

# Plan for Supporting States and Tribes on Designated Use Issues

Office of Science and Technology

EPA Office of Water

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## Background

The water quality-based approach of implementing the Clean Water Act continues to evolve and generate an increasing number of watershed restoration plans (e.g., Total Maximum Daily Loads (TMDLs)) and discharge permits (e.g., stormwater), and address more pollutants in a quantitative fashion (e.g., nutrients and sedimentation). To accommodate the increased scope and added complexity, while striving for environmental improvement, there is a greater need for innovation and flexibility in the goal-setting process (establishing water quality standards) and implementation through TMDLs, permits, and nonpoint source programs. As new criteria are developed and adopted, and as new TMDLs are contemplated based on assessment and listing processes, we need to consider how best to develop and use available program and policy tools to put measures in place that will achieve the desired improvements. These tools could include site-specific criteria, phased TMDLs, compliance schedules, designated use changes, variances, and temporary standards.

In developing EPA's 2003 *Strategy for Water Quality Standards and Criteria*, the Office of Science and Technology (OST) interviewed numerous stakeholders about their highest priorities for the water quality standards (WQS) and criteria program. Setting designated uses were consistently mentioned by most participants. In November 2001, OST held a workshop in San Francisco with state and EPA staff to identify the highest priority issues related to designated uses. In June 2002, OST sponsored the National Symposium on Designated Uses in Washington, DC to obtain perspectives from multiple interests, including the regulated community, environmental groups and municipalities. (The Symposium proceedings are available at <http://www.epa.gov/waterscience/standards/training.htm>).

In reflecting on the diverse opinions surrounding designated use issues, OST believes that the best way to move the WQS program forward in the area of designated uses is through dialogue between EPA, states, tribes, and stakeholders, together with lessons learned from pilot projects, information exchange, and creative case-specific solutions. This plan is designed to facilitate such a dialogue.

## Purpose of This Plan

The 2003 *Strategy* commits OST to the following as a high priority strategic action:

#7. Provide technical support, outreach, training and workshops to assist states and tribes with designated uses, including use attainability analyses and tiered aquatic life uses.

Specifically, OST committed in the *Strategy* to:

1. Develop a plan for providing outreach, training, workshops and other support for states and tribes on critical issues regarding designating appropriate uses by the end of June 2004;
2. Issue methods for the use of bioassessments to refine designated aquatic life uses by the end of December 2004; and
3. Establish a web-based clearinghouse of information supporting the establishment of designated uses by the end of December 2004.

This plan addresses item one above. OST views the plan as a framework encompassing many products and mechanisms that will provide use designation assistance to states and authorized tribes (i.e., tribes with EPA-approved water quality standards). This plan includes specific steps to produce items two and three above as well.

This plan was developed with input from EPA regional, state and tribal partners, as well as other EPA water programs. Between January and April 2003, several state-EPA conference calls took place to discuss recreational use issues as a high priority issue. In March 2004, state, tribal and regional workgroups were formed to solicit input on the development of this plan.

To be responsive to the Strategy, this plan focuses on working with states and tribes. However, EPA recognizes the importance of involving other stakeholders as well. This plan includes steps to engage municipal or industrial point sources, nonpoint sources, the Combined Sewer Overflow (CSO) community, and environmental groups. Special attention will also be given to the linkages between water quality standards, water permitting and the TMDL program.

The Plan for Supporting States and Tribes on Designated Use Issues includes five major components:

1. Conducting a Use Attainability Analysis (UAA) workshop for EPA staff to improve national consistency and program direction;
2. Sponsoring four co-regulator workshops around the country to develop practical approaches to environmental progress in situations where designated use changes are among the potential solutions;
3. Providing funding for pilot projects involving designated use issues;
4. Developing methods for the use of bioassessments to refine designated aquatic life uses; and

5. Establishing a web-based clearinghouse of information related to designated uses to serve as a resource to the EPA regions, states, tribes and municipalities as they address designated use issues.

### **UAA Workshop for EPA Staff**

EPA's water quality standards regulation established a process for reviewing and revising designated uses, described as a "use attainability analysis." A Use Attainability Analysis (UAA) is "a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors" (§131.3(g)). The UAA generally provides the rationale for refining or changing a use. The UAA should lead to standards that are scientifically and legally defensible. UAAs are an important tool as part of a strong WQS program. OST believes that UAAs can be used to create opportunities for environmental improvements and is therefore investing significant resources to provide additional information, outreach and training on UAA issues as described in this plan.

