

**City of Fellsmere**  
*Central Indian River Lagoon BMAP*  
*Draft Allocations April 2020*

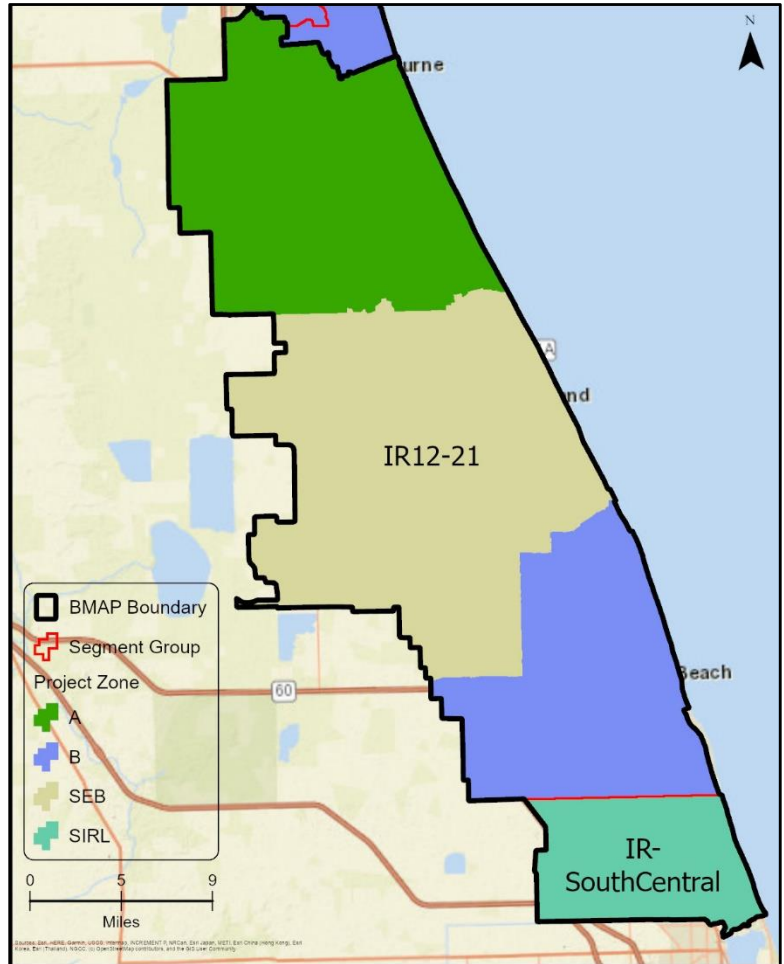
**Updated Draft Allocations**

**Summary:**

- Used load estimation tool (LET) developed from SWIL model to calculate total nitrogen (TN) and total phosphorus (TP) starting loads for each 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.*

