Florida Department of Environmental Protection

TMDL Prioritization, Public Process, and Streamlining

Erin Rasnake

Florida has:

- Population of 19,893,297 (US Census Bureau 2014)
  - 98 million tourists a year (Visit Florida Website 2015)
- >1,700 rivers and streams (26,960 miles)
- 44,850 miles of canals
- 1,607,261 acres of lakes
  - 2nd largest freshwater lake wholly within continental U.S. (Okeechobee) – 730 sq mi
- 1,702,390 acres of freshwater and tidal wetlands
- 2,154 coastal miles
- 1,013 known springs
- 6,573 total waterbody segments, or WBIDs

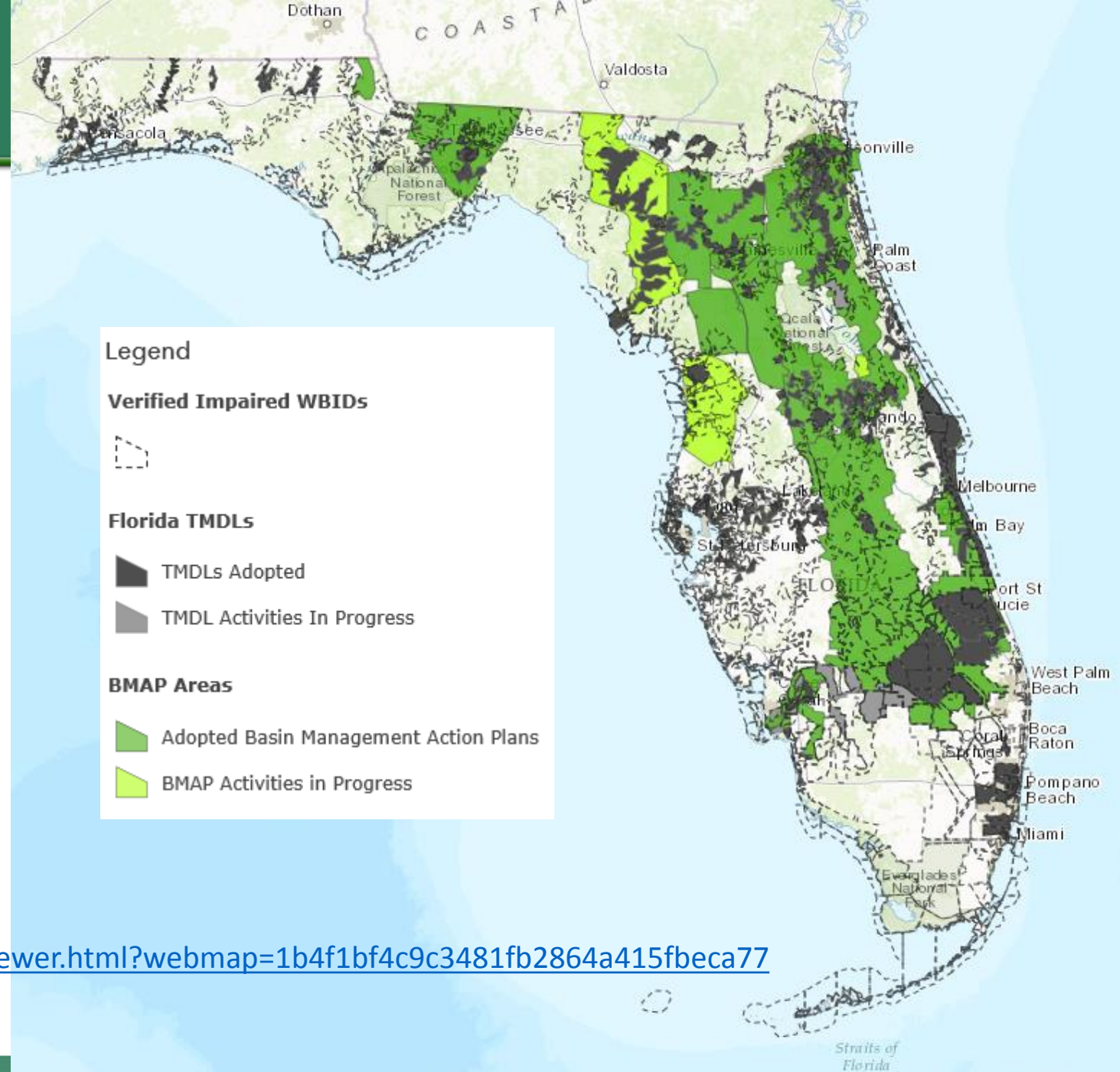http://dep.state.fl.us/water/docs/2016-Integrated-Report.pdf

