

Manatee River Basin BMAP Meeting

Bradenton Central Library
June 3, 2011



WELCOME



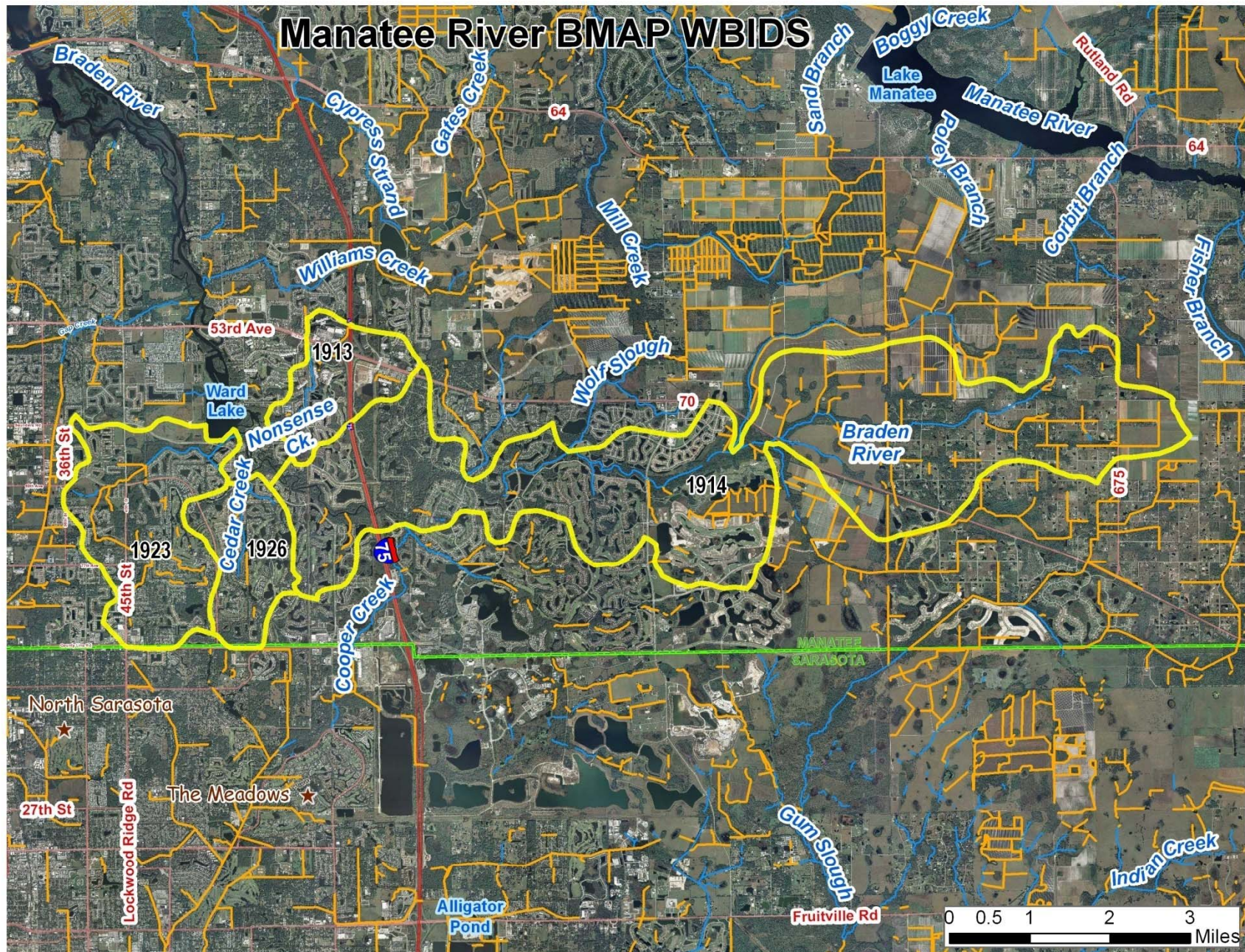
Introductions

staff supporting the BMAP

- Gerold Morrison (AMEC)
- Terry Hansen (FDEP)



Manatee River BMAP WBIDS



Meeting Logistics

- Sign-in Sheets
- Questionnaires
- Facilities
- Agenda Review
 - Basin Management Action Plan Areas
 - Watershed Restoration Efforts
 - Total Maximum Daily Load (TMDL)
 - Basin Management Action Plan (BMAP)
 - Stakeholder Involvement
 - Timeline

Florida's Sunshine Law (Chapter 286, F.S.)

A Quick Overview



Background on Sunshine Law

- Sunshine Law is Intended to Expose the *Entire* Decision Making Process to Public Scrutiny
- Establishes a Basic Right of Access to
 - Most Meetings of Boards, Commissions and Other Governing Bodies of State and Local Governmental Agencies or Authorities
 - Applies to all Discussions and Deliberations

Background on Sunshine Law

- Applies to any gathering in which some matter on which foreseeable action will be taken by the board or commission is to be discussed
 - Meetings of Two or More Members
 - Both Formal and Casual Meetings
- Additional Information on the Attorney General's Website
 - <http://myfloridalegal.com/sunshine>

Requirements

- Meetings of Boards or Commissions Must Be Open to the Public
- Reasonable Notice of Such Meetings Must Be Given
- Minutes of the Meeting Must Be Taken

Requirements

- Fact-finding Committees are Exempt from Sunshine
- However, Committees Are Subject to Sunshine if They
 - Take Formal Action and/or
 - Provide Official Recommendations
- *The Sunshine Law is Consistent with the Transparent Nature of the BMAP Process*

What Does Sunshine Mean for This Group?

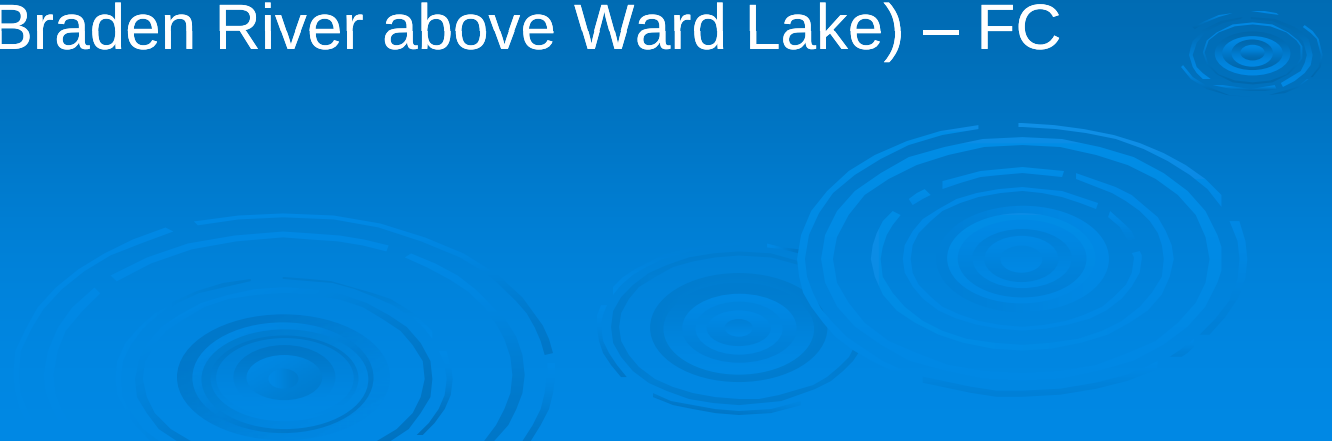
- FDEP is the Official Decision-Making Body for the BMAP
 - This Group provides input to FDEP on
 - BMAP approaches
 - Implementation Schedules
 - BMAP Language
 - Commitments to FDEP on BMPs, Management Actions and Capital Projects
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WATERSHED RESTORATION

