

Indian River County

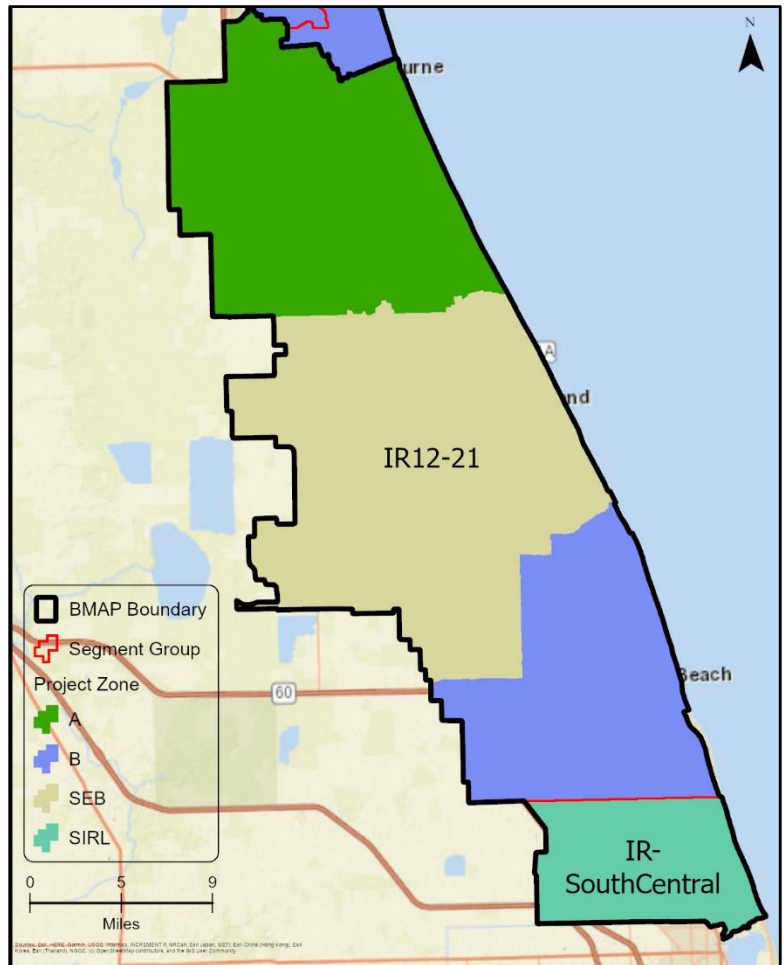
Central Indian River Lagoon BMAP

Draft Allocations April 2020

Summary:

- Used load estimation tool (LET) developed from 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.

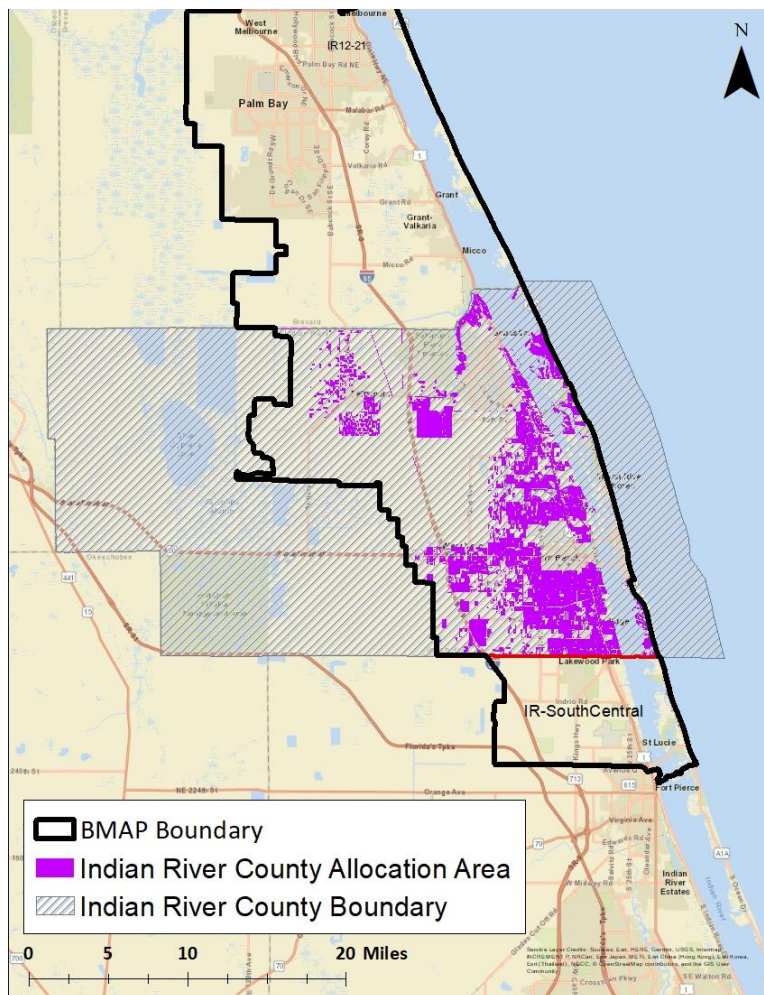


Required Reductions Per TMDL Segment Group

BMAP	Project Zone	TMDL Segment Group	% TN TMDL Total Reduction	% TP TMDL Total Reduction
Central IRL	A, B, SEB	IR12-21	56%	48%
Central IRL	SIRC	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
Central IRL	B	279,791	178,854	100,937	40,678	21,756	18,922
Central IRL	SEB	90,700	71,955	18,744	12,985	8,138	4,847
Central IRL	SIRL	603	289	315	91	66	25
Total		371,094	251,097	119,997	53,754	29,960	23,794



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:

Central 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
178,854	31,426	18%	21,756	4,666	21%

Central Indian River Lagoon Project Zone SEB

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
71,955	10,230	14%	8,138	2,311	28%

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

Notes:

- There are currently no projects listed in Project Zone SURL.
- We could not locate a treatment area (TA) shapefile for project **IRC-11**. Once we receive the TA shapefile for this project, the reduction credits can be calculated and added to total reductions once project is complete.
- Need clarification on project type for **IRC-07** and **IRC-15** to determine if projects should be credited.
- For project **IRC-08**, a reduction efficiency of 2.5% was applied based on the project description. If there are additional components of an overall education/ordinance program, this efficiency may increase to a maximum of 6%.

Potential credits including underway and unverified projects:

Central 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
178,854	36,307	20%	21,756	5,676	26%

Central Indian River Lagoon Project Zone SEB

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
71,955	18,348	25%	8,138	3,563	44%