

KEY								
Type of Vulnerability								
Agriculture	Buildings	Business, Recreation Tourism	Ecosystems	Emergency Preparedness and Response	Energy	Health	Land Use Planning	Water
		\$						
Severity of Vulnerability								
		Somewhat problematic						
		Extremely problematic						

Ecosystems & Wildfire Goals and Vulnerabilities Addressed			
<b>Goal 1: Build a shared understanding of the realities of wildfire and our expectations of wildfire response.</b>			
	<b>P3</b>		Increased tension between private and public interests (wildfire, floods)
	<b>P8</b>		Community costs of development in the wildland-urban interface (wildfires)
<b>Goal 2: Reduce high severity wildfires and their impact in high risk areas/landscapes.</b>			
	<b>B4</b>		Buildings vulnerability to wildfire
\$	<b>T8</b>		Reduced tourism/spending due to wildfires and smoke
	<b>E23</b>		Changes to ecosystem type (e.g. forests transitioning to grassland or shrubland)
	<b>E26</b>		Increases in tree mortality and reduction in regeneration

	<b>R4</b>		Impact of fire on first responders
	<b>R9</b>		Need for evacuations and places to shelter evacuees (fire)
	<b>R10</b>		Increased draw on resources due to fire
	<b>R11</b>		High potential for loss of life due to fire
	<b>R12</b>		Disruption of communication systems due to fire, extreme weather events
	<b>N7</b>		Damage to utility infrastructure from wildfires and extreme heat, resulting in significant service disruptions
	<b>H6</b>		Trauma/burns due to wildfire
	<b>P3</b>		Increased tension between private and public interests (wildfire, floods)
	<b>P6</b>		Impact on transportation systems (wildfire)
	<b>P8</b>		Community costs of development in the wildland-urban interface (wildfires)
	<b>W5</b>		Reduction of surface water quality due to runoff sediment (wildfire)

**Goal 3: Build understanding of forest, terrestrial and aquatic ecosystems and appropriate, site/landscape-specific, management options that account for climate change.**

	<b>E3</b>		Increased erosion
	<b>E4</b>		Decreased water quality
	<b>E5</b>		Changes and reductions to instream/habitat quality
	<b>E6</b>		Increased stress on riparian vegetation

	<b>E7</b>		Impacts on aquatic species' adaptive capacities
	<b>E8</b>		Increased water temperature
	<b>E9</b>		Increased invasive species (aquatic)
	<b>E10</b>		Hydrologic disconnections
	<b>E11</b>		Increased competition among water users
	<b>E12</b>		Increased stress on aquatic species
	<b>E13</b>		Increased risk of contamination
	<b>E14</b>		Changes in hydrology/storage capacity
	<b>E15</b>		Increased evapotranspiration
	<b>E18</b>		Impacts to flora due to habitat loss and fragmentation
	<b>E19</b>		Changes to species composition, species richness, genetic diversity
	<b>E20</b>		Impacts to fauna of habitat loss and fragmentation
	<b>E21</b>		Increased development and recreation pressure due to climate migrants
	<b>E22</b>		More forest pathogens
	<b>E23</b>		Changes to ecosystem type (e.g. forests transitioning to grassland or shrubland)

	E24		Ecosystem effects of changes in amount and timing of water availability
	E25		Expansion of invasive species (terrestrial)
	E26		Increases in tree mortality and reduction in regeneration
<b>Goal 4: Ensure ecological integrity during and after fire, and/or fire suppression activities.</b>			
	E3		Increased erosion
	E4		Decreased water quality
	E18		Impacts to flora due to habitat loss and fragmentation
	E20		Impacts to fauna of habitat loss and fragmentation
	E23		Changes to ecosystem type (e.g. forests transitioning to grassland or shrubland)
	E25		Expansion of invasive species (terrestrial)
	E26		Increases in tree mortality and reduction in regeneration

DRAFT Guiding Principles for Prioritizing and Implementing Climate Adaptation Actions

- **Collaborate and think holistically.** Climate change touches all aspects of our lives, requiring us to collaborate in new ways, to work across sectors and silos, and to think beyond our geographic boundaries.
- **Balance immediate and long-term needs.** When prioritizing actions, select a combination of easy, quick wins and critical but challenging longer-term initiatives.

- **Build on past work.** Recognize, value, and integrate prior and ongoing work. Don't reinvent the wheel.
- **Value natural processes.** Learn from nature and protect and restore naturally resilient ecological processes.
- **Draw on tradition and culture.** Honor cultural values and draw on traditional ecological knowledge through collaborative partnerships. The Confederated Salish and Kootenai Tribes are key partners, especially given that Missoula County falls within the ancestral homelands of these tribes.
- **Act with, not for.** Maximize transparency and inclusivity in planning and implementation. Empower people with knowledge and tools to participate and take ownership of climate resiliency actions.
- **Don't exacerbate the problem.** Adaptation actions should avoid increasing our contribution to climate change or undermining the ability of other sectors or regions to adapt. Prioritize actions that reduce our contribution to climate change while building resilience.
- **Prioritize equity.** Adaptation actions should not increase inequity. Prioritize actions that build resilience while focusing on underrepresented and vulnerable groups and increasing equity.
- **Use science.** Make decisions based on the best available science while explicitly considering uncertainty.
- **Innovate and adapt.** Monitor and evaluate actions to learn what's actually working. Experiment with emerging solutions, be creative, and maintain flexibility as conditions change.
- **Focus on prevention.** When possible, prioritize actions aimed at avoiding problems rather than addressing them after they occur.