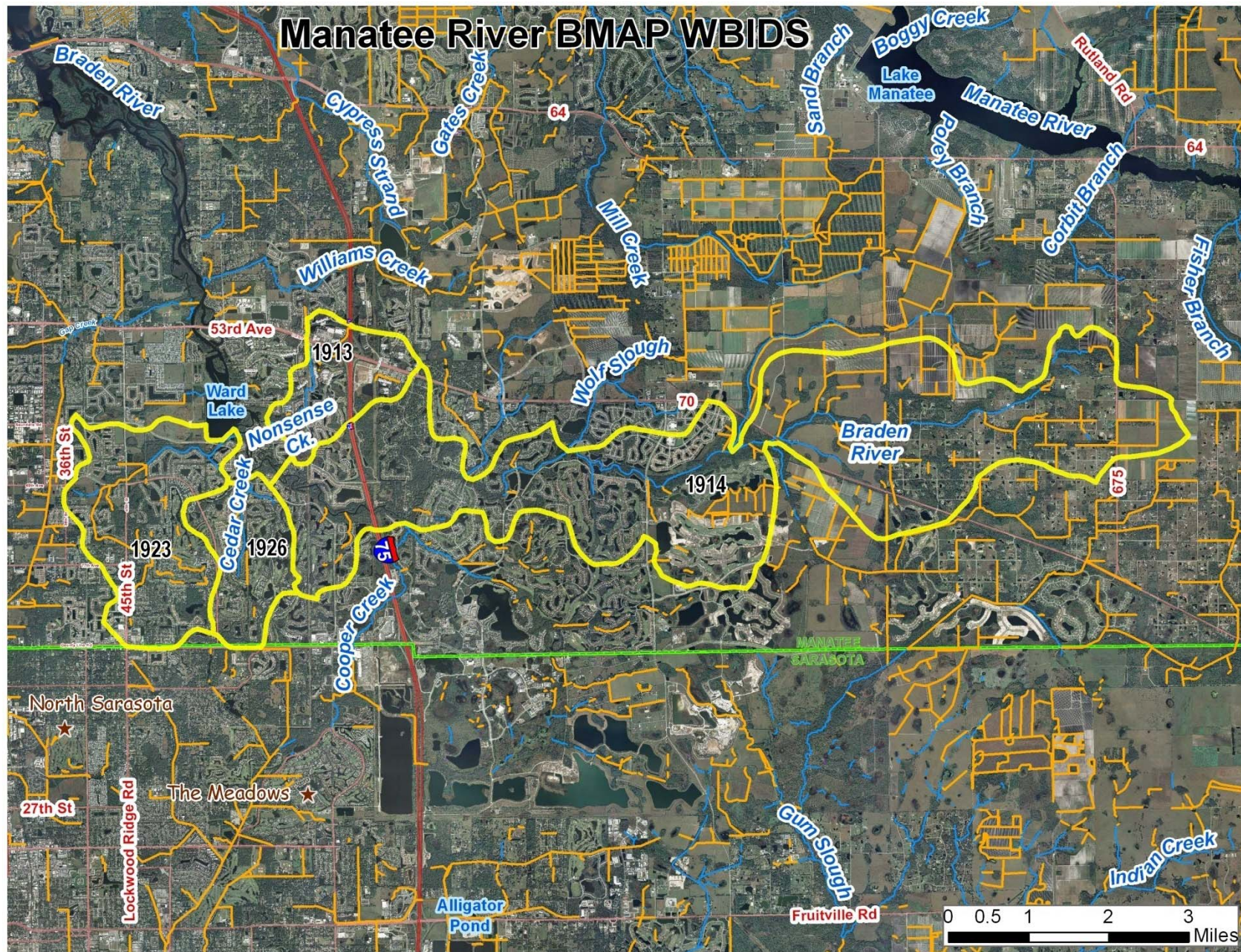
- TMDL
- NNC
- BMAP



Manatee River Basin WBIDs (in this BMAP)

- WBID 1923 (Rattlesnake Slough) – Nutrient, dissolved oxygen (DO) and fecal coliform (FC) impairments
 - WBID 1926 (Cedar Creek) – FC impairment
 - WBID 1913 (Nonsense Creek) – DO and FC impairments
 - WBID 1914 (Braden River above Ward Lake) – FC impairment
- 

Manatee River BMAP WBIDS



TMDL Program

➤ Program result of

- 1972 Clean Water Act Section 303(d)
- 1999 Florida Watershed Restoration Act

➤ Process

- Data Collection and verification of waterbody as impaired
- Listing process for impaired waterbodies
- Development of TMDL
- Implementation of TMDL through BMAP

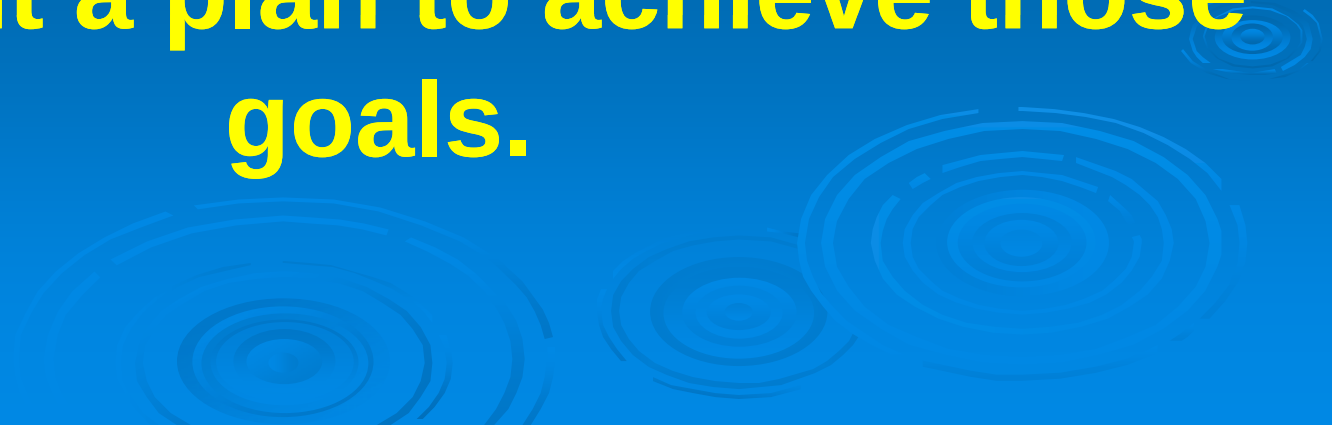
What is a TMDL?

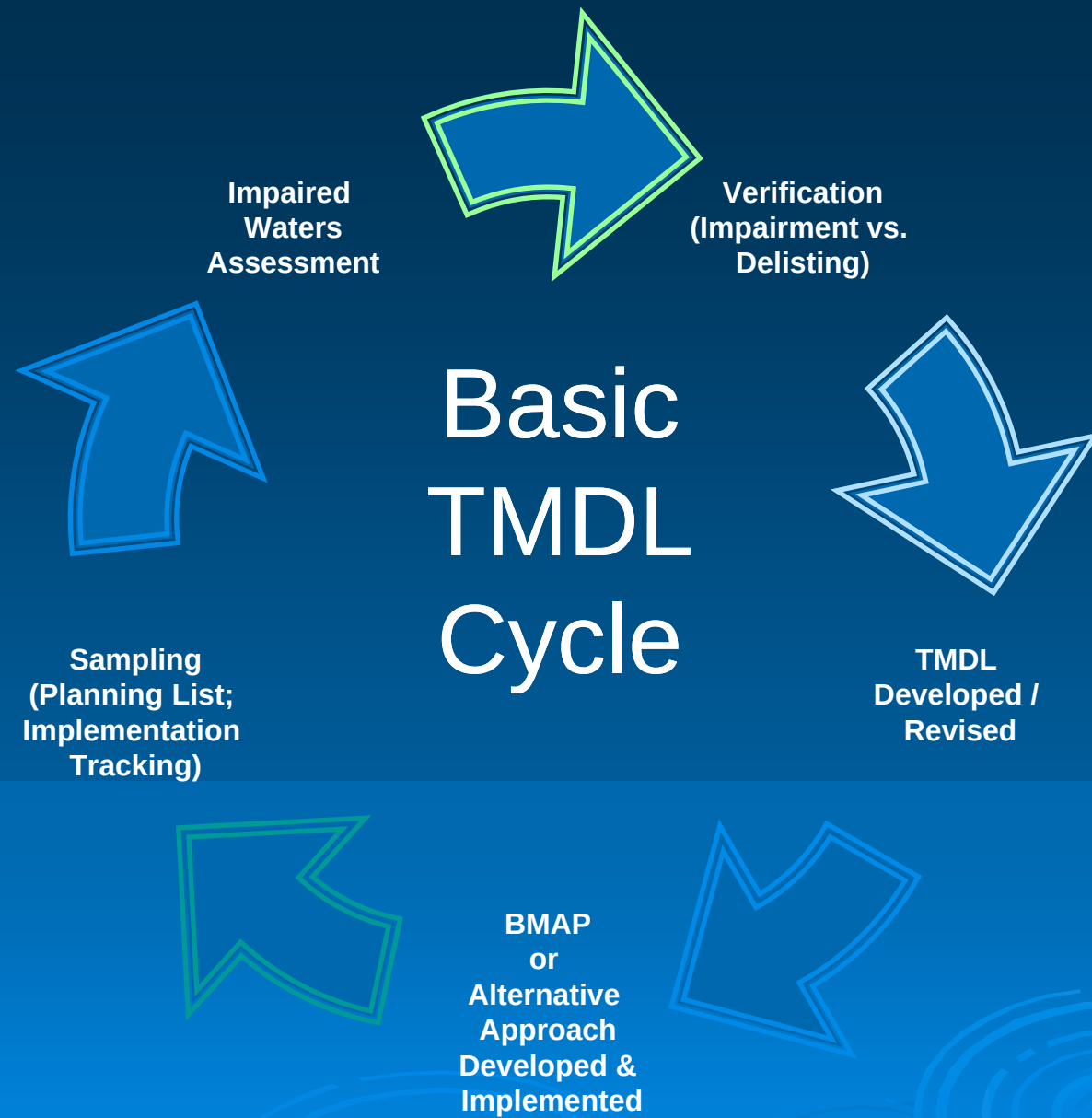
The maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.



