# SEDQUAL CLARIFICATION PAPER

# REPORTING SEDIMENT QUALITY FOR COMPIANCE WITH THE SMS RULE (173-204 WAC)

Prepared by Thomas H. Gries (Washington Department of Ecology) for the DMMP agencies and Ecology.

# **INTRODUCTION**

The original PSDDA agencies cooperatively developed SEDQUAL as a database not only to house navigation dredging project data, but also one that would include ambient sediment quality and disposal site monitoring data, sediment quality data from cleanup sites and source control projects, special scientific studies, etc. In addition, SEDQUAL was intentionally designed not only to be a data repository but also an application that included specific, portable and flexible analytical capabilities. Some of these analytical tools enable the agencies to a) calculate new, or revise old sediment quality guidelines/criteria, b) compare site chemistry to existing guidelines/criteria, c) statistically evaluate biological test results, d) evaluate and map the extent of known or suspected contaminated sediment sites. Using this database and accompanying analytical tools enables the agencies to make informed decisions on appropriate sampling analysis plans, cleanup site boundaries, establish 303d listed water bodies, and management alternatives for contaminated sediment, etc.

### PROBLEM IDENTIFICATION

Over the 12+ year history of its use and development, SEDQUAL has evolved into what is arguably one the most robust information management tools in the country used for evaluating sediment quality and making related regulatory decisions. Ecology, the agency responsible for maintaining this database and application, with funding from the U.S. Environmental Protection Agency, has made every effort to make submittal of data in SEDQUAL format a straightforward process. Data entry templates are readily available on Ecology's web site and staff have periodically offered training workshops on the use of SEDQUAL. Yet submittal of sediment quality in format easily reviewed in SEDQUAL continues to be problematic.

It is common practice for individual dredging project proponents or liable parties to contract with consulting firms that have developed their own proprietary databases and/or applications. Having the consulting firm enter data into their own system as well as into SEDQUAL adds cost. However, is it tremendously burdensome and costly from the taxpayers perspective for the regulated community to continue to provide sediment quality data to Ecology in a myriad of different formats. Furthermore, the sediment quality data submitted in these different formats is almost always incomplete. These factors lead to a very resource intensive effort (e.g., more than an entire week) for highly trained technical staff to review and enter sediment quality data for just one fairly typical project.

One potential solution to this problem has been for Ecology to require all environmental data to be submitted in an agency-wide standard format ("Environmental Information Management" system). This is arguably an appropriate goal that has been or is being effectively implemented for some of Ecology's programs. However, the EIM database has been designed to neither house all the data needed to make informed sediment management decisions nor provide practically any of the current capabilities of SEDQUAL required for effective implementation of the SMS rule.

Ecology and the other agencies involved in the umbrella Cooperative Sediment Management Program should work to ensure sediment quality information is readily available and analyzed for multiple purposes. The following are possible approaches to address this need:

- Ecology, with the support from other CSMP agencies, insists that all sediment quality data be submitted in SEDQUAL format, with accompanying hard copy source data and quality assurance reports
- Ecology could develop its EIM system further to fully meet the needs of sediment management decision-makers
- A different regulatory agency, with greater dedicated resources, could assume the responsibility of maintaining SEDQUAL
- Ecology or a different regulatory agency could develop an alternative or "next generation" SEDQUAL
- **Other**

### PROPOSED CLARIFICATIONS

Ecology has required submittal of sediment quality data into SEDQUAL prior to this clarification. Since development of the EIM system, there has been confusion as to the appropriate format in which to submit sediment quality data. However, because Ecology must make timely and informed sediment management decisions with increasingly limited resources, the agency can no longer accept alternative data formats. Ecology will not approve subsequent SAPS for sites involving navigation, cleanup or source control projects unless the previously collected data upon which the SAPS have been based were provided to Ecology in SEDQUAL format. The agency will no longer make decisions on cleanup site boundaries, etc. unless it is able to analyze the pertinent sediment quality data using the only comprehensive sediment management database and analytical application available that is not nonproprietary - SEDQUAL.

A few reasonable exceptions to this clarification follow. In the case of navigation projects evaluated under DMMP guidelines, proponents may provide the sediment quality to the Corps in DAIS format because the Corps maintains a convenient and accurate program that translates sediment quality data into SEDQUAL format. In the case of projects involving collection of natural resource damage assessment data that cannot be entered into SEDQUAL at this time, Ecology will accept sediment quality information in SEDQUAL format only. Associated NRDA data may be submitted in any format agreeable to all parties involved.