

City of Titusville

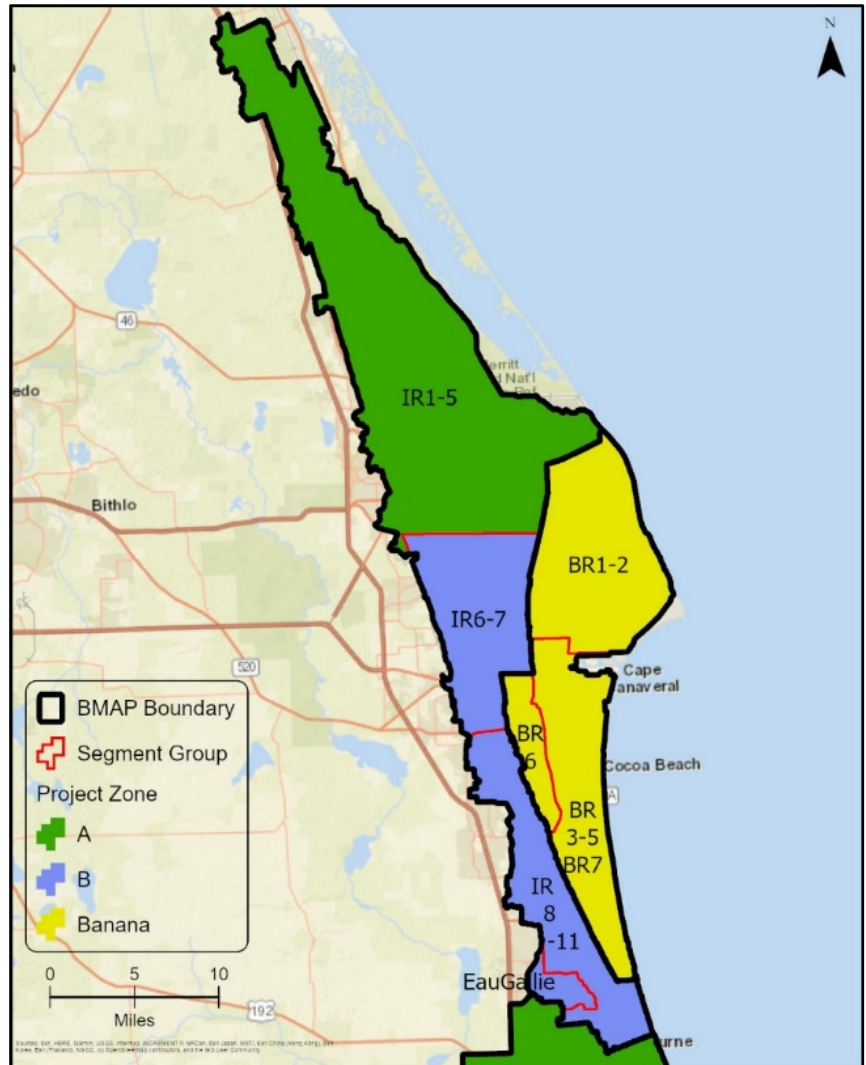
North Indian River Lagoon BMAPs

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.