- **Standards**

- Monitoring

- Assessment

- **TMDL development**

  - **Numeric Nutrient Criteria Hierarchy 1 (H1)**

- **Basin Management Action Plan (BMAPs)**
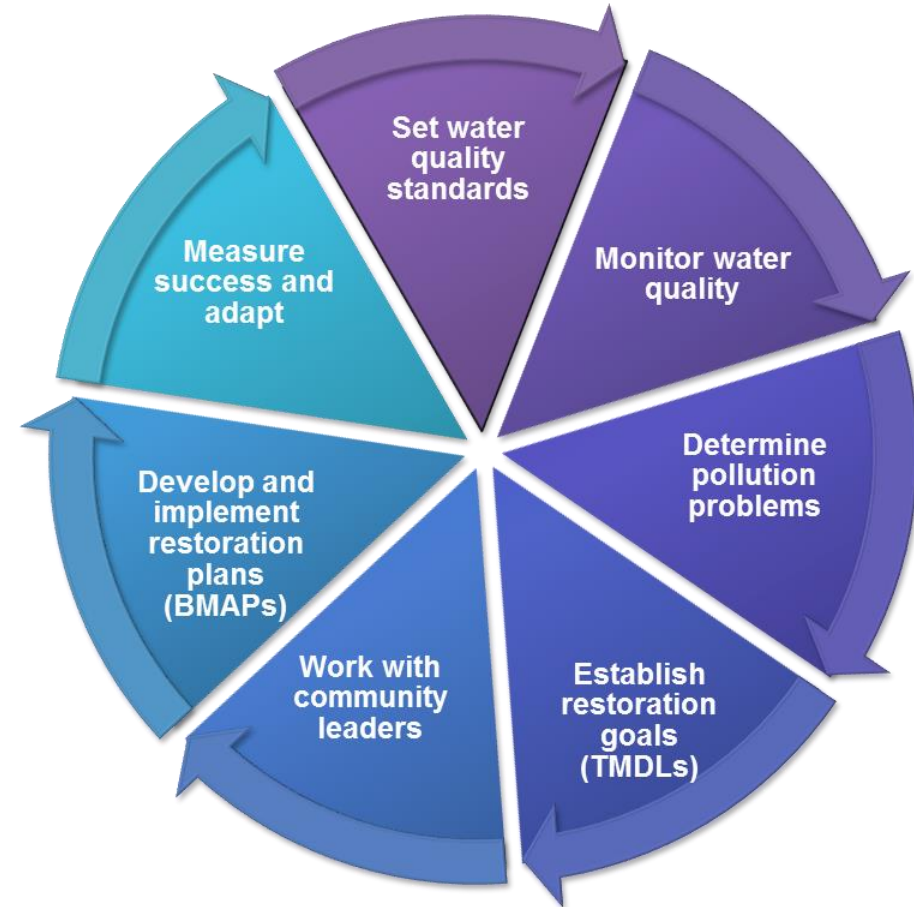
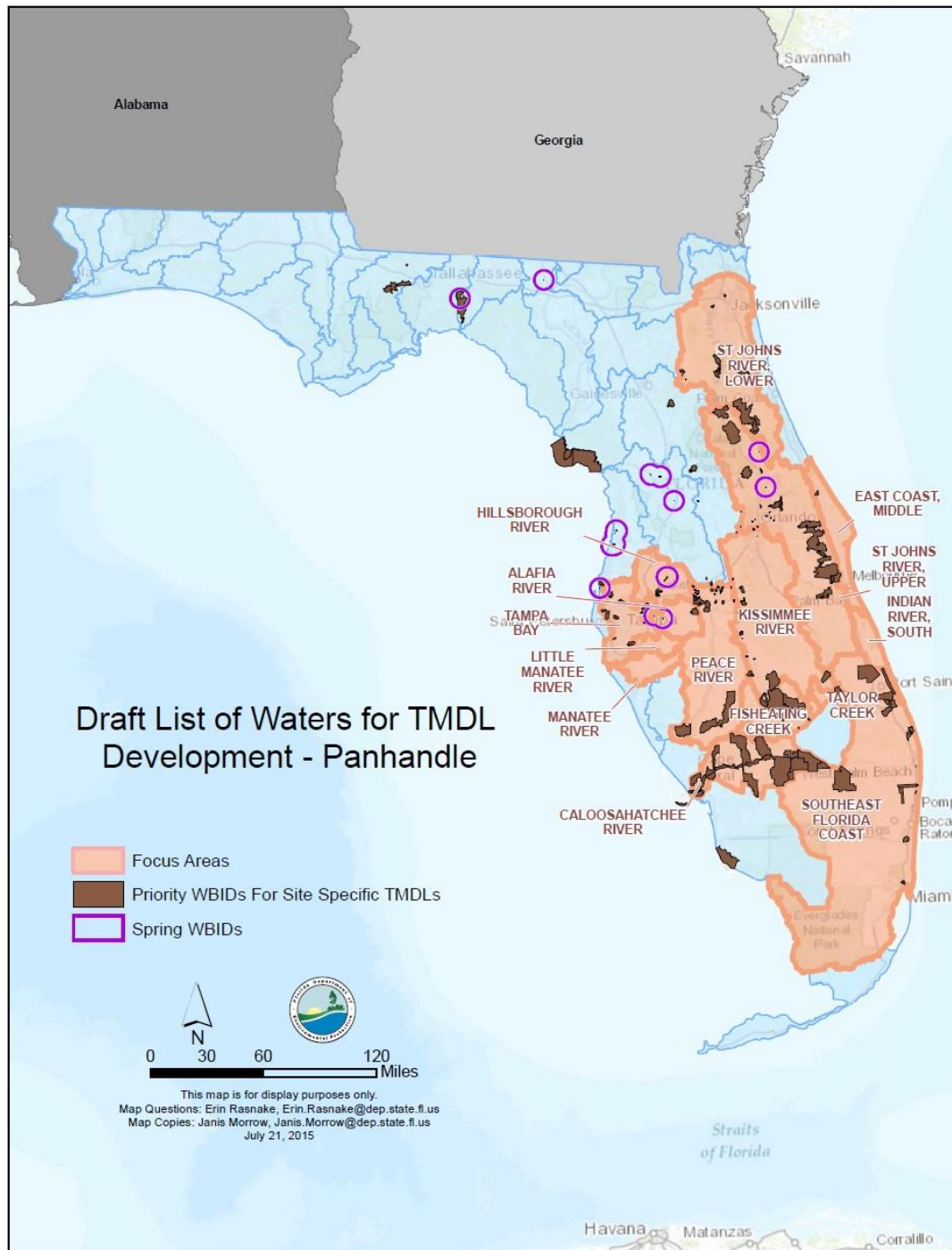_Implemented on a rotating basin approach and adopted into State Rule or Statue…_