**CIRL BMAP Project Zones and TMDL Segments**

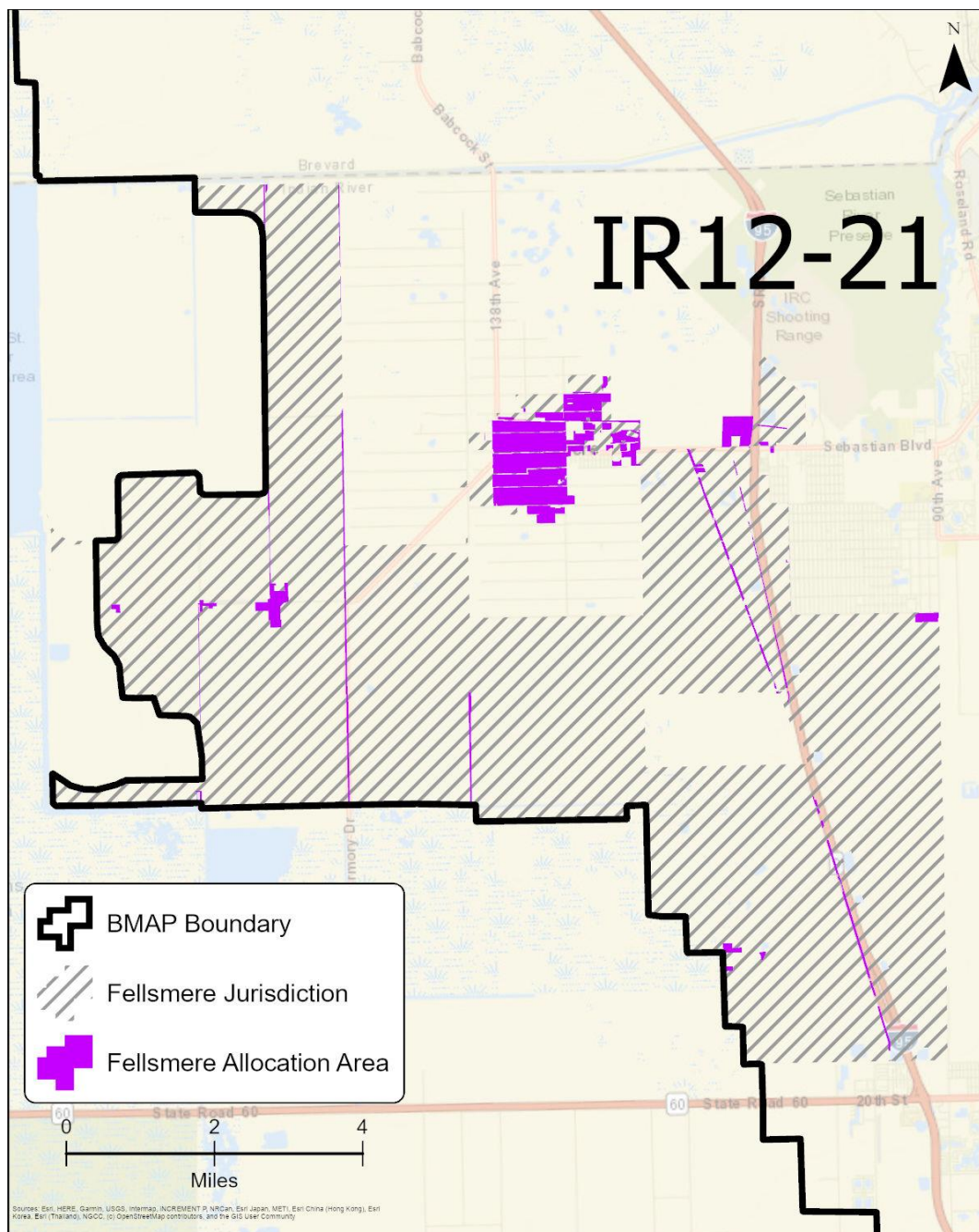


**Required Reductions Per TMDL Segment Group**

| BMAP        | Project Zone | TMDL Segment Group | % TN TMDL Total Reduction | % TP TMDL Total Reduction |
|-------------|--------------|--------------------|---------------------------|---------------------------|
| Central IRL | A, B, SEB    | IRL12-21           | 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  | SEB          | 14,024        | 11,126              | 2,898        | 1,993         | 1,249               | 744        |
| <b>Total</b> |              | <b>14,024</b> | <b>11,126</b>       | <b>2,898</b> | <b>1,993</b>  | <b>1,249</b>        | <b>744</b> |



## 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:*

| TN (lbs/yr)         |                         |                       | TP (lbs/yr)         |                         |                       |
|---------------------|-------------------------|-----------------------|---------------------|-------------------------|-----------------------|
| Required Reductions | Updated Project Credits | % Reductions Achieved | Required Reductions | Updated Project Credits | % Reductions Achieved |
| 11,126              | 184                     | 1.7%                  | 1,249               | 43                      | 3.4%                  |

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

Notes:

- The treatment area (TA) shapefiles for completed project **F-09** could not be located to calculate the project base load and reduction.
- TA shapefiles and additional information needed for planned projects **F-10, F-11, F-12, F-13, F-14, F-15, F-17** to calculate potential future reductions.
- Projects **F-10, F-17, and F-18** are listed as "Planned" with a completion date of 2019. Clarification on the status of these projects is requested.
- No project description was provided for many projects; project descriptions should be sent to DEP to be included in the updated BMAP.
- For **F-08**, only 0.5% 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.