

**Table 2. Management Approaches for Recreation Categories.** Management approaches reflect the overall direction that could be taken in the near- or long-term. Adaptation strategies and tactics are climate adaptation responses that make sense in terms of the selected management approach.

**Management Approaches (definitions)**

**Resistance:** Prevents the effects of climate change from reaching and/or affecting a recreation category. *Near-term approach.*

**Resilience:** Buffers against climate change impacts by avoiding the effects of or recovering from changes. *Near- to mid-term approach.*

**Transition:** Intentionally accommodate change and adaptively respond to new conditions. *Long-term approach.*

**Realignment:** Revisit and revise underlying goals and priorities. *Long-term approach.*

**No Action:** Proactively decide to do nothing.

	<b>Climatically Suitable</b>	<b>Marginal</b>	<b>Climatically Unsuitable</b>
<p><b>Highly Valued – Likely to Persist</b></p> <p><i>Highly valued unique category likely to persist over the mid- or long-term)</i></p>	<p><b>Management Approach: <u>No Action</u></b></p> <p><b>Management Approach: <u>Resilience</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase management flexibility to respond to changing access demands and use patterns</li> <li>• Minimize synergistic impacts of climate changes, recreation use, and other stressors</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Maintain and/or improve current recreation infrastructure to respond to changing use patterns/demand</li> <li>• Adjust capacity of recreation sites to accommodate changes in demand</li> <li>• Adjust infrastructure maintenance schedule as needed to accommodate changing conditions and/or demand issues</li> <li>• Prioritize post-disturbance treatments (e.g., relocation, armoring)</li> </ul>	<p><b>Management Approach: <u>Resistance</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Manage recreation sites to mitigate risks to public safety and infrastructure and to continue to provide recreation opportunities for as long as possible</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Focus on activities that will remain feasible given projected changes, and take action to preserve those opportunities</li> <li>• Shift location of activities to maintain opportunities and/or to mitigate safety risks</li> <li>• Relocate at-risk infrastructure</li> <li>• Maintain to safety standards for as long as possible</li> <li>• Maintain and/or improve current recreation infrastructure at sites that will remain viable under future climate conditions</li> </ul> <p><b>Management Approach: <u>Resilience</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase management flexibility to respond to changing access demands, use patterns, and resource availability</li> <li>• Minimize synergistic impacts of climate changes, recreation use, and other stressors</li> </ul>	<p><b>Management Approach: <u>Resistance</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Manage recreation sites to mitigate risks to public safety and infrastructure and to continue to provide recreation opportunities for as long as possible</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Focus on activities that will remain feasible given projected changes, and take action to preserve those opportunities</li> <li>• Maintain to safety standards for as long as possible</li> <li>• Identify nearby areas where similar activities might still be possible and consider feasibility of developing</li> <li>• Shift location of activities to maintain opportunities and/or to mitigate safety risks</li> <li>• Relocate at-risk infrastructure</li> <li>• Maintain and/or improve current recreation infrastructure at sites that will remain viable under future climate conditions</li> </ul> <p><b>Management Approach: <u>Realignment</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Revisit and revise goals and priorities in order to provide sustainable recreation opportunities in response to changing supply and demand</li> </ul>

