

Evolution of Clean Water Act Section 303(d) Listing and TMDL Program Vision

ACWA Committees

TMDLs and Watersheds

Monitoring, Standards and Assessment

October 20, 2011

Purpose

- Request formal State/ASIWPCA participation in effort to develop next 10 year vision and goals for Listing and TMDL program

Content

- Review Program history and accomplishments
- Highlight current Program realities and opportunities/challenges for shaping next era
- Recent input from State TMDL practitioners on program priorities
- Proposed schedule and process refining a collaborative vision

Program History Recap

Early years: 1972 – Mid/Late 90s (*Litigation Filing Era*)

- Limited State/EPA activity
- 40 lawsuits (constructive submission) drive TMDL development schedules, beginning in 1990s
- Emphasis on point sources, with slow progress on NPS

Late 90s – Early 2000s (*Litigation Response & Attempted Rule Making Era*)

- Ten-fold increase in TMDLs with pace driven by litigation (70% of TMDLs)
- 1997 AA Perciasepe guidance to advance TMDL development: pace (8-13 years), reasonable assurance
- 1998 NACEPT Federal Advisory Committee report on national TMDL Program
- 2000 rule requiring implementation components and 10-15 year pace (blocked by Congress)

History (cont.)

Early 2000s – Present (*Implementation Era*)

- Role of TMDL pace litigation diminishes (from ~70% to ~25% of total TMDLs) but brisk pace continues
 - Over 45,000 TMDLs completed (~4,000/year)
 - Pace consent decrees will taper off by 2013
- Litigation continues but focuses on TMDL content
 - “Daily” load allocations (*i.e., Anacostia River*)
 - Climate change & MOS (*e.g., Lake Champlain, Cape Cod, Buzzards Bay*)
 - Nutrient targets where no numeric criteria (*e.g., Spokane River, Town Branch*)
 - Reasonable assurance (*e.g., Chesapeake Bay*)
- TMDL pace is primary external measure of program performance
 - Exceeded measures (as well as 100% of pace) for past six years, but state-developed TMDLs decreasing
 - States responsible for >90% of TMDLs

Early 2000s – Present (*Implementation Era*) (cont.)

■ Listing tools/guidance

- Biennial 303(d)/305(b) integrated reporting guidance; overhauled with States for 2006 reporting cycle
- Push for timely submissions & approvals
- Category 5m (mercury) & 4b (TMDL alternatives) options added
- Recent guidance on ocean acidification

■ TMDLs tools/guidance

- Completed: modeling tools & technical guidance for mercury, examples & guidance for stormwater sources, options & guidance for expressing daily loads
- On-going:
 - Watershed TMDLs Handbook
 - TMDLs to Permits Handbook for Stormwater
 - Revise/withdraw expectations
 - MJ-TMDL handbook
 - PCB & nutrient TMDL compendiums
 - Approaches for factoring in climate change
 - Refining expectations for reasonable assurance
- 319 Handbook for developing watershed plans & grant guidance linking funding to impaired waters

Early 2000s – Present (*Implementation Era*) (cont.)

- Analyzed TMDL components and implementation results (e.g.):
 - Several statewide analyses indicate implementation activities after TMDL development are occurring
 - Region 5 statistical sample indicated large majority of TMDLs “partially” implemented
- Analyzed TMDL-influenced water quality improvements
 - Kent State University study of TMDLs in OH and WV:
 - 19% of waterbodies with TMDLs (partial recovery)
 - 3% of waterbodies with TMDLs (recovered)
 - TMDLs associated with 54% of published 319 Success Story waterbodies (partial/full recovery)
- Analyzed TMDL “drivers of success”
- Developed “recovery potential” tools to support restoration

Key Emerging Program Realities

Listing/Integrated Reporting

- Despite delisting successes, several challenging assessment issues persist and on horizon
 - Achieving comprehensive assessments (*see slide 8*)
 - Timely list/IR submittals & reviews (*see slide 9*)
 - Interpretation of narratives
 - Addressing antidegradation

