

## Identifying Adaptation Strategies and Actions: HABITATS

Adaptation refers to efforts to reduce the negative effects of, or respond to, climate change. Adaptation strategies and actions explicitly incorporate climate considerations, and aim to alleviate the impacts of climate change by increasing adaptive capacity of and/or decreasing the effect of stressors on priority resources.

### HABITAT: \_\_\_\_\_

#### 1. Identifying Adaptation Strategies

Adaptation strategies are broad adaptation responses that consider ecological conditions and overarching management goals. They are general statements of how to reduce climate vulnerabilities (or stressors) or increase adaptive capacity. Example adaptation strategies include:

- Restore floodplain function to enhance meadow and riparian integrity, connectivity, and resilience under climate change
- Improve infrastructure at spring sites to conserve water and provide habitat for wildlife
- Prevent the introduction and establishment of invasive species and/or remove existing invasives in aquatic habitats
- Increase the resilience of aspen by improving regeneration and reducing herbivory
- Improve and restore nesting and wintering habitats of sage-grouse

#### Instructions

Step 1: Review the habitat vulnerability assessment for your selected habitat.

Step 2: Using the box below, brainstorm adaptation strategies to reduce habitat vulnerabilities and/or increase adaptive capacity.

#### Adaptation Strategies

## 2. Identifying and Evaluating Adaptation Actions

Adaptation actions are more specific activities to implement; they are prescriptive actions designed for specific site conditions. For example, if your adaptation strategy is to restore floodplain function, specific adaptation actions might be a) decommissioning abandoned roadbeds and trails, b) using fencing to reduce herbivory, or c) maintaining aspen in areas with high soil moisture holding capacity. Other example adaptation actions include:

- Utilizing vegetation management techniques (e.g., mechanical thinning, prescribed fire) to reduce fire severity and subsequent effects such as increased erosion potential
- Manually or chemically removing non-native species
- Optimizing grazing management practices (e.g., consider rotational grazing, shift timing of grazing activities, remove allotments) to reduce sediment production

### Instructions

Step 1: For each adaptation strategy identified above under #1, identify specific actions to implement.

Step 2: For each adaptation action, evaluate:

- Implementation feasibility (High, Moderate, Low): High feasibility = high likelihood of implementation; Low feasibility = low likelihood
- Effectiveness in reducing stressors (High, Moderate, Low): High effectiveness = action is highly likely to reduce stressors and may benefit additional resources; Low effectiveness = action is unlikely to reduce stressors, or may reduce stressors but to a minimal degree. **List the specific stressors reduced by a given action.**
- When to implement: Near (<5 years); Mid (5-10 years); Long (>10 years)
- Where to implement: Identify the management, site, or ecological conditions where the action could most appropriately be applied. For example: areas with high soil moisture, areas with fish passage or crossing, areas projected to lose most water supply, post-fire areas, high roaded areas, inaccessible areas due to topography, etc.
- How to implement: Given vulnerabilities, identify how you would implement the action, including considering specific constraints or conditions. For example, in restoration projects will you be planting native species, species adapted to a range of current and future conditions, or species adapted to future conditions only?
- Who could implement: List the agencies and organizations that could put the action into practice.

**HABITAT:** \_\_\_\_\_

<b>Adaptation Strategy #1:</b>			
	<b>Specific Action (1)</b>	<b>Specific Action (2)</b>	<b>Specific Action (3)</b>
<b>Adaptation Actions</b>			
<b>Implementation Feasibility (H, M, L)</b>			
<b>Effectiveness in Reducing Stressors (H, M, L)</b>			
<b>When to Implement (Near, Mid, Long)</b>			
<b>Where to Implement</b>			
<b>How to Implement</b>			
<b>Who Could Implement</b>			

**HABITAT:** \_\_\_\_\_

<b>Adaptation Strategy #2:</b>			
	<b>Specific Action (1)</b>	<b>Specific Action (2)</b>	<b>Specific Action (3)</b>
<b>Adaptation Actions</b>			
<b>Implementation Feasibility (H, M, L)</b>			
<b>Effectiveness in Reducing Stressors (H, M, L)</b>			
<b>When to Implement (Near, Mid, Long)</b>			
<b>Where to Implement</b>			
<b>How to Implement</b>			
<b>Who Could Implement</b>			