	Climatically Suitable	Marginal	Climatically Unsuitable
		<p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Adjust infrastructure maintenance schedule as needed to accommodate changing conditions</li> <li>• Monitor recreation sites and set trigger points to determine when a site should be closed or access restricted</li> <li>• Modify existing infrastructure to better withstand future climate conditions</li> <li>• Educate the public about changing site conditions and/or safety issues</li> <li>• Prioritize post-disturbance treatments (e.g., relocation, armoring)</li> </ul> <p><b>Management Approach: <u>Transition</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase management flexibility to respond to changing access demands, use patterns, and resource availability</li> <li>• Increase collaborations with partners and concessionaires to address changes in recreation opportunity supply and demand</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Develop new recreation sites designed for flexibility in use and/or resilient to climate impacts, or create new recreation opportunities at existing sites</li> <li>• Develop additional access restrictions, which may include changes to permitting processes, seasonal closures, or allowable uses</li> <li>• Invest strategically in infrastructure that will accommodate new access needs and/or changes in existing access</li> <li>• Adjust the timing of actions (e.g. open/close dates, road or trail closures, food storage orders, special use permits) to accommodate changing conditions and/or demand issues</li> <li>• Adopt new technology that may help disperse use, direct users, and provide information about</li> </ul>	<ul style="list-style-type: none"> <li>• Use research, monitoring, and assessment to increase knowledge of current conditions and projected changes</li> </ul> <p><i>Tactics</i></p> <ul style="list-style-type: none"> <li>• Create new recreation opportunities at existing sites</li> <li>• Develop additional access restrictions, which may include changes to permitting processes, seasonal closures, or allowable uses</li> <li>• Adjust the timing of actions (e.g. open/close dates, road or trail closures, food storage orders, special use permits) to accommodate changing conditions and/or demand issues</li> <li>• Conduct a cost-benefit analysis of maintaining the current opportunities over time in order to determine whether prioritized opportunities should change</li> <li>• Assess infrastructure vulnerability to climate change and natural hazards, and prioritize by seasonal use, viability, and required investment</li> <li>• Monitor climate variables critical to current and future use, and use monitoring results to determine whether to continue current opportunity and/or develop alternative opportunities</li> <li>• Monitor snow dates, event dates, and snowpack depth using SNOTEL data and incorporate that data into decision-making processes</li> <li>• Limit expansion and/or pioneering of new recreation sites in riparian areas as demand for water-based recreation increases</li> </ul>

	Climatically Suitable	Marginal	Climatically Unsuitable
		changing conditions/climate impacts <ul style="list-style-type: none"> <li>Develop options for diversifying snow-based recreation (e.g., cat-skiing, helicopter skiing, higher-elevation runs)</li> </ul>	
<b>Highly Valued – Somewhat Likely to Persist</b>  <i>Highly valued category that could be made available elsewhere and/or is likely to persist over the near- or mid-term</i>	<p><b>Management Approach: <u>Resilience</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Increase management flexibility to respond to changing access demands and use patterns</li> <li>Minimize synergistic impacts of climate changes, recreation use, and other stressors</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>Maintain and/or improve current recreation infrastructure to respond to changing use patterns/demand</li> <li>Adjust infrastructure maintenance schedule as needed to accommodate changing conditions and/or demand issues</li> <li>Prioritize post-disturbance treatments (e.g., relocation, armoring)</li> </ul> <p><b>Management Approach: <u>Transition</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Increase collaborations with partners and concessionaires to address changes in recreation opportunity supply and demand</li> </ul>	<p><b>Management Approach: <u>Resistance</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Manage recreation sites to mitigate risks to public safety and infrastructure and to continue to provide recreation opportunities for as long as possible</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>Focus on activities that will remain feasible given projected changes, and take action to preserve those opportunities</li> <li>Shift location of activities to maintain opportunities and/or to mitigate safety risks</li> <li>Relocate at-risk infrastructure</li> <li>Maintain to safety standards for as long as possible</li> <li>Maintain and/or improve current recreation infrastructure at sites that will remain viable under future climate conditions</li> <li>Identify nearby areas where similar activities might still be possible and consider feasibility of developing</li> </ul> <p><b>Management Approach: <u>Resilience</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Increase management flexibility to respond to changing access demands, use patterns, and resource availability</li> <li>Minimize synergistic impacts of climate changes, recreation use, and other stressors</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>Adjust infrastructure maintenance schedule as needed to accommodate changing conditions</li> <li>Monitor recreation sites and set trigger points to</li> </ul>	<p><b>Management Approach: <u>Resistance</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Manage recreation sites to mitigate risks to public safety and infrastructure and to continue to provide recreation opportunities for as long as possible</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>Focus on activities that will remain feasible given projected changes, and take action to preserve those opportunities</li> <li>Maintain to safety standards for as long as possible</li> <li>Identify nearby areas where similar activities might still be possible and consider feasibility of developing</li> <li>Shift location of activities to maintain opportunities and/or to mitigate safety risks</li> </ul> <p><b>Management Approach: <u>Realignment</u></b> <i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>Revisit and revise goals and priorities in order to provide sustainable recreation opportunities in response to changing supply and demand</li> <li>Use research, monitoring, and assessment to increase knowledge of current conditions and projected changes</li> </ul> <p><i>Tactics</i></p> <ul style="list-style-type: none"> <li>Create new recreation opportunities at existing sites</li> <li>Develop additional access restrictions, which may include changes to permitting processes, seasonal closures, or allowable uses</li> </ul>

