



Webinar Housekeeping

Attendee Participation

Open your control panel

Join audio:

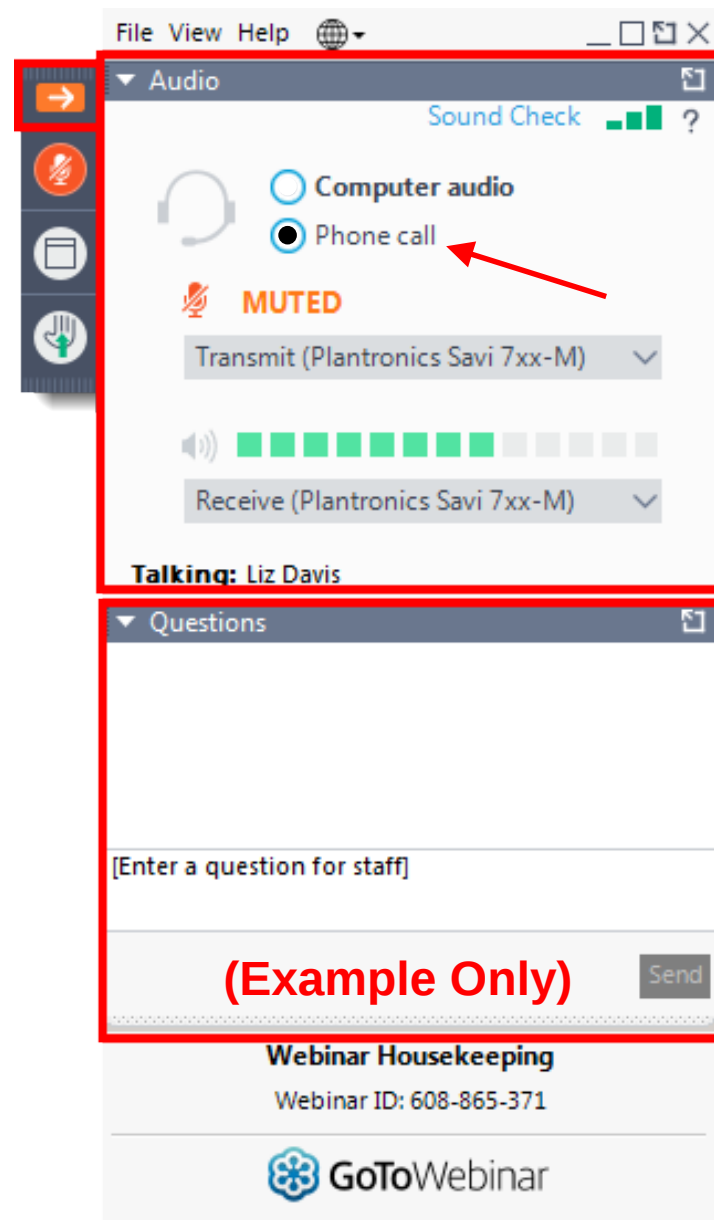
- Choose **Phone Call** and dial using the information provided
- Attendee audio will be muted

Submit questions and comments via the Questions panel

If viewing this webinar as a group, please provide a list of attendees via the Chat panel

Note: Today's presentation is being recorded and will be provided on the ftp after the webinar.

11/6/2019





Caloosahatchee River and Estuary Basin Management Action Plan Technical Webinar

November 6, 2019



Agenda

- *Background*
- *BMAP Update*
- *Targeted Restoration Area (TRA) Approach and Request for Information (RFI)*
- *Allocation/Project Credit Update*
- *Next Steps*