OST plans to sponsor a UAA Workshop for EPA staff in September 2004 in conjunction with the EPA Regional WQS Coordinators Conference. Staff from OST and other EPA water programs, and the regional coordinators will participate in both the conference and UAA workshop. The goal of this workshop is to improve national consistency in the review of UAAs and enable the regional coordinators to provide clearer direction to states and tribes concerning the information that is expected in a UAA. Tentatively, the workshop will be one and a half days and focus on discussing questions/issues that require a nationally consistent answer.

OST invites states, tribes, regions and other stakeholders to identify issues/questions that EPA should consider in the workshop. In the near future, OST will conduct several conference calls with key stakeholder groups including representatives of municipal or industrial point sources, nonpoint sources, the CSO community, and environmental groups to solicit input on the workshop agenda.

### **Milestones:**

September 2004      Conduct EPA WQS Regional Coordinators Conference & joint UAA workshop

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### **Co-Regulator Workshops**

OST plans to sponsor four 2 ½ day technical workshops with co-regulators (states and

authorized tribes). The workshops will focus on practical approaches to making environmental progress in the four common situations where designated use changes are among the potential solutions: (1) permit limits cannot be met; (2) newly adopted criteria cannot be achieved; (3) there is insufficient specificity for criteria; and (4) water quality targets in TMDLs cannot be achieved. The workshops would be open to any interested state, tribal and federal government employees. The locations of the workshops were selected based on feedback from the regional, state and tribal workgroups.

Two days of the workshops will be spent covering a majority of the following common issues:

- Recreational use subcategorization
- Distinguishing human caused conditions and natural conditions
- Determining existing uses
- Refining aquatic life uses
- Mechanisms for facilitating near-term environmental improvements, including variances, compliance schedules, temporary standards, partial attainment acknowledgment, and phased TMDLs
- Economic analysis
- Categorical UAAs
- Approaches for CSOs, urban streams, ephemeral streams/intermittent flow waters, and agricultural ditches

A Planning Committee will determine how much time and emphasis is allotted to each of these topics for each workshop. The Planning Committee would include, at a minimum, an OST representative, a representative from the hosting region, and one representative of the states/tribes from the hosting Region. The Planning Committee may decide to cut some of the topics listed above from the agenda that are not high priorities for the participants. In addition, the Planning Committee may choose a topic of particular interest to the region to focus on for the ½ day session. This topic may come from the list above, or the Planning Committee may choose a different issue or focus on a sub-issue of the topics listed above. Early in the planning process, the Planning Committee will conduct conference calls with representatives of stakeholders such as municipal or industrial point sources, nonpoint sources, the CSO community, and environmental groups to solicit input on the workshop agenda.

OST plans to develop a proceedings document based on the presentations and discussions during the workshops. These proceedings will be posted in the Designated Use Clearinghouse (described below).

Milestones:

Spring 2005	Philadelphia workshop
Summer 2005	San Francisco workshop

Fall 2005                      Denver workshop

Spring 2006                    Chicago workshop

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**Pilot Projects**

The Office of Science and Technology plans to actively work with the regions, states, tribes and the regulated community to identify pilot opportunities. Resources permitting, OST intends to fund approximately 10 designated use pilot projects during Fiscal Years (FY) '04 and '05. For FY '04 thus far, OST has provided funding and contract vehicle(s) for the following pilot projects:

- Christina Basin Wet Weather Assessment Project, Wilmington, Delaware: This project will develop decision criteria and a work plan for pursuing wet weather UAAs, and a strategy for integrating the UAA and refinement of WQS with high-flow TMDLs, CSO long-term control plans, stormwater permit implementation and other water quality initiatives. A work plan was presented to Delaware Department of Natural Resources (DNR), EPA Region 3, Delaware Department of Transportation, New Castle County, and the City of Wilmington on March 17, 2004. A Stakeholder Advisory Group will be formed representing a broad cross-section of the public, and a series of three workshops will occur with the Stakeholder Advisory Group to solicit public input into the development of the work plan. EPA Region 3 approved the work plan and notified DE DNR of this approval on March 17, 2004. The project is tentatively scheduled for completion by January 2005. For more information, please contact Cheryl Atkinson, EPA Region 3, at (215) 814-3392 or [atkinson.cheryl@epa.gov](mailto:atkinson.cheryl@epa.gov).
- Recreational UAA Development for a Section of Ohio River, Wheeling, West Virginia: This project will investigate the level of recreational use that can be attained during periods of wet weather flow on an urbanized/industrial 72 mile section of the Ohio River. The project will use a previously developed model to simulate levels of control of wet weather sources and resulting water quality. A work plan to conduct this investigation was submitted in draft by the Ohio River Valley Water Sanitation Commission (ORSANCO) to West Virginia Department of Environmental Protection, EPA Region 3, and the City of Wheeling on December 17, 2003. A project advisory committee, consisting of representatives of municipalities that have participated in the wet weather study to date, will provide local input and review of project outputs. Before the final report is prepared, the public will be provided an opportunity to review the draft results of

the project. The project will tentatively be completed by Spring 2005. For more information, please contact Cheryl Atkinson, EPA Region 3, at (215) 814-3392 or [atkinson.cheryl@epa.gov](mailto:atkinson.cheryl@epa.gov).

- Ambient Water Quality Monitoring Plan for Bacteria in Pittsburgh Area Receiving Waters: EPA will co-sponsor a project to develop a bacteria monitoring plan for Pittsburgh, Pennsylvania area receiving waters (Allegheny, Monongahela, and Ohio Rivers and tributaries). The monitoring plan would be implemented by a diverse group of stakeholders, including regulating authorities, local municipalities, not-for-profit organizations, and citizens. The plan would identify how to collect data that will support the development of a receiving water quality model that can be used for multiple purposes, including informing a UAA. A Stakeholder Advisory Group will be formed representing a broad cross-section of the public, and a series of three workshops will occur with the Stakeholder Advisory Group to solicit public input into the development of the monitoring plan. EPA is coordinating with the Pennsylvania Department of Environmental Protection to provide the remaining funds needed to complete this project. The project will tentatively be completed by Spring 2005. For more information, please contact Cheryl Atkinson, EPA Region 3, at (215) 814-3392 or [atkinson.cheryl@epa.gov](mailto:atkinson.cheryl@epa.gov).
- Missouri Primary Recreational Use Waterbody Assessments: OST and EPA Region 7 is supporting Missouri DNR in the assessment of waterbodies for primary recreational uses. Missouri is considering designating all waters for recreational use and applying a streamlined UAA process to change designated uses as appropriate. MO DNR has a draft UAA protocol that will be used to collect data within the recreational season (April 1 to October 31). The UAAs are tentatively scheduled to be completed by March 2005. For more information, please contact Don Miller, EPA Region 7 at (913) 551-5156 or [miller.don@epa.gov](mailto:miller.don@epa.gov).
- An Evaluation of the Feasibility of Tiered Aquatic Life Uses (TALU) in Arid Urban Coastal Streams: A Case Example in the Los Angeles Region: This project will evaluate the applicability of the Tiered Aquatic Life Uses (TALU) conceptual model to arid urban coastal streams in the Los Angeles Region, recommend appropriate tiered aquatic life uses for these arid urban coastal streams, and evaluate potential reference conditions for each tier. The project will tentatively be completed by Fall 2005. For more information, please contact Gary Wolinsky, EPA Region 9 at (415) 972-3498 or [wolinsky.gary@epa.gov](mailto:wolinsky.gary@epa.gov).
- Oregon UAA Guidance: OST and Region 10 is supporting the Oregon Department of Environmental Quality in their efforts to develop a guidance document for performing UAAs for the State of Oregon. The work will focus on UAAs for dams, specifically water temperature, but will also discuss guidance for UAAs in other situations, including agriculture, forestry and NPDES permits. The guidance document is expected to be completed before December 31, 2004. For more information, please contact Mary Lou Soscia, EPA Region 10 at (503) 326-5873 or [soscia.marylou@epa.gov](mailto:soscia.marylou@epa.gov).