Current view of statewide TMDLs, BMAPs and verified impaired WBIDs

Legend

Verified Impaired WBIDs

Florida TMDLs

TMDLs Adopted

TMDL Activities In Progress

BMAP Areas

Adopted Basin Management Action Plans

BMAP Activities in Progress

http://fdep.maps.arcgis.com/home/webmap/viewer.html?webmap=1b4f1bf4c9c3481fb2864a415fbeca77

Draft List of Waters for TMDL Development - Panhandle

Focus Areas
Priority WBIDs For Site Specific TMDLs
Spring WBIDs

This map is for display purposes only.
Map Questions: Erin Rasnake, Erin.Rasnake@dep.state.fl.us
Map Copies: Janis Morrow, Janis.Morrow@dep.state.fl.us
July 21, 2015

303(d) Long-Term Vision

- Removes "one size fits all" expectations
- Allows states to tailor their strategies
  - Leverage local resources
  - Address local water quality goals
- Ensures accountability through new measures
  - Areas addressed by TMDLs
  - Recognition of TMDL alternatives (reasonable assurance, nutrient management plans)
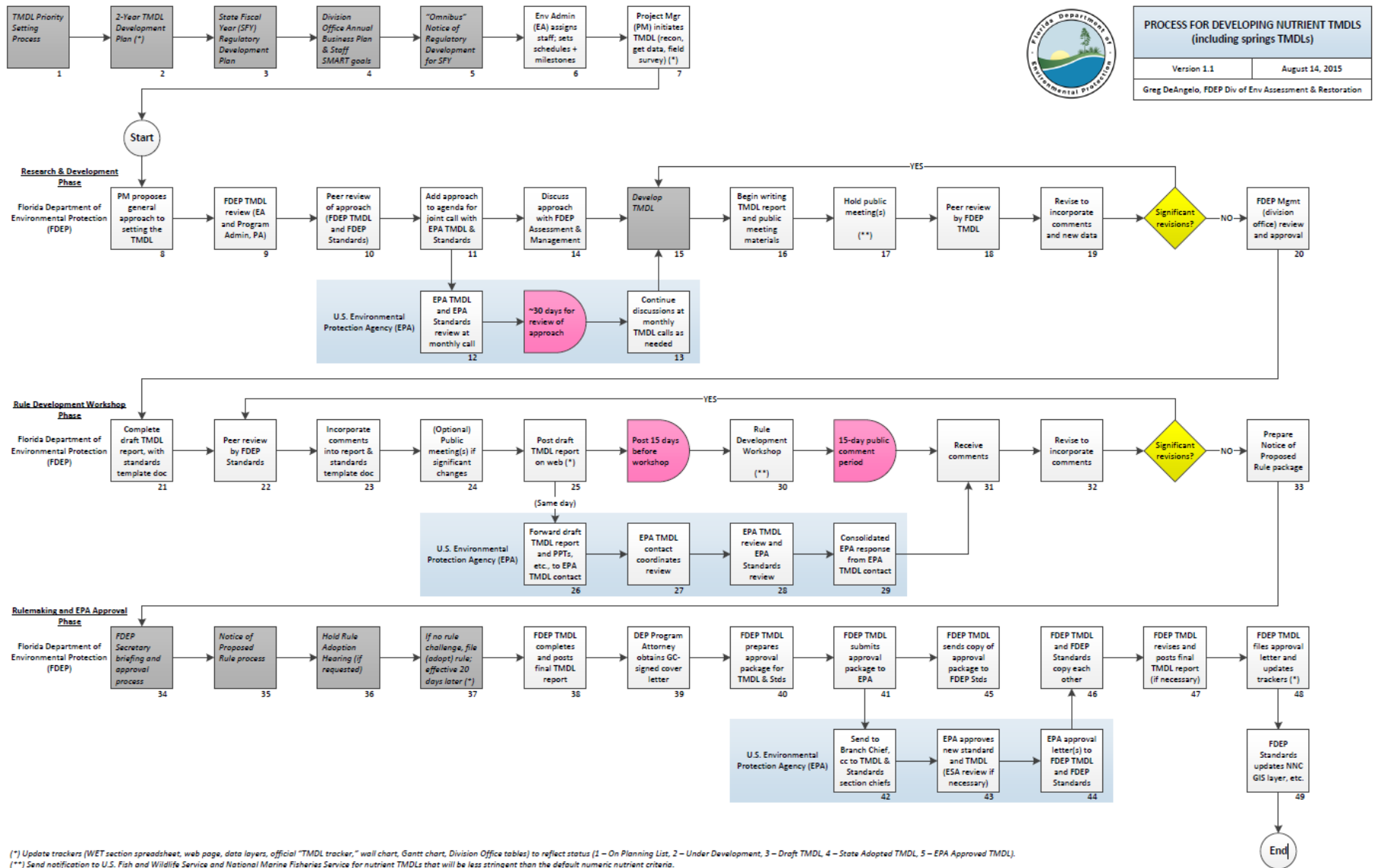- Operates on a longer time horizon

Key Issues

1. TMDL/H1 reports
   a. Improve the readability
   b. Ensure consistency
   c. Meet EPA TMDL and Standard's requirements for approval
2. TMDL development process
   a. Follows matrix
   b. Meets state and federal rule/statutes for adoption as an H1
   c. Creates consistent and clear communication between DEAR programs and EPA

Strive for a more broadly applicable target language and balance of technical detail to improve the readability of the TMDL/H1 documents, ensure key players in DEAR and EPA are all speaking the same language, and ensure the TMDL report meets the needs of all groups.

