



TMDL PRIORITIZATION 2.0

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BACKGROUND

DEP MUST PRIORITIZE WHICH WATERS WILL RECEIVE TMDLS FIRST

- Workplans required by EPA (prioritization framework).
- Need to effectively manage state resources.

FIRST PRIORITIZATION WAS CREATED IN 2014

- Developed schedule and recovery-potential screening approach.
- Planning horizon through 2022.

DEP IS INITIATING THE NEXT 10-YEAR PLAN (PRIORITIZATION 2.0)

- New workplans on a two-year cycle.
- Focus on nutrients.
- Bacteria a major component.



PUBLIC MEETING #1: MAY 24, 2022

Methodology for TMDL Prioritization 2.0 Presented to the Public

- Numerical prioritization.
- Bifurcated approach for different types of impairments and different waterbody types.

[TMDL Prioritization 2.0 | Florida Department of Environmental Protection](#)



VISION

Select a set of waters where TMDLs would be the best tool to guide restoration of **ECOSYSTEMS** and the **COMMUNITIES**, which rely on them. **THREE GOALS:**

1

Enhance program's capacity to develop complex and challenging TMDLs.

2

Engage with communities.

3

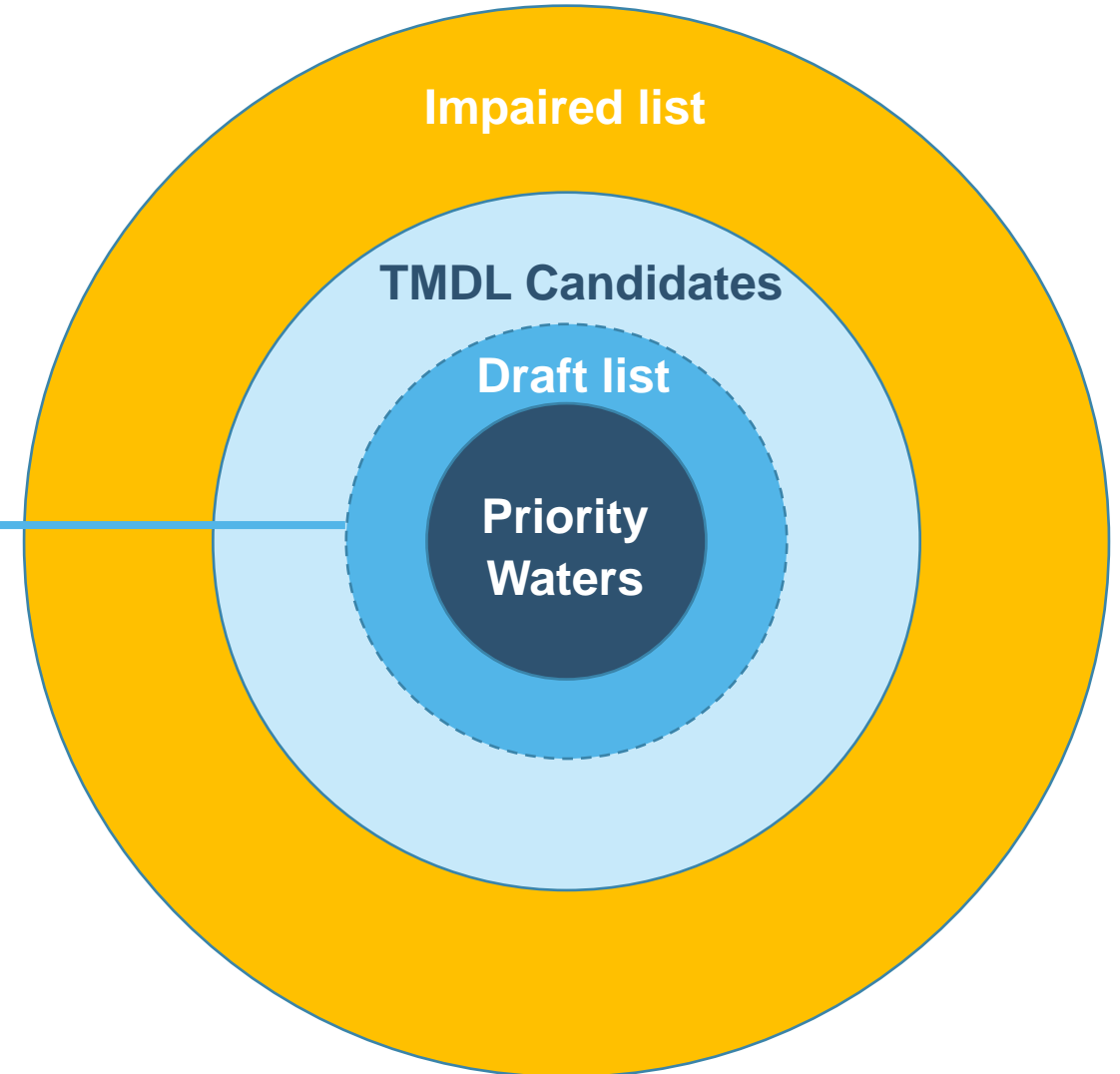
Encourage "clean water, faster" through alternative restoration plans where TMDLs are not the best tool.



