

**Sector and Planning Area:**

**Your name:**

**Date:**

## **Climate Change Adaptation Planning Worksheet**

This worksheet can be used to help you and your climate change planning team members with impact and vulnerability assessments and developing adaptation goals and strategies. It is meant to be used for recording information about a specific impact on a sector and planning area. Note: This information can also be entered into ITEP's Climate Change Adaptation Planning Spreadsheet for organizing information about multiple sectors and planning areas.

### **Instructions:**

- Fill out the worksheet for a specific impact on a sector and planning area.
- Complete each section. You can use qualitative ratings, for example, "low," "medium," or "high." You can include supporting information/explanations.
- Use additional worksheets for other impacts and/or other sectors/planning areas.

### **Sector**

General grouping to describe a resource, ecological system, management area, etc.

Ex: Transportation, Utilities, Emergency Services, Human Health, Cultural Resources and Traditions, Water Resources, Forest Resources, Air Quality, etc.

### **Planning area**

Subcategory of "Sector"— area in which tribal government; manages, plans, or make policy.

Ex: Within "Utilities" you might have planning areas of "Water Supply" and "Electricity"

## **Impact**

- **How** is (or will) the sector/planning area being affected by changes in climate? (describe impact)
- **Where?** Spatial extent (geographical area)—Is it restricted to specific parts of reservation? All parts of reservation?
- **When?** Temporal extent—estimated timeframe of when the impact will occur. (near-term, medium-term, long term; or specify range of years)
- **Probability** of Impact: How likely is it that this impact will happen? (low, medium, high)
- **Confidence:** how confident are you that the impact will happen? (low, medium, high)
- **Consequences** if impact occurs: consider social, cultural, economic, legal, etc. (low, medium, high). Describe consequences.

## Vulnerability

- **Exposure:** How much is the sector/planning area exposed to changes in climate or specific climate impacts? (low, medium, high)
- **Sensitivity:** How much is the sector/planning area affected by changes in climate? (low, medium, high). Consider other existing stresses, impact thresholds, etc.
- **Adaptive Capacity:** Ability to accommodate change (adapt) with minimum disruption or additional cost? (low, medium, high). Consider: Already able to adapt? Already adapting? Barriers to adaptation? Do other current stresses limit ability to adapt? Will rate of climatic change be faster than adaptability?
- **Vulnerability:** Susceptibility to harm. Function of the sensitivity to climate and adaptive capacity. (low, medium, high). (ex: high sensitivity and low adaptive capacity=high vulnerability). See the Vulnerability matrix

## **Risks and Prioritization**

- **Estimated risk**  
(low, medium, high). See the Risk Matrix
  
- **Priority for planning?**  
(low, medium, high). See the Identifying Priority Planning Areas Matrix

## **Adaptation Strategies: Goals and Actions**

### **Preparedness Goals**

Major result that your tribe wants to accomplish.

Ex: “Reduce property damage caused by sea level rise, erosion by storms, and flooding.”

### **Preparedness Actions**

Action that your tribe might take to accomplish the goal.

Ex: Build seawalls; Relocate buildings to less vulnerable site

- What are the required authorities and capacities to undertake the action?

- Do these authorities and capacities already exist within the tribe?

- Potential partners within the tribe and outside the tribe

- time frame within which the action needs to happen

- potential funding needs

- potential sources of funding



For easy reference, here are the matrices...

### Vulnerability Matrix

| SENSITIVITY | ADAPTIVE CAPACITY |             |             |
|-------------|-------------------|-------------|-------------|
|             | HIGH              | MEDIUM      | LOW         |
| HIGH        | MEDIUM            | MEDIUM-HIGH | HIGH        |
| MEDIUM      | MEDIUM-LOW        | MEDIUM      | MEDIUM-HIGH |
| LOW         | LOW               | MEDIUM-LOW  | MEDIUM      |

### Risk Matrix

| CONSEQUENCES | PROBABILITY |             |            |
|--------------|-------------|-------------|------------|
|              | HIGH        | MEDIUM      | LOW        |
| HIGH         | HIGH        | MEDIUM-HIGH | MEDIUM     |
| MEDIUM       | MEDIUM-HIGH | MEDIUM      | MEDIUM-LOW |
| LOW          | MEDIUM      | MEDIUM-LOW  | LOW        |

### Identifying Priority Planning Areas

| RISK        | VULNERABILITY   |                 |
|-------------|-----------------|-----------------|
|             | HIGHER          | LOWER           |
| HIGHER RISK | HIGHER PRIORITY | MEDIUM PRIORITY |
| LOWER RISK  | MEDIUM PRIORITY | LOWER PRIORITY  |