

## **Beneficial Use Goods and Services (BUGS) Tool Released Online and Article Published**

*ERDC researchers from the Environmental and Coastal and Hydraulics Laboratories developed a Beneficial Use Goods and Services (BUGS) tool that addresses the requirements of Section 125 by providing a simple tool for dredging operations managers to screen alternative dredged material placement sites. This publicly available spreadsheet tool fulfills the need to identify and standardize the range of benefits considered for dredged material placement site alternative analysis, greatly supporting decision-making by the field.*

WRDA Section 125 requires comprehensive benefits assessment specifically for dredging and sediment management projects. Therefore, there is a need to identify and standardize the range of benefits considered for sediment placement site alternative analysis. To address this need, the USACE Ecosystem Goods and Services (EGS) Planning Framework provides a comprehensive set of social, environmental, and economic benefits that can be integrated into the Corps' existing 6-step planning process. By incorporating the EGS Framework and integrating it with standard sediment placement methods defined in EM 1110-2-5025 (the manual for Dredging and Dredged Material Management), a comprehensive benefit analysis can be conducted as an enabler to increase beneficial use of dredged sediment through the BUGS tool.

The BUGS tool provides a simple tool for dredge operations managers to screen alternative placement sites. The development of the BUGS tool addresses the USACE 70% beneficial use goal by providing systematic, large-scale opportunities for beneficial use of dredged material, supporting the USACE navigation mission. The BUGS tool provides a means to compare sediment placement alternatives and provides evidence for the benefits and costs associated with beneficial use alternatives.

The BUGS tool is available for download at the link below on the DOER website. A description of the BUGS tool combined with an example of how the tool was used in practice was recently published in the WEDA Journal of Dredging.

The screenshot shows an Excel spreadsheet titled 'BUGS Tool 2014 (Excel 2010)'. The worksheet is divided into several sections:

- USACE District:** A dropdown menu.
- Federal Navigation Project (FNP):** A text input field.
- Table 1. Placement Sites:** A table with columns for:
  - 1.1 Number
  - 1.2 Select all placement site(s) being considered for this FNP
  - 1.3 Placement site name
  - 1.4 Placement Site Volume
  - 1.5 ROM Unit Cost
  - 1.6 Total Cost
  - 1.7 Duration
  - 1.8 Priority
  - 1.9 Placement site narrative/justification

Below the table, there are red text instructions for data entry:

- Project Description:** A red dashed line indicating where to enter the project description.
- Volume, Cost, Duration:** A red dashed line indicating where to enter the volume, cost, and duration.
- Priority:** A red dashed line indicating where to enter the priority.
- Narrative:** A red dashed line indicating where to enter the narrative.

Figure 7. Screen capture of the Beneficial Use Goods and Services (BUGS) tool placement site worksheet.

Link: <https://doer.el.erc.dren.mil/bugs.aspx>

Reference: Suedel, B., C. Theiling, J. Wilkens, B. Emery, and J. Miller. 2025. Dredged Material Placement Beneficial Use Goods and Services (BUGS) Tool. WEDA Journal of Dredging. 22(1):25-43.

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