STRUCTURE TWO-YEAR WORK PLAN

Priority Waters - TMDLs DEP intends to complete in two years.

Draft List - DEP will initiate TMDL development during the two-year workplan period but may not complete TMDL development within the two-year period.





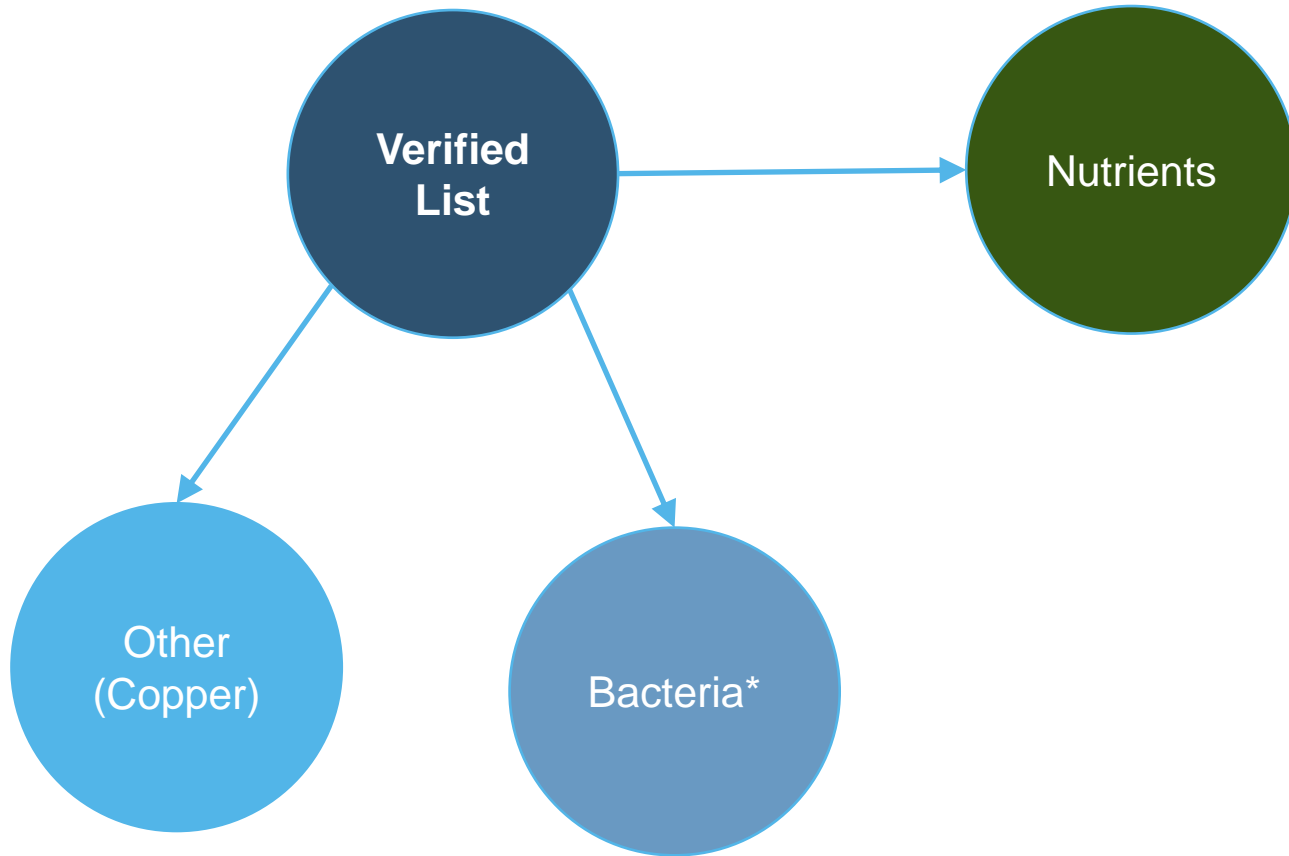
PRIORITIZATION TIMELINE

Year	BA	Prioritization Activity	TMDL Activities
2022		Develop 10-year Prioritization Process and Establish Two-Year Workplan	
2023			
2024		Set 2nd 2-year Workplan (IR)	
2025			
2026		Set 3rd 2-year Workplan (IR)	
2027			
2028		Set 4th 2-year Workplan (IR)	
2029			
2030		Set 5th 2-year Workplan (IR)	
2031			