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		<p>determine when a site should be closed or access restricted</p> <ul style="list-style-type: none"> <li>• Modify existing infrastructure to better withstand future climate conditions</li> <li>• Educate the public about changing site conditions and/or safety issues</li> </ul> <p><b>Management Approach: <u>Transition</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase management flexibility to respond to changing access demands, use patterns, and resource availability</li> <li>• Increase collaborations with partners and concessionaires to address changes in recreation opportunity supply and demand</li> </ul> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Develop new recreation sites designed for flexibility in use and/or resilient to climate impacts, or create new recreation opportunities at existing sites</li> <li>• Develop additional access restrictions, which may include changes to permitting processes, seasonal closures, or allowable uses</li> <li>• Adjust the timing of actions (e.g. open/close dates, road or trail closures, food storage orders, special use permits) to accommodate changing conditions and/or demand issues</li> <li>• Adopt new technology that may help disperse use, direct users, and provide information about changing conditions/climate impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the timing of actions (e.g. open/close dates, road or trail closures, food storage orders, special use permits) to accommodate changing conditions and/or demand issues</li> <li>• Conduct a cost-benefit analysis of maintaining the current opportunities over time in order to determine whether prioritized opportunities should change</li> <li>• Assess infrastructure vulnerability to climate change and natural hazards, and prioritize by seasonal use, viability, and required investment</li> <li>• Monitor climate variables critical to current and future use, and use monitoring results to determine whether to continue current opportunity and/or develop alternative opportunities</li> <li>• Monitor snow dates, event dates, and snowpack depth using SNOTEL data and incorporate that data into decision-making processes</li> <li>• Limit expansion and/or pioneering of new recreation sites in riparian areas as demand for water-based recreation increases</li> </ul>
<p><b>Lower Value – Unlikely to Persist</b></p> <p><i>Lower value category unlikely to persist beyond</i></p>	<p><b>Management Approach: <u>No Action</u></b></p> <p><b>Management Approach: <u>Transition</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase collaborations with partners and concessionaires to address changes in recreation opportunity supply and demand</li> </ul>	<p><b>Management Approach: <u>Transition</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Increase management flexibility to respond to changing access demands, use patterns, and resource availability</li> <li>• Increase collaborations with partners and concessionaires to address changes in recreation</li> </ul>	<p><b>Management Approach: <u>No Action</u></b></p> <p><b>Management Approach: <u>Realignment</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Revisit and revise goals and priorities in response to changing supply and demand</li> </ul>

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<i>near-term</i>		<p>opportunity supply and demand</p> <p><i>Adaptation Tactics</i></p> <ul style="list-style-type: none"> <li>• Develop additional access restrictions, which may include changes to permitting processes, seasonal closures, or allowable uses</li> <li>• Adjust the timing of actions (e.g. open/close dates, road or trail closures, food storage orders, special use permits) to accommodate changing conditions and/or demand issues</li> </ul> <p><b>Management Approach: <u>Realignment</u></b></p> <p><i>Adaptation Strategies</i></p> <ul style="list-style-type: none"> <li>• Revisit and revise goals and priorities in response to changing supply and demand</li> </ul>	