PROCESS FOR DEVELOPING NUTRIENT TMDLS
(including springs TMDLs)

| Version 1.1 | August 14, 2015 |

Greg DeAngelo, FDEP Div of Env Assessment & Restoration

(*) Update trackers (WET section spreadsheet, web page, data layers, official "TMDL tracker," wall chart, Gantt chart, Division Office tables) to reflect status (1 – On Planning List, 2 – Under Development, 3 – Draft TMDL, 4 – State Adopted TMDL, 5 – EPA Approved TMDL).
(**) Send notification to U.S. Fish and Wildlife Service and National Marine Fisheries Service for nutrient TMDLs that will be less stringent than the default numeric nutrient criteria.
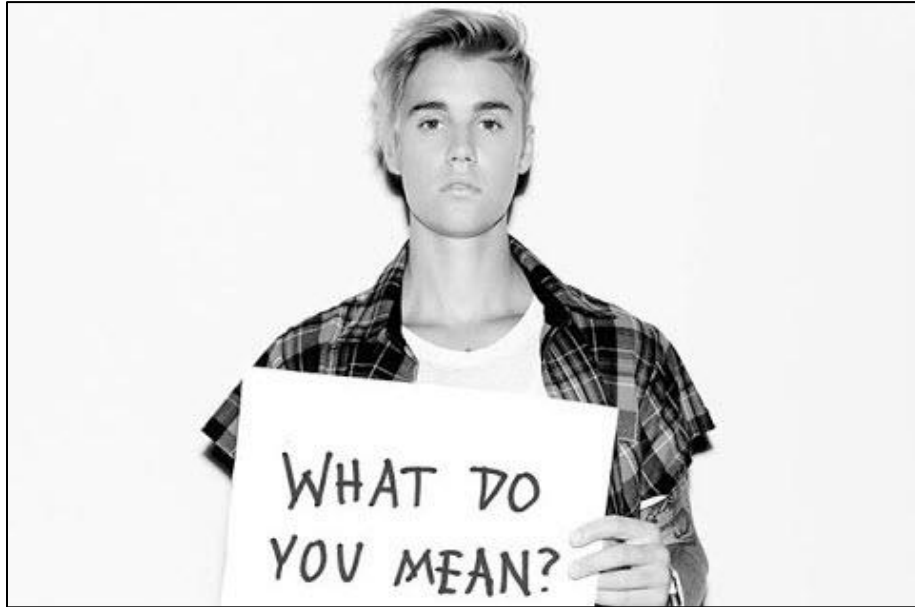
Setting Priorities