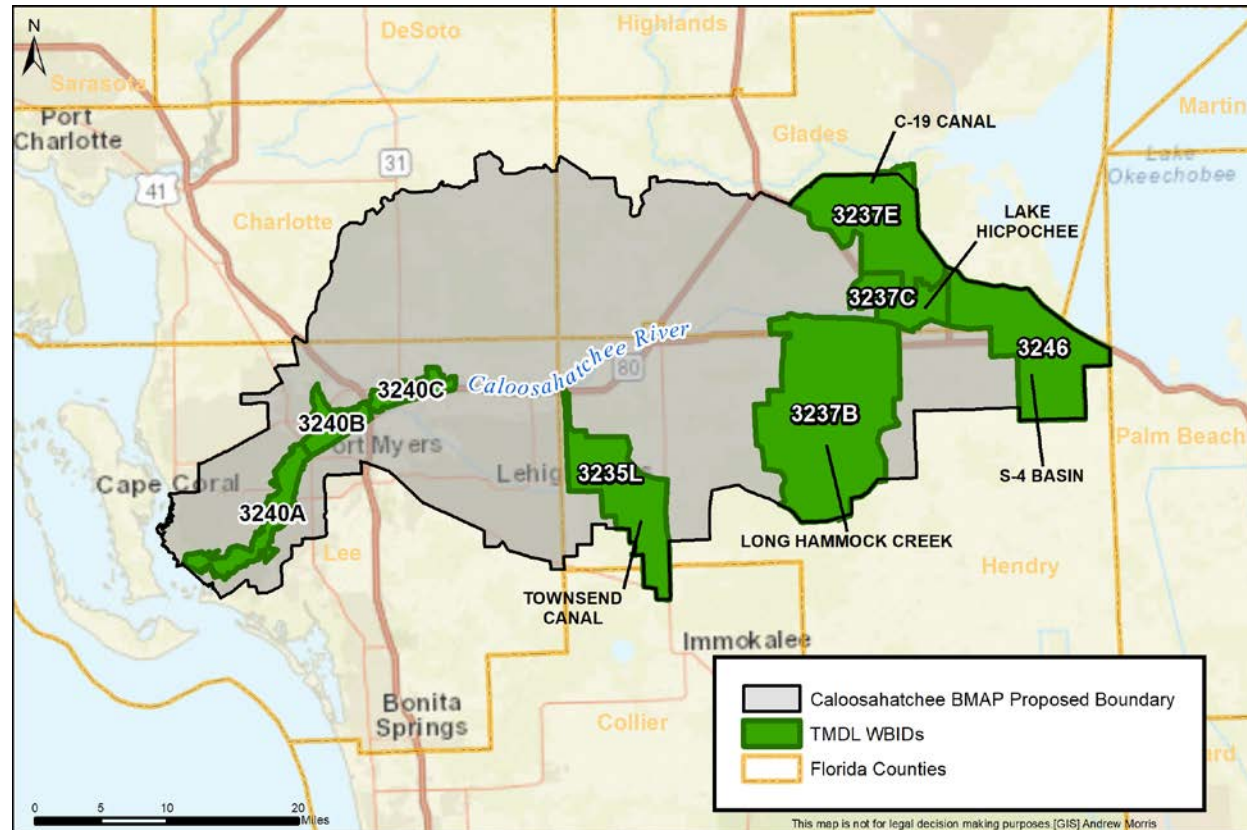
Background

Caloosahatchee Watershed TMDLs and BMAP



Caloosahatchee Watershed TMDLs and BMAP

- Estuary TMDL (TN) - 2009
- Tributary TMDLs (TN, TP, BOD) – 2019
- BMAP adopted November 2012
- 5-Year Review November 2017
- *BMAP Update 2020*





BMAP Update

Background

Status

Timeline



BMAP Update

Background

- 5-Year Review provided recommendations for updating the BMAP
- Executive Order 19-12 issued in January 2019
 - Set timeline to update BMAP within one year
- BMAP Update to include:
 - Expansion of boundary and monitoring network
 - New tributary TMDLs
 - New stakeholders and projects
 - New approaches to target sources
 - Updated/new allocations and milestones