## **Methods for the Use of Bioassessments to Refine Designated Aquatic Life Uses**

A variety of different methods and indices have been designed and applied by states to quantify the biological condition of their waters, therefore it is difficult using currently available data to determine if conditions vary across states or to combine state assessments to develop regional or national assessments. EPA, in coordination with states and academia, has developed a nationally applicable model that allows biological condition to be interpreted independently of assessment methods. This will greatly assist the efforts of environmental practitioners in the U.S. to (1) more uniformly and directly assess aquatic resources and (2) communicate more clearly to the public both the current status of aquatic resources and their potential for restoration. EPA HQ plans to complete the EPA peer review process on a manuscript on the scientific foundation for use of biological assessments to refine designated aquatic life uses. Following the internal review, the manuscript will be submitted for publication in a scientific peer review journal. HQ will use the manuscript and any comments received to draft a document on use of biological assessments to refine designated aquatic life uses.

### Milestones:

June 2004                                      Complete EPA peer review of manuscript

December 2004                      Complete methods document for scientific review

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### **Designated Use Clearinghouse**

OST's Designated Use Clearinghouse will provide web-based information that will serve as a resource to the regions, states, tribes and municipalities as they address designated use issues. The Clearinghouse is intended to meet several purposes and goals, including:

- C Provide a free, nonregulatory service to state/local/tribal governments, EPA and other federal agencies, industry, regional planning organizations, and other interested parties that will allow quick access to available information on how to appropriately change designated uses, prepare use attainability analyses, and refine or remove uses in state and authorized tribal water quality standards regulations.

- C Enhance public education and awareness of the processes and methods associated with developing, changing or removing designated uses, and serve as a gateway to related websites and online documents associated with these processes and methods.

The Clearinghouse will include an overview and basic instructions on how to search for information, and be designed to allow users to quickly find a wide variety of designated use information by using various navigation topics or clicking on a topics directory that will be available on the website.

OST will build a webpage on OST's web site devoted to issues related to designating appropriate uses. Tentative topics for the clearinghouse include:

1) *Opening statement and disclaimer*

An opening statement on the web page will note that the UAA process is an important tool for setting appropriate water quality standards. EPA will also provide a disclaimer near the top of the website, making clear that the information provided by non-EPA parties on the website is intended for information exchange only, and that unless otherwise noted, any positions or statements made in documents or materials available on the Clearinghouse should not be construed to be EPA's national policy or guidance related to designating appropriate uses in water quality standards.

2) *Available EPA Headquarters policy memos and guidance related to:*

- C UAAs for long-term use removals, refinements, and site-specific criteria, including topics such as:
  - C How to apply any of EPA's six 40 CFR 131.10(g) factors to change designated uses;
  - C Recreational use changes; and
  - C Use changes related to low or high flows.
- C Existing uses
- C Mechanisms for use refinements on short-term changes that acknowledge incremental attainment (e.g., variances, compliance schedules, etc.)
- C Issues related to UAAs on waters with combined sewer overflows (CSOs)
- C How to assess limited available monitoring data to appropriately consider a change in uses as compared with other factors affecting the waterbody

3) *Relevant EPA regulations and preamble language associated with proposed & final rules related to designated uses*

4) *EPA regional information related to designated uses*

- Guidance
- C Websites
- C Approval Letters



- 5) *Non-EPA guidance on designating uses*
- State UAA protocols and guidance
  - Tribal UAA protocols and guidance
  - Trade association guidance

- 6) *Examples of UAAs that resulted in EPA approved changes to water quality standards.*

HQ will populate the “UAA examples” section with various UAAs EPA has received in hard copy or electronically. This section will also include **descriptions** of communication and public participation strategies that supported the UAA, if available.

- 7) *Information on UAA pilot projects that are underway*

- 8) *Other topics (as suggested by EPA regions and states/tribes)*

Milestones:

September 2004	Test Clearinghouse Webpage available to EPA Regional WQS Coordinators and EPA Workgroup for review and comment
October 2004	Incorporate comments received from EPA Regional WQS Coordinators and EPA Workgroup
	Make Test Clearinghouse Webpage available to state and tribal WQS contacts for review and comment
December 2004	Incorporate comments received from state and tribal contacts and make the Clearinghouse “live” to the public

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