TMDL development and implementation

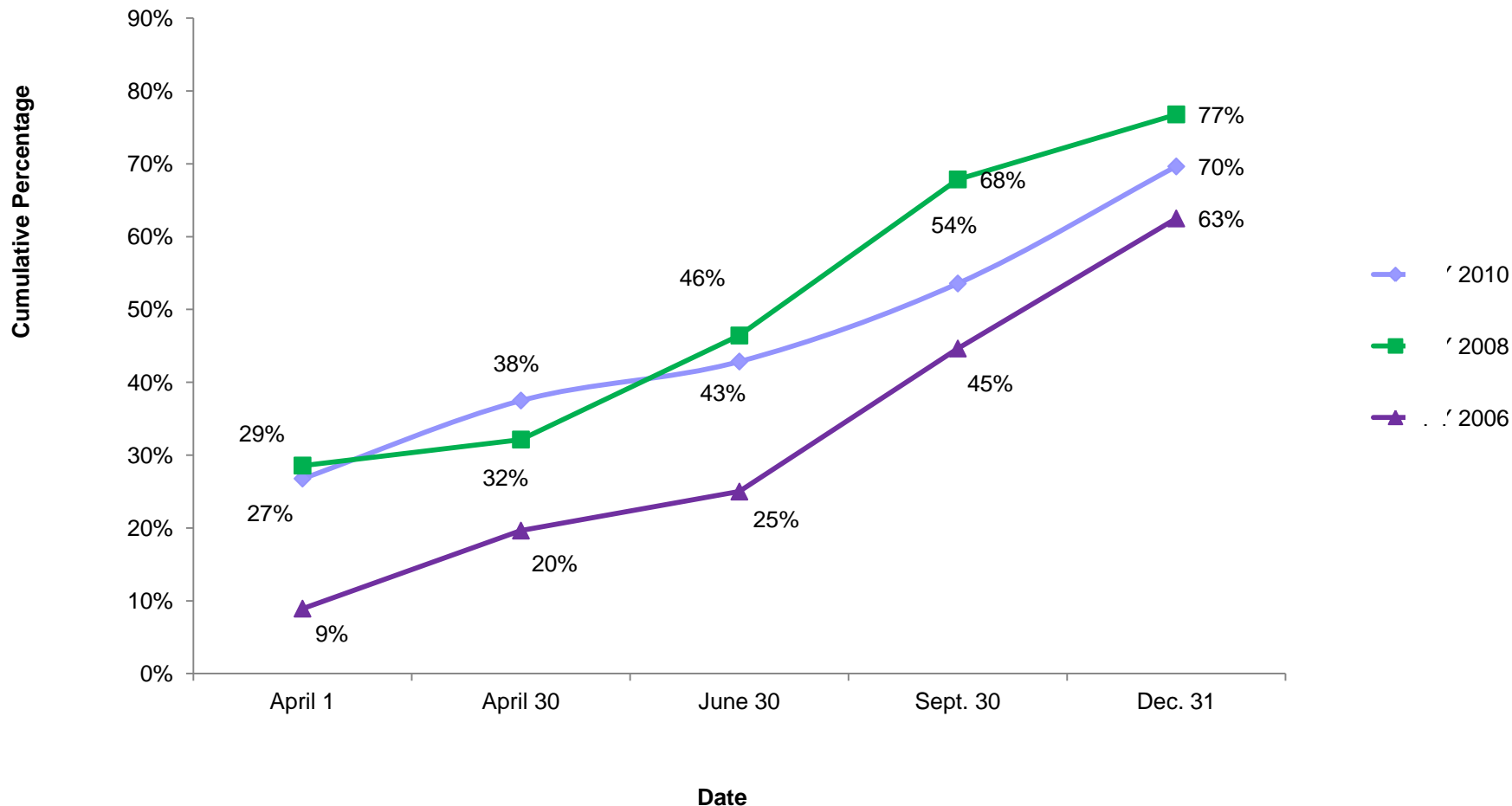
- >40,000 waters still need one or more TMDLs
 - Likely to continue to increase as more waters assessed
 - Pathogens, metals, nutrients, sediment, and PCBs are >60% of remaining waterbody-pollutant combinations
 - Includes larger share of complex TMDLs

