

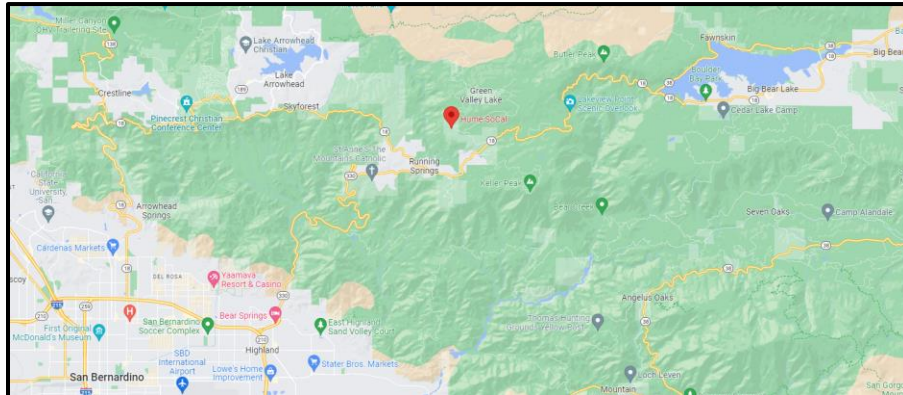
2022 SAN BERNARDINO FORESTRY CHALLENGE FOCUS TOPIC QUESTION

Introduction:

The focus topic for 2022 is ***Forest Management Planning at Hume SoCal*** (Hume). Students will consider the steps involved with forest management planning which include identifying management objectives and collecting information on the existing “stand” or group of trees with similar characteristics. Current stand data can be compared with data collected by Forestry Challenge participants at the 2015 event to see how the stand has changed in the last 7 years.

Location:

Hume SoCal is a recreational property located on Green Valley Lake Road, about 5 miles from Running Springs and about 2 miles from the community of Green Valley Lake, and is approximately half way between Lake Arrowhead and Big Bear.



Background Information:

Property History

This 250 acre parcel of private property was owned and operated as a Boy Scout Camp from the 1950's to the early 1980's, when it was purchased by the Calvary Chapel Costa Mesa. Between the late 1980's and 1994, the old buildings were demolished, and the log structures you see here today were built. The Camp opened to guests in 1994.

Shortly before opening (March 1993), the camp created a Stewardship Plan, the document that, at that time, made it eligible for government funding to do vegetation work. The funding paid for treatment, which consisted of cutting and removing small trees and pruning lower branches on larger trees, and was the first of three treatments that were completed in the late 1990's.

Between 1999 and 2003, severe bark beetle infestations in this area killed some of the trees scattered throughout Camp property. The dead trees were cut and removed in this second entry, in 2005. Then, in 2007, the Slide II Fire burned a total of 12,759 acres, and a large portion of the Camp was burned, some at high intensity, and some at low or medium intensity. In 2009, as in 2005, the majority of the dead trees were cut and removed, that being the third and last tree-removal entry. Evidence of the fire is easily seen, with many trees having charred bark.

The property is currently in escrow and will be purchased by Hume Corporation. The new owners are interested in creating a forest management plan, so they can become eligible for funding to do projects on the landscape.

Forest Management Plans

In early 2012, what used to be called a Stewardship Plan went through a "makeover". CalFire and The Natural Resource Conservation Service (NRCS), in partnership with the US Forest Service (USFS), released a new template, and renamed it the California Cooperative Forest Management Plan. The new plan not only enables a landowner to be eligible for state funding, but it is also a universal document that makes the landowner eligible for grant funding from CalFire, NRCS, USFS, and the American Tree Farm Association. The coordinated effort to create one plan helps eliminate duplication and streamlines the process of applying for and receiving grant funding. As new owners, Hume has expressed interest in updating the old Stewardship Plan to the new format.

The plan will help determine what management action(s) are appropriate for the land, how to obtain technical and financial support, and what, if any, permits may be necessary. Developing and executing an effective forest management plan may seem like a large and complex task; however, while it may certainly require some effort, it is attainable.

Forest Evaluation Process

A brand-new publication called *The Forest Management Handbook for Small Parcel Landowners in the Sierra Nevada and Southern Cascades* was written to help landowners build a California Cooperative Forest Management Plan. The Handbook organizes the forest evaluation process in a stepwise manner to assist the landowner in making decisions. The process is structured in a 4-step process: 1) define management objectives, 2) assess forest conditions on the property, 3) identify the disturbances and threats the forest may face, and 4) evaluate a variety of treatment options. The evaluation of the information collected through this process will provide the landowner with key data needed to develop a site-specific forest management plan.

Step 1 – Define Management Objectives: Establishing objectives could be the single most important decision to make for many years to come. Defining objectives will set the landowner on a path toward recognizing concerns and selecting different management actions needed to achieve the objectives. A worksheet will be provided to help students with the process.

Step 2 – Assess Forest Conditions: Quantifying the stand is essential, as it can be compared to historic and/or ideal conditions to determine what specific actions need to be taken to return the stand to a healthy and resilient condition. Data collected in 2022 can be compared to data collected in 2015 to see how the stand is changing.

Step 3 – Recognize Threats: Four examples of threats are wildfire, insects, drought, and pathogens. At low levels, these stressors/disturbances are normal, and the forest can remain healthy. However, when forests become too dense, these stressors can become threats. You will be asked to rank these threats according to their potential to damage the stand.

Step 4 – Evaluate Treatments: After completing steps 1 through 3, you can determine what treatments are most appropriate to meet the landowner goals. A “treatment” is an action or series of actions intended to support reaching the desired condition of your forest. The main options to modify the vegetation in your forest fall into three categories: 1) mechanical and manual treatments of various kinds, 2) burning piles or using prescribed fire, and 3) planting desired species.

Fieldtrip: On Thursday afternoon your team will be assigned a 1/10th acre plots for data collection, and you will determine:

- Number of trees (alive and dead) in the plot with a diameter at breast height (dbh) of 4" or greater, and their species
- Basal area using an angle gauge, which will be compared to the raw data of each tree's dbh
- Canopy cover using a densitometer
- Number of seedlings and saplings in the tenth acre plot
- Growth over the last 20 years, which can predict future growth
- Percent understory live vegetation cover
- Amount of woody debris

Items to be Addressed in Your Presentation:

Your presentation should address the following points:

1. The location, size, and history of the Hume SoCal property
2. Forest Management Plans and steps needed to create one
3. Data collection process and results of 2015 and 2022 cruise data
4. Threats to the forest and a ranking of their importance
5. Recommended treatments and their priorities

Resources:

On Thursday evening, you will be given resources on a flash drive to load onto your team's computer, including information on the stand. Additionally, you can use photos you take on Thursday and statements from foresters you work with and interview during Ask a Forester.

Final Product:

Your goal is to produce a PowerPoint presentation up to 15 minutes in length that summarizes the steps to creating a Forest Management Plan and your assessment of current forest conditions, threats, and recommended treatments. You are encouraged to use photos and information collected, interviews with resource professionals, and the maps, tables, and information on the flash drive. Additionally, use the judges' score sheet as a checklist, to make sure you cover the items on which you will be scored.