Overview of State Prioritization Frameworks
Scope of the Overview

- It is based only on the Vision Prioritization Framework documents provided by 44 states in response to an ELI inquiry.
- There was a wide range of ways in which Frameworks were organized, how much detail was provided about the Vision prioritization process, etc.
- Most of the Framework documents provided to ELI have been posted online.
What is the Purpose of the Vision Prioritization Framework Document?

States are using Vision Prioritization Framework documents to:

• *Explain* how the state’s Vision priorities were chosen;

• Establish a *system* for prioritizing that can be used to identify current and/or future priorities;

• Identify the state’s specific universe/list of Vision priorities (e.g., list of priority watersheds and TMDL commitments); or

• Some combination of the above.

The most common approach is to have the Framework document both *create a system* for prioritizing and *list or explain the Vision priorities* that were the “results” of the process.
Prioritization Process

In most states, the Vision prioritization process involved one or more of the following steps:

• **Step 1**: Define a “candidate pool” (often based on an overall focus or program goal)

• **Step 2**: Narrow down the candidates to a list of geographic units (e.g., waterbody, watershed) in which to work through 2022

• **Step 3**: Order the resulting list of Vision priority areas or waterbodies
Identifying Candidates for Prioritization

How did states define a “pool of candidates” for potential selection (or ranking) as long-term Vision priorities?

Of the state Frameworks reviewed, **over 70% started by choosing an overall focus area**, rather than analyzing all impairments for potential prioritization.
Geography-Based Focus

3 states indicated that they would start by choosing particular geographic units in which to focus TMDL/alternative efforts during the term of the Long-Term Vision. This approach was taken to align Vision priorities with other programs’ priorities.

The Vision priority areas in these states were chosen from:

- Basins on the NPS program’s list for targeted CWA 319 funding
- Basins identified in the existing Nutrient Loss Reduction Strategy document as “priority watersheds for reducing nutrient losses”
- Watersheds where multiple water programs’ priorities overlapped
Pollutant-Based Focus

12 states whose Frameworks we reviewed chose to focus on impairments caused by, or waters to be protected from, certain pollutants or pollution sources.

7 additional states that took a hybrid approach chose one or more pollutants as one of their multiple focus areas.

Common reasons cited for this approach?

• Number of impairments
• Public health
• Relationship to other pollutants (opportunities to address other problems with the projects)
• Difficulty of developing and/or implementing the TMDLs
  ➢ “Relatively easy” and “relatively difficult” were both reasons
Pollutants

What were the pollutants or pollution sources on which states chose to focus?

Nutrients, sediment, and bacteria were the most common pollutants chosen as an overall focus for Vision priorities.

- Also, chloride, pH, stormwater, chlorophyll-a, ammonia, pesticides, bioassessments (various), “all except legacy pollutants,” and “all except toxics” each were chosen by a state.
- Note: In some states, the focus is on addressing chosen pollutants in certain types of waterbodies (e.g., lakes) only.
Use-Based Approach

3 states decided to focus their prioritization efforts on waters impaired for certain designated uses.

An additional 5 states that took a hybrid approach focused on certain uses as one of their multiple focus areas.

Some of the reasons that states noted for focusing on these uses:

- Number of impairments
- Human and aquatic health
- Economic reasons (e.g., recreational use of waters important to tourism)
4 states chose to focus on waters where certain uses are impaired and the impairments of those uses are associated with particular pollutants.

An additional 2 states that took a hybrid approach chose a pollutant-use combination as one of their multiple focus areas.

Most of the combinations identified by the states reflect human health concerns.

Examples of scenarios chosen as focus:

“Bacteria + recreation” -- most common

“Impaired biotic communities + (DO, algae, TSS and/or phosphorus)”
Hybrid Approach

7 states opted to define their initial candidate pool based on some combination of a pollutant-based, use-based, and/or pollutant-use approach.

- In some states, the combination of focus areas reflected input received from different programs, regional offices, stakeholder groups, etc.
- One state prioritized several uses for protection and restoration, and chose an additional pollutant focus for restoration.

<table>
<thead>
<tr>
<th>Pollutant Focus</th>
<th>State A</th>
<th>State B</th>
<th>State C</th>
<th>State D</th>
<th>State E</th>
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</thead>
<tbody>
<tr>
<td>Nutrients</td>
<td>• Aquatic Life</td>
<td>• Drinking Water</td>
<td>• Nutrients</td>
<td>• Bacteria</td>
<td>• Drinking Water</td>
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<tr>
<td>Bacteria</td>
<td></td>
<td>• Shellfish</td>
<td>• DO</td>
<td>• TSS</td>
<td>• Source</td>
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<td>Stormwater</td>
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<td>• Public Beach</td>
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<td>• Recreation</td>
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<td>• Aquatic Life</td>
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<th>Use Focus</th>
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<tbody>
<tr>
<td>Aquatic Life</td>
<td>• Bacteria + shellfish</td>
<td>• Bacteria + recreation</td>
<td>• Temperature + cold water fisheries</td>
<td>• Drinking Water Source</td>
<td>• Recreation</td>
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<td></td>
<td>• Public Beach</td>
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<tr>
<th>Pollutant-Use Combo</th>
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<tbody>
<tr>
<td>Bacteria + shellfish</td>
<td>• Fish</td>
<td>• Shellfish</td>
<td>• Aquatic Life</td>
<td>• Drinking Water</td>
<td>• Recreation</td>
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<td></td>
<td>• Mercury + fish</td>
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Note on “Additional” Vision Priorities

