CAF MANAGEMENT PLAN: PUBLIC SUMMARY 2017

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Description of Managed Forest Resources

Location and Surrounding Landscape

The Collins Almanor Forest (CAF) is approximately 94,000 acres and is located in Tehama and Plumas Counties near Lake Almanor in northeastern California. The forest is approximately 180 air miles northeast of San Francisco, 110 air miles north of Sacramento, and 40 air miles northeast of Chico, California. The working forest component (i.e., commercial forest land) of the CAF comprises approximately 88,475 acres, the majority of this consisting of sierra mixed conifer habitat. The remaining 6,000 acres of the ownership are comprised of non-timber areas, such as meadows and lakes, non-commercial forest, rock outcrops, and the mill site in Chester.

The CAF is located at the juncture of two major geomorphic provinces of the Pacific Coast region. The western two-thirds of the CAF (Western and Central District) is located in the southern extreme of the Cascade Range, while the Eastern District to the south of Lake Almanor falls within the northern extreme of the Sierra Nevada Range. Underlying geology and derived soils reflect the CAF's location relative to these two provinces. The Central District is predominantly characterized by volcanic rocks ranging from basalt to rhyolite and andesite with ash deposits widespread throughout the area, while the Eastern District falls within the region of metamorphic and granitic rocks. These metamorphic rocks are of a much older origin (Paleozoic) than the more recent volcanic activity that formed the Southern Cascade Range.

Soils reflect the parent materials from which they were weathered, with soils derived from volcanic and metamorphic materials being most prevalent on the forest. Throughout the bulk of the forest, there is an abundance of surface rocks. Depth to bedrock varies widely but averages around 30 to 40 inches. The most erosive soils found on the CAF are the rhyolite soils found on the plateaus of the Chester Management Unit and the decomposed granitic soils found predominantly in the Wolf Creek Management Unit.

Elevations on the CAF range from 3,200 to 6,500 feet. Topography varies widely across the CAF with areas of gentle slopes, such as the "Chester Flat", and areas of steep slopes, such as is found throughout the Eastern District and in the inner gorge of Mill Creek. CAF timberlands are located in the headwaters of three major tributaries to the Sacramento River: Deer Creek, Mill Creek, and North Fork of the Feather River.

Deer Creek and Mill Creek are both unregulated tributaries and important for their native spring run salmon populations, arguably two of the last such tributaries in northern California. Both tributaries enjoy relatively little exposure from community developments, until they descend into the Sacramento Valley. Except for a pocket of Rhyolite soils in the headwaters, Deer and Mill Creeks are blessed with stable volcanic soils which tend to be less erosive and provide low sediment inputs.

The North Fork is a highly regulated arm of the Feather River possessing numerous dams and diversions for hydroelectric generation and irrigation. The East Branch of the North Fork dwarfs the former and then splits into two major streams, Spanish Creek and Indian Creek. It is only into Wolf Creek, a small tributary of Indian Creek, that the CAF drains into the East Branch. One third of the upper Deer Creek watershed belongs to the CAF, whereas our ownership in Mill Creek and North Fork of the Feather River is a minor percentage.

A number of natural and manmade lakes exist within these three basins, but only a few are adjacent to CAF timberlands. The principal lake in proximity to the ownership is Lake Almanor, which is 56 square miles of water, owned by PG&E, and operated for hydroelectric generation, recreation, and flood control. Natural lakes tend to be small and less than 10 acres in size. The most historic one of note is Wilson Lake, which, through a ditch dug by Chinese labor, provided water to the Dutch Hill Mine for hydraulic gold mining near the turn of the 19th century.

The region's continental climate is characterized by warm, dry summers and cold, wet winters, with large daily temperature ranges. Average winter temperature is 30 degrees and average summer temperature is 65 degrees. Extremes in temperature range from minus 16 degrees to 103 degrees. Precipitation is predominantly associated with eastward moving Pacific storms, though summer thunderstorms also contribute to annual totals. In Chester, the average annual precipitation is 34 inches, with approximately 75% of the precipitation falling as snow from November through March.

