# Vision Goal & Programmatic Measures

### **MEASURES SIDEBOARDS**

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2013 NATIONAL TRAINING WORKSHOP ON CWA 303(D) LISTING & TMDLS

# Overview

- Existing EPA strategic measures
- New program measure why now?
- Outcomes of 2012 State and EPA Workshops guiding principles for a new measure
- Workgroup Activities Fall 2012 Spring 2013
- Proposed three approaches for a new measure and examples
- Where to next?

# **Existing EPA Strategic Measures**

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#### Tracked by the 303(d) Program

- WQ- 8a: Total number of TMDLs established or approved by EPA
- WQ-8b: Number of TMDLs established by States and approved by EPA
- WQ-21: Number of segments with complete restoration planning (no longer reported in FY13)

# Not tracked by the 303(d) Program, but use 303(d) listed impaired waters information

- SP-10: Number of water bodies fully attaining water quality standards (2002 baseline, cumulative)
- SP-11: Remove the specific causes of impairment identified by states (2002 baseline, cumulative)
- SP-12: Improved water conditions in impaired watersheds nationwide using the watershed approach (cumulative)
- WQ-09: Estimated annual reduction of nitrogen from nonpoint (Section 319 funding projects only)
- WQ-10: Number of water bodies identified by States (in 2000 or subsequent years) as being primarily nonpoint source (NPS) impaired that are partially or fully restored (cumulative)

## **New Program Measure – Why Now?**

- More than 50,000 TMDLs have been developed
  - Significant achievement how well does the number alone measure the progress?
- Evolution in emphasis on catalyzing and facilitating environmental results as historic pace-driven litigation has been successfully addressed
- Long-Term Vision for the CWA 303d Program presents an opportunity to reform
  - Pace was important over the last two decades
  - Now the program obligations to identify impaired waters and complete TMDLs for those waters can inform measures that more meaningfully capture implementation success.
- Opportunity to identify an improved way to measure and report on the successes and progress of the CWA 303(d) Listing and TMDL Program in light of the new vision and its 6 goals

## Outcomes of 2012 State and EPA Workshops – Guiding Principles For a New Measure

- Links to values (e.g., fishing, drinking water, etc.)
- Visual able to experience what it means when measure is met
- Incremental identifies progress
- Links to strategy for improvement
- Identifies a meaningful target
- Reflects 303(d) program vision and goals (under development)
- Useful to States
- Reflects ultimate goal of CWA, but bounded by what program has control over
- Outcome (vs. output) oriented
- Reflects counter pressures
- Integrates with other CWA program measures
- Acknowledges alternative benefits of TMDLs (e.g., supports site-specific criteria)
- Involves lower reporting burden
- Considers variable baseline (non-2002 baseline)

## Measures Workgroup Activities Fall/Winter of 2012/2013

### • State/EPA Workgroup:

- 15 States, 4 EPA Regions, EPA HQ Staff from Watershed and Nonpoint Source Branches
- Goal to develop a measure to replace the current EPA Strategic Plan measures WQ-08
- Series of about 10 meetings in the fall/winter of 2012/2013
  - Workgroup supportive of the new Vision and the idea of aligning the new metric(s) with the new Vision
  - Workgroup decided to have the Vision and implementation plan be developed more fully, prior to choosing a new program metric option(s)
  - Workgroup decided to reconvene after the April Workshop

## **Proposed Approach – Straight to Measure**

#### Measure one (or more?) specific indicators (e.g., % of waters assessed)

- Extent of water resources with a TMDL and non-TMDL Approach
  - × % of total impaired state miles of rivers and streams, and acres of lakes
- Extent of water resources addressed by a TMDL and non-TMDL approaches with a focus on a specific pollutant (NPS pollutants)
  - GIS-calculation of percentage of impaired waters within a state that have a TMDL for NPS pollutants
- Percent of WLAs and LAs that have been addressed
  - Percentage of approved WLAs and LA's that are being addressed through permit requirements or watershed plans.
- Impairments now meeting WQS
  - Number of previous impairments now meeting water quality standards due to corrective actions (go to page 78 of lhttp://www.legacy.leg.mn/resources/metadata-worksheets-2012-clean-water-fund-performance-report)
- Percentage of watershed restoration and protection strategies that are in progress/completed
  - Numbers or percentages of watersheds showing significant parameter-specific changes in water quality. This measure includes significant improvements as well as declines in water quality.
- Watersheds showing parameters-specific changes in WQ (include improvements and declines)
- NPS success stories with TMDLs and non-TMDL approaches

## **Proposed Approach – Straight to Measure**

#### Example:

Extent of water resources with a TMDL and non-TMDL approach - % of total impaired state miles of rivers and streams, and acres of lands

Total amount of water in the state: 2759 miles

Impaired: 1339 miles (49%)

Waters with TMDLs or alternative approaches: 950 miles (71% of impaired waters)



