Menu of Adaptation Strategies and Approaches

Developed for Outdoor Recreation

**Strategy 1: Protect and sustain key infrastructure**
Approach 1.1 Stabilize shorelines to reinforce vulnerable infrastructure
Approach 1.2 Maintain, improve, and construct infrastructure using materials that can withstand a range of climate stressors
Approach 1.3 Maintain, improve, and construct infrastructure using designs that reduce impacts from variable water levels
Approach 1.4 Employ technological innovations to maintain the viability of developed winter recreation areas
Approach 1.5 Employ protective measures to minimize damage from disturbance events

**Strategy 2. Enhance measures to prevent ecological damage from variable precipitation**
Approach 2.1 Maintain and increase the capacity of stormwater infrastructure to accommodate variable precipitation
Approach 2.2 Enhance the capacity of natural systems to accommodate variable precipitation
Approach 2.3 Minimize impacts of existing roads and trails that are compromised by changing conditions

**Strategy 3. Manage impacts from shifting visitation and use trends**
Approach 3.1 Reduce visitor impacts to vulnerable areas
Approach 3.2 Optimize timing of opportunities to align with changing conditions
Approach 3.3 Provide alternative means of access

**Strategy 4. Account for and communicate risks to human well-being**
Approach 4.1 Train employees to be aware of climate-exacerbated risks to public safety
Approach 4.2 Prevent or minimize hazards from wildland fire
Approach 4.3 Prevent or minimize hazards from extreme heat events
Approach 4.4 Improve public awareness regarding climate change and climate-exacerbated risks
Approach 4.5 Communicate the reality of environmental change

**Strategy 5. Manage recreational opportunities to address impacts of expected conditions**
Approach 5.1 Recondition recreation-related infrastructure located in vulnerable areas
Approach 5.2 Use appropriate vegetation to increase resilience of recreation settings to climate-related stressors
Approach 5.3 Alter infrastructure to better capture and use natural and man-made snow
Approach 5.4 Employ snow-based options that are functional in low-snow conditions

**Strategy 6. Alter recreational opportunities to accommodate expected conditions**
Approach 6.1 Increase four-season and non-skiing recreation opportunities at winter sports areas
Approach 6.2 Relocate existing infrastructure and opportunities to areas with less risk of climate-exacerbated damage
Approach 6.3 Integrate long-term siting and climate considerations into recreation management
Approach 6.4 Use materials and designs that are impermanent
Approach 6.5 Remove or decommission vulnerable infrastructure


More information can be found at www.forestadaptation.org/adapt/adaptation-strategies