

SITE VISITS WITH LANDOWNERS

Partners from the American Forest Foundation, New England Forestry Foundation, MassConn Sustainable Forest Partnership, and Northern Institute of Applied Climate Science have worked together to develop a worksheet that can be used during forestry site visits to collect information about how a forested property may be vulnerable to climate change. This information can then be used to complete the Adaptation Workbook, if desired, or to develop management plans or activities that consider climate change.

Site Visit Sheet, Page 1: Property-level Information

The first page of the site visit sheet is intended to collect general information about the property, as well as record factors that may increase or reduce its risk from climate change. This includes basic information such as the landowner name, property acreage, date of site visit, and whether the property has a management plan or is enrolled in a current use program. It also requests information about landowner interests and goals and the harvest and management history of the property.

Site Visit Sheet, Page 2: Forest Conditions, Stressors, and Vulnerabilities

The second page of the site visit sheet asks additional details about the property that can help to inform future management. Every site is different, making it important to identify the unique conditions that may make a forest more or less healthy in the future. By collecting information about current conditions, managers can also have a better sense of whether a forest will be at risk from climate change or other stressors. Take a look at the back of this page for help walking through each component of the Site Visit form appearing on page 2.

Considerations for Your Woodlot: A Checklist for Private Landowners

One-on-one visits with landowners are essential for talking through these complex issues with landowners and making the guidance relate to their property in particular. That being said, not all of these issues or recommendations will relate to every situation, so we've designed a checklist for you to assess the most important aspects and provide details on the landowner's current situation.

The top portion of the sheet is to identify any forest stressors or weather vulnerabilities that the landowner should keep an eye on. These can be summarized based on conversations and assessments for the landowner to keep "top of mind" following the personalized visit.

The lower portion of the sheet corresponds to the Fact Sheet that the landowner will receive, which includes general recommendations to keep your forest healthy and able to adapt to changes into the future. These practices are based on several of the adaptation strategies and approaches listed earlier in this document, but phrased in simpler language. **Please check 2-5 of the recommendations that are most applicable to this particular landowner, along with some notes to provide additional details.** For example, you may want to select "Prevent and control non-native plants/weeds that threaten native plants and animals" and describe that the landowner should work to remove Japanese barberry where it is present in their forest, or select "Promote a diversity of tree species" and recommend that a landowner follow up with a forester to consider options for managing their forest to increase diversity.

Site-visit Sheet Item	Why is this important for climate change?
FOREST CONDITIONS	Every site is unique, which means that climate change will affect each place differently based on its unique conditions.
Site characteristics (soils, slope, aspect, water features):	Site characteristics have a substantial effect on the risk to forests from climate change. For example, properties on south-facing slopes with well-drained soils may be more vulnerable to drought, sites on exposed ridges may be more vulnerable to extreme wind, and sites on valley bottoms may be more prone to flooding.
Is current forest healthy and productive?	Forests that are currently healthy may be better able to respond to the many increased stressors that are expected to occur in the future. Conversely, forests that are currently stressed, regardless of the cause, are more susceptible to other stressors, such as insect pests, forest diseases, and changing climate conditions.
Is there sufficient species and structural diversity (given forest/cover type)?	Studies have consistently shown that more diverse systems are more resilient to disturbance, and low-diversity systems have fewer options to respond to change.
Constraints on access/operability:	Altered precipitation, increased heavy precipitation events, and warmer winters with less frozen ground and snow may affect access. Roads and culverts, as well as the timing of harvest operations, may need to change in order to protect soils and water resources.
FOREST STRESSORS	Changes in climate may enhance the habitat for undesirable plant species, insect pests, and pathogens, thereby increasing the potential for damage. Reducing the current impacts from invasives, pests, and pathogens will increase the ability of forests to cope with other stressors.
Insect pests	Some insect pests, such as hemlock woolly adelgid and southern pine beetle, are expanding northward under a warmer climate.
Forest pathogens	Forest diseases are expected to change in response to climate change, and may have the greatest effect on trees that are already stressed.
Invasive plant species	Many invasive plant species are better able to take advantage of the changing climate conditions than our native species.
Deer	Deer browse on understory trees and vegetation, making it more difficult to grow the future forest.
Other forest stressors	Stressors increase the risk of forest decline, and may increase the risk of a forest to climate change impacts.
EXTREME WEATHER AND CLIMATE CHANGE	An altered climate is expected to lead to more extreme weather events. Different locations will have different levels of susceptibility to these changes, which would affect future management.
Extreme precipitation events	Extreme weather events, such as severe rain and associated flooding, are expected to continue increasing. For woodland stream crossings, consider assessing vulnerable culverts, driveways or road crossings for high flow events, as future heavy rainfall may surpass historic patterns in some areas.
Short- or long-term drought	Warmer temperatures may also increase the risk of moisture stress and drought. Consider how susceptible the site is to these impacts given the soils, hydrology, and vegetation.
DOMINANT AND IMPORTANT TREE SPECIES	Individual species will respond to climate change differently. Regional projections of changes in habitat suitability can provide a general sense of how species may respond, which can be used with local expertise to determine which species may be best suited to a particular site.