Ownership/Legal Status

The managing entity of the Collins Almanor Forest is: Collins Pine Company P.O. Box 796 Chester, CA 96020

Current ownership of the Collins Almanor Forest is distributed between three ownership groups:

- 1. Collins Family Members (Various locations)
- 2. General Board of Global Ministries, United Methodist Church (New York, New York)
- 3. Collins Pine Company (Portland, Oregon)

The 94,000 acres comprising the CAF is composed of 9 different variations in proportion of ownership between the above three groups, with the largest block (over 77,000 acres) being the lands of the former Curtis, Collins and Holbrook Company (CC&H). Undivided ownership of the former CC&H lands is roughly apportioned as: 55% to the United Methodist Church, General Board of Global Ministries, and 45% to individual members of the Collins family (descendants of E.S. Collins, the principal owner of CC&H).

The second largest component of the CAF is the approximately 6,000 acres held by the Collins California Trust (CCT), whose beneficiaries are members of the Collins family. The Collins Timber Properties (CTP) component of the CAF amounts to approximately 3,200 acres with undivided interest held by Collins family members as well as Collins Pine Company. Minor holdings include Rock Creek Investors (a Collins family and CPC holding), parcels with exclusive title held by the United Methodist Church, and lands held exclusively by Collins Pine Company, which includes the mill site. Finally, the CAF includes approximately 1,300 acres of land for which Collins Pine Company, or the CC&H partnership, owns only the timber rights.

The Childs Meadow and Wilson Lake properties on the CAF, which were acquired from The Nature Conservancy (TNC) in 2015, are under a conservation easement that is managed by TNC. TNC additionally still holds the grazing lease on this property as well.

History of Land Use

The historical record of the Collins Family involvement in California forestry began in 1902, with the initial purchase of timberland in Plumas and Tehama Counties in Northeast California by the partnership of Curtis, Collins and Holbrook (CC&H). By 1912, CC&H had acquired over 62,000 acres in the region. At the time of T.D. Collins' death in 1914, his 95% interest in the CC&H partnership passed on to his son, E.S. Collins. E.S. carried on the land stewardship philosophy of his father, which was strongly influenced by their active membership in and support of the United Methodist Church. Through the tenure of both T.D. and E.S. Collins, these timberlands were not actively managed for timber production, in part due to the lack of a mill in Chester, poor transportation, and because of the emphasis on timbering on other lands outside of California.

With E.S. Collins' death in 1940, leadership passed to his son, Truman Collins, who was elected President of all Collins enterprises. With Truman's assumption of leadership came a new era of active management of the land base. The passing of E.S. Collins also led to a new era of involvement of the World Division of the United Methodist Church, to whom E.S. willed an undivided 55% ownership in the California CC&H land base.

Prior to the CC&H partnership establishment in Northeast California, T.B. Walker and his Red River Lumber Company operated a very large sawmill in nearby Westwood. By 1910, T.B. Walker owned over 750,000 acres in the region, a holding that later would be heavily cutover by the Red River Lumber Company in the first four decades of the 20th century. By 1940, Red River had cut most of its timber in the vicinity of Chester and they were amenable to selling bare land as a site for the future Chester sawmill and 13 miles of railway to the Collins enterprises. These acquisitions and subsequent construction of the sawmill at Chester enabled the opening of the active era of management of the Collins land base, which was expanded shortly thereafter (1946) by the acquisition of the 17,500 acres of cut over land later to be termed the Wolf Creek Management Unit. At that time, the land holdings were renamed the Collins Almanor Forest (CAF) and long term cutting/management rights were contracted to Collins Pine Company (CPC), an entity entirely held by members of the Collins family. Collins Pine Company owns the Chester mill, which began operating in 1943.

Beginning with the first harvests in 1941, the CAF was put under sustained yield management, with fee-land timber eventually supplying roughly 50% of the mill's annual log requirements. An early management emphasis was the development of a road network affording access to the CAF, eventually totaling over 680 miles of roadways on the property. The same time period saw the expansion of company logging crews and equipment as well as a fleet of off-highway trucks for transporting logs to the Chester mill. By the early 1990's, economic conditions in the timber industry and the aging nature of the Collins rolling stock dictated a change to contract logging and hauling, under the supervision of Collins Pine foresters.