The purpose of the TMDL program...

To identify scientifically-based quantitative goals for restoration of waterbodies that do not meet State water quality standards, and implement a plan to achieve those goals.

A decorative graphic at the bottom of the slide consisting of several concentric circles of varying sizes, resembling ripples on water, rendered in a lighter blue color against the dark blue background.



TMDL Implementation

- A Basin Management Action Plan (BMAP) is the primary tool available to implement Total Maximum Daily Loads (TMDLs)

Manatee River WBIDs with Fecal Coliform Impairments

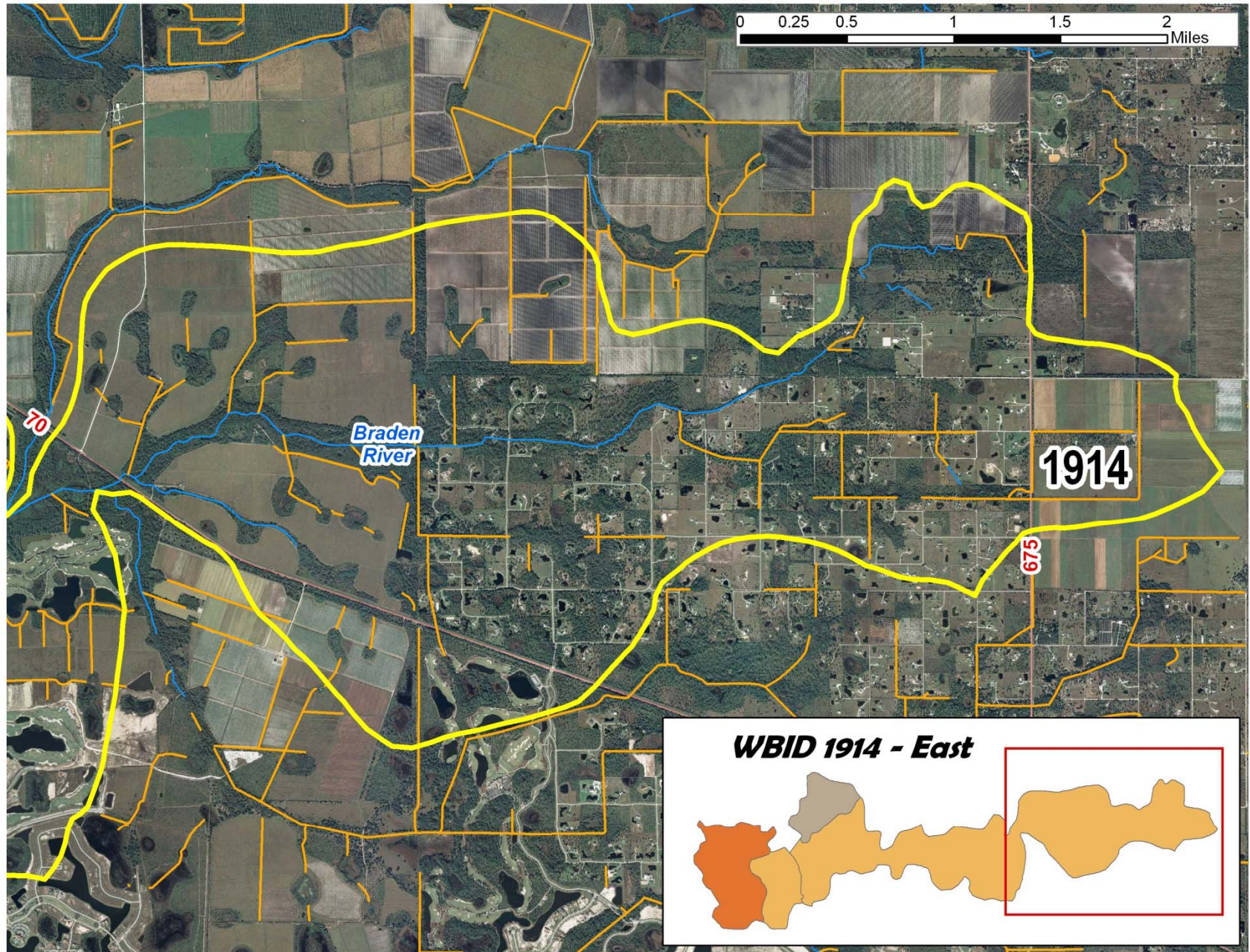
- WBID 1914 (Braden River above Ward Lake) – FC impairment
- WBID 1913 (Nonsense Creek) – DO and FC impairments
- WBID 1926 (Cedar Creek) – FC impairment
- WBID 1923 (Rattlesnake Slough) – Nutrient, dissolved oxygen (DO) and fecal coliform (FC) impairments
- Verified period - January 2001 through June 2008
- TMDL adopted 2009

