Dredged Material Decision Tool (DMDT) Criteria Worksheet

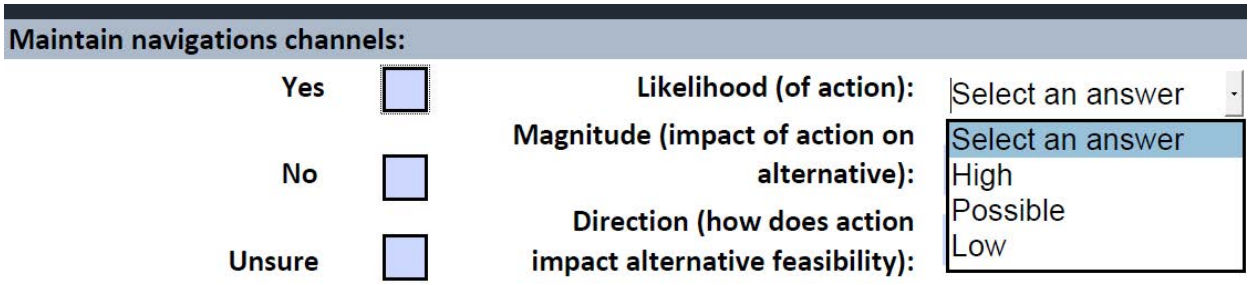
Objectives

The following worksheet is designed to collect the information necessary to populate the Dredged Material Decision Tool (DMDT). Depending on the details of the proposed beneficial use management alternative, some of the information may be unknown or unavailable. Fill in what you can based on what you know and can infer; leave fields blank if details are unknown.

Instructions

The worksheet is structured so that some categories will require you to fill in the blanks, while others provide a range of options in a drop-down list for you to choose from. For each criterion, there will be an option to select "yes," indicating that criterion will be met, "no" indicating it will not be met, or "Unsure," indicating uncertainty regarding that criterion. After choosing "yes," "no," or "unsure," read through the content under each criterion and fill in what you can before moving on.

While you are working through the worksheet, hover over each blank/drop-down box and a tool tip will pop up with direction for exactly what information is required. If the criterion has defined answers such as the one in the example below, you will click on the arrow on the right side of the drop-down box to select your answer:



Definitions

There are three different measures of impact characterization under each criterion: likelihood, magnitude, and direction. There is a place at the end of the section for each category of criteria to comment on the strength of evidence for the responses for that category. Each of the impact characterization terms are defined below.

- **Likelihood** refers to the probability that an effect will happen with respect to the criterion. The values are "highly likely," "possible," or "not likely."
- **Magnitude** indicates the expected size of the effect associated with the specific criterion. This can be described using the values "high," "moderate," or "low." For criterion with a quantitative effect, a high magnitude would refer to a larger quantitative impact than moderate or low magnitude. For example, the creation of 100 acres of a certain type of habitat could be characterized as "high" while the creation of 10 acres could be "low." A qualitative example would be determining the magnitude of impact that being enrolled in a voluntary program has on a beneficial use management alternative. If the alternative can only be completed through enrollment, the expected effect of enrollment is "high." If enrollment is optional and will not provide many resources for the alternative, the effect is "low." The drop-down boxes provide guidance as to how the magnitude should be ranked.

1. **Direction i**ndicates how criteria will affect different aspects of the beneficial use alternatives. For each category of criteria, the direction refers to the different goals listed below:
    a. *Biophysical environment:* The goal of biophysical environment criteria is to assess the harmful and beneficial effects of the beneficial- use alternative on habitat and the organisms that utilize the habitat. Responses explain how each beneficial use management alternative will change the biophysical environment (habitat and organisms).
    b. *Economic:* The goal of economic criteria is to assess the feasibility of the alternative given potential economic incentives and constraints. Responses explain how project funding elements and costs impact the economic feasibility of the alternative.
    c. *Social:* The goal of social criteria is to assess how the proposed alternative will impact human health and well-being. Responses explain how each alternative has the potential to change human health and well-being outcomes in the community.
    d. *Governance:* The goal of governance criteria is to assess the feasibility of beneficial use management alternatives and ensure they are compliant with place and project-relevant governance structures, including funding and regulations. Responses explain how different funding and regulatory requirements might impact the feasibility of the alternative.
    e. *Built environment:* The goal of built environment criteria is to assess the feasibility of beneficial use management alternatives based on an alternative's end uses and the ways that dredged materials will be utilized in construction. Responses explain how the beneficial use management alternative will be utilized in as a construction material.
2. **Strength of Evidence** refers to the quality and reliability of the evidence used to determine your evaluation of each criterion. Evidence can include personal experience, knowledge from colleagues, information from research conducted elsewhere, scientific literature. A blank space for comments on the strength of evidence has been included at the end of each section. When using this box, indicate which criterion you are referring to in your comments and what evidence was used. Please include any other thoughts or insights at the end of the worksheet in the provided "Comments" box.