Social Impacts

The Collins Almanor Forest is part of the Collins Companies headquartered in Portland, OR, with 295,000 acres of FSC certified timberland in Pennsylvania, Oregon, and California. There is one retail store (Builder's Supply) in Chester, CA. The Collins family is committed to the sustainable, long-term

management of the CAF and the community it benefits. Collins Pine Company (CPC) in Chester employs more than 100 people with an annual payroll of over \$9 million in taxes, payroll, and benefits. These positions are family wage earning jobs through the Western Council of Industrial Workers Local #3047. In addition, CPC contracts out to another 70+ woods workers at about \$6 million per year to supply the sawmill with logs and chips. Taxes paid by CPC help support Plumas County schools, build local roads, and maintain local public services. CPC also provides funding for a host of community charities and is the annual sponsor of Little League, the Chester Fun Run, Girl Scouts, Boy Scouts, and other children's groups. Land grants from the Company have aided expansion projects for the Seneca Health District, Plumas County School District, Chester Cemetery District, the Almanor Recreation and Park District, and the Wildwood Senior Center and Apartments. CPC also sponsors the Almanor Scholarship Fund, which awards graduates of Chester High School up to \$2,400 annually.

See the 2014 Collins Almanor Forest Sustained Yield Plan (SYP) for additional information on public access to the forest, recreational impacts and mitigation, and visual resource management.

Forest Types

See the 2014 Collins Almanor Forest SYP for information on forest and other habitat types that occur on the CAF.

Natural Disturbance Regime

See the 2014 Collins Almanor Forest SYP for historical fire events occurring on the CAF. See the insect and disease management section for more information on disease/insect events on the CAF.

Description of Silvicultural System

Current and Desired Forest Conditions

See the 2014 Collins Almanor Forest SYP for a list of management objectives on the forest and a complete description of current and future desired forest conditions on the CAF. This description also includes historical management, such as grazing and fire history, and current protection measures against threats like these. Previous timber harvesting projects are also discussed in the CAF SYP.

Silvicultural System

See the 2014 Collins Almanor Forest SYP for a complete description of the main silvicultural systems used to on the CAF, which was designed to sustain the forest over the long-term.

Annual Harvest and Species Selection

See the 2014 Collins Almanor Forest SYP for a complete description of species selection and harvest rate calculations on the CAF.

Forest Growth and Dynamics

See the 2014 Collins Almanor Forest SYP for information on monitoring forest growth and dynamics on the CAF.

Harvesting Equipment and Techniques

To harvest timber off the CAF, there are two main machines used in the forest: a feller buncher, which cuts the tree, and a skidder, which brings the tree to the landing to be decked and shipped. Additional equipment is used, such as loaders and logging trucks, to transport the logs off the landing site. These additional pieces of equipment remain on the landing site and designated roads, and thus have no direct impact on the forest.

Chemical Use

See the 2014 Collins Almanor Forest SYP for information on the use of herbicides in reforestation on the CAF.

Biological Controls

No biological control agents are used on the CAF.

Transportation Network

See the 2013 Collins Almanor Forest Road Management Plan (RMP) for a description of management and monitoring of the CAF road system.

Insects and Disease Management Plan

Insect pests and forest pathogens are naturally occurring features in forested landscapes, with the CAF being no exception. Major insect pests, those that cause the most damage, on the CAF include fir engraver beetle (Scolytus ventralis), mountain pine beetle (Denroctonus ponderosa) and western pine beetle (Dendroctonus brevicomis) and pathogens include root disease (Armillaria mellea, Heterobasidion annosum, Phaedrus schweinitzii, and Lepographium wageneri), Indian paint fungus (Echinodontium tinctorium) and Cytospora canker of true firs (Cytospora abietis). Insects and pathogens help naturally thin overstocked stands, maintain food for species such as woodpeckers, and create features in trees for wildlife that provide suitable structure for denning, nesting, and foraging. While there are many positives to insect pests and pathogens, natural and anthropogenic events can increase pests and pathogens to levels that decrease forest health, and in extreme cases, completely wipe out a forest stand. Events such as drought and warm winters not only stress trees and leave them more susceptible to invasions, but it can also increase insect pest populations and create a more suitable environment for forest pathogens, further exaggerating these pressures. Anthropogenic activities, such as fire suppression, can additionally stress forest stands by maintaining overstocked areas, which cause increased competition between individual trees and additional stress. Trees affected by insect pests and disease can impacted in many ways. Unless a tree can fight off the invasion, it ultimately will die. Prior to dying though, trees can be impacted through blue stain and other features that affect the quality of the wood.