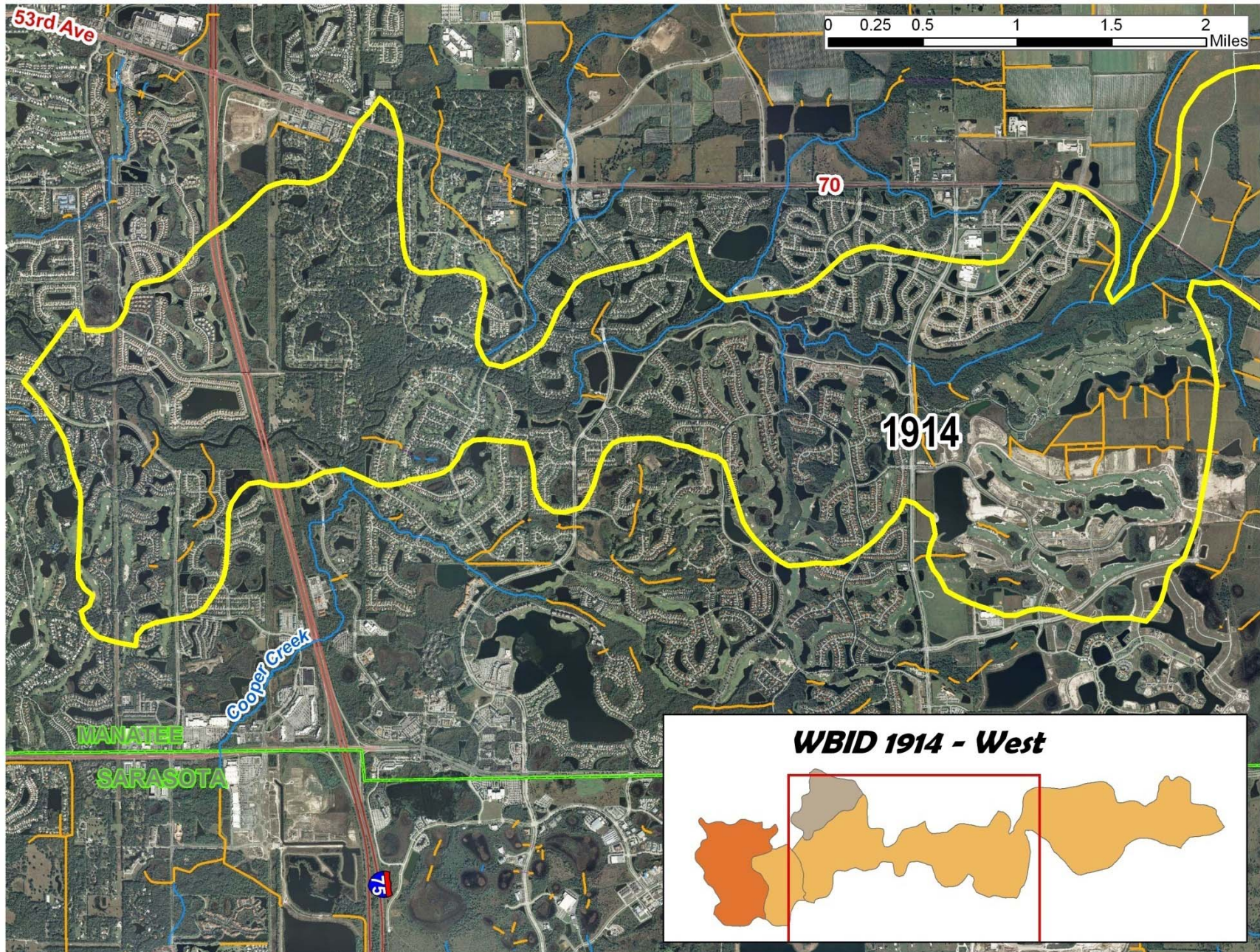
Bacterial Quality

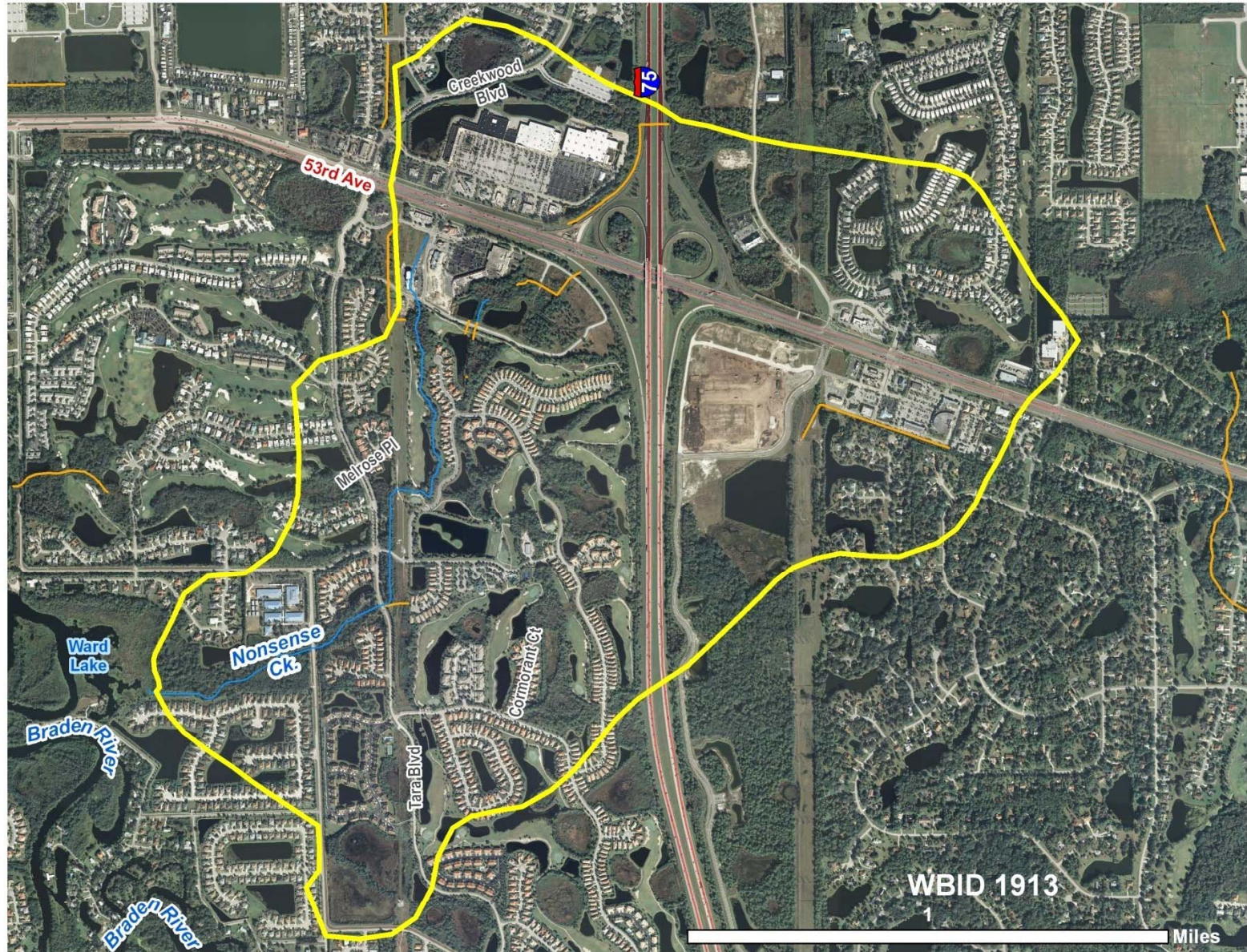
- Numeric criteria for bacterial quality are expressed in terms of fecal coliform bacteria concentration. The water quality criterion for the protection of Class III waters, as established by Rule 62-302, F.A.C., states the following:

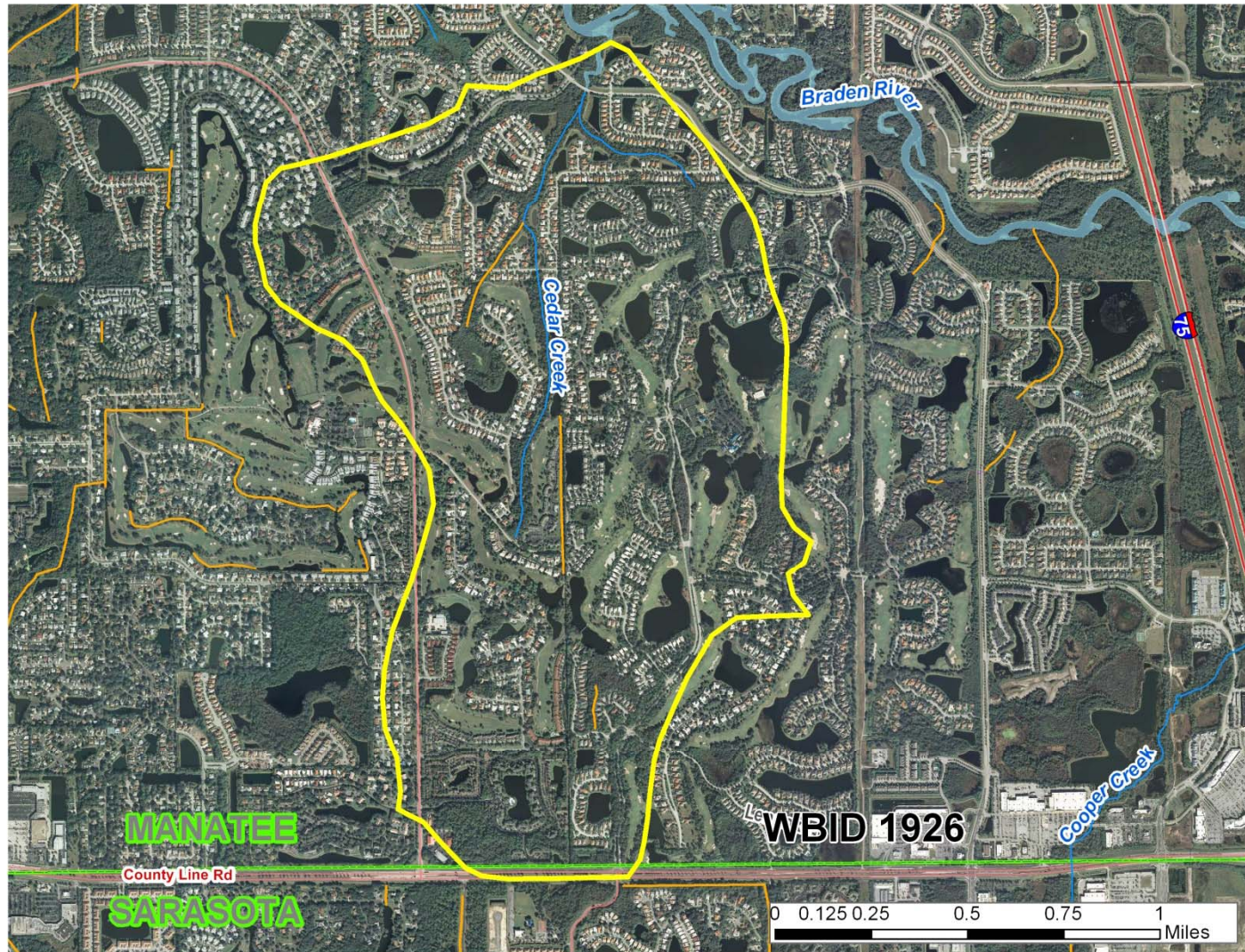
- ***Fecal Coliform Bacteria:***

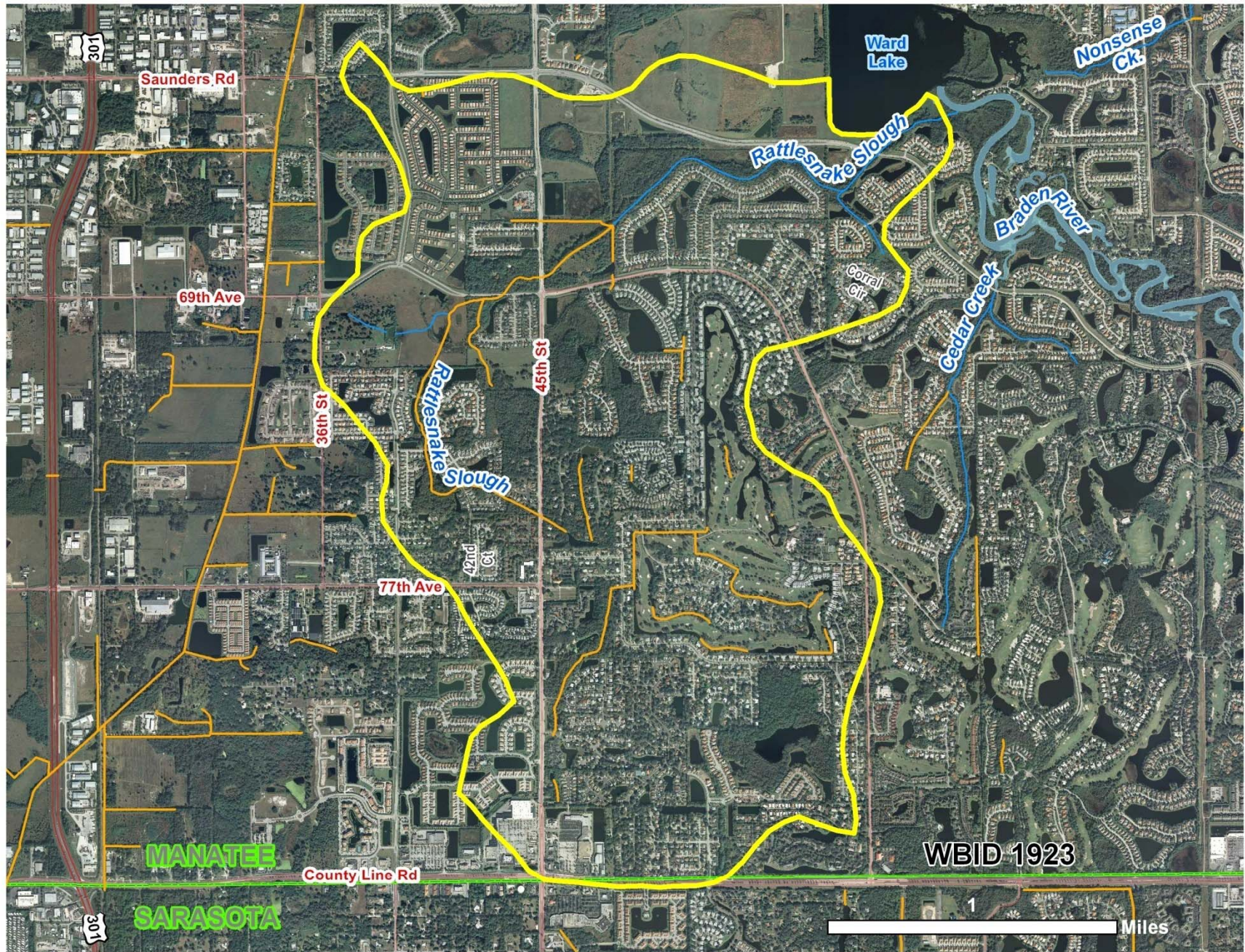
The most probable number (MPN) or membrane filter (MF) counts per 100 mL of fecal coliform bacteria shall not exceed a monthly average of 200, nor exceed 400 in 10 percent of the samples, nor exceed 800 on any one day