National Water Quality Assessment Status (CWA Section 303(d)/305(b))

- Rivers/streams: 26%
- Lakes/ponds/reservoirs: 42%
- Bays & estuaries: 21%
- Coastal shoreline: 4%
- Ocean/near coastal: 11%
- Wetlands: 2%
- Great Lakes shoreline: 23%
- Great Lakes open water: 94%

Source: ATTAINS (Aug 2011)

Comparison of 2006, 2008, and 2010 CWA 303(d) Impaired Waters List Submissions for 56 Jurisdictions



As of October 19, 2011, 51 IR/303(d) lists submitted and 39 approved

Key Emerging Program Realities

TMDLs (cont.)

- As TMDLs age, more will require revision
- Lawsuits/remands on individual TMDL components still require program attention
- As historic litigation driven TMDL pace consent decrees taper off, TMDL pace is diminishing
- States continue to use varying scales (segment vs. watershed)
- States and EPA program managers agree that, while important, pace does not
 - Reflect significant variability in types of TMDLs or State listing methods
 - Give credit for more robust TMDLs that better support implementation and water quality results; “implementation-ready”
 - Capture water quality improvement (output vs. outcome)

Key Emerging Program Realities

TMDLs (cont.)

- TMDL implementation is widespread; however, partial and full recovery lags
- TMDL CWA authority only extends to “the math and the path” – not implementation
- Lack of NPS load reductions remain key barrier to water quality restoration

General

- State/Federal resources static or declining

Emerging Program Goals

- Watershed Branch (WB) spearheading effort to position CWA Section 303(d) program for future
- In search of refined 10 year program vision and goals (by 2012)
 - Directed evolution, not revolution
- Seeking participation of States and other stakeholders
- State and regional input collected in Spring 2011 will help inform this process

Recent Input from States

- States, Tribes, Territories want continued voice in shaping guidance and future direction of program
- Finalize near-complete technical guidance initiated during “Implementation Era” (*see slide 5*)
- Continue to develop science/tools/guidance for emerging implementation issues
 - Recovery potential
 - Tech-based requirements for N/P
 - Suite of BMPs information specific to sources and land use
 - Reasonable assurance “checklist”
 - Assess climate change effects

Recent Input from States (cont.)

- Need to better engage public – ‘rebranding’ to emphasize load reductions & water quality improvements
- Balance budget realities with statutory obligation and achievement of environmental results
 - Restoration vs. protection
 - TMDL Development vs. TMDL implementation
- Cooperation & coordination with other EPA programs (WQS, monitoring, NPS, NPDES) & other agencies (esp. USDA) are important for future success
 - Critical in order to address NPS, nutrients, stormwater
 - CWA 303(d) does not have necessary authorities to fulfill all program expectations

Framework

■ *Vision*

- Long-term view of what the program wants to become
- Stretch the program's capabilities and image of itself
- Range in length from a couple of words to a paragraph

■ *Goals*

- Multi-year planning to achieve vision
- Specific, measurable, achievable, realistic and time-based statements of intended future results

■ *Objectives*

- Annual planning/actions to achieve goals

■ *Mission*

- Description of what an organization does

Example of Potential Vision Statement

The CWA 303(d) program is the organizing mechanism for restoring and protecting the Nation's aquatic resources, where all waters have been evaluated, restoration and protection objectives have been prioritized and implementation actions are underway with the collaboration of states, tribes, territories, federal agencies, stakeholders, and the public

Potential Schedule

- Dec 2010 – EPA Regional program discussion
- April 2011 – Current program issue identification & discussion with States
- July 2011 – EPA HQ distillation of State and Regional feedback
- Aug 2011 – Initiate formal State-EPA workgroup to develop 10 year vision and goals
- Jan 2012 – Draft vision & goals
- March 2012 – State & stakeholder discussion
- June 2012 – Finalize vision & goals



Proposed Next Steps & Process

- Identify participating states
- Convene series of topic-specific calls in November and December (2/month) to inform drafting process in January
- Calls will cover both Assessment/Listing and TMDLs topics