On the CAF, we are experiencing higher than normal mortality that is anticipated to continue for the next couple of years due to a four year drought (2011-2015), but will likely decrease over time to a more normal level with aggressive salvage logging and improving forest health by decreasing stand

density. Overall, we are not seeing property-wide high levels of mortality, but instead pockets of attacks on the more xeric (drier) portion of the property. While insect pests and forest pathogens have always naturally occurred on the CAF, over the last decade, the CAF has experienced increased levels of pest and pathogen invasion, causing us to re-evaluate our management goals to control insects and disease and to aim to increase forest health across the landscape. Environmental factors, including decreased precipitation, warmer winters, and increased fires, have left the CAF more susceptible to insect and pathogen invasions than historically. While we are unable to manage for these environmental factors, there are other actions the CAF is taking to decrease levels of insect and pathogen invasion and increase forest health.

The first step we are taking is assessing our silvicultural regime across the landscape and looking specifically at tree density, tree species mix, and tree vigor. Proper tree spacing and planting species in their best growing environment reduces stress and gives individual trees the best chance of surviving an insect or pathogen attack. For areas with high pest and/or pathogen populations, management goals include salvage logging of merchantable trees and reduce stocking levels of species more susceptible to drought stress and attack, which can reduce levels of insects and disease. While removing infected trees can be the best way to slow an invasion, some infected trees are left on the landscape for wildlife purposes, as these defect trees have the most wildlife value. Future populations of pests and disease on the CAF are unknown, but we are hopeful that through more informed management of the forest, we will decrease pest and disease populations to a more typical background level and maintain a healthier forest.

Environmental Safeguards

Water Resources

See the 2014 Collins Almanor Forest SYP for a complete description of water resources on the CAF.

Soil Resources

See the 2014 Collins Almanor Forest SYP for a complete description of soil resources on the CAF.

High Conservation Value Forest (HCVF) and Representative Sample Area (RSA)

See the 2017 Collins document *High Conservation Value Forests and Representative Sample Areas: Identification and Assessment on the Collins Almanor Forest* for a complete description of areas identified as HCVF or RSA on the Collins Almanor Forest. This description includes management and monitoring of these areas.

Other Special Management Areas

See the 2014 Collins Almanor Forest SYP for a description of other areas with environmental safeguards, such as erosion potential, riparian function, seismic and volcanic risk, other potential geologic hazards, sensitive road condition areas, etc.

Identification and Protection of RTE Species

Description and Conservation of RTE Species

See the 2014 Collins Almanor Forest SYP for a full description of special status plants, wildlife, and communities, including their occurrences on or adjacent to the CAF, critical periods, and protection measures if the species is found.

Invasive Species Management Plan

Priority invasive species have been identified on the CAF. If additional species are encountered, they will also be evaluated for mapping and treatment on a case-by-case basis. The control strategy for priority invasive species is:

- Identify areas with non-native flora and fauna with invasive tendencies. This will be done during the Timber Harvest Plan (THP) process when intensive surveys for plants and wildlife are conducted. Areas designated as HCVF/RSA may receive regular surveys for priority invasive species if there is the high potential for these species to occur (such as disturbed areas).
- 2. Areas identified as having non-native species will be mapped to determine the extent of the occurrence.
- 3. If possible, management/restoration techniques will be implemented to remove or lower populations. Invasive tendencies vary by species, thus management/restoration techniques will be species specific and will depend on the extent of the occurrence.
- 4. Post-restoration monitoring will be conducted to ensure the species does not return or that populations don't increase.

Maps Depicting Forest Resources

See the 2014 Collins Almanor Forest SYP for various maps of different features on the CAF.