

Town of Indialantic

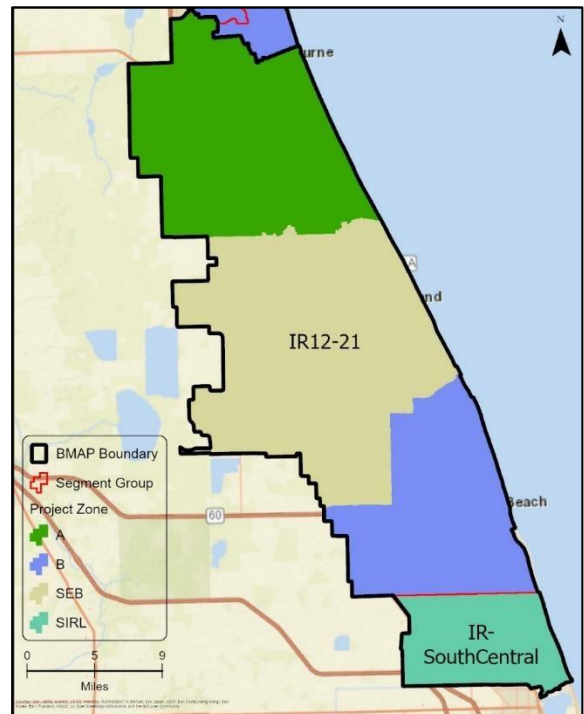
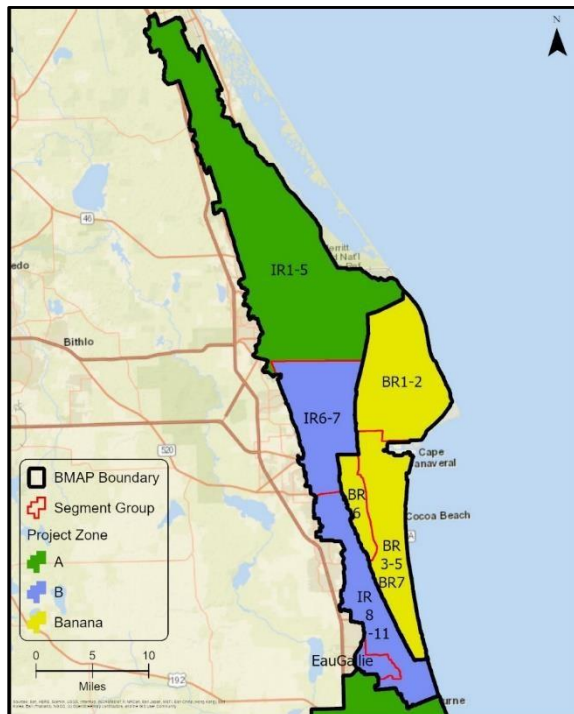
Central Indian River Lagoon and North Indian River Lagoon BMAPs

Draft Allocations April 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.



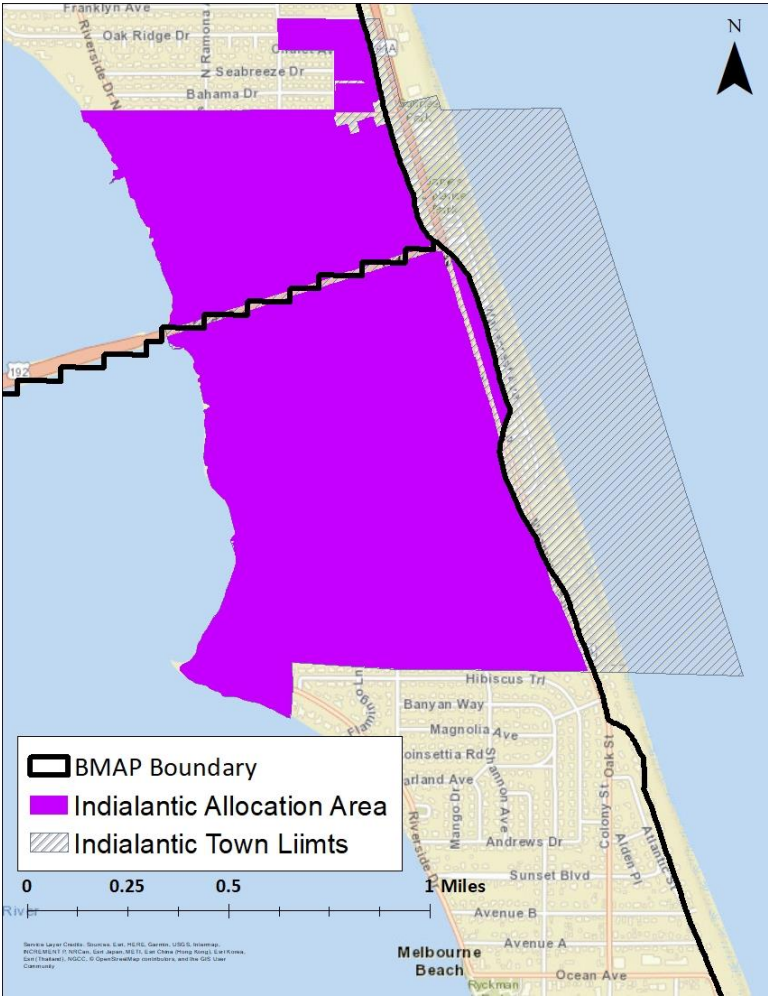
Required Reductions Per TMDL Segment Group

BMAP	Project Zone	TMDL Segment Group	% TN TMDL Total Reduction	% TP TMDL Total Reduction
North IRL	A	IR1-5	35%	47%
North IRL	B	IR6-7	36%	53%
North IRL	B	IR8-11	36%	48%
North IRL	B	EauGallie	51%	58%
Central IRL	A, B, SEB	IR12-21	56%	48%
Central IRL	SIRL	IR-SouthCentral	36%	58%

New Load Calculations from SWIL Model

BMAP	Project Zone	TN (lbs/yr)			TP (lbs/yr)		
		Starting Load	Required Reductions	Allocation	Starting Load	Required Reductions	Allocation
North IRL	B	1,623	664	959	244	131	113
Total		1,623	664	959	244	131	113

BMAP	Project Zone	TN (lbs/yr)			TP (lbs/yr)		
		Starting Load	Required Reductions	Allocation	Starting Load	Required Reductions	Allocation
Central IRL	A	3,589	2,570	1,019	531	310	221
Total		3,589	2,570	1,019	531	310	221



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:

North Indian River Lagoon Project Zone B

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
664	1,357	204%	131	202	154%

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
2,570	183	7%	310	41	13%

These credits represent the Town of Indialantic's status as of April 2020 – there will continue to be opportunities to submit new projects and obtain additional credits.

Notes:

- Treatment areas for projects **TI-01-N** and **TI-02-N** overlap into both BMAPs. Additional project lines should be added to the annual report to reflect treatment in each BMAP.
- Need retention depth in inches for projects **TI-01-N** and **TI-02-N**.
- For project **TI-03-C**, need more information on materials collected to calculate credits with FSA MS4 tool.
- For project **TI-04-C**, previous reduction calculation was applied. Updated information can be used to update calculation with FSA MS4 tool.
- The treatment area shapefile for project **TI-04-N** appears to be missing from our records. Additional information is required to calculate reduction credits for this project.