MUTLI-FACETED APPROACH

DEPENDENT ON IMPAIRED PARAMETER AND WATERBODY TYPE

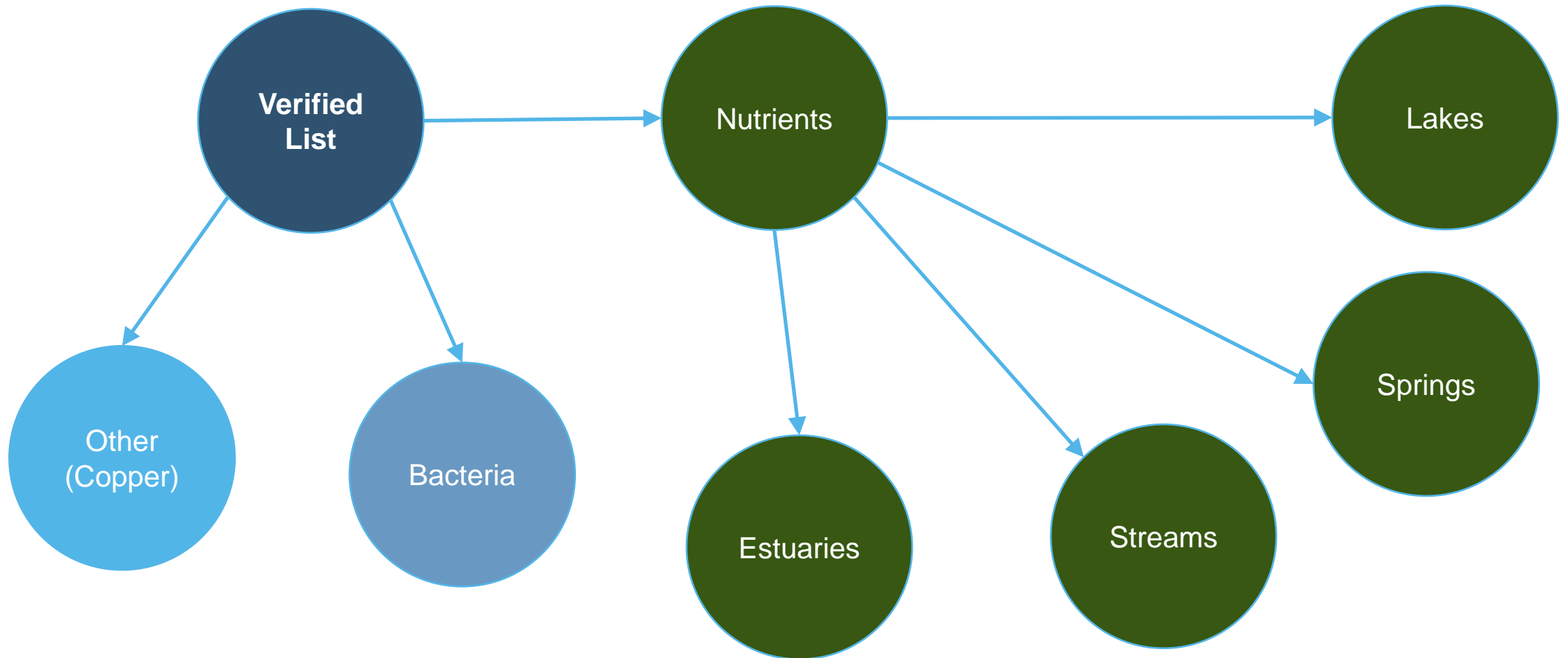


*Bacteria TMDLs addressed by Ken Weaver



MUTLI-FACETED APPROACH

DEPENDENT ON IMPAIRED PARAMETER AND WATERBODY TYPE





NUMERIC NUTRIENT CRITERIA FLORIDA

EXPRESSION AND DERIVATION DIFFER BY WATERBODY TYPE

- Lakes.
- Estuaries.
- Streams.
- Springs.

