

These rapid assessment protocols are designed to provide a general overview of the vegetation conditions present on each Management Unit (MU) within a park. If Management Units have not yet been established, this must be accomplished before continuing. These protocols are designed to be done in a rapid fashion and involve estimating values for the entire area of each MU. There are two main sections of data to be collected for each MU: the **Site Characteristics Inventory** and the **Vegetation Inventory**.

Site Characteristics Inventory

The first step in assessing a site is to take a look at the entire MU and complete a site characteristics inventory. This inventory provides information about the MU such as the slope, aspect, soil type, and other features that can aid in creating a restoration plan. Use the **Site Characteristics Inventory Data Sheet** to record the following site information for each MU within your park:

- **Aspect** - the direction in which water flows off the site. Options include N, NE, E, SE, S, SW, W, NW or Flat. Use a compass to determine the predominant direction of slope on the site.
- **Slope** - measurement of slope steepness in degrees or percent, please clearly mark which units are being used. Slope can be measured using an electronic or mechanical clinometer, which is a tool also used for measuring tree heights, or visually estimated.
- **Soil moisture** - record the general moisture conditions of the soil as they currently appear and are most likely to appear on any given summer day. Options include standing water, saturated soil, damp soil or dry soil.
- **Soil type** - basic soil type (sand, silt, clay or gravel). Take a small sample of soil from several areas in the plot and examine the texture. Sandy soils feel gritty. Clay soils feel sticky. Silty soils feel smooth or slippery.
- **Soil compaction** - Observe the presence of trails or other compacted areas on the plot that are human caused. Record the level of compaction on the entire site in one of the following categories: none, light, moderate or heavy.
- **Soil compaction notes** - Note compaction causes (i.e. trail, campsite, etc.).
- **Soil stability** - Observe the presence of erosion over the entire plot. Categories include None, Erosion, Slumping or Slides
- **Litter depth** - Use a pencil or small ruler to probe the depth of the litter layer on top of the soil. Record the depth in one of the following categories: 0, <1/2", 1/2" - 1", 1-2", 2-5", >5" (0, <1.27cm, 1.27-2.54cm, 2.54-5.08cm, 5.08-12.7cm, >12.7cm).
- **Bare ground** - The percent of bare ground or mulch without plants growing over the entire plot. Record in one of the following categories: 0-20%, 20-40%, 40-60%, 60-80%, >80%

- **Coarse Woody Debris (CWD)** - Visually estimate the percent cover of CWD (DBH must be greater than 5 inches) on the ground over the entire site. Record it as: 0-5% cover, 6-10% cover, 11-25% cover, 26-50% cover, >50% cover.
- **Snags** - Visually estimate number of standing dead trees (DBH must be greater than 5 inches) over the entire site. Record it as: none, low (1-5 stems per acre), Med (6-20 stems per acre), high (>20 stems per acre),
- **Overstory tree diameter** - Conduct a visual inspection of the overstory trees present on the plot. Record the predominant **diameter at breast height (DBH)** of trees over the entire site in one of the following categories: <5", 6-15", 16-20", 21-30" or >30" (<12.7cm, 15.2-38.1cm, 40.6-50.8cm, 53.3-76.2, >76.2)
- **Habitat Type** - To determine habitat type, there must be 30% or greater overstory cover of that type present. For example, if you had a predominately deciduous forest with only a couple conifer trees, it would be categorized as deciduous forest.
 - Conifer forest- Overstory dominated by conifer trees
 - Conifer deciduous mixed- More than 30% of the overstory is dominated by both conifer and deciduous trees.
 - Deciduous forest- Overstory dominated by deciduous trees
 - Forested wetland- More than 30% of trees growing in standing water or saturated soils or more than 30 % of area has small wetlands present entirely beneath overhanging forest canopy.
 - Riparian forest- Greater than 25% tree canopy with stream as dominant influence
 - Emergent wetland- Herbaceous plants growing in standing water or saturated soils
 - Madrone- More than 30% of overstory dominated by Madrones.
 - Madrone conifer mixed- Both Madrone and conifer trees make up more than 30% of the overstory
 - Madrone deciduous mixed- Both Madrone and deciduous trees make up more than 30% of the overstory
 - Shrubland- Less than 10% tree canopy and dominated by shrubs or regenerating trees (ie. blackberry, scotch broom, etc.)
 - Tree savannah- 10%-25% tree canopy with, shrubs or both
 - Oak Savannah- 10%-25% tree canopy dominated by oak trees with unmaintained grass, shrubs or both
 - Grassland/meadow- Less than 10% tree canopy with unmaintained grass
- **Special features** - Note any special features found on the site such as wetlands, streams, dumps, camps, power lines, etc.

Vegetation Inventory

- **Overstory Canopy Cover** - Conduct a visual inspection of the overstory trees present on the site. Make sure you are including the total leaf cover of those trees that are over 5" diameter at breast height (DBH). Use the following categories: 0-25%, 26-50%, 51-75%, >76%.
- **Trees** - Estimate the relative density for each category of overstory (>5 inches DBH) and regenerating trees (<5 inches DBH). Use the approximate stems per acre and the approximate feet on center to help you determine the density and record either none, low, med, or high.
- **Shrubs** - Estimate the relative cover for combined native and combined invasive shrub species and circle the corresponding percent value.
- **Herbaceous** - Estimate the relative cover for combined native and combined invasive herbaceous species and circle the corresponding percent value.

Dominance: Indicate which plants are most dominant (1) to least dominant (3) by placing a number after each species (1-3). Dominance refers to the species of greatest prevalence/biomass and has the most influence on the plant community. Species sharing a value of (1) are co-dominant. A value of (2) refers to a prevalent but not dominant species and a (3) is considered least prevalent. Up to four species of either trees, shrubs, or herbaceous plants can be listed for each category.

- **Restoration** – Indicate the general scale and type of restoration that is required on each site by circling all conditions that apply.