-12, PAFB-14, PAFB-18**) with load reductions listed as "TBD" can be calculated with the LET or other methods and added to total reductions once additional project information is received.