



CAIT Step 1: Assess the Vulnerability of the Resource to Climate Change

To begin this first step, define the focal resource (for example, recreation opportunity or rangeland vegetation) and assess its vulnerability to climate and non-climate stressors. Regional climate change vulnerability assessments can be used to identify the key climate and non-climate factors that influence the resource. For example, key climate vulnerabilities for winter-based recreation may include amount, timing, and type of precipitation, while non-climate vulnerabilities include increased human populations and deferred or neglected maintenance. Document the key climate and non-climate stressors for a resource, including the data and information that you consulted.

Use the list of key climate and non-climate vulnerabilities to help guide the choice of spatial information and maps to assemble and map and use as aids in answering the Critical Questions in CAIT Step 2.

CAIT Step 2: Answer Critical Questions

Use the results compiled in CAIT Step 1: assessment of climate change vulnerabilities, expert knowledge, and spatial data and maps, to answer the Critical Questions for three planning considerations: future climatic suitability, value, and current condition. It is important to define a reference point⁶ prior to answering Critical Questions for current condition, as these Critical Questions are intended to help you evaluate how much a resource departs from a given point. When considering Critical Questions regarding value, maps of value determined for multiple sites can put individual sites into the context of regional conditions so assessments of high, medium or low value are consistent. Consider and document your answers to the questions, including the data and information that you consulted and how it influenced your answers. Based on your responses to the Critical Questions, select the overall summary determination for each planning consideration.

Once summary determinations in the form of a three-letter code have been selected for each of the three planning considerations, go to CAIT Step 3.

Considering answers above, choose the most appropriate level of vulnerability		Considering answers above, choose the most appropriate level of vulnerability	
Summary Determination	A- Climatically Suitable (conditions likely to become or remain suitable to meet demand for opportunity)	D- High Value (higher value; unique opportunity provided by the forest)	
	B- Climatically Marginal (conditions may remain suitable in the short-term to meet demand for the opportunity)	E- Moderate Value (somewhat valued; opportunity may be provided elsewhere)	
	C- Climatically Unsuitable (conditions likely to become unsuitable to meet demand for the opportunity)	F- Low Value (lower value; opportunity may be provided elsewhere)	
Future suitability:		Resource value:	
Find your 3-letter code (Future suitability + Resource value + Current condition) in the list below			
If you answered	Go to Matrix Code	If you answered	If you answered
A D G	I	B D G	C D G
A D H	H	B D H	C D H

CAIT Step 3: Select Management Approach

Use the three-letter code summary determination made in CAIT Step 2 to locate the corresponding management approach matrix cell. Each cell in the matrix lists at least one management approach that reflects the summary determinations for climate suitability, value, and current condition. Management approaches include resistance, resilience, transition, realignment, and no action (box 3). Select the approach that best suits the given situation for your resource. Consider approaches to implement in the near- or short-term (that is, resistance, resilience) as well as those more suitable in the long-term (that is, transition, realignment). Once the preferred management approach has been selected, move on to CAIT Step 4.

	4	5	6
Moderate	Resistance	Resistance	Resistance
Low	7 No action	8 Transition	9 Realignment
High	10 Resistance	11 Resistance	12 Realignment
Moderate	13 Resistance	14 Resistance	15 Realignment
Low	16 No action	17 No action	18 Realignment
High	19 Resistance	20 Resistance	21 Realignment
Moderate	22 Resistance	23 Resistance	24 Realignment

CAIT Step 4: Select Adaptation Strategies and Actions to Implement Preferred Management Approach

Use the preferred management approach selected in CAIT Step 3 to locate the associated adaptation strategies and actions in the CAIT Step 4 reference table. Adaptation strategies may be most appropriately integrated into plans and programs, while adaptation actions may be most applicable to on-the-ground projects. Adaptation actions can also be integrated into the Potential Management Approaches section of a forest plan.

	Adaptation strategies	Adaptation actions
Resistance	Manage recreation sites to mitigate risks to public safety and infrastructure and to continue to provide recreation opportunities for as long as possible	<ul style="list-style-type: none"> Focus on activities that will remain feasible given projected changes, and preserve those recreation opportunities Shift location of activities to maintain opportunities and/or mitigate safety risks Relocate at-risk infrastructure Maintain or safety standards for as long as possible Maintain and/or improve current recreation infrastructure at sites that will remain viable under future climate conditions
Resilience	Increase management flexibility to respond to changing access demands, use patterns, and resource availability	<ul style="list-style-type: none"> Adjust infrastructure maintenance schedule as needed to accommodate changing conditions and/or demand issues Monitor recreation sites and set trigger points to determine when a site should be closed or access restricted Educate the public about changing site conditions and/or safety issues

⁶For example, historical range of variation assessments provide baseline information on ecosystem conditions (composition, structure, and function) that can be compared to current conditions.