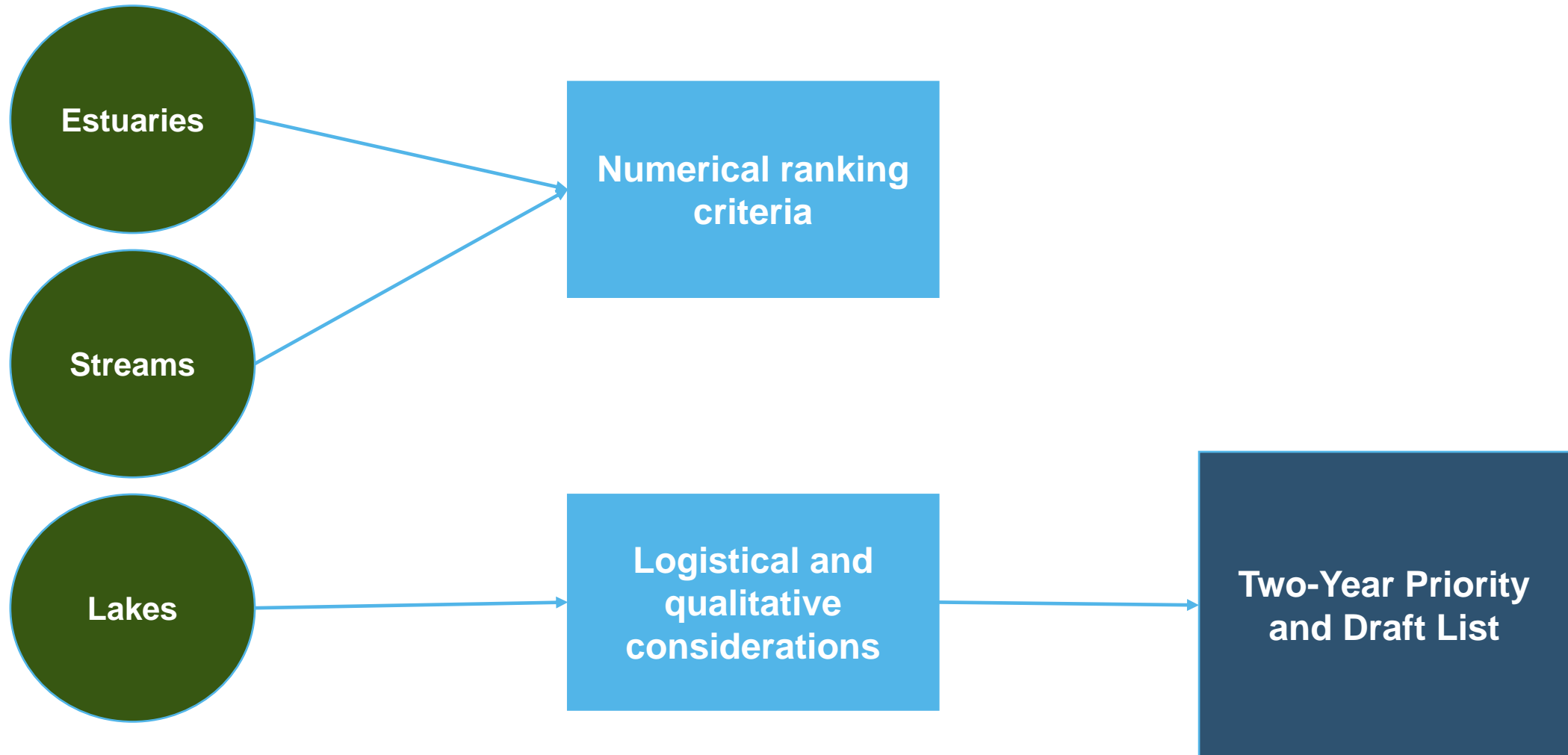
COMPLICATED RELATIONSHIPS BETWEEN STRESSORS AND RESPONSE

LOGISTICAL CONSIDERATIONS

- Model requirements.
- Methods development.



NUTRIENT PRIORITY SETTING





LAKE SELECTION CRITERIA

DATA SUFFICIENCY