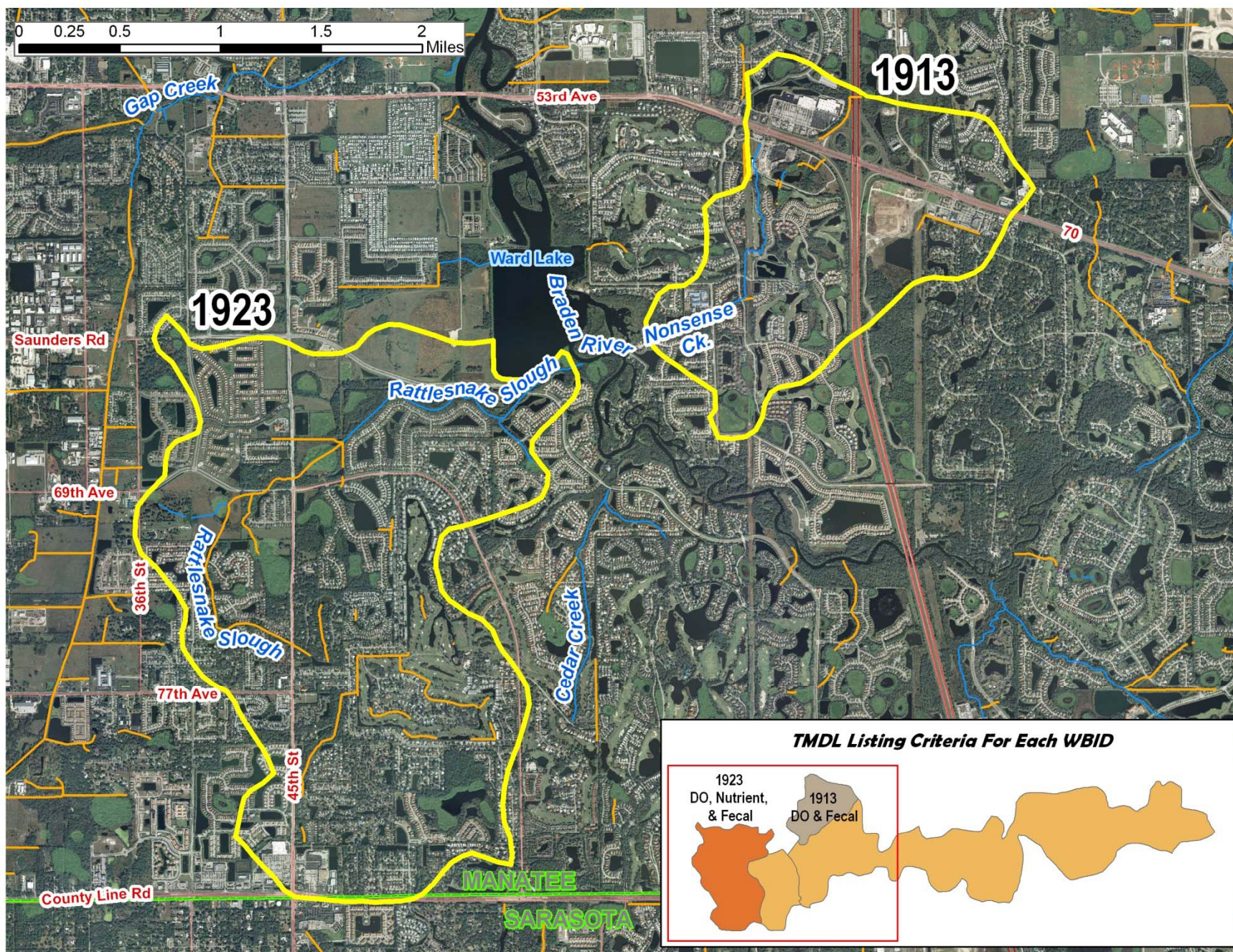






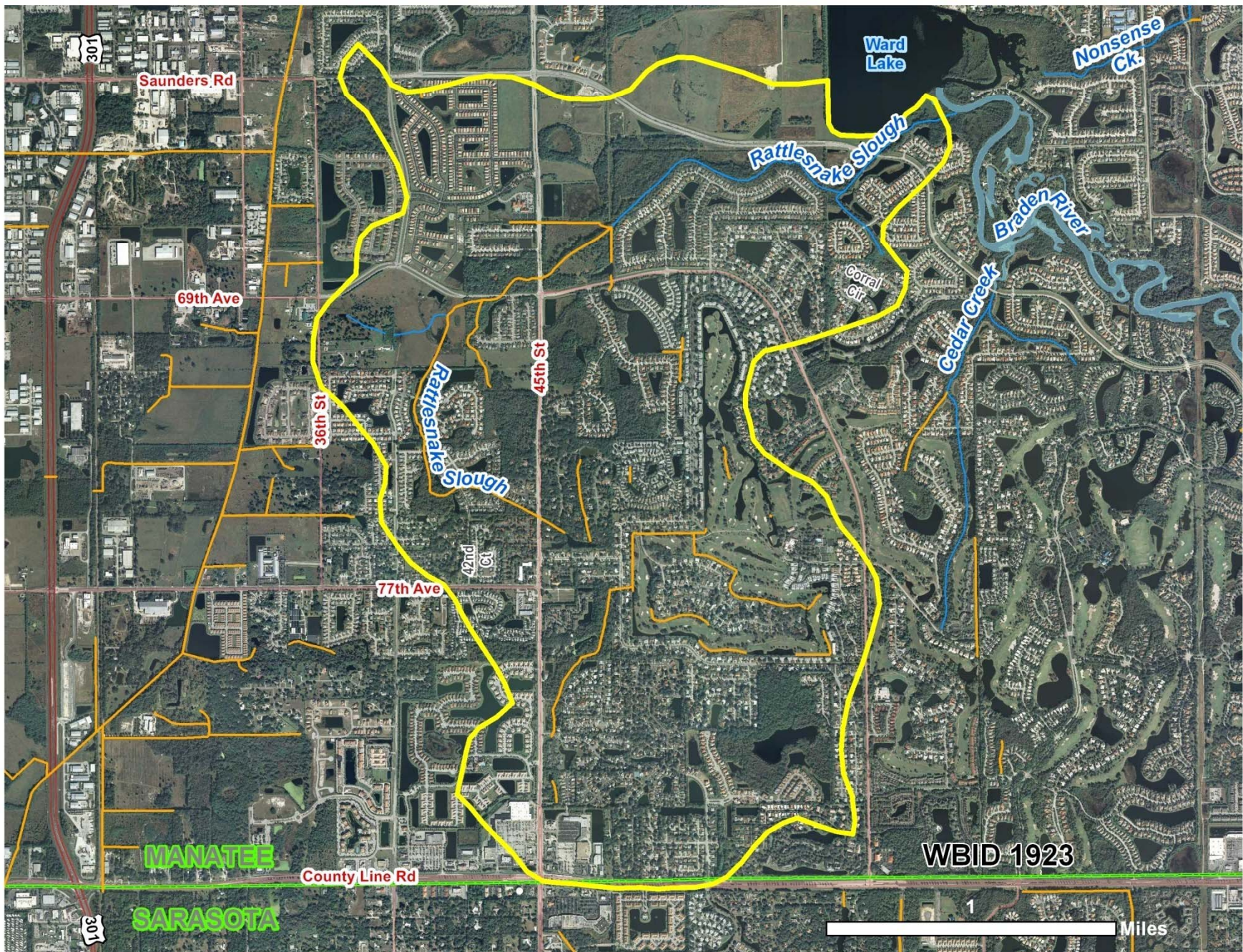
Manatee River WBIDs with Nutrient and DO impairments

- 1923 (Rattlesnake Slough) – Nutrient, dissolved oxygen (DO) and fecal coliform (FC) impairments
- WBID 1913 (Nonsense Creek) – DO and FC impairments
- Verified Period
 - January 2001 thru June 2008
- TMDLs adopted 2009



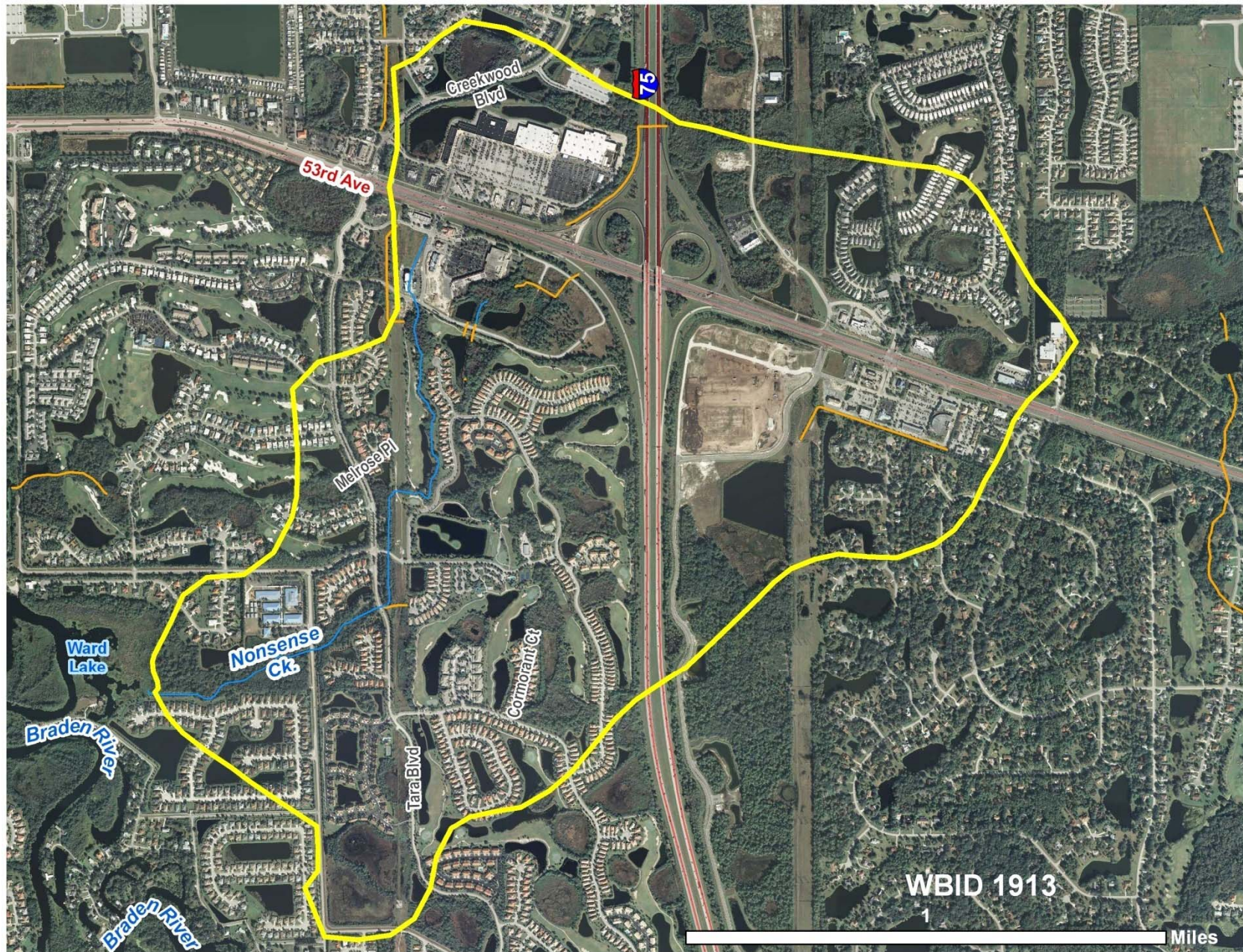
Manatee River Basin WBID 1923

- WBID 1923 Rattlesnake Slough
- Chlorophyll a exceedances & low Dissolved Oxygen
- Impairments a result of excessive TN TP & BOD
- TMDL
 - TN = 0.84mg/l (30% reduction)
 - TP = 0.48 mg/l (21% reduction)
 - BOD = 2.4 mg/l (31% reduction)



WBID 1913 (Nonsense Creek)

- Impairments - DO, (nutrient), and FC
- Urban
- 36% reduction in BOD to 2.0 mg/l
- 27% reduction in TN to 0.89 mg/l
- achieve DO & BOD targets through nutrient reductions



TMDL / NMC RA / NNC

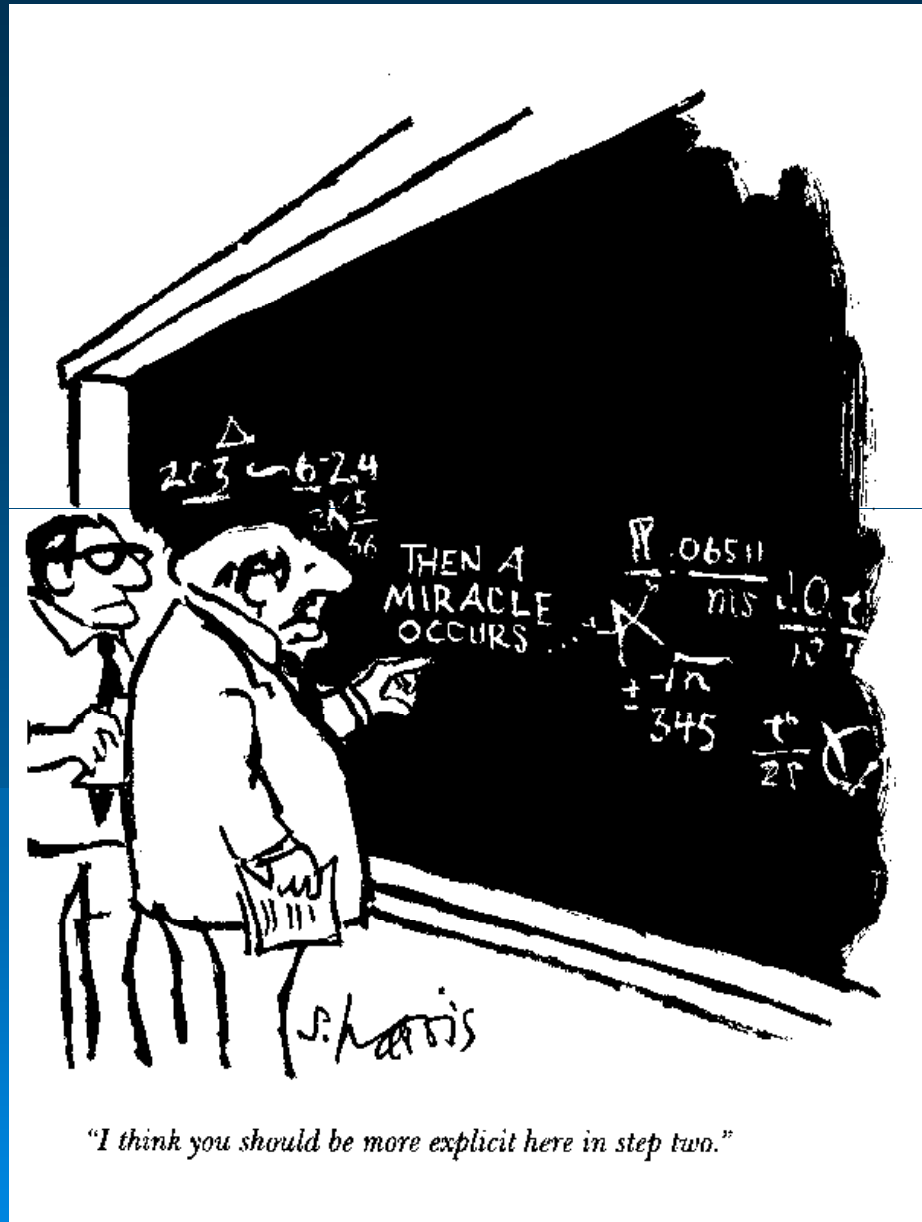
- Total Maximum Daily Load (TMDL)
 - Developed by FDEP and approved by USEPA
- Numeric Nutrient Criteria (NNC)
 - Proposed USEPA criteria
- Nitrogen Management Consortium (NMC)
Reasonable Assurance Plan (RA)
 - Approved by FDEP and under review by USEPA

