

# **DEBRIS SCREENING REQUIREMENTS (CLARIFICATION)**

---

SMARM 2015

Erika Hoffman (EPA), Celia Barton (DNR),  
David Fox, John Hicks (US COE)

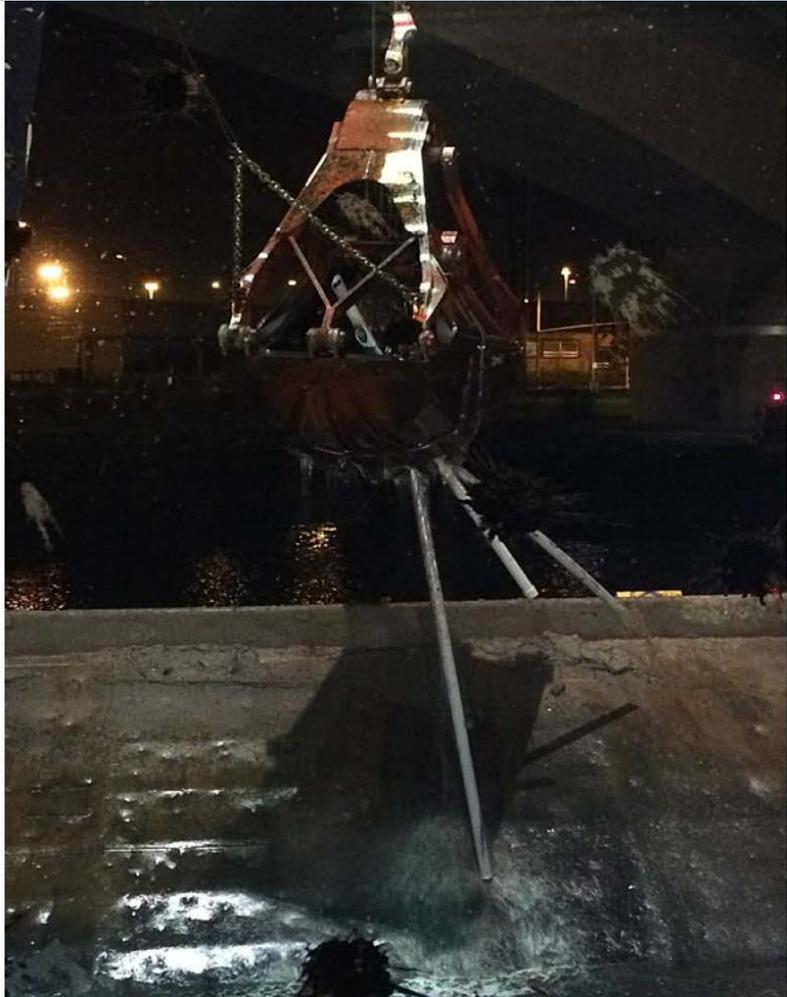
# DEBRIS IN DREDGED MATERIAL: CURRENT RESTRICTIONS

- Only approved dredged material allowed for disposal at open water sites.
- Debris allowed if natural material and less than 2-ft in any dimension (wood, rock) = **small debris**
- All other anthropogenically-derived debris of any size (e.g., rebar, tires, plastic trash) prohibited for open water disposal = **anthropogenic debris**
- PSDDA MPR and UM discuss clamshell and screening methods to remove debris but no specific method required.

# DEBRIS REMOVAL USING CLAMSHELL

- In Washington State – debris removal typically triggered based on visual observation of dredging process
- Debris greater than 2' x 2' removed from dredge barge using bucket and segregated for upland disposal

# DEBRIS REMOVAL USING CLAMSHELL



# DEBRIS REMOVAL BY SCREENING

- Steel mesh (“grizzly”) recommended in COE national guidance
- Covers part or all of scow. Can be (re)movable
- Heavy-duty chain or inflexible steel construction
- 1’ x 1’ mesh grizzly required for most projects in California
- Grizzlies rarely used in Puget Sound and Grays Harbor projects

# DEBRIS REMOVAL BY GRIZZLY



# DEBRIS REMOVAL BY SCREENING



# RETAINED DEBRIS



# DEBRIS IN DREDGED MATERIAL PROBLEM STATEMENTS

- **Large debris observed at Puget Sound disposal sites**
  - May change habitat quality at sites
  - Interferes with site monitoring equipment
- **Anthropogenic debris of all sizes seen at sites**
  - May change habitat quality at sites
  - May introduce contamination into the aquatic environment

# DEBRIS AT ELLIOTT BAY SITE (2014)



# DEBRIS IN DREDGED MATERIAL PROBLEM STATEMENTS (CONT.)

- **DMMP User Manual definition of “debris” doesn’t distinguish between allowable and prohibited types of debris**
  - Creates confusion on what is allowed and what isn’t
  - Could erode public acceptance of open water disposal
- **Inconsistent debris screening requirement between West Coast EPA Regions**

# PROPOSED CLARIFICATION

**1. All projects must use a screen to remove debris unless they meet one of these exemption criteria:**

- Dredging most native sediments
- Dredging of frequently maintained navigation channels, away from berths and shorelines
- Dredging in non-urban areas removed from marina/industrial/shipping activities
- Evidence from previous rounds of dredging with screen shows no debris

# PROPOSED CLARIFICATION (CONT.)

## 2. Maximum size of wood and rock debris allowable for open water disposal is reduced to 1-ft in any dimension

- Material must be screened using 1'x1' grid
- Provides for more effective removal of both anthropogenic debris (e.g. tires) and large woody/rock debris
- Aligns DMMP debris management guidelines with those in place in California

# IMPLEMENTATION

- Screening and 1-ft size limitation requirement begins 2017 dredging year (June 2016)
- Requirement for grizzly will be documented in DMMP Suitability Determination
- Applicable to all areas covered by DMMP: Puget Sound, Grays Harbor, Willapa

# IMPLEMENTATION

Costs associated with new requirements:

- Additional scow and offloading equipment for debris
- Offloading & disposal of debris
- Cleaning and repairing the grizzlies
- Moving the grizzlies
- Potential reductions in production rate

Many dredging companies working in Washington State have been successfully using 1'x1' grizzlies for dredging projects in California for over a decade

# COMPLIANCE ENFORCEMENT

- Site inspections
- Fines for failure to use grid when required
- Disposal site monitoring may be required (costs borne by dredging contractor)

# COMMENT LETTERS RECEIVED

- Ports of Seattle and Tacoma
- Objections include:
  - Increased mobilization cost
  - Reduced production rates
  - Lack of evidence that debris is really a problem
  - Lack of screening equipment in Washington
- The DMMP agencies will address these concerns

Questions?