Objective: to identify appropriate management responses to each use based on how it will help to meet the management objectives of each management area.

Activity: 1) first review handouts 4.2 and 4.3 and discuss the management options with your team; 2) then use post-its on poster 4.2 to make a preliminary assessment of the best management options for improving the compatibility of each human use activity that have a medium or low rating.

Time: 1 hour, 45 minutes
Exercise 10.1: Identifying & Selecting Management Strategies

HANDOUT 4.2: Behavior-based Management Strategies Decision Making Flow Chart

1. THEN
   UNDERSTAND BEHAVIOR
   Impacts and management options through research or monitoring

2. THEN
   INFLUENCE BEHAVIOR
   by providing compelling evidence of the impacts and benefits to their life

3. THEN
   MODIFY BEHAVIOR
   by identifying, introducing, and facilitating access to alternatives

4. THEN
   CONTROL BEHAVIOR
   by prohibiting or regulating uses in your management area

5. THEN
   DEVELOP POLICY
   Provide relevant information about the issue to both groups to facilitate change, and advocate removal of barriers. Provide incentives. Defer to another agency.

IF... human uses are impacting your management area and you determine that...

- You don't have enough information about the impacts or don't know how to address the issue
  - The users don't have enough information or don't understand the issue, and they have an impact on your management area
    - However, they would change their behavior if they knew better
  - The users have enough information and know about the issue
    - But continue to impact the target resource(s)
      - Even with incentives
        - Because they are not willing to change their behavior
  - The users have information on and about the issue
    - They may or may not care about it,
      - And they have options, skills, and access to resources
        - But laws, policies, economic forces, or other barriers prevent them from reducing their impacts
          - Your management area or management body may or may not have authority to address the issue
### Exercise 10.1: Identifying & Selecting Management Strategies

**HANDOUT 4.3: Identifying CMSP Management Strategies**

<table>
<thead>
<tr>
<th>Management Tool</th>
<th>Description of CMSP Management Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPATIAL/TEMPORAL APPROACHES</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Zoning for Specific Uses               | Used primarily to 1) cluster activities that are similar in terms of impacts and spatial/temporal requirements; and/or 2) to specifically separate activities that are not compatible with one another.  
  - Zoning for specific uses might include: wind farms, military operations, sand and gravel mining, marine transportation, offshore mariculture. |
| Zoning by Objective                    | Primarily used to meet management objectives of management area.  
  - Zoning by objective might include: economic development areas, conservation areas, multiple use areas, cultural protection areas |
| Zones for Prohibiting Specific Uses    | Used to prohibit a specific use that is not compatible with the primary objectives of the management area. Prohibition zones may be spatially discrete areas, or might apply to the entire management area.  
  - Prohibition zones might include something like the exclusion of oil and gas development anywhere in the management area. |
| Temporal Zones                         | Temporal zones are most often applied to coincide with specific periods in the life history of a living marine resource.  
  - Examples of temporal zones might include the closing of a beach to tourism during turtle nesting season or fishing closure during spawning season. Temporal zones can also be used to allow an activity that occurs on a periodic, but regular basis such as regatta. |
| Other                                   |                                                                                                         |

**CMSP MANAGEMENT STRATEGIES THAT MAY OR MAY NOT APPLY TO SPECIFIC ZONES**

| Regulations                          | Regulations are used to regulate which specific activities can or cannot take place (prohibited) in a management area or a specific zone. Each zone will most likely have it’s own set of regulations.  
  - For example, regulations for a “fishing zone” might specifically state that hook and line fishing is allowed, while any bottom contact gear is prohibited. |
| Permits                               | Allows certain activities to take place within the management area or in specific zones based on the conditions of the permit.  
  - Example of a research permit is one that allows for research activities to take place in the conservation zones IF no bottom contact takes place as a result of the research activity. In addition to this requirement, the research PI may be required to file a research methods plan prior to receiving the permit, or required to share data with the management area manager(s). |
| Best Management Practices (BMPs)      | Best Management Practices set a standard for how an activity is to be conducted (required) or should be conducted (voluntary).  
  - An example of a BMP for a dive boat operation is that before each dive a site orientation is required to be given by the dive master for the divers to explain the dive site, fragile environments and diving etiquette. |
| Voluntary Compliance                  | Voluntary compliance can apply to zones or BMPs and seeks to educate the user group about the impacts from their specific activity with the intent that they will choose to comply with the recommendations of a voluntary zones or BMP.  
  - An example of a voluntary zone would be to ask fisherman not to fish during spawning season in a specific area. |
| Recommend to Other Agencies           | "Recommend to Other Agencies" is a CMSP management strategy that directs the management area manager(s) to request other agencies with jurisdictional authority within or adjacent to your management area, to either create their own zones or take management action to address impacts on your management area.  
  - Example is to coordinate with coastal zone managers to create development set back zones to control sediment input or discharge into your management area. |
| Other                                  |                                                                                                         |
Exercise 10.1: Identifying & Selecting Management Strategies

### POSTER 4.2: Selecting Management Strategies

<table>
<thead>
<tr>
<th>Activity or Use</th>
<th>Incompatibility (Impacts of Concern) (refer to worksheet 2.3, poster 3.2, poster 1.1)</th>
<th>INFLUENCE BEHAVIOR</th>
<th>MODIFY BEHAVIOR</th>
<th>CONTROL BEHAVIOR</th>
<th>Other</th>
<th>How does it meet objectives now?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet skills</td>
<td>Wildlife harassment, safety issues in regards to divers and swimmers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Obj 1</td>
<td>L</td>
</tr>
</tbody>
</table>

- Brochures and signage
- Yes, enforce corridors
- Prohibited in bay, can only use corridors to access open water
- Prohibited in bay except in corridors with speed limits
- All year around
- Mooring buoys marking corridors

*High = H, Medium = M, Low = L*