In a few of the states that started by defining their pool of candidates based on an overall focus, the state also noted a small, discrete group of additional impairments that may (or will) be included in their Vision priorities, e.g.:

• “Other threats to drinking water supplies or human health”

• Segments where a pollutant “has contributed to the documented decline of a threatened or endangered species”

• Waterbodies where water quality data was available, the sources(s) of impairment were thought to be known, or (with pathogen impairments) were considered as possibilities

• TMDLs that were already planned or in progress using the prior selection methods
Narrowing the List of Candidates

Of the Frameworks reviewed, **38 states** narrowed down their initial candidate lists by selecting or ranking the specific watersheds, waterbodies/segments, or impairments for which they intend to develop TMDLs or alternatives between 2016 and 2022.

- Commonly, the Framework explicitly noted that the decision to narrow the initial candidate pool was based on limited resources and a need to maximize return on investment.
- The narrowing involved/will involve selecting a subset of the candidates as high priority (*screening*), *ranking* the list of candidates, or both.

The most common approach was a process involving both screening and ranking (but using widely varying methods and orders of operation).

![Refining the List of Candidates](chart.png)
What Was the *Process* for Selecting (or Ranking) Specific Vision Priorities?

States took a wide variety of approaches in selecting or ranking the specific priority waters in which to focus their efforts.

By far the most common approach was to combine a standardized process with use of professional judgment.
What Types of Standardized Mechanism or Process Were Used?

To identify priority areas with the “greatest recovery potential”:
- RPS Tool - at least 11 states
- Other standardized decision tools (e.g., WATERSCAPE, SPARROW)
- State-developed “points system”
- Number of impairments

To categorically screen out areas/waterbodies/listings considered lower priority, e.g.:
- Insufficient data or standards;
- Already an existing or planned TMDL, statewide TMDL, or other watershed planning effort in that area (avoid duplication of efforts)
- TMDL development not considered the most efficient way to address impairment type

Examples of Other Mechanisms Used: National Land Cover Datasets, Qualitative Habitat Evaluation Index score
What Factors Did Programs Consider when Selecting and/or Ranking their Specific Vision Priorities?

A wide range of factors were noted in addition to the severity of the pollution and the sensitivity of the uses.

As shown here, several of the most common factors were related to likelihood of successful implementation.

- **Several states** gave particular weight to human health considerations.
- **A few states** gave particular weight to aquatic life/habitat considerations (e.g., existing or high quality habitat; endangered/threatened/rare species).
Prioritizing Protection

A number of states’ Frameworks indicate that the state has identified Vision priorities for protection plans, has established a process for doing so, or will/may do so in the future.
Role of the Public

What was the public’s role in selecting and reviewing the state’s list of Vision priorities?

![Bar chart showing the public's role in different stages of Vision priorities process.]

At least 7 states described engaging the public for both selection and review of Vision priorities.

Note: For purposes of this graph, public “review” is review that occurred separately from the IR process. Also, this graph does not include subsequent outreach after the list is final.
In a majority of states, the Framework document reflects that one or more of their other CWA programs had a role in selecting and/or reviewing the list of Vision priorities or determining the schedule of project implementation.
What type of role did the NPS program have in the selection of Vision priorities?

*Examples:*

- Purposefully aligned Vision priorities with priorities, plans, or ongoing projects of the NPS program — at least 14 states
- After defining creating the pool of candidates, the potential for NPS program collaboration (e.g., funding) was considered when selecting the specific Vision priority areas — at least 7 states
Permits

What type of role did the permits program have in the selection of Vision priorities?

Examples:

- The permit program provided input when selecting the Vision priorities – at least 10 states
- Consideration of permitted sources helped inform selection/ranking of specific Vision priority areas and/or where to start – at least 15 states
  - Prioritize areas with permitted sources (e.g., high number of permitted sources, MS4 jurisdiction), or
  - Avoid duplication of efforts by not prioritizing candidates that are, or could be, addressed by the permit program
Monitoring and Assessment

How were monitoring and assessment program activities considered when selecting Vision Priorities?

**Examples:**

- Monitoring plans or schedules helped to shape the Vision priorities and/or helped determine the work schedule (“data first, priorities will follow” approach) – at least **15 states**

- Several other states’ Frameworks explained that priorities were established first, and that they would work closely with the monitoring and assessment program to ensure that data needs were met as priorities are carried out (“priorities first, data will follow” approach)
Questions?