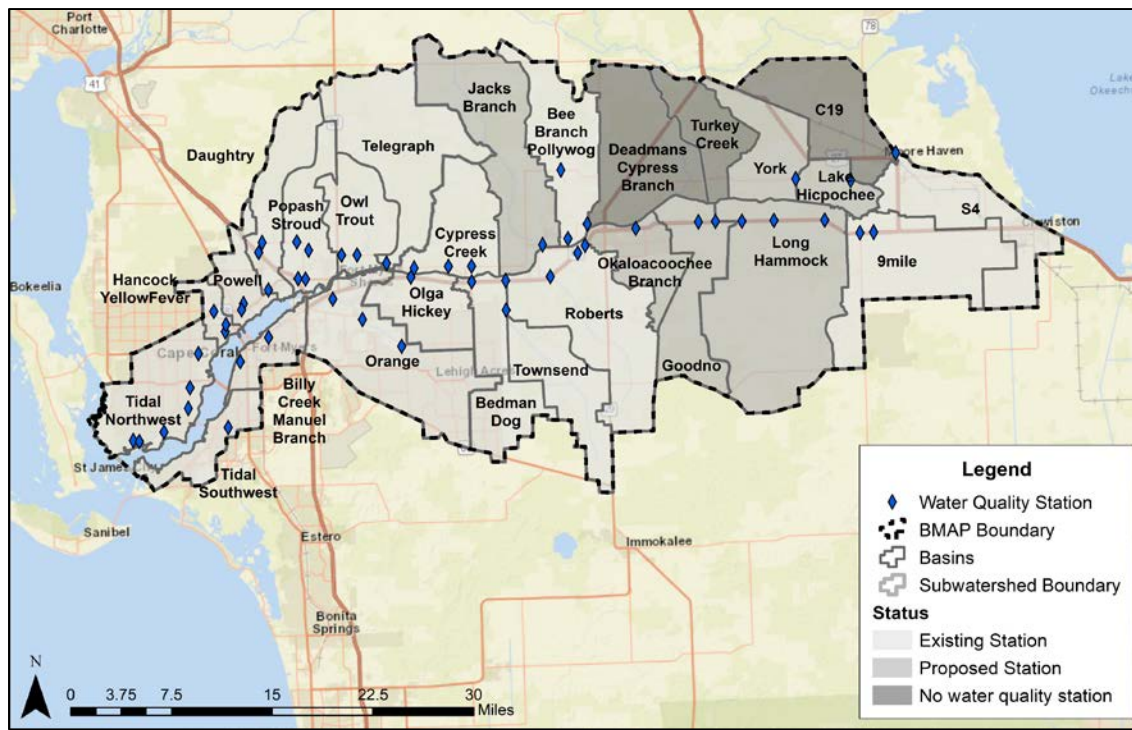




BMAP Update

Status

- **Boundary expansion** – *decided in March 2019; working with SFWMD to refine*
- **Monitoring network changes** – *tiered network; representative sites for each basin within the watershed; working with SFWMD and other data providers to refine*





