The Roles and Contributions of the Sequoia National Forest - DRAFT

The Sequoia National Forest encompasses over 1.1 million acres of land and water along the western slope of the southernmost end of the Sierra Nevada Mountains. Soaring granite monoliths, glacier-carved canyons, limestone caves, roaring world-class whitewater, and scenic lakes and reservoirs defined by towering conifers describe the Sequoia National Forest. It is the gateway to the southern Sierras, including the highly visited Giant Sequoia National Monument (Monument). The forest has two sections divided by the Sequoia and Kings Canyon National Parks, bordered by the Sierra National Forest to the north, the Inyo National Forest to the east, and the Tule River Indian Reservation to the west.

The Sequoia National Forest, named for the world's largest trees, contains the greatest concentration of giant sequoia groves in the world. Thirty-three groves and the areas around them are protected within the Monument. The Monument is unique as it is the only national monument in California that was designated by presidential proclamation.

Elevations range from 790 feet in the Lower Kern River Valley to 11,873 feet in the Golden Trout Wilderness. The elevation span under 12,000 feet, combined with the variability in aspect and slope created by deep river canyons, a variety of geology and soils, and precipitation primarily as rain at low elevations and snow at high elevations, creates an extremely high diversity of ecosystems across the forest. The Sequoia National Forest has a particularly diverse assemblage of plant communities and a high diversity of rare and endemic plants. This is because the forest is situated at the crossroads of five different geographic and floristic provinces: Sierra Nevada Mountains, San Joaquin Valley, Great Basin Desert, Mohave Desert, and Tehachapi Mountains.

This varied landscape is critical in supporting biological diversity in the western United States. The Sequoia National Forest is inhabited by over 2,000 plant species, and approximately 304 species of terrestrial wildlife: 194 bird species, 85 mammal species, 13 amphibian species, 25 reptile species, and nine native fish species. The forest is one of three native sites for the Pacific fisher, a threatened species, whose original range included much of the western United States and Canada. The forest's terrestrial and aquatic plant and animal species, and the resulting biodiversity, are critical for resilient and healthy forest ecosystems upon which all social and economic contributions depend.

The lands and people are connected and have a strong influence on each other. Native Americans have inhabited these areas for thousands of years and their diversity, longevity, and importance in the region result in deep cultural ties to the forest and surrounding lands. The forest lies in the traditional territories of five federally recognized tribes, as well as a number of other tribes, groups, and tribal organizations. Tribal communities are important partners in forest management activities.

From the dramatic Kings Canyon, through the ancient giant sequoias, down to the mighty Kern River, and on to the Kern Plateau and Piute Mountains, the Sequoia National Forest features diverse settings and special places, providing benefits to people from far and near. The Sequoia National Forest and the Monument offer visitors spectacular views in a dramatic range of settings and an attractive overnight destination for visitors. Opportunities are plentiful for hiking, horseback riding, mountain biking and offroad vehicle use. Forest facilities offer experiences that range from highly developed campgrounds and

picnic areas, to minimally developed overnight and day use areas that serve primarily as access points to trails, creeks, rivers, and general forest areas for people who prefer to camp without the amenities that developed sites provide. Key developed recreation areas include campgrounds and day use sites at Lake Isabella, along the Kern River, and on the Kern Plateau. The Greenhorn Mountains and Piute Mountains provide valued dispersed recreation opportunities. The resulting tourism from recreational opportunities in the forest contributes to the economic stability of some local communities. Visitor spending supports jobs, creates revenue for local businesses, and generates county sales tax revenues used to provide local public services.

The Sequoia National Forest has six areas designated as wilderness and one area proposed for wilderness in the Giant Sequoia National Monument, adding up to 314,310 acres, or 27 percent of the forest. These areas offer solitude and vast open spaces as part of one of the largest contiguous blocks of wilderness in the continental United States.

The Sequoia National Forest provides opportunities for nature-based education to a wide variety of local and area residents. The Long Meadow Grove features the accessible Trail of 100 Giants that educates hikers on the ecology of the giant sequoias. Programs like the Youth Conservation Corp and Wild Places provide opportunities to students from communities in and around the San Joaquin Valley to learn about natural resources, as well as to contribute to stewardship.

The San Joaquin Valley located to the west is mostly rural and agricultural in character and has historic economic and cultural ties to the commodities that are produced on the forest. In addition, the valley is home to urban centers with a growing and increasingly diverse racial and ethnic population that is seeking new and evolving recreational opportunities. Within this ecological, social, and economic landscape, the Sequoia National Forest contributes a vast array of benefits.

Cultural opportunities are also an important contribution of forest lands. Tribal communities benefit socioeconomically through the use of cultural resources for artisan and craft materials, medicinal purposes, fuel, and traditional foods, and by supporting heritage tourism and recreation. Cultural resources on the Sequoia National Forest also enhance the sustainability of tribal communities by providing opportunities for traditional ceremonies and religious practices that strengthen the community's sense of place and self. Gathering activities on the forest play an important role in contributing to social, economic, familial, and religious benefits. Native American areas for gathering and distributing wealth and resources on the Sequoia National Forest include sedge beds, sour berry patches, meadows, elderberry patches, and black oak groves, just to name a few. Among the general public, the young fronds of bracken fern are used in several types of Asian cuisine by residents of the Central Valley.

Maintaining wildland urban intermix zones in a condition that prevents the spread of fire and reduces fire hazards to adjacent lands and communities is a key contribution of the Sequoia National Forest to local communities. Managed wildfire, prescribed burning, and mechanical treatments will be used as tools in the national forest to reduce hazardous fuels and maintain fuel conditions that support fires characteristic of complex ecosystems. However, wildfires will also be actively suppressed when needed to protect key resources in the national forest and to prevent intrusion of dangerous fires into the wildland urban intermix defense zones.

The lands of the Sequoia National Forest provide water and hydropower. Watersheds of the Sequoia National Forest drain into the Tulare Buena Vista Lakes Hydrologic Province and contribute to municipal, agricultural, recreation, warm and cold freshwater habitat, groundwater recharge and

freshwater replacement. The benefits to people from all of these uses are extensive from the water originating on the forest. Most of the runoff from the northern Sequoia National Forest is carried by the Kings River to Pine Flat Lake and Dam. In the southern section of the forest, the Kern River flows into Lake Isabella and then down into the southern end of the Central Valley. Three reservoirs on or adjacent to the Sequoia National Forest have an historic average of approximately 1,360 thousand acre feet of water and ultimately supply water to the populations and agricultural industries of the southern San Joaquin Valley. Six hydroelectric projects are located on the forest, four on the Kern River, and two on the Tule River. These contributions of the forest are absolutely critical in supporting the economic and social sustainability of jobs, rural culture, and quality of life in the San Joaquin Valley. There are also benefits to people living outside of the Valley who value the commodities obtained from continued agricultural production in the area – one of the most diverse and fertile agricultural areas in the world.

Some of these benefits of the forest are more easily appreciated than are others. For example, forest recreational and cultural opportunities, as well as a clean water supply, are enjoyed directly by people and communities as a whole and, as a result, their contributions to our well-being are more clearly understood. Other vital forest ecosystem services provide benefits that are less apparent in our daily lives but are important because they support and regulate the ecosystems and social environments in which we live (e.g., biodiversity). The benefits from all forest contributions provide tremendous ecological, social, and economic value to us all. The term "value" is used here to represent something more inclusive than a monetary or dollar value and captures the idea that all contributions of the Sequoia National Forest, even when they are not directly related to dollars that are spent or received, still contribute to improving the quality of our lives.