Questions and Answers Regarding EPA's Federal Register Notice on the Clean Water Act Section 303(d) Program and Ocean Acidification

1. What is the Clean Water Act 303(d) program and its relation to Total Maximum Daily Loads (TMDLs)?

The goal of the Clean Water Act (CWA) is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 303(d) of the CWA and its supporting regulations (40 CFR 130.2 and 130.7) establish the Impaired Waters Listing and Total Maximum Daily Load (TMDL) Program. This program is primarily a State-driven process with EPA oversight where States, Territories, and authorized Tribes are required to develop lists of "water-quality limited segments," every two years (e.g. 2008, 2010). These 303(d) lists include segments that will not meet water quality standards for a particular pollutant even after a technology-based CWA permit is in place. The CWA also requires States to develop a pollutant "budget" or TMDL, for every water body/pollutant combination on this 303(d) list. EPA approves both the 303(d) lists of impaired waters and the TMDLs. To date, about 44,000 waters are listed nationwide as impaired, and nearly 41,000 TMDLs have been developed. For more information on the 303(d) program see: http://iaspub.epa.gov/waters10/attains_nation_cy.control?p_report_type=T.

The TMDL calculates the maximum amount of a pollutant that can enter a waterbody, also known as the loading capacity, so that the waterbody will meet applicable water quality standards. The TMDL allocates that pollutant load to point sources (Wasteload Allocation or WLA) and nonpoint sources (Load Allocation or LA) which include both anthropogenic and natural background sources of the pollutant. Under the CWA, TMDLs are not self-implementing, meaning that EPA cannot enforce implementation of a TMDL once the analysis is complete, and does not require States to develop plans to describe how the pollutant allocations in the TMDL will be implemented. However, approved wasteload allocations for point sources must be implemented in applicable National Pollutant Discharge Elimination System (NPDES) permits. Load allocations for nonpoint sources are implemented through a wide variety of State, local, and Federal programs, which are primarily voluntary or incentive-based.

2. What key actions did EPA commit to in its March 10, 2010 agreement with the Center for Biological Diversity (CBD)? Is EPA required to begin any rulemaking?

EPA and CBD agreed to settle a complaint filed by CBD challenging EPA's approval of Washington State's 2008 303(d) list citing failure to include coastal waters as impaired for marine pH. In response, EPA agreed to sign a *Federal Register* notice (FRN) by March 15, 2010, seeking comments on how to address ocean acidification under the Clean Water Act (CWA) 303(d) program, including whether EPA should issue guidance regarding the listing of waters as threatened or impaired for ocean acidification, and what that potential guidance might entail. Ocean acidification refers to the decrease in the pH of the Earth's oceans caused by the uptake of carbon dioxide (CO2) from the atmosphere. In addition, EPA agreed to request information in the FR notice regarding recommendations for TMDL development for waters impaired by ocean acidification. EPA agreed to complete a memorandum by November 15,

2010, that describes how the Agency will approach ocean acidification under the 303(d) program.

The agreement does not require EPA to initiate a rulemaking, or require EPA to develop 303(d) listing or TMDL development guidance. It also does not require EPA to take comment on how States can limit pollutants, or on the ways States might regulate TMDLs or pollutants linked to ocean acidification.

3. What information is EPA soliciting from the public with its March 22, 2010 *Federal Register* notice on ocean acidification and the Clean Water Act 303(d) program, and what will EPA do with this information?

The *Federal Register* notice (FRN) is asking the public to comment on the effects of ocean acidification as it relates to 303(d) program. EPA is soliciting specific input on what considerations EPA should take into account when deciding how to address listing of waters as threatened or impaired for ocean acidification under the 303(d) program. Should EPA decide to issue guidance regarding the listing of waters as threatened or impaired for ocean acidification under the 303(d) program, EPA is using this opportunity to seek public comment on the specific assessment, monitoring and other elements under the CWA that EPA should consider. If EPA issues guidance, the Agency is asking for input on what are the specific elements EPA should consider in regards to monitoring and assessment. Other questions EPA is requesting comment on include: How can States or EPA otherwise aid in monitoring ocean acidification and its impacts on marine life and ecosystems? If waters were determined to be threatened or impaired for ocean acidification under 303(d), what issues should EPA and States take into account when considering how to address TMDL development for such waters? What other Federal ocean acidification programs and initiatives should EPA take into account when deciding how to approach ocean acidification under the 303(d) program.

By November 15, 2010, EPA will complete a memorandum that describes how EPA intends to proceed with its section 303(d) program in light of the comments received to the *Federal Register* notice. EPA is not required to pursue any type of rulemaking after considering all the comments.

4. How is the March 22, 2010 *Federal Register* notice related to EPA's review of its recommended criteria for marine pH related to ocean acidification?

EPA published a Notice of Data Availability (NODA) in the *Federal Register* in April 2009 requesting technical information and data available to consider in a re-evaluation of the current aquatic life recommended CWA section 304(a) criterion for marine pH. EPA issued the NODA following careful consideration of a petition submitted to EPA from the Center for Biological Diversity. The petition requested EPA to revise the marine pH criteria and provide guidance on addressing ocean acidification under the Clean Water Act authority. EPA committed in the NODA to decide whether a revision to the marine pH criteria is warranted based on available scientific data. EPA intends to finalize its decision regarding evaluation of the information and data by Spring, 2010. In addition, EPA has been developing a draft coral biocriteria technical guidance framework which could provide information related to the issue of ocean acidification.

This information may be useful to States as they assess and monitor for ocean acidification impacts and as they assemble and evaluate these data in developing their 303(d) lists.

5. If waters are included on a State's CWA 303(d) list for Ocean Acidification, will a Total Maximum Daily Load need to be developed?

State 303(d) lists indicate what waters are too polluted to meet the water quality standards and also identify priority rankings for waters on the lists to develop TMDLs. In setting these priority rankings, States are required to take into account the severity of the pollution and the uses to be made of the waters. There is neither a CWA or regulatory deadline for States to develop TMDLs. EPA guidance recommends that jurisdictions develop TMDLs 8-13 years after a waterbody impairment is first included on a 303(d) list. Because a TMDL allocates pollutant loads among sources that contribute to an impairment, both point and nonpoint, a TMDL must address in some fashion the contribution of pollutants transported by atmospheric deposition that contribute to the impairment. Currently, EPA and the States have developed some air deposition-related TMDLs for mercury but have no experience modeling and developing TMDLs based on listings related to ocean acidification from air deposition of carbon. One of the goals of the March 22, 2010 FRN is to solicit public comment on what information and methods might be available, and other issues to take into account, when considering how to address TMDLs for such waters.

6. What is the relationship between the March 22, 2010 *Federal Register* notice on Ocean Acidification and the Clean Water Act 303(d) program and air emissions ?

The CWA 303(d) program does not include a regulatory program to address nonpoint sources of pollutants such as sources of air deposition. What the program does require is that states must list all waters not meeting water quality standards, regardless of the source. In addition, the TMDL must account for the overall pollutant contribution from the air source to the pollutant level in the waterbody. TMDLs do not override other Federal and State authorities and programs designed to address air sources, such as programs to implement the Clean Air Act. States may choose to voluntarily develop an implementation plan outside the TMDL, and can identify specific voluntary programs or State-required reductions in air emissions that could be used to address particular air sources contributing to ocean acidification.