Numeric Nutrient Criteria

- West Central Region (Tampa Bay)
 - Instream protective Value Criteria
 - TN 1.65 mg/l
 - TP 0.40 mg/l
- Estuarine Criteria in development
- FDEP petition

Comparison of Values

WBID	NNC TN / TP mg/l (PROPOSED)	TMDL mg/l TN / TP / BOD
1923	1.65/0.49	0.84/0.48/ 2.4
1913	1.65/0.49	0.89/NA/2.0



MORE INFORMATION

NNC & State of Florida

SSAC Contact : Russ Frydenborg Administrator, FDEP
Standards and Assessment, 2600 Blair Stone Rd.,
Tallahassee, FL 32399-2400
850 245-8063 Russel.Frydenborg@dep.state.fl.us

USEPA NNC Information:

<http://www.dep.state.fl.us/water/wqssp/nutrients/index.htm>



BREAK



Basin Management Action Plans

Why do a BMAP?



Basin Management Action Plan

The Basin Management Action Plan (BMAP) is a Restoration Plan and the process for implementing the Total Maximum Daily Load

- 403.067(7) F.S.
- Depends on watershed characteristics and the impairment

Basin Management Action Plan Basics

- BMAPs are developed collaboratively with stakeholders
- Point Sources: TMDL references in NPDES and MS4 permits provide link to BMAP
- Nonpoint Sources: BMAPs are linked to BMP implementation
- BMAPs are adopted by DEP Secretarial Order, but include statements of commitment from stakeholders

The Progression of Stakeholder Involvement



Initial effort to
get all
stakeholders
involved

Sustaining
technical effort:

- to collect and synthesize data
- identify issues to be resolved

Increasing
involvement of a
broad range of
stakeholders:

- additional staff
- elected officials
- citizens
- agricultural producers

Stakeholder Involvement

- Source Identification
- Verification/Acquisition of Current Data
- Ongoing Water Quality Improvement Efforts
- Project Information
 - Ongoing
 - Future plans
- Meetings
 - Government officials
 - Information collection for projects
 - Citizen groups
 - Local ordinance information
 - Education