1. Improve existing process checklist for TMDL/H1 development

2. Improve GIS checklist and standardized maps

3. Revise Rulemaking Checklist

4. Establish a template for all TMDL/H1 reports

5. Establish a list of resources for TMDL/H1 developers

6. Establish a process improvement for TMDL/H1 reporting, counting and communication strategies
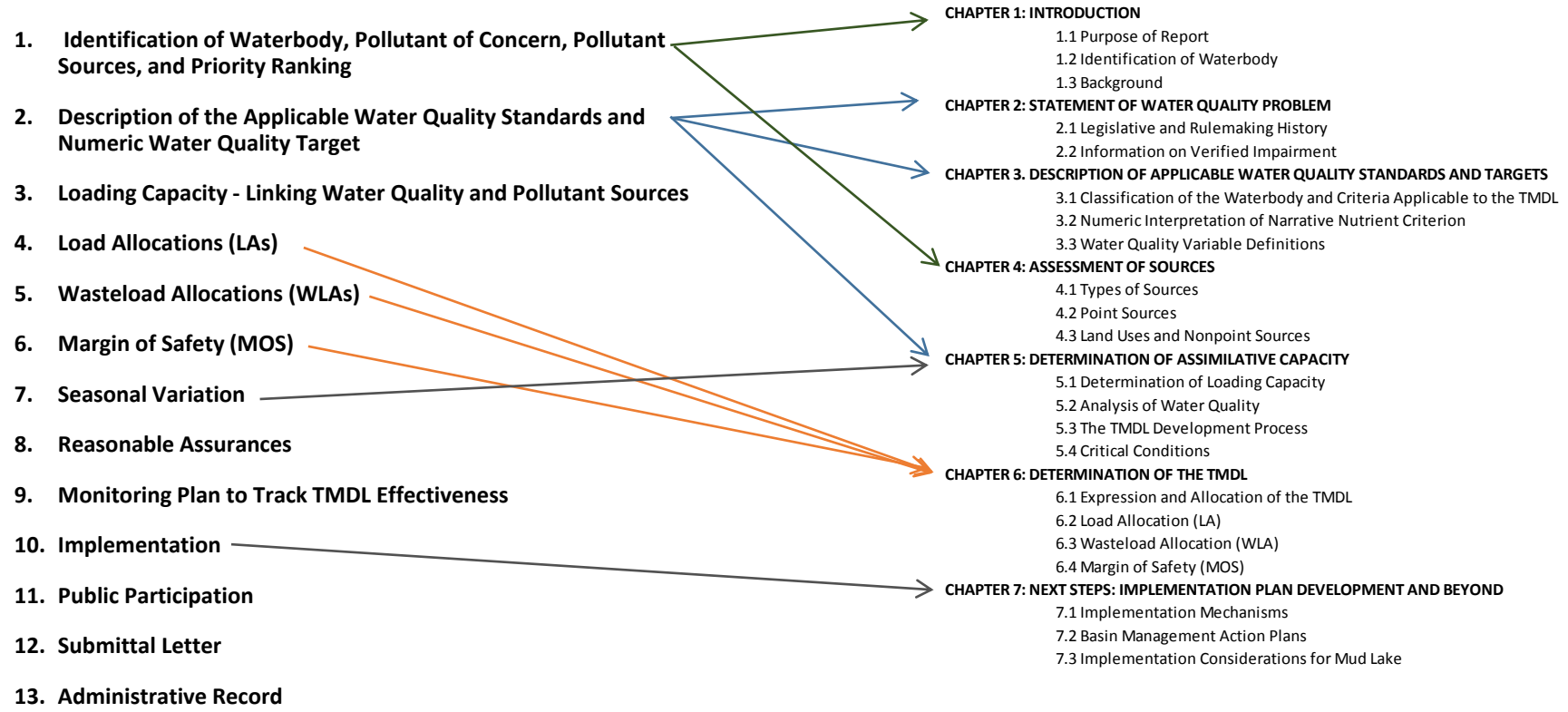
Refining the report to ensure it covers the minimum requirements, and by doing so reduce the amount of ancillary information

- Reviewed reports that other states have done to find examples of some <u>extremely efficient TMDLs</u>

