

BENEFICIAL USE OF DREDGED MATERIAL

DMMP CLARIFICATION PAPER

Prepared by Justine Barton (U.S. Environmental Protection Agency, Region 10) for the DMMP agencies.

INTRODUCTION

"Beneficial use" is the placement or use of dredged material for some productive purpose. While the term "beneficial" indicates some "benefit" is gained by a particular use, the term has come to generally mean any "reuse" of dredged material. As part of overall sediment management in Washington, the regulatory agencies responsible for sediment management support the productive reuse of dredged material. To this end, a work group was established as part of the Cooperative Sediment Management Program Interagency Agreement. The work group consisted of regulatory agencies, local government, port representatives, and a tribal representative and met over the course of a year. Based on the meeting discussions, a draft users manual has been produced. Excerpts from this manual are presented here to clarify portions of the proposed process for beneficial use. The purpose of the manual is to promote beneficial uses and to provide a clear process that encourages a wide variety of beneficial uses. A separate report to the agency heads will suggest future work to be performed by agency staff including resolution of agency policy differences that affect beneficial uses.

PROBLEM IDENTIFICATION

While a number of beneficial use projects have been pursued in Washington over the last ten years, no clear process has been developed for project proponents and agency reviewers wishing to promote these types of projects. Projects are handled on a case by case basis.

TECHNICAL BACKGROUND AND DISCUSSION

Generally the proposed process utilizes existing cooperative models and fora for handling beneficial uses project management and review. In this clarification paper, aspects of pre-application, sediment characterization, and a suitability determination process are outlined. These processes are generally consistent with the way beneficial use projects are currently handled, that is, on a case by case basis. Other issues such as prioritization for use of material are handled in the draft manual and will be further discussed during public review of the draft manual.

PROPOSED CLARIFICATIONS

Pre-application for Material.

When the Washington Department of Natural Resources (DNR) owns dredged material desired for reuse, the project proponent should contact DNR and the Corps early in the project planning process. In this pre-application process, DNR and/or Corps agency representatives will present potential beneficial use projects at the interagency Cooperative Sediment Management Program (CSMP) monthly forum. It is likely the project proponent will be asked to provide either a brief written project description, or provide a presentation of the proposed project. In some dredging years conflicts among potential users of dredged material may arise. In these situations a CSMP interagency subgroup and project proponents will likely have separate meetings to discuss potential projects, resolve conflicts, and determine priority for use of the material.

(Note: A table specifying material ownership and contact numbers is available in the draft manual and will be updated annually at the SMARM.)

When DNR is not the owner of the material, a project proponent should approach the material owner and negotiate for its use. If a beneficial use project is agreed upon and will be brought forward for permitting, the project should be coordinated via the Corps at the interagency Cooperative Sediment Management Program monthly forum.

Sediment Characterization.

Sediment characterization is required in order to determine whether a particular dredged material is suitable for a proposed reuse. Characterization may include determining physical characteristics (such as grain size) and chemical characteristics via sampling and testing. The amount of information already known about an area and its dredged material, as well as the proposed reuse, will dictate the amount and types of characterization required.

Unconfined aquatic projects (such as beach nourishment, habitat restoration, and in-situ capping) are projects where dredged material may come directly into contact with the surrounding aquatic environment. For these projects dredged material is compared to existing numeric and narrative standards of the Washington State Sediment Management Standards (SMS) in Chapters 173-204-320 through 173-204-340 WAC.

Material \leq SQS (including bioassays) is appropriate for most projects

Material $>$ SQS but less than CSL may be appropriate on a case-by-case basis due to site specific considerations

(SQS are the sediment quality standards located at Chapter 173-204-320 WAC)

PSDDA Comparisons.

In Washington state many dredgers initially test their dredged material via the Puget Sound Dredged Disposal Analysis (PSDDA) process or the Grays Harbor/Willapa Dredged Material Evaluation Procedures. These programs determine if dredged material

is suitable for unconfined open-water disposal at specific sites. The suitability of dredged material for unconfined open-water disposal at designated open-water sites is documented in a signed interagency "Suitability Determination." If a proposed beneficial use project falls through, a dredger with a PSDDA Suitability Determination could still use the PSDDA unconfined, open-water disposal sites for disposal.

At present, a PSDDA or Grays Harbor/Willapa Suitability Determination for open-water disposal alone is not adequate for an aquatic beneficial use project. A specific analysis and comparison of testing results to the Washington State Sediment Management Standards must be performed. This means that data obtained under programs such as PSDDA or Grays Harbor/Willapa must be repackaged to allow comparison to Washington State SMS. Separate actions are underway to more closely align PSDDA/Grays Harbor/Willapa chemical guidelines for sediments with the SMS.

Suitability Determination Process.

In order to provide for efficient consideration of project data and to document suitability of material for beneficial use, the suggested process is to utilize the existing Corps Dredged Material Management Office (DMMO) coordination and suitability determination process for aquatic beneficial use projects. Using the Corps DMMO as the clearinghouse, the agencies will encourage applicants to consider beneficial use up front in their sampling and analysis plan and ensure data collected will allow for repackaging for SMS interpretation. If a project's sediments are \leq SQS, the agencies will sign a suitability determination indicating that the material meets SQS and as such is generally appropriate for "exposed" aquatic beneficial use. Similar to current PSDDA suitability determinations, the beneficial use section of the suitability determination would contain a caveat that the suitability determination is NOT a permit and that other factors such as antidegradation, etc. will be applied during permit processes.

The use of the suitability determination process and repackaging of PSDDA and other data when necessary requires an interagency commitment to use of Best Professional Judgment. Some potential repackaging complications between the existing open water disposal programs (PSDDA and Grays Harbor/Willapa) and SMS include detection limits, use of TOC normalization, and slightly different lists of chemicals of concern. These issues should be considered up front when the applicant initially prepares a sampling and analysis plan. If complications arise during repackaging for SMS comparisons, they will be handled using best professional judgment, depending on the project and issues at hand.