

SEDiment MANagement (SEDMAN) Web Application

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DOTS Webinar Series

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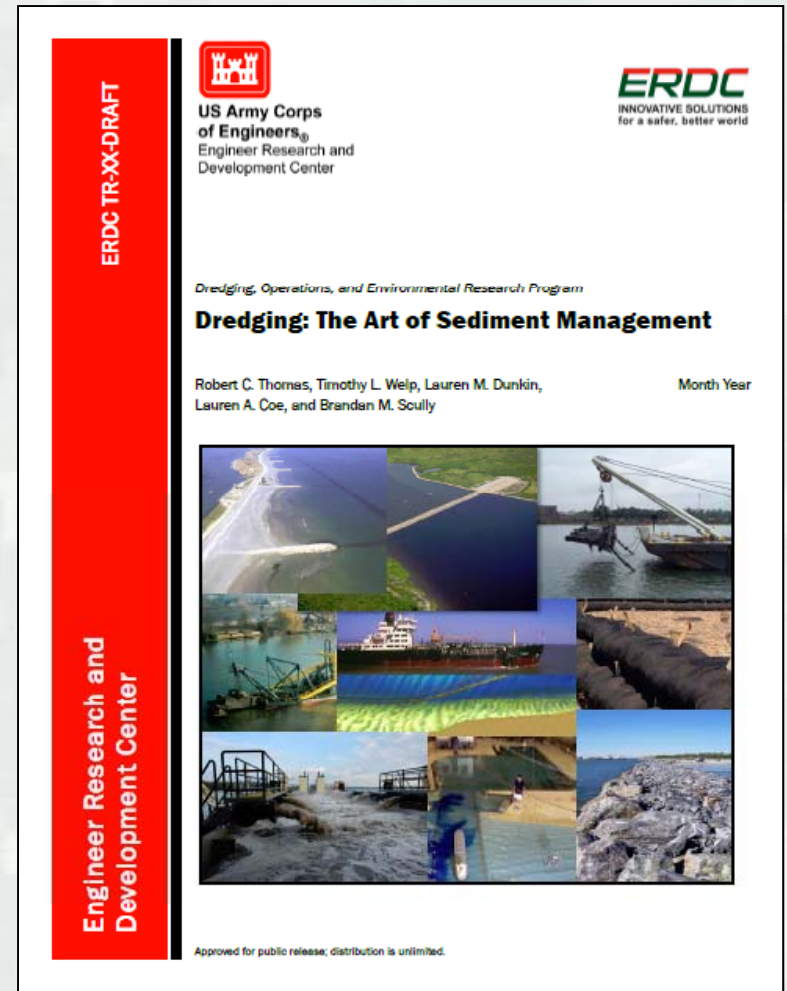


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Why SedMan?

- DOER: research into sediment management methods to reduce dredging
- Products:
Technical Report
3 Technical Notes



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What is it?

- Database & Web-Tool of sediment management technologies
 - ▶ Name
 - ▶ Picture
 - ▶ Description
 - ▶ How it works
 - ▶ Key things to remember
 - ▶ Where you can get more info
 - ▶ Where its been used before
 - ▶ Rank on over 80 parameters

The screenshot shows a web browser window with the URL `je.usace.army.mil/sedman/index.aspx`. The page title is "SEDiment MANagement Technologies" and it is described as "an interactive decision support tool". The interface includes a "Define the problem by selecting and deselecting criteria" section with a "Reset Criteria" button. Below this are two main sections: "Identify the Problem" and "Physical Processes and Environment". The "Identify the Problem" section has fields for Physical Location, Project Type (with a checked "Navigation Channel" option), New or Existing Facility, Project Objective, EWN Goals, Placement Area, and Typical Annual Dredging. The "Physical Processes and Environment" section has fields for Environmental Constraints, Type of Sediment (with a checked "Non-Cohesive" option), Dominant Sediment Load (with checked "Suspended Load" and "Bed Load" options), Sediment Source, and Sediment Forcing/Critical Parameter. On the right, there is a list of candidate solution technologies with their corresponding scores. The list includes: Hopper Dredge (100%), Sediment Collector (95%), Hydraulic Cutterhead Dredge (95%), Dustpan Dredge (95%), Mechanical Dredge (77%), Advance Maintenance Dredging (77%), Sweep Beam Dredging (73%), Agitation Dredging (73%), Vessel Speed and Sailing Regulations (73%), Fixed hydraulic suction dredge with a rotating (73%), Jetties (73%), Spur Jetties (73%), Jetty Sand Tightening (73%), Weir training wall/jetty and trap with conventi (73%), Jet pump and crane (mobile system) (73%), Breakwaters (73%), and Weir Jetties (73%). The footer of the page includes a small logo and the text "2013 - US Army Corps of Engineers".