BMAP Update

Status

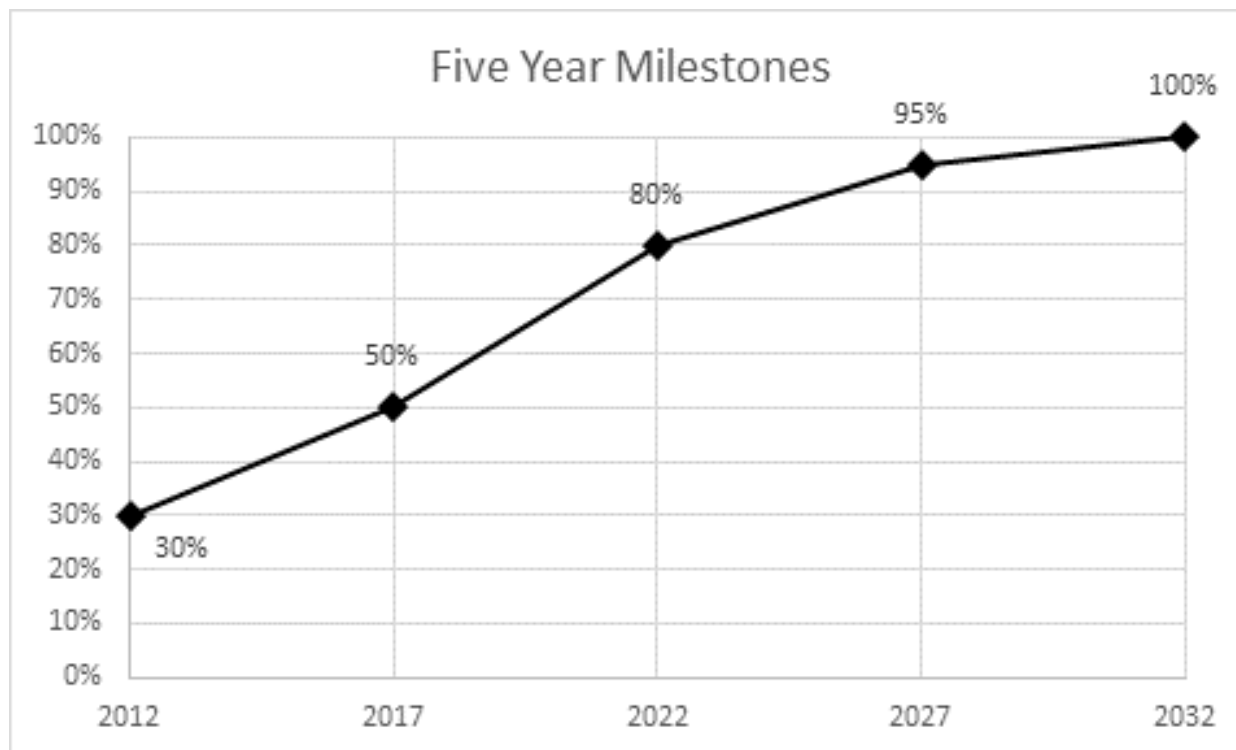
- **Tributary TMDLs** — *adopted in August 2019; included in expanded boundary and updated allocations*
- **New stakeholders** — *working with new stakeholders to collect projects and get feedback on allocation areas*
- **New projects** — *solicited all stakeholders for new projects; RFI released October 2019*
- **New approaches** — *Targeted Restoration Areas (TRA) approach; basin-wide sources approach*



BMAP Update

Status

- **Updated/new allocations** – *incorporating stakeholder feedback after first round of review*
- **Milestones** – *applying milestone percentages from 5-Year Review to updated required reductions*





BMAP Update

Tentative Timeline

- October 2019
 - RFI released
- November 2019
 - Public meeting; RFI Responses Due
- December 2019
 - Draft BMAP released for review; tentative public meeting
- January 2020
 - Final BMAP report submission deadline