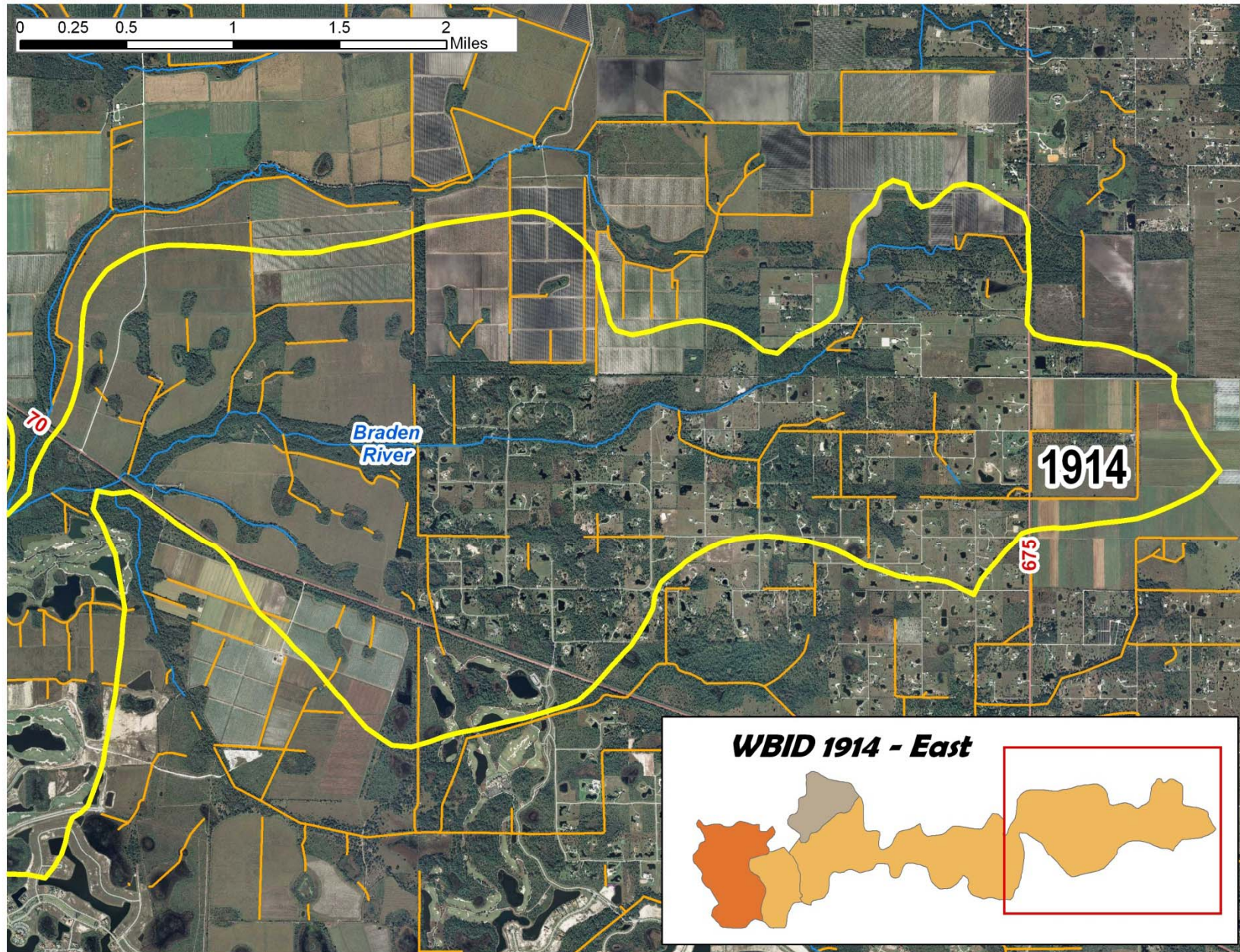
BMAP Process

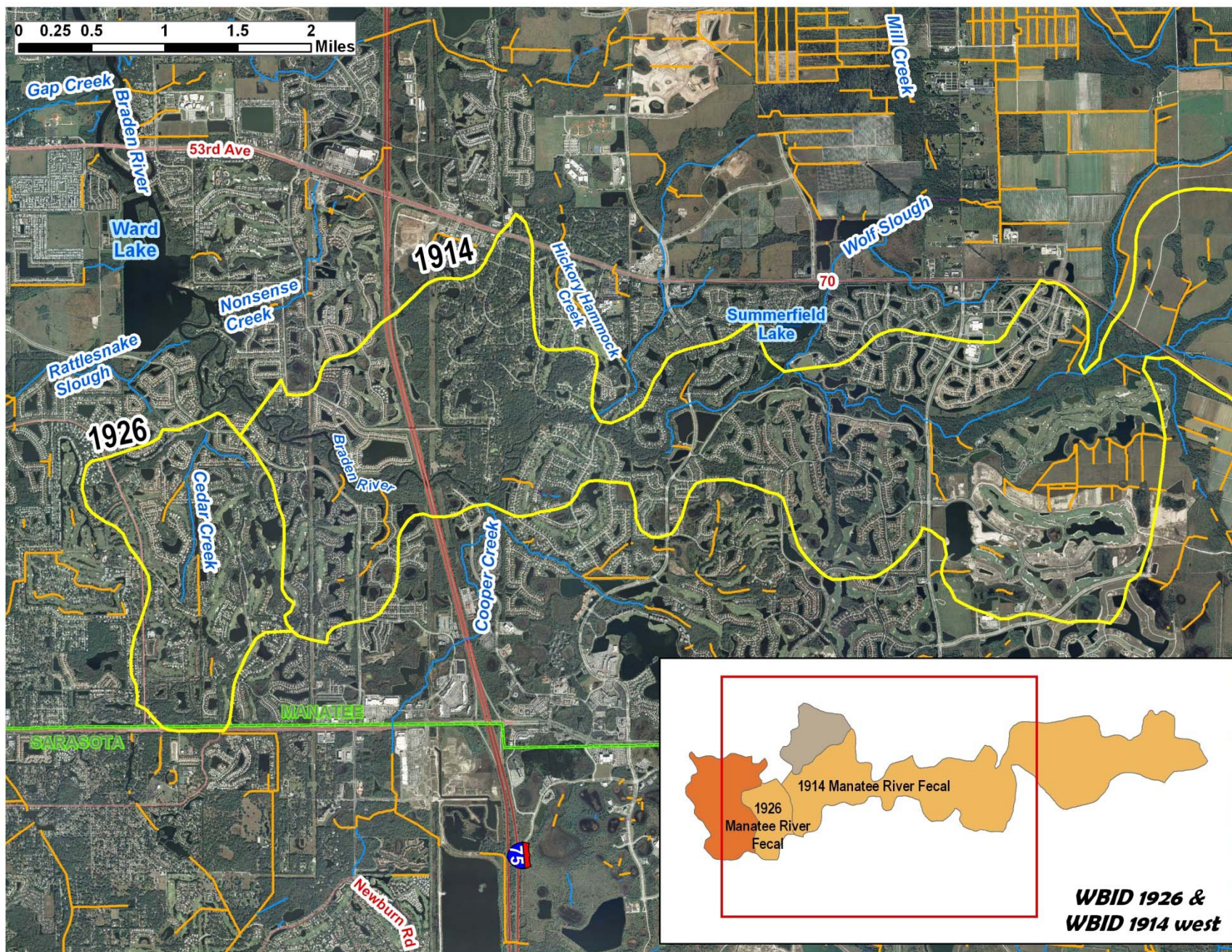
- Review Existing Data
- Fecal Impairments
 - Source identification
 - Decision Matrix
 - Sufficiency of Effort evaluation
- Nutrient / DO Impairments
 - Point and nonpoint source confirmation
 - Load allocations/ reductions
 - Phased process

BMAP Approach (Fecals)

➤ Fecal Impairments

- Source identification
 - Walk the Water body
 - Source identification & corrective actions
- Decision Matrix
 - “Risk” based determination on exceedances
- Sufficiency of Effort
 - Not allocation based
 - Level the Playing Field
 - All Stakeholders implementing applicable BMPs





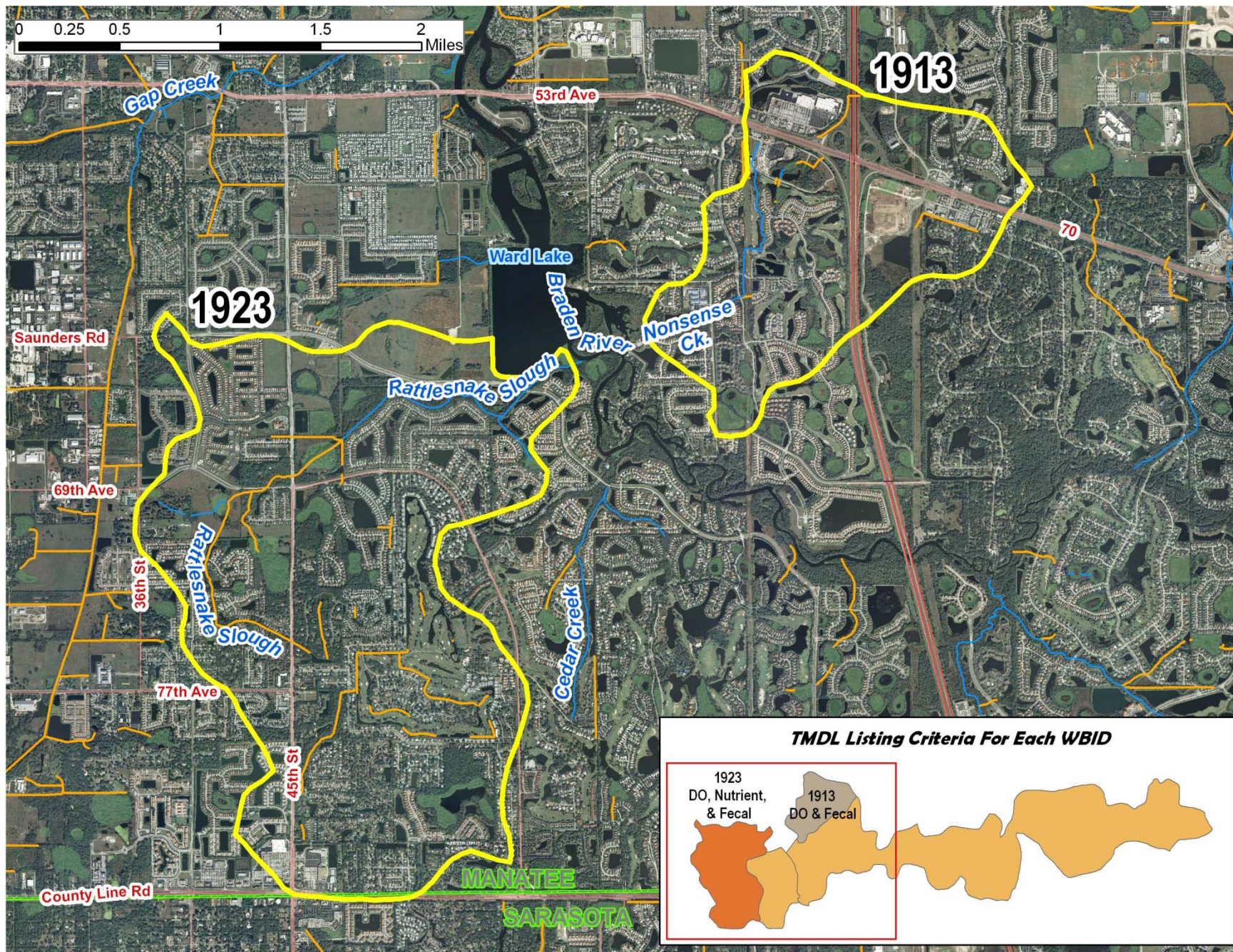
BMAP Approach (Nutrient/DO)

➤ DO Impairments

- Met by achieving TN & TP reductions
 - No immediate plan to develop DO only projects

➤ TN & TP Impairments

- Point and Nonpoint Sources
- Level the Playing Field
 - Nonpoint - All Stakeholders implementing applicable BMPs
 - Point - Permit limits adjusted to TMDL
- Determine Load Allocations/Reductions



Strategy for Progress

➤ Iterative Process

- Solutions not instantaneous
- Phased Implementation

➤ Document current status

➤ Acquire additional information as needed

➤ Conduct Monitoring

- BMP Implementation & Adherence
- Water Quality

➤ Evaluate Progress & Refine Goals

- Response to restoration efforts

BMAP Timeline



Future Meeting Topics

➤ July Meeting

- Fecal Coliform Toolkit discussion
- Walk the Waterbody introduction
- Decision Matrix Process

➤ August Meeting

- Data update
 - Nutrient load reduction strategies
 - Project discussion
- 

What Needs to be Done Next?

➤ Identifying Interested Parties

- Who else needs to be involved?
- How to engage them in an effective process?

➤ Understanding the Basin:

- What are the issues?
- What information exists?
- Is the current information sufficient to support analysis and decision-making?
- Additional Data Collection:
 - May focus on some stakeholders more than others
 - May require additional analysis

What Needs to be Done Next?

- Nutrient & FC WBIDs
 - Collect project information
 - Determine load allocations (as needed)
- BCI/AMEC will be contacting stakeholders to:
 - update projects in RA Plan
 - Collect information on new projects

Contact Information

- Basin Coordinator terry.hansen@dep.state.fl.us
- TMDL kevin.petrus@dep.state.fl.us
- TMDL Website link
<http://www.dep.state.fl.us/water/tmdl/index.htm>
- Presentations & other Information
http://publicfiles.dep.state.fl.us/DEAR/BMAP/Tampa_Bay_Tributaries/