- Five or more years of data (Chl *a*, TN, TP) from the most recent 10-year period.
 - Lakes with insufficient data added to the strategic monitoring plan (SMP).

ONGOING MANAGEMENT STRATEGIES

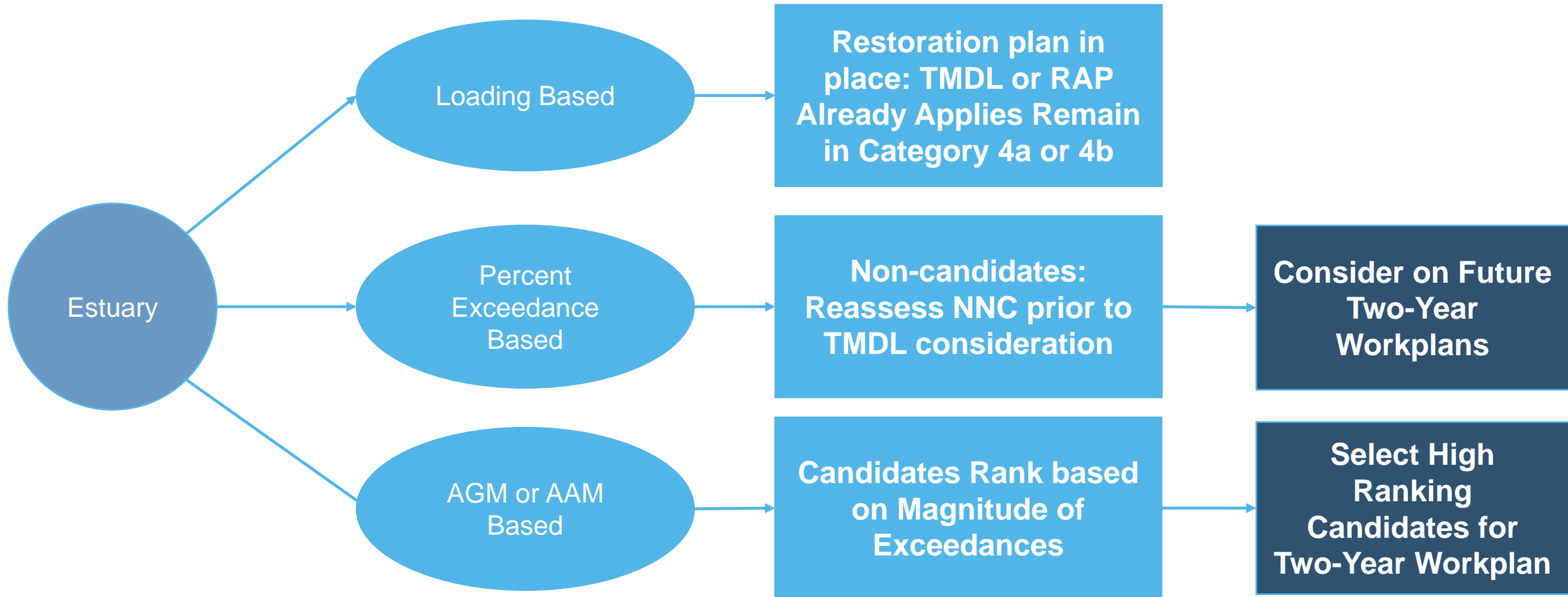
- Absence of an existing restoration plan.