- Decided what was ancillary and what was essential using EPA TMDL Guidelines

EPA Guidelines vs Our TMDLs

1. Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking

2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

3. Loading Capacity - Linking Water Quality and Pollutant Sources

4. Load Allocations (LAs)

5. Wasteload Allocations (WLAs)

6. Margin of Safety (MOS)

7. Seasonal Variation

8. Reasonable Assurances

9. Monitoring Plan to Track TMDL Effectiveness

10. Implementation

11. Public Participation

12. Submittal Letter

13. Administrative Record

CHAPTER 1: INTRODUCTION
    1.1 Purpose of Report
    1.2 Identification of Waterbody
    1.3 Background
CHAPTER 2: STATEMENT OF WATER QUALITY PROBLEM
    2.1 Legislative and Rulemaking History
    2.2 Information on Verified Impairment
CHAPTER 3. DESCRIPTION OF APPLICABLE WATER QUALITY STANDARDS AND TARGETS
    3.1 Classification of the Waterbody and Criteria Applicable to the TMDL
    3.2 Numeric Interpretation of Narrative Nutrient Criterion
    3.3 Water Quality Variable Definitions
CHAPTER 4: ASSESSMENT OF SOURCES
    4.1 Types of Sources
    4.2 Point Sources
    4.3 Land Uses and Nonpoint Sources
CHAPTER 5: DETERMINATION OF ASSIMILATIVE CAPACITY
    5.1 Determination of Loading Capacity
    5.2 Analysis of Water Quality
    5.3 The TMDL Development Process
    5.4 Critical Conditions
CHAPTER 6: DETERMINATION OF THE TMDL
    6.1 Expression and Allocation of the TMDL
    6.2 Load Allocation (LA)
    6.3 Wasteload Allocation (WLA)
    6.4 Margin of Safety (MOS)
CHAPTER 7: NEXT STEPS: IMPLEMENTATION PLAN DEVELOPMENT AND BEYOND
    7.1 Implementation Mechanisms
    7.2 Basin Management Action Plans
    7.3 Implementation Considerations for Mud Lake

Standardized Outline Structure

Executive Summary

Table of Contents
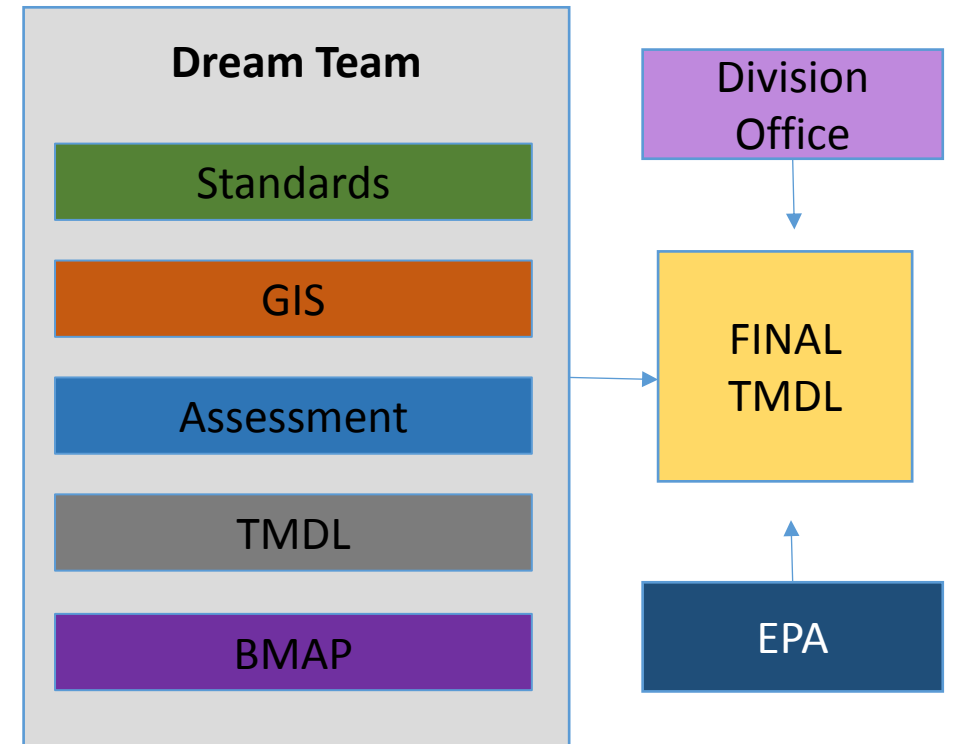List of Tables and Figures
Acknowledgments
1. INTRODUCTION
2. APPLICABLE WATER QUALITY STANDARDS, POLLUTANT OF CONCERNS, AND SITE SPECIFIC TARGET
3. DETERMINATION OF THE TMDL
4. DETERMINATAION OF LOADING ALLOCATIONS
5. IMPLEMENTATION PLAN DEVELOPMENT AND BEYOND

References
Appendix A: Background on Federal and State Stormwater Programs
Appendix B: Water Quality Standards Template Document
Appendix C: Ancillary Data (i.e. Model report)