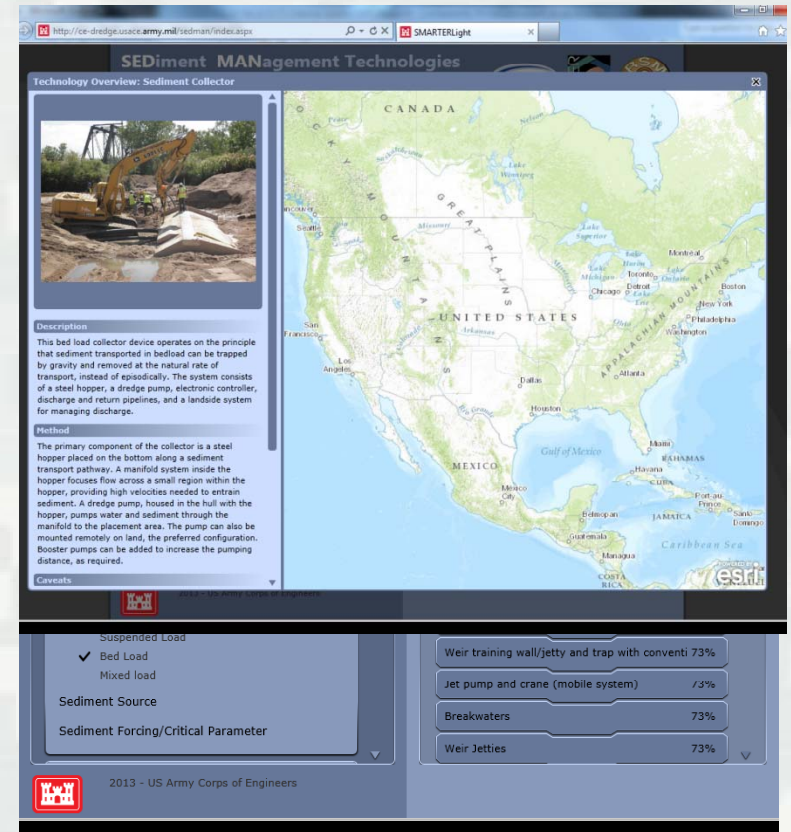
Technology	Score
Hopper Dredge	100%
Sediment Collector	95%
Hydraulic Cutterhead Dredge	95%
Dustpan Dredge	95%
Mechanical Dredge	77%
Advance Maintenance Dredging	77%
Sweep Beam Dredging	73%
Agitation Dredging	73%
Vessel Speed and Sailing Regulations	73%
Fixed hydraulic suction dredge with a rotating	73%
Jetties	73%
Spur Jetties	73%
Jetty Sand Tightening	73%
Weir training wall/jetty and trap with conventi	73%
Jet pump and crane (mobile system)	73%
Breakwaters	73%
Weir Jetties	73%



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What is it?

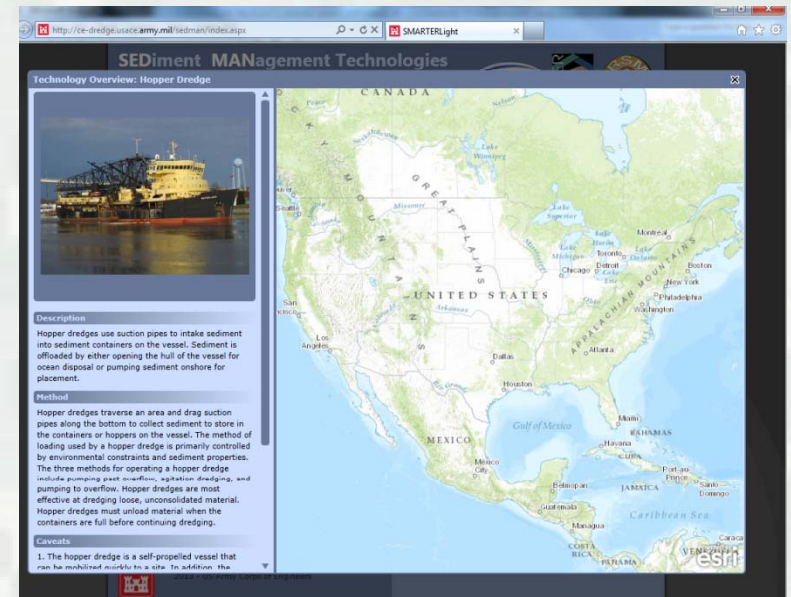
- Users identify which parameters are relevant for their project
- Algorithm ranks technologies
- Website displays the results