LOGISTICAL CONSIDERATIONS

- Site specific evaluation for modeling suitability.
- DEP can develop multiple lake TMDLs per year depending on the complexity of the approach.



ESTUARY SELECTION CRITERIA





ESTUARY SELECTION CRITERIA

AGM or AAM Based



Evaluate Magnitude of Exceedance over Estuary Nutrient Region (ENR)
1.2 * Criterion



Priority Rank 1
Chl *a* > 1.2 criterion

Non-Candidate
Attain NNC over ENR (Chl *a*, TN, and TP)

Priority Rank 2
Chl *a* > criterion
and
TN and/or TP > 1.2 criterion

Priority Rank 3
TN, TP, and/or Chl *a* > criterion



STREAM PRIORITY SELECTION CRITERIA

Based on Habitat Assessment (WBID Max)

- Partially linked to stream exclusion requirements.
- Lower priority for stream that may be hydrologically and physically altered.
- Potential managed systems.

Stream Priority	HA Score	Artificial Channelization Score	Notes
4	≤40	N/A	Reconsider after stream exclusion review
4	>40-80	≤5	
3	>40-80	>5-10	Requires additional review of stream exclusion and stressors
3	>80-100	≤5	
2	>80-100	>5-10	Need additional decision criteria
1	>80-100	>10	Need additional decision criteria
1	>100	N/A	



STREAM PRIORITY SELECTION CRITERIA

Streams: First Two-Year Period

- Select from Priority Rank 1 or 2 streams.
- Focus on Capacity Building.
- Low-hanging fruit
 - Streams in Category 5 for exceeding Stream Condition Index (SCI) and nutrients threshold(s) that attain the floral metrics, and/or,
 - Streams in Category 5 for Chl *a* and nutrient threshold(s) that attain RPS and LVS.
- Proposing to include at least two streams on the draft list of the first two-year workplan.



TWO-YEAR PRIORITY SELECTION

- Waterbody type and parameter specific ranking.
- Data availability.
- Geographic clustering.
- Selection of appropriate modeling tools.
- Proximity to Outstanding Florida Water, Aquatic Preserve, or Park.
- Other Considerations.
 - Alternative Restoration Plans.
 - Community Needs.
 - Climate Change.

