

# Ocean Acidification and the Clean Water Act Section 303(d) Program

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Ocean Acidification PI Meeting  
Woods Hole, MA  
March 22-24, 2011



## OA and the CWA 303(d) Program

- Section 303(d) of Clean Water Act requires States to develop “lists” of waters that will not meet water quality standards
- Currently about 40,000 waters are listed nationwide
- Only a few waters are listed for OA parameters (e.g. marine pH)
- Once listed, States develop pollution “plans”, or TMDLs
- EPA and states have some experience with mercury TMDLs based on air contributions, but no experience with “carbon” TMDLs



## OA and the CWA 303(d) Program

- EPA settled lawsuit with Center for Biological Diversity on WA State 2008 303(d) List
- EPA Issued OA Listing Guidance for States on November 15, 2010 (Office of Water)
- States:
  - Most have difficulty implementing marine pH criteria (measure of OA)
    - Not monitoring for marine pH or other OA parameters (e.g.,  $p\text{CO}_2$ , DIC, TA)
    - Lack assessment methodologies, especially for determining natural background
- EPA decided in 2010 not enough science to revise national marine pH criteria

## OA November 15, 2010 Memo

- Recognizes the seriousness of aquatic life impacts associated with OA
- Describes how States can move forward where info exists to address OA in 2012 lists using current 303(d) Framework
- Acknowledges OA information is limited right now to support OA listings in many States.
- EPA will provide additional guidance when future OA research provides the basis for improved monitoring and assessment methods
- EPA's actions under Clean Air Act to address GHG show greatest promise in addressing this challenge
- EPA also recognizes that 303(d) program can aid this effort by identifying waters impaired by OA



## Key Elements of November 2010 Memo

- Now: For 2012 guidance, highlight and tailor existing Integrated Reporting approach for OA, e.g.,
  - States may solicit data on OA and assess against existing criteria (numeric, narrative, biological)
  - States may consider OA in setting TMDL development priorities
  - States can focus efforts on OA-vulnerable waters impaired for other pollutants (e.g., nutrients)
  - States consider having a separate assessment section for marine water segments instead of grouping with freshwater segments
- Future: EPA will consider developing comprehensive listing guidance for OA
  - When emerging technical and scientific methods become available from Interagency Federal efforts
  - Within current framework of biennial IR listing update, or as stand-alone guidance
  - EPA will defer development of TMDL guidance until more information becomes available