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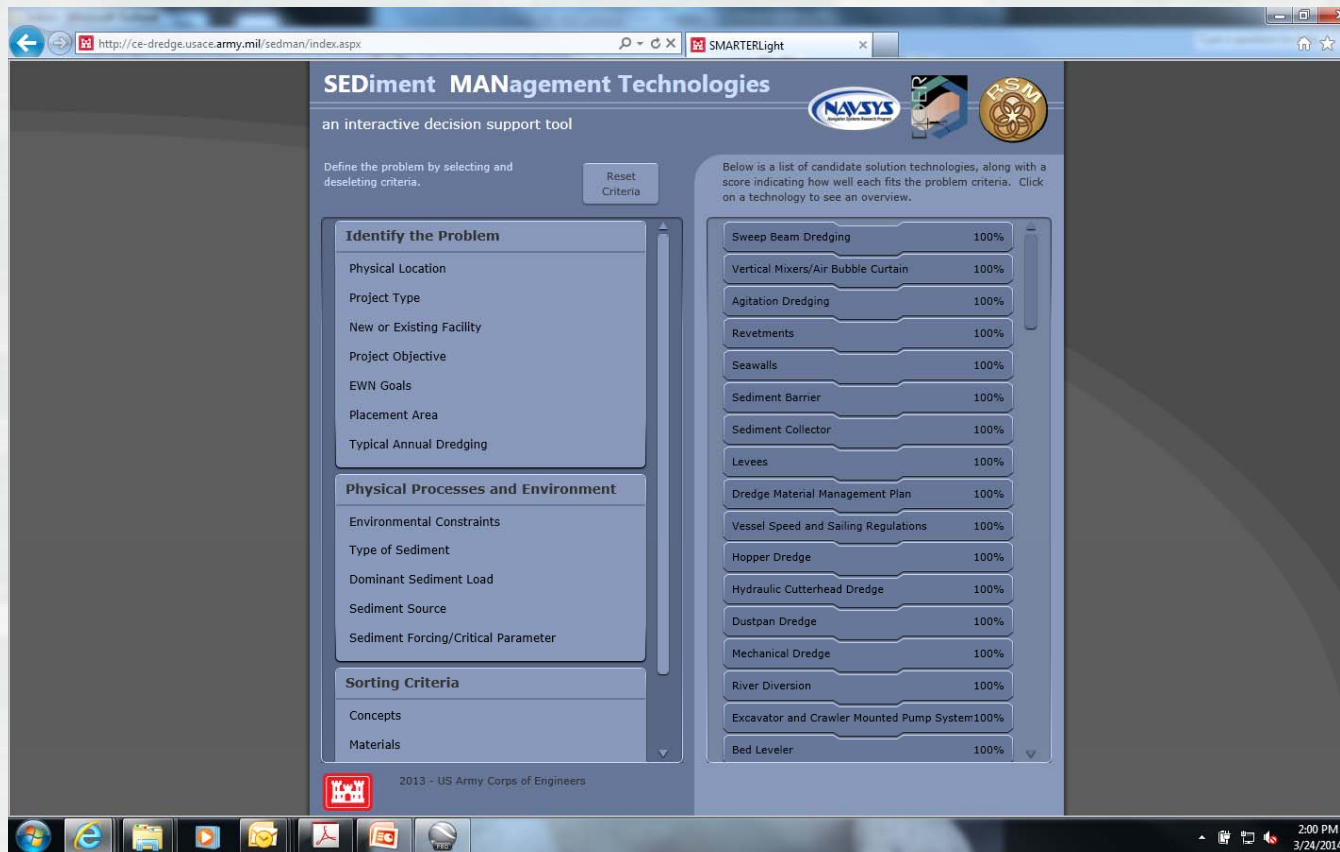
What can you do with it?

- Identify and screen alternatives
- Integrate knowledge of sediment management technologies into other tools
- Easy update allows integration of new knowledge into the DB
- Avoid reading 1000s of pages of reports!



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Live Demo



<http://sedman.usace.army.mil>
<http://ce-dredge.usace.army.mil/sedman/index.aspx>



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