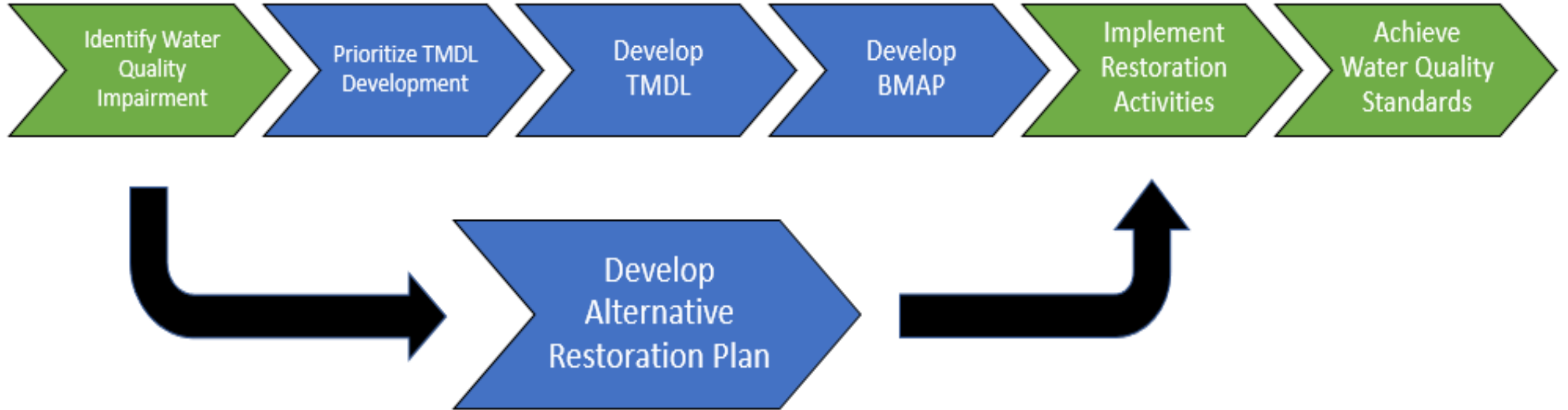


CLIMATE CHANGE

- DEP will continue to build capacity to evaluate impact of climate change on water quality.
- Assess potential Onsite Sewage Treatment and Disposal System failures in low-lying coastal areas.
- Evaluate whether the effectiveness of stormwater treatment may be hindered by rising sea level.



PATHWAYS TO RESTORATION



Both pathways have the same goal:
Water Quality Restoration.



PRIORITY LIST

Group	WBID	Waterbody	Analyte	Approach
Middle St. Johns	3168X3	Lake Terrace	Nutrients	TMDL
Middle St. Johns	3168Y	Lake Lancaster	Nutrients	TMDL
Middle St. Johns	3168Z4	Lake Giles	Nutrients	TMDL
Middle St. Johns	3168Z9	Lake Lawsona	Nutrients	TMDL
Kissimmee River	3169A3	Lake Buchanon	Nutrients	TMDL
Kissimmee River	1573A	Tiger Lake	Nutrients	TMDL
Ochlockonee - St. Marks	647E	Lake Mcbride	Nutrients	TMDL
Suwannee	3366A	Lake Francis	Nutrients	TMDL
Withlacoochee	1467	Mud Lake	Nutrients	TMDL



DRAFT LIST

Group	WBID/ENR	Waterbody	Analyte	Approach
Southeast Coast - Biscayne Bay	3226H5/ENRH5, 3226H6/ENRH9	Biscayne Bay	Nutrients	4e/4b
Chactawhatchee - St. Andrew	731/ENRM1	Choctawhatchee Bay	Nutrients	4e/4b
Apalachicola - Chipola	51B	Chipola River	Biology	TMDL
Kissimmee River	3168B2	Lake Michelle	Nutrients	TMDL
Middle St. Johns	3168W4	Lake of The Woods	Nutrients	TMDL
Lake Worth Lagoon - Palm Beach Coast	3226F1/ENRR2	Lake Worth Lagoon	Nutrients	4e/4b
Middle St. Johns	3011D	Lake Lovely	Nutrients	TMDL
Ocklawaha River	2705A	Prairie Creek	Nutrients	TMDL
Sarasota Bay - Peace - Myakka	1488A	Lake Smart	Nutrients	TMDL/4e
Sarasota Bay - Peace - Myakka	1488R	Lake Idyl	Nutrients	TMDL/4e
Sarasota Bay - Peace - Myakka	1497D	Lake Gibson	Nutrients	TMDL/4e
Sarasota Bay - Peace - Myakka	1449A	Lake Deeson	Nutrients	TMDL/4e
Springs coast	1567B	Spring Branch	Biology	TMDL
Tampa Bay	1541C	Briar Creek	Biology	TMDL
Tampa Bay	1574A	Alligator Lake	Nutrients	TMDL



NEXT STEPS

- Hold second **public workshop**.
 - Tentatively scheduled for December 7, 2022.
 - Present draft list of waters identified in the two-year work plan.
 - Two-week comment period ending December 21, 2022.
- Finalize two-year workplan.



THANK YOU!

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