Targeted Restoration Areas

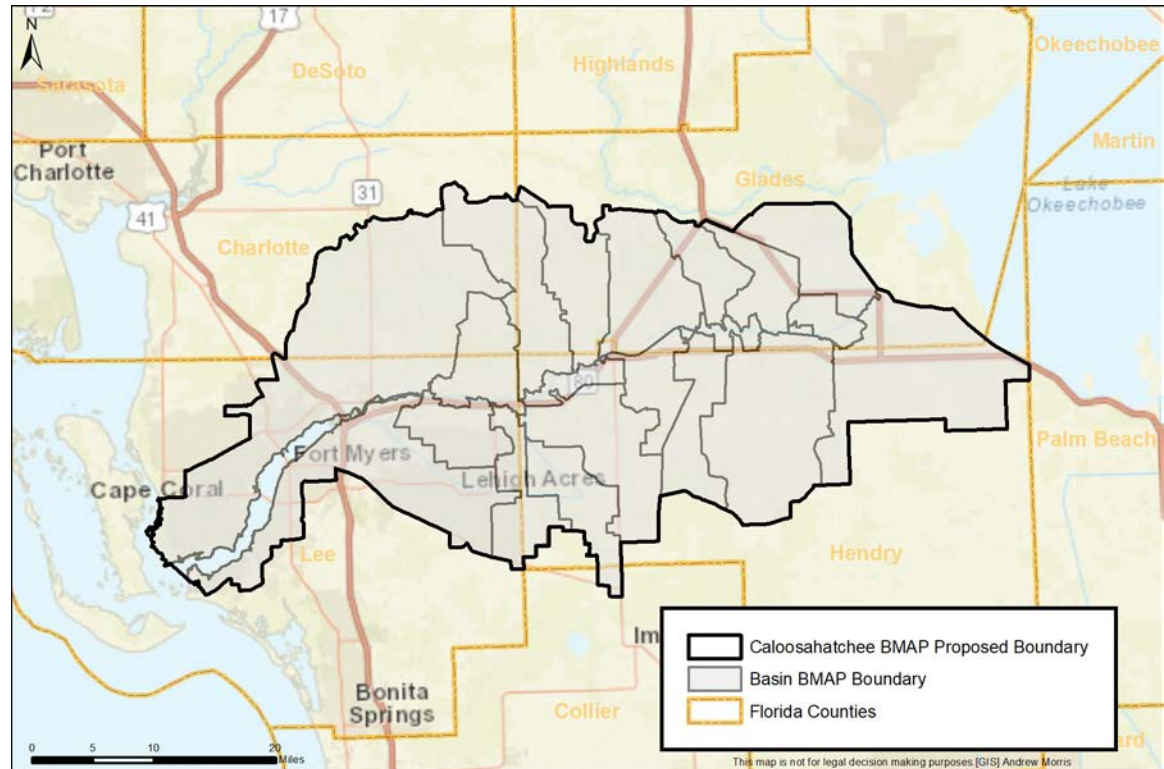
Approach



Targeted Restoration Areas

ACHIEVING MORE, NOW

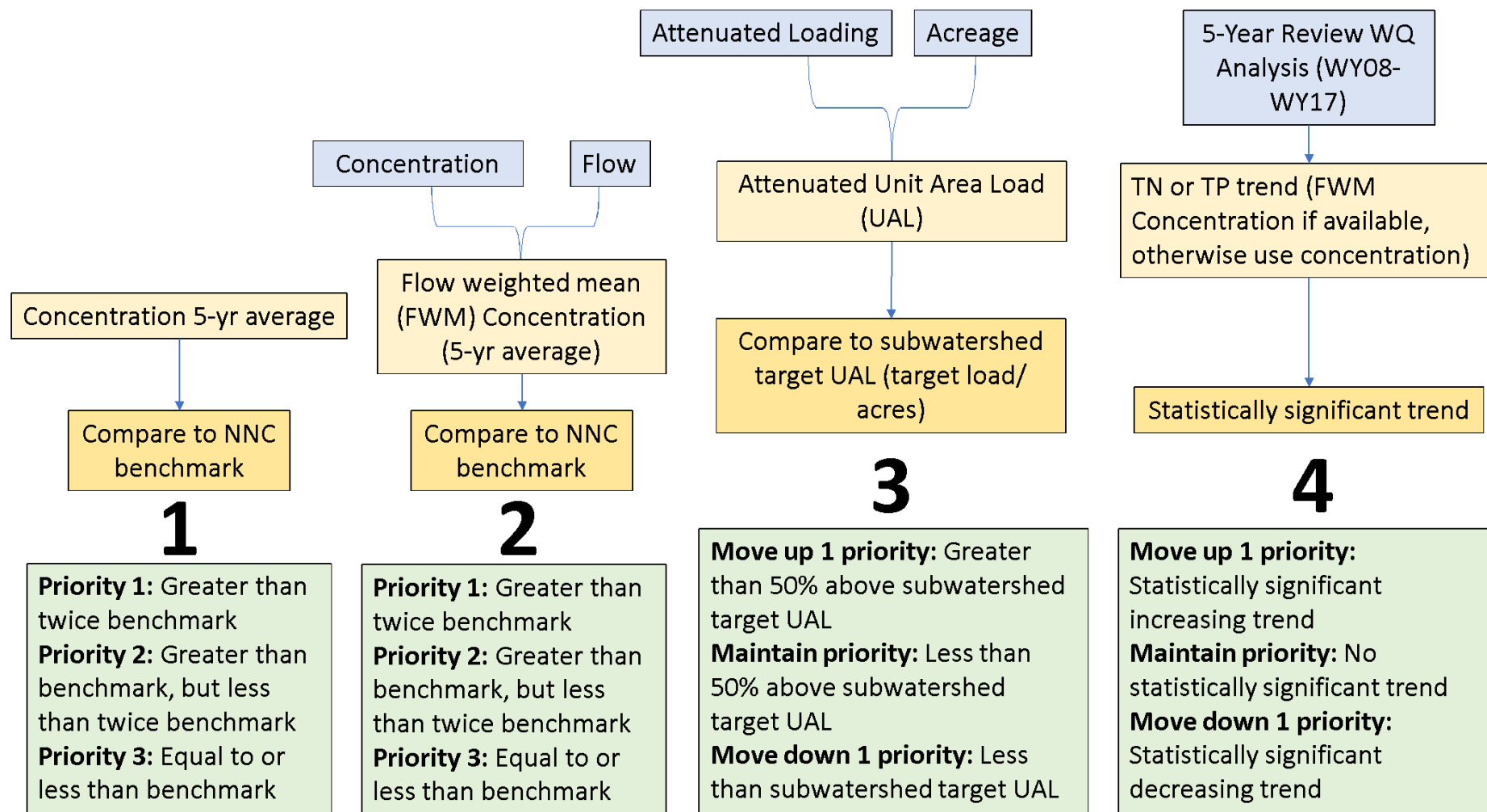
- Data-driven approach
- Focusing on smaller subdivisions called **“targeted restoration areas”**
- Evaluating TN, TP, and flow
- Prioritize by comparing water quality to appropriate benchmarks





