Summary of Scoping Effort: Findings & Recommendations
Goals:

1) to share key findings & recommendations

2) to clarify findings that will be used to inform reports, and ultimately tool creation.
Affiliations of Interviewees and Survey Participants:

- Federal/State: 23, 44%
- Local/Tribal: 6, 11%
- Conservation: 15, 29%
- Fishing Industry: 3, 6%

Combined Survey & Interview Counts by Category
Results
Q: What are the most pressing management issues you currently face?

KEY FINDING:
- Increasingly, climate change is an important aspect to include in marine planning. This type of information needs to be incorporated into tools alongside other data types.
Q: What management decisions do you envision having to make in the future?

KEY FINDING:
- The most pressing management decisions revolve around climate change and the associated changes in environmental conditions coupled with increasing industrial development and consequent uses of the ocean and near shore environments.
Decision Making Process
Q: What primary processes do you use to make decisions?

**Interview results:**
1. Expert opinion (18%)
2. Internal meetings (18%)
3. Advisory groups (12%)
4. Public meetings (12%)
5. GIS (11%)
6. Other computer-based tools or models (7%)
7. NEPA planning process (7%)
8. Internet search (7%)
9. Other (4%)
10. Personal experience (2%)
11. No formal process (0%)

**KEY FINDING:**
- Currently, marine resource management decisions are primarily a human based process
Q: How effective are current decision-making processes?

<table>
<thead>
<tr>
<th>Interview results:</th>
<th>Survey results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (18%)</td>
<td>Excellent (7%)</td>
</tr>
<tr>
<td><strong>Adequate (46%)</strong></td>
<td><strong>Good (48%)</strong></td>
</tr>
<tr>
<td>Needing improvement (18%)</td>
<td>Adequate (17%)</td>
</tr>
<tr>
<td>Not asked (18%)</td>
<td>Needing improvement (28%)</td>
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</tbody>
</table>
Q: What do you see as the strengths and weaknesses of current decision-making methods?

1) Public Participation
   - **Strength:**
   - **Weakness:**

2) Data and Information
   - **Strength:**
   - **Weakness:**

**KEY FINDING:**
- The most important weaknesses in current decision-making processes relate to public participation and the availability of data and information.
Decision Making Process Key Findings

- Currently, marine resource management decisions are:
  - Primarily a human based process
  - Often made through processes that are not based explicitly on resource data, suggesting a need for tools to improve the accessibility and use of data in management decisions.

- An opportunity exists to improve decision-making processes through the use of critical information and tools to access, view, summarize and analyze data.

- The most important weaknesses in current decision-making processes relate to public participation and the availability of data and information.

Are we on track?
Data
Q: What types of geospatial/mapping data do you currently use?

KEY FINDING:

- While all data types received very similar amounts of usage, the most commonly used types of data were oceanographic, fish stock, ice cover, marine mammals and regulatory boundaries.
Q: What additional data would you like to have?

KEY FINDING:

• Demand exists for having year round and real-time data as well as oceanographic, physical and biological data in a central repository or accessible across decision support tools. This will lend itself well for conducting a data gap analysis.
Q: What prevents you from getting or using this data?

1) the data do not exist

2) existing data are difficult to access.

**KEY FINDING:**
Finding and accessing data is one of the biggest barriers to using data for decision making.
Data Key Findings

• While all data types received very similar amounts of usage, the most commonly used types of data were oceanographic, fish stock, ice cover, marine mammals and regulatory boundaries.

• Demand exists for having year-round and real-time data as well as oceanographic, physical and biological data in a central repository or accessible across decision support tools. This will lend itself well for conducting a data gap analysis.

• Finding and accessing data is one of the biggest barriers to using data for decision making.

• Compiling these data into a central repository or across publicly available decision support tools allows users to begin analyzing relationships between data types.

• Designing decision support tools to incorporate socioeconomic data will allow users to illustrate critical relationships between social, economic, ecological, oceanographic and physical aspects of marine systems.

Are we on track?
Tools
Q: What tools do you currently use for data analysis or visualization?

KEY FINDING:
- Further exploration of types of decision support tools is necessary to determine which are cost effective and most suitable to the marine planning process in Alaska.
Q: How often do you use decision support tools?

KEY FINDING:
• GIS and Google Earth are the most important, and frequently used spatial tools.

Q: What are the strengths and weaknesses of the tools you use?

KEY FINDING:
• There is a need to develop tools that do not require specialized training, skills and knowledge in order to use them.
Tools Key Findings

• Further exploration of types of decision support tools is necessary to determine which are cost effective and most suitable to the marine planning process in Alaska.

• GIS and Google Earth are the most important, and frequently used spatial tools.

• There is a need to develop tools that do not require specialized training, skills and knowledge in order to use them.

Are we on the right track?
Creating tools for today and tomorrow
Q: How can your management decisions be best supported with a tool?

KEY FINDING:
• Management decisions can best be supported by a tool with the following characteristics:
  ▪ a central clearinghouse that makes many types of data easily accessible,
  ▪ ability to quickly add and visualize different types of data layers, and
  ▪ scenario-building tools.
Q: If you could envision your ideal decision support tool, what functional capabilities would it have?

Survey Responses for Functional Capabilities of an Ideal Decision Support Tool
Tools for today and tomorrow key findings

- Increasingly, climate change is an important aspect to include in marine planning. This type of information needs to be incorporated into tools alongside other data types mentioned in this report.

- The most pressing management decisions revolve around climate change and the associated changes in environmental conditions coupled with increasing industrial development and consequent uses of the ocean and near shore environments.

- Visual representation and access to the latest data are the most important functional capabilities in a tool.

- Management decisions can best be supported by a tool with characteristics including:
  - a central clearinghouse that makes many types of data easily accessible,
  - ability to quickly add and visualize different types of data layers, and
  - scenario-building tools.
Recommendations

• Develop a comprehensive clearinghouse of data that makes many types of data easily accessible.

• Consider developing a tool that helps people explore the potential effects of climate change on environmental conditions and human uses of the ocean, and that enables them to illustrate and analyze scenarios and management responses.

• Consider creating a tool offering the ability to quickly add and visualize different types of data layers without the skill and expense of standard GIS systems.

• Build a tool that fits into and complements an existing management decision-making process.

• Make sure that the tool is easy for the target audience to use.
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