# **Proposed Approach–Vision Strategy**

- Measure the development and implementation of individual State strategies to pursue the new 303d goals.
- Approach incorporates customized State-specific measures for their program
- Some of those measure should aid national tracking of progress
- Example on Federal level: Nationally EPA can count the number of State or Territory Vision Strategies submitted to EPA
- Example on State level: "Amount of nutrient wasteload reduction from major NPDES facilities in priority HUC 8's between 2012 and 2022"



# **Proposed Approach–Vision Strategy**



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Program Element	State Accountability	Federal Metric	
TMDL Vision Strategy and Implementation Document	<ol> <li>State has developed document either as a new document or incorporated it into other existing State planning document such as CPP or similar planning document</li> <li>TMDL Vision Strategy is reviewed and revised as necessary every 5 years</li> </ol>	1) Number of States Participating in TMDL Vision Planning and Implementation Process	
Priority Watersheds	1) As part of Integrated Report (IR), identify Priority Watersheds to be included in TMDL Vision Process during next two years (40 CFR 130.7(d))	1) Percent of States Participating in Vision Process that have identified Priority Watersheds in IR	
Priority Watershed Scoping and Planning Document	1) State has developed a Plan (flexible, ranging from simple to complex) for TMDL development and implementation	<ol> <li>For each participating state, percentage of Priority</li> <li>Watersheds for which Scoping and Planning Document has been developed</li> </ol>	
TMDL	1) State has developed a TMDL for priority watershed	1) For each participating state, percent of Priority Watersheds with a Scoping/Planning Document for which TMDLs have been developed in accordance with timeline identified in Scoping/Planning document	
TMDL Status Reports	1) State produces a SHORT status report of progress within the State's IR every two years, documenting activities and progress towards achieving water quality goals	<ol> <li>For each participating state, percentage of Priority Watersheds with an approved TMDL for which a TMDL Status Report has been prepared and published in State's IR</li> </ol>	
TMDL Final Report	1) State produces and publishes on web page a final TMDL report, detailing attainment of water quality conditions and goals established in the TMDL for the Priority Watershed	1) For each participating state, percentage of Priority Watersheds with an approved TMDL for which Water Quality Goals outlined in TMDL (s) have been protected or attained	

# **Proposed Approach– Hybrid**

- Measure the cascade of 303d program progress from percentage of priority waters assessed to those with a TMDL or alternative plan to those with implementation actions to those with WQ improvement or attainment.
- Approach would require close integration with other CWA programs and their measures



## **Proposed Approach– Hybrid** Example

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1. State defines priority watersheds to set the baseline for the measure

2. Identifies the total amount of water miles/lake acres or number of standardized units, such as catchments\*, within the priority watersheds



154 miles of waters or 260 catchments in 4 HUC12 priority watersheds

\* Catchment is the incremental drainage area for a linear hydrologic feature found in the National Hydrography Dataset (NHD) with average size of 1-3 sq. miles





# Proposed Approach– Hybrid Example

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	State A,	State A 2022	State B,	State B 2022	National Average for	Average 2022
	20XX	Goal	20XX	Goal	20XX	Goal
Baseline (priority waters)	154 miles/260 catchments		200 miles/420 catchments		177 miles/340 catchments	
Assessed	65% (50%)	100% (100%)	80% (75%)	100% (100%)	72.5% (62.5%)	100% (100%)
Impaired	31% (22%)	10% (7%)	20% (15%)	8% (6%)	25.5% (19.5%)	9% (6.5%)
Protected	5% (2%)	15% (13%)	2% (2%)	10% (8%)	3.5% (4%)	12.5% (10.5%)
Not Impaired	34% (28%)	90% (93%)	60% (60%)	92% (86%)	47% (44%)	91% (93.5%)
TMDL or Alternative Plan	16% (10%)	5% (3%)	10% (8%)	5% (3%)	13% (9%)	5% (3%)
Implementation Activity	4% (2%)	5% (3%)	6% (5%)	5% (3%)	5% (3.5%)	5% (3%)
Restored	6% (4%)		4% (3%)		5% (3.5%)	
Improving	2% (1%)		4% (3%)		3% (2%)	
Declining	2% (1%)		1% (1%)		3% (1%)	
No Change	26% (18%)		13% (9%)		19.5% (13.5%)	

Values in % stream miles (% catchments)



## Where to Next – WQ-08?

- Current Strategic Plan Measure (WQ-08) will continue to be reported on annually while the new measure approach is being developed and refined.
- WQ-08 may remain on "the books" through FY15 and will likely overlap with the new approach due to timing of and role in several EPA processes (budget measure, Strategic Plan, National Water Program Guidance).

## Where to Next?

- April May, 2013: Reconvene Measures Workgroup. and recommend an approach/measure(s)
- By July, 2013: Finalize the choice of the national program measure(s) approach and identify any program/data/technology gaps necessary for tracking
- By October, 2013: refine the details for the new program measure