Targeted Restoration Areas

Prioritization Steps





Questions & Comments





Allocation Calculations

Methodology

Draft Existing Loads



Allocation Approach

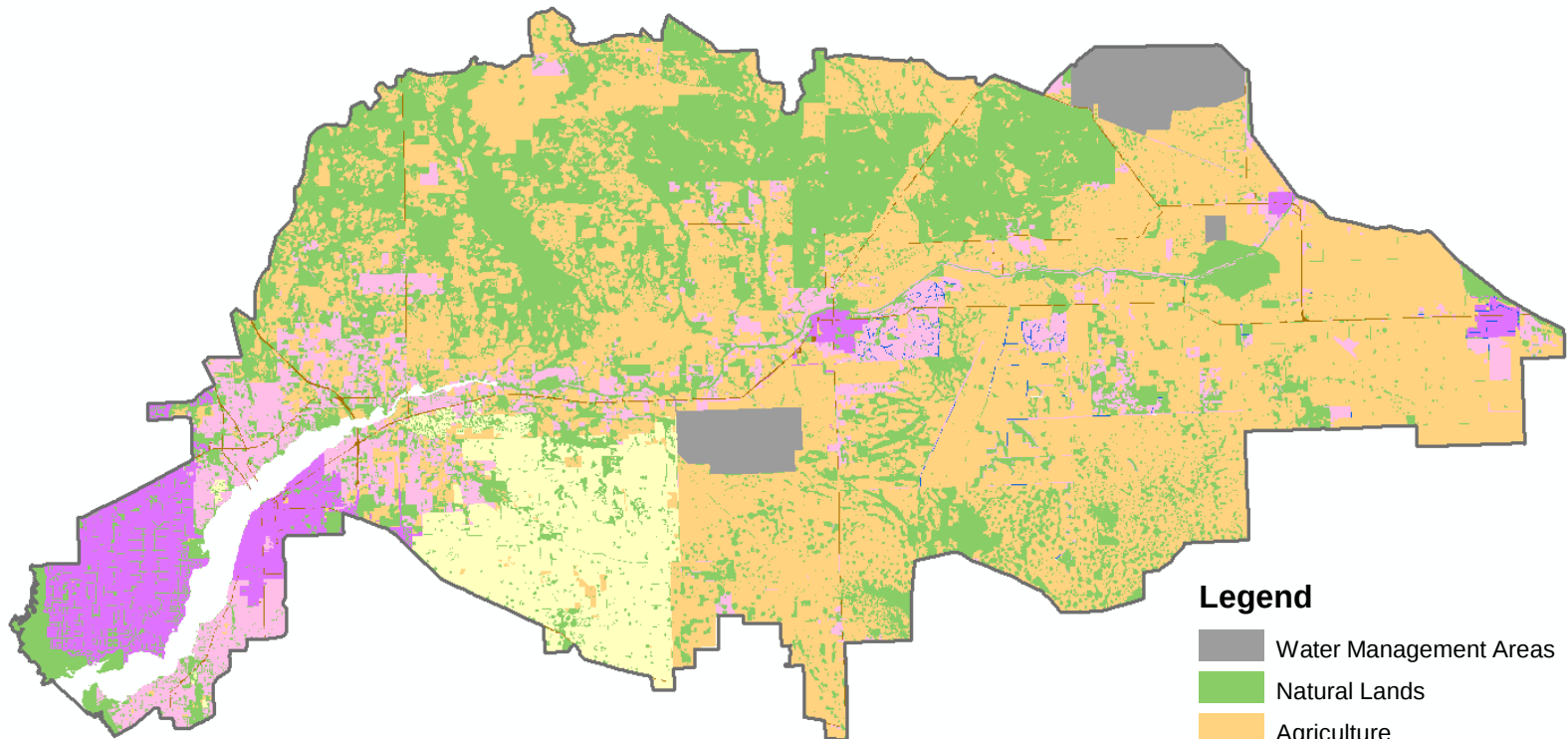
Methodology - Estuary

PART A – Requirements for Estuary (All Stakeholders)

- Calculate average annual TN loads from model outputs to obtain stakeholder existing loads
- Areas were clipped out and assigned to each entity using GIS process:
 - 1) Water management areas
 - 2) Natural lands
 - 3) Agricultural lands
 - 4) Florida Department of Transportation (FDOT) roads and rights-of way (ROW)
 - 5) Water control district (WCD) canals and ROWs
 - 6) Community development districts (CDDs)
 - 7) Cities
 - 8) Remaining land split by county boundaries



Base Map



Legend

- Water Management Areas
- Natural Lands
- Agriculture
- FDOT
- WCD Canals
- CDDs
- Cities
- Counties



Allocation Approach

Methodology – Estuary (continued)

- Next step is to calculate required reductions
 - Total reduction = TN load for the entire watershed times the 23 % TMDL reduction ($3,953,940 \times 23\% = 909,406$)
 - Required reduction was assigned to stakeholders based on the percentage of each stakeholder's starting load
- Example calculations table:

Entity	Existing Load	Percent of Load	Required Reduction
A	36,171	1%	9,674.5
B	180,855	5%	48,372.7
C	361,710	16%	96,745.3
D	2,821,341	78%	754,613.6
Total	3,400,078.0	100%	909,406.1



Allocation Approach

Methodology - Tributaries

PART B – Requirements for Tributary Stakeholders

- Calculate average annual TN and TP loads from model outputs to obtain stakeholder existing loads by tributary
- Apply the TMDL percent reductions to calculate the required reductions for each stakeholder

Waterbody (WBID)	TN LA (% reduction)	TP LA (% reduction)
C-19 Canal (3237E)	48%	48%
Lake Hicpochee (3237C)	2%	2%
Long Hammock Creek (3237B)	42%	42%
S-4 Basin (3246)	23%	27%
Townsend Canal (3235L)	37%	38%



Allocation Approach

Methodology – Tributaries (continued)

- Stakeholder's TN tributary reduction may cover their TN estuary reduction (Example)

Entity	Required Tributary TN Reduction	Required Estuary TN Reduction	Final Required TN Reduction
A	10,469.4	9,674.5	10,469.4
B	23,158.3	48,372.7	48,372.7
C	31,279.8	96,745.3	96,745.3
D	358,292.1	754,613.6	754,613.6
Total	423,199.6	909,406.1	910,201.0



Questions & Comments





Next Steps

- *Finalize draft allocations*
- *Develop draft revised BMAP document*
- *Tentative meeting: December*



Contact Information

Sara Davis, Environmental Manager

850-245-8825

Sara.C.Davis@floridadep.gov

Brianna Rossiter, Environmental Consultant

850-245-8066

Brianna.Rossiter@floridadep.gov



Questions & Comments