Dream Team

- Standards
- GIS
- Assessment
- TMDL
- BMAP

Division Office → FINAL TMDL

EPA → FINAL TMDL

TMDL Checklist

Key Steps for Consultation Between Dream Teams, Division and EPA

Also includes state (62-304 FAC) and federal rule making process, notifications and deadlines

15	8	NPR		Update tracking: ☐ TMDL Tracker for each WBID to "Under Development" ☐ TMDL Tracking sheet to "In Development" ☐ GIS Shapefile to "In Development"	PL			
16	9	RDW		Prepare F.A.R. notice announcing rule development workshop (must hold at least one in the vicinity of the waterbody) or public meeting.	PL	3 days before review	4. F.A.R. Notice (Mtg.)	TMDL Checklist '!B39'
17	10	RDW		Review F.A.R. notice.	EA, OGC	3 days before publication		
18	11	RDW		Submit notice to F.A.R., publishes on next day.	OGC			TMDL Checklist '!B40
19	12	RDW		Submit draft report and other materials to post on TMDL web page, GovDelivery, and SharePoint.	PL	3 days before publication		TMDL Checklist '!B40
20	13	RDW		Send Microsoft Word copy of draft to EPA (Standards & TMDL).	PL, EA	30 day review period		TMDL Checklist '!B41
21	14	RDW		Before the final rule development workshop (i.e., prior to the NPR), publish newspaper notice in the vicinity of the impaired waterbody.	Administrative Assistant, PL	5 to 15 days before workshop		
22	15	RDW		Hold public workshop 30 days after F.A.R. publishes.	PL	Wait 30 days		TMDL Checklist '!B43
23	16	NPR		Update tracking: ☐ TMDL Tracker for each WBID to "Draft" ☐ TMDL Tracking sheet to "In Draft" ☐ GIS Shapefile to "In Draft"	PL			
24	17	NPR		Prepare NPR authorization packet: ☐ Memo from Dir. to Sec. (PA drafts, forwards to OGC)	PA		5. Memo (NPR)	TMDL Checklist '!B51

GIS Checklist

	Date Requested	Date Completed	Standard (Y or N)	Requested (Y or N)	Components	Template Style (1-4)	Specify data source(s)/comments:
					TMDL Developer notes on check list: maps to be made (in addition to Standard maps) and data source to be used:		
			Y	Y	Small Scale Map (Location of Basin and Major Geopolitical Features)		
			Y	Y	Watershed/Springshed Scale Map (Basin with Major Geopolitical and Hydrologic Features)		
			Y	Y	Water Quality Monitoring Map		
			Y	Y	Watershed/Springshed Scale Landuse Map(s)		
			Y	Y	Landuse Classification table		
			Y	Y	Paragraph summarizing land use characteristics.		
			Y	Y	Watershed/Springshed Septic Tank Locations		*Default FWMI unless specified otherwise*
			Y	Y	Watershed/Springshed Soil Types		
			N		Watershed/Springshed Scale Digital Elevation Model with Contours		
			N		Map of NPDES Facility outfalls within Watershed/Springshed		
			N		Table of NPDES facilities		
			N		Map of MS4 Boundaries within Watershed/Springshed		
			N		Table of MS4 permittees and co-permittees		
			N		Watershed/Springshed Population Density		
			N		Summary of population density, housing density, etc.		
			N		Model grid Map (if applicable)		
			N		Model Subbasins Map (if applicable)		
			N		Aquifer Vulnerability/FAVA Map/County Specific AVA (if applicable - for Springs TMDLs)		
			N				
			N				
					Conduct an internal review of the maps with the GIS section before drafts are sent to the TMDL Developer.		
					Export maps as 300 dpi JPEG and place maps in the Dream Team/Maps/Drafts folder for TMDL Developer review.		
					Make changes as need and export revised maps as 300 dpi JPEG. Place final maps in the Dream Team/Maps/Final folder for insertion into TMDL report.		

Waterbody Name:
WBID #:
TMDL Developer:
GIS Analyst:
Estimated deadline:
Notes:

Contacts

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QUESTIONS