Comments and Questions

If you have comments or questions while working through the worksheet, feel free to contact any of the individuals listed here:

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Project and Site Information

Name of Site:

Type of Site: Select type of site

Owner: Select owner type

Name of Owner:

State:

Purpose of project: Select use purpose

Dredging Information

Dredging location (lat/long):

Volume (c/y):

Dredged material source: Select dredged material program/source

Primary soil type: Select primary soil type

List other soil types:

Cost:

Funding source:

Mode of transportation

Barge: ☐

Pipeline: ☐

Truck: ☐

Elevated contaminants:

Contracting

Reasonable Expectations: ☐

Available: ☐

Affordable: ☐

Governance			
Maintain navigations channels:			
Yes	☐	**Likelihood (of action):**	Select an answer
No	☐	**Magnitude (impact of action on alternative):**	Select an answer
Unsure	☐	**Direction (how does action impact alternative feasibility):**	Select an answer
Consideration of liability (past, present and future for project/ project site):			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Enrolled in a voluntary program (often assessment/clean-up support):			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Able to be completed inside of relevant environmental windows:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Referred to or included in existing guidance documents:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Permitting timeline conducive to project timeline:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Meets zoning requirements:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Flexible timeframe:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer
Replicable in other harbors, ports, environments, jurisdictions, or projects:			
Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Built Environment

Demand on terrestrial borrow sources reduced:

Yes	☐	**Likelihood (of action):**	Select an answer
No	☐	**Magnitude (impact of action on project alternative):**	Select an answer
Unsure	☐	**Direction (how does action impact project feasibility):**	Select an answer

Diversion to construction:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Provide fill or cap (development sites, roads, greenspace)

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Biophysical Environment

Habitat Gain and Loss	Quantity	Quality		Quantity	Quality
Rivers and Streams					
Gain	☐	☐	Likelihood (of habitat gain or loss):	Select an answer	Select an answer
Loss	☐	☐	Magnitude (of changes due to gain or loss):	Select an answer	Select an answer
No impact	☐	☐	Direction (impact on health of habitat and organisms):	Select an answer	Select an answer
N/A	☐	☐			
Lakes and Ponds					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			
Near Coastal Marine/Estuarine					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			
Open water					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			
Wetlands					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			
Urban/suburban					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			
Barren rock/sand					
Gain	☐	☐	Likelihood:	Select an answer	Select an answer
Loss	☐	☐	Magnitude:	Select an answer	Select an answer
No impact	☐	☐	Direction:	Select an answer	Select an answer
N/A	☐	☐			

Impact on priority habitat:

Gain	☐	**Likelihood:**	Select an answer
Loss	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Type of priority habitat lost or gained:

Benefit or protect species of management concern:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Restore or manage native vegetation:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Reduce invasive vegetation:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Influence biophysical environment by reducing contamination:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Increase stormwater protection and control:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
No impact	☐		
N/A	☐	**Direction:**	Select an answer

Economic

Funding pathway identified:

Yes	☐	**Likelihood (of action):**	Select an answer
No	☐	**Magnitude (impact of action on alt.):**	Select an answer
Unsure	☐	**Direction (how does action impact feas.):**	Select an answer

Funding application prepared:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Partnerships are established:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Potential partnerships have been identified:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Transportation to the site is feasible:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Alternative can accept materials for 5 years:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Project site can accept materials for 20 years:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Lead to the creation or growth of viable business:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Secondary benefits created:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Require long term maintenance

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Social

Improved access to parks or natural spaces:

Yes	☐	**Likelihood (of action):**	Select an answer
No	☐	**Magnitude (impact of action on project alternative):**	Select an answer
Unsure	☐	**Direction (benefit/harm to health:**	Select an answer

Potential for indirect job creation:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Improvement of aesthetics:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Involves local community through inclusion in feedback, planning, other parts of the project:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Improved access to ecosystem services:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

New or improved infrastructure services for surrounding community/communities:

Yes	☐	**Likelihood:**	Select an answer
No	☐	**Magnitude:**	Select an answer
Unsure	☐	**Direction:**	Select an answer

Strength of Evidence

Comments