# **Pathway: No Action**

Landowners and forest managers can intentionally decide to take no action in managing their forests. Passive management, which allows forests to mature and be influenced by natural succession and disturbance dynamics rather than human intervention, can be an intentional management decision to help meet landowner goals.

In the context of a changing climate, forests are subject to a wide array of changing weather patterns and climate conditions, regardless of whether they are actively or passively managed. Even if there is no active management, forests will continue to change over time as a result of natural processes, forest disturbances such as storms and pest outbreaks that may or may not be exacerbated by climate change, and the growing direct effects of climate change like warmer winter temperatures.

The current condition of a site and its vulnerability to climate change and other stressors is likely to have a strong influence on how systems will change over time. Forests with greater exposure and sensitivity to environmental changes are more likely to undergo change; while forests that experience fewer impacts are generally expected to maintain their current conditions and expected trajectories for longer.

You may want to consider whether passive management is most in line with your goals for your forest. Compare this option with the **Resistance**, **Resilience**, and **Transition** pathways to determine what option best meets your management goals and objectives

## Actions for Forests Health and Productivity ()

Here are some examples of adaptation actions that can help maintain oak forests to meet objectives for general forest health to provide wood products and other benefits. The specific actions used in a particular location will vary based on local site conditions, management goals, and climate risks. Additional actions are described in the <u>Adaptation Strategies and Approaches for Forests</u>.

Condition	Adaptation Approach	Example Action
Ecosystem contains a high-quality native plant community or is of high conservation value	<ul> <li>4.1 Prioritize and maintain unique sites</li> <li>4.2 Prioritize and maintain sensitive or at-risk species or communities</li> <li>5.4 Establish reserves to maintain ecosystem diversity</li> </ul>	<ul> <li>Identify areas for passive management (no harvest) reserve area when consistent with landowner goals and site capability</li> </ul>
Invasive plants are present at low levels or nearby.	<ul> <li>2.2 Prevent the introduction and establishment of invasive plant species and remove existing invasive species</li> </ul>	<ul> <li>Use monitoring to support early detection and rapid response to prevent new infestations</li> </ul>

•	10.2 Allow for areas of natural	•	Rely on natural succession and
	regeneration to test for future-		shifts in species composition and
	adapted species		distribution
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	regeneration to test for future-		shifts in species composition and
	adapted species		distribution
	•	<ul> <li>10.2 Allow for areas of natural regeneration to test for future- adapted species</li> <li>10.2 Allow for areas of natural regeneration to test for future- adapted species</li> </ul>	<ul> <li>10.2 Allow for areas of natural regeneration to test for future-adapted species</li> <li>10.2 Allow for areas of natural regeneration to test for future-adapted species</li> </ul>

## Actions for Wildlife (‡

Here are some examples of adaptation actions that can help maintain oak forests to meet objectives for wildlife habitat. The specific actions used in a particular location will vary based on local site conditions, management goals, and climate risks. Additional actions are described in the Adaptation Strategies and Approaches for Wildlife (in review).

Condition	Adaptation Approach	Action
Forest lacks age class or structural diversity	<ul> <li>8.1. Manage for plant species diversity and complexity</li> <li>8.8. Maintain or mimic natural disturbance regimes to enhance habitat quality</li> </ul>	<ul> <li>Allow natural succession and stand development to occur following a disturbance from fire, wind, pests, or diseases.</li> </ul>
Forests lacks downed wood	<ul> <li>8.1. Manage for plant species diversity and complexity</li> <li>8.8. Maintain or mimic natural disturbance regimes to enhance habitat quality</li> </ul>	<ul> <li>Retain downed wood following a disturbance from fire, wind, pests, or diseases.</li> </ul>

### Actions for Water ()

Here are some examples of adaptation actions that can help maintain oak forests to meet objectives for water resources. The specific actions used in a particular location will vary based on local site conditions, management goals, and climate risks. Additional actions are described in the <u>Adaptation Strategies and Approaches for</u> <u>Forested Watersheds</u>.

Condition	Adaptation Approach	Action
Presence of riparian areas, vernal ponds, and other sensitive wetlands	<ul> <li>1.2 Maintain and restore hydrologic connectivity</li> <li>1.5 Maintain and restore forested wetlands and lowland areas</li> <li>3.5 Prioritize and maintain unique habitats for refugia</li> </ul>	<ul> <li>Use conservation easements or other land use restrictions to prevent land use change or development.</li> <li>Create and expand reserve areas around sites that may be more vulnerable to extreme weather and climate change</li> </ul>
		cilliate change

 Identify and protect potential wetland migration corridors

## Actions for Forest Carbon ()

Here are some examples of adaptation actions that can help maintain oak forests to meet objectives for general forest health to provide carbon sequestration and storage, along with other benefits. The specific actions used in a particular location will vary based on local site conditions, management goals, and climate risks. Additional actions are described in the <u>Adaptation Strategies and Approaches for Forest Carbon</u>.

Condition	Adaptation Approach	Action
Potential for land use change	<ul> <li>1.1 Avoid forest conversion to nonforest land uses</li> </ul>	<ul> <li>Use conservation easements or other land use restrictions to prevent land use change or development.</li> </ul>
Mix of agriculture and forest lands on property	<ul> <li>1.2 Reforest lands that have been deforested and afforest suitable lands</li> </ul>	<ul> <li>Allow for succession to forest cover to take place through cessation of mowing, tillage, or other disturbance</li> </ul>
Forest of high conservation value and large trees or healthy, mature forest subject to few stressors	<ul> <li>5.1 Prioritize low-vulnerability sites for maintaining or enhancing carbon stocks</li> <li>5.2 Establish reserves on sites with high carbon density</li> </ul>	<ul> <li>Create no-harvest reserve areas (passive management) when consistent with landowner goals and site capability</li> </ul>

#### **On-the-Ground Examples**

- <u>Adaptive Silviculture Southern New England Oak Forests</u>
  - The Adaptive Silviculture for Climate Change (ASCC) study sites in southern New England include resistance, resilience, transition, and no action treatments in oak forests that are representative of forests across much of the region. The treatments were developed by a team of scientists and managers working to identify options relevant to smaller parcel sizes and varied ownership.