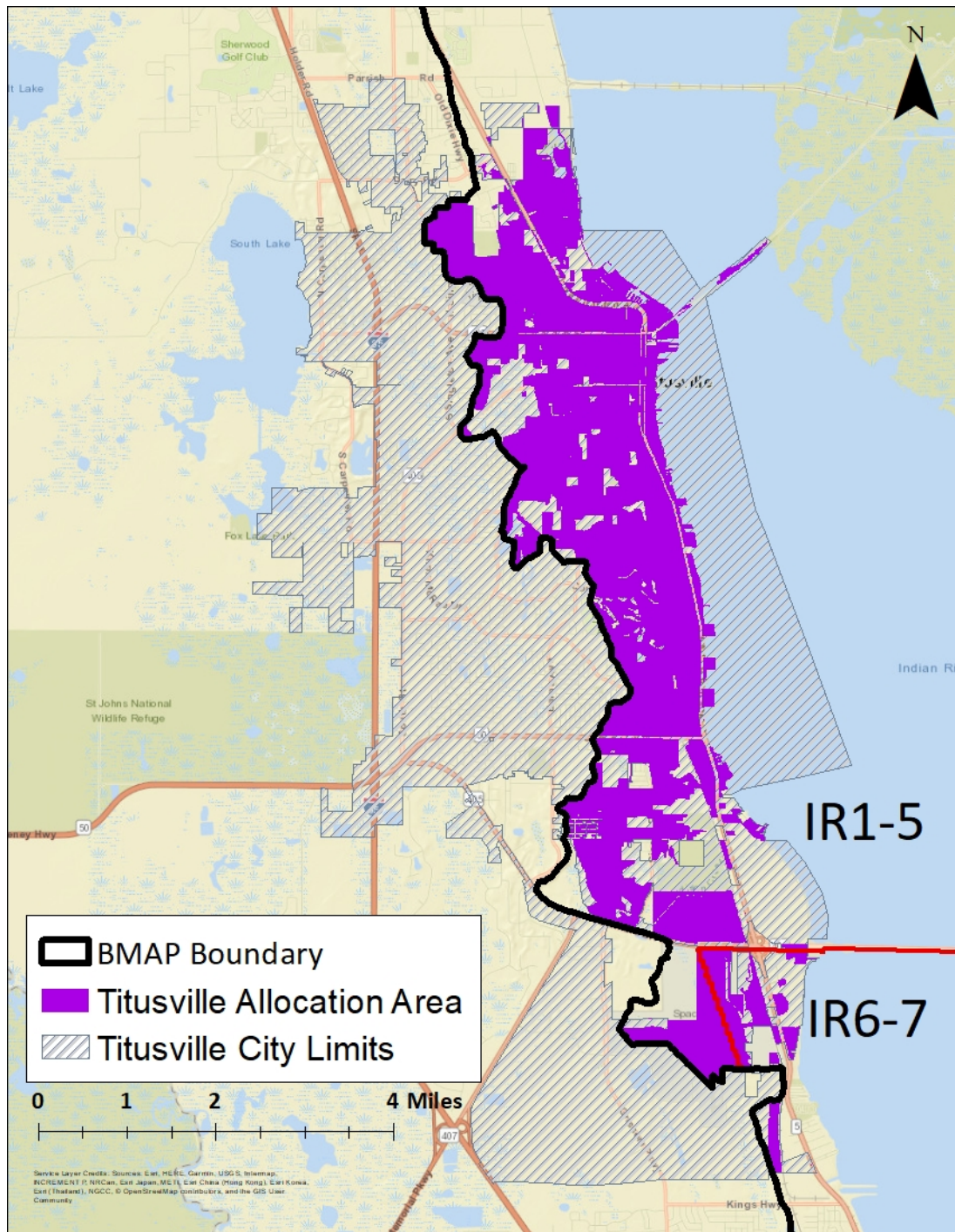


Required Reductions Per TMDL Segment Group

BMAP	Project Zone	TMDL Segment Group	% TN TMDL Total Reduction	% TP TMDL Total Reduction
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%

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	A	53,991	45,418	8,573	7,892	7,068	825
North IRL	B	2,784	1,396	1,388	372	251	121
Total		56,775	46,814	9,961	8,264	7,319	946



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 A

TN (lbs/yr)			TP (lbs/yr)		
Required Reductions	Updated Project Credits	% Reductions Achieved	Required Reductions	Updated Project Credits	% Reductions Achieved
45,418	20,695	46%	7,068	5,705	81%

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
2,784	283	20%	251	96	30%

These credits represent the City of Titusville's status as of April 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 9 projects: **TV-04, TV-05, TV-11, TV-12, TV-13, TV-17, TV-18, TV-19, and TV-20.**
- The treatment area shapefile for project **TV-13** appear to be missing from our records.

Potential future reductions - [underway or not yet verified]:

North 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
45,418	20,695	46%	7,068	5,705	81%

Notes:

- There are 14 projects with load reductions listed as "TBD" which can be calculated with the LET or other methods and added to total reductions once additional project information is received.