

EXECUTIVE SUMMARY

CLEAR CREEK/KINGS CANYON

LANDSCAPE ANALYSIS AND STRATEGY

Submitted to:

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BACKGROUND

Study Objectives and Approach

The Clear Creek/Kings Canyon strategy provides a vision for management of National Forest System lands in Clear Creek, Kings Canyon, and Voltaire Canyon. The objective of this landscape analysis is to provide essential background information for future site-specific decisions, to set priorities for management actions, and to identify management situations needing attention. While this document does contain specific recommendations, it is not a decision document. Any ground-disturbing, site-specific action that would be undertaken as a result of these recommendations will require compliance with the National Environmental Policy Act, which includes an environmental analysis and opportunities for public comment.

The Clear Creek/Kings Canyon landscape analysis and strategy focus on the key questions identified to be most relevant for land and resource management. The issues and associated key questions identified by the U.S. Forest Service and the public include: (1) Vegetation and Fuels, (2) Recreation, (3) Scenery Management, (4) Wildlife, (5) Watershed, (6) Roads Management, (7) Cultural Resources, and (8) Law Enforcement. Baseline conditions are characterized in the landscape analysis using the best available information.

General Setting of Analysis Area

The Clear Creek/Kings Canyon analysis area is located on the Carson Ranger District of the Humboldt-Toiyabe National Forest in western Nevada (Map 1). The analysis area is located in Carson City and Douglas County, Nevada. It encompasses approximately 17,000 acres, of which 10,000 acres are National Forest System lands located west of U.S. Highway 395 near Carson City, Nevada, along the California-Nevada border. The landscape analysis area includes the Clear Creek (10,234 acres), Kings Canyon (4,165 acres), and Voltaire Canyon (2,461 acres) sub-areas.

Land ownership status in the Clear Creek/Kings Canyon analysis area is 60.0 percent in National Forest System lands, 31.1 percent in private lands, 3.8 percent in Nevada state lands, and 1.9 percent in mixed (private/tribal). The U.S. Forest Service land allocations applicable to the analysis area, based on the Sierra Nevada Forest Plan Amendment, include Old Forest Emphasis Areas, Protected Activity Centers (California spotted owl and northern goshawk Protected Activity Centers [PACs]), Riparian Conservation Areas (RCAs), Urban Wildland Intermix Zones (Defense Zone and Threat Zone), and General Forest (Map 2).

Public Involvement and Partnerships

The U.S. Forest Service involved the public and local government agencies to help identify issues and land/resource management concerns for the Clear Creek/Kings Canyon landscape analysis. A public meeting was held in March 2003, which was attended by about 40 local residents and agency representatives. In addition, a short article about the landscape analysis was published in "The Flow", a newsletter by the Carson Water Subconservancy District. An overview of the landscape strategy was presented to the Clear Creek Watershed Council at one of their regular meetings. Agencies consulted include Carson City, Douglas County, the Washoe Tribe, and Nevada Department of Transportation. The U.S. Forest Service worked in close cooperation with Carson City Department of Recreation and Open Space staff in developing the recreation issues and associated recommendations. The Nevada Division of Forestry, Nevada Department of Wildlife, and Nevada Division of Water Resources provided relevant background information for the landscape analysis.

VEGETATION AND FUELS

Key Findings

Past natural disturbances, land use/management, and fire exclusion have contributed to the current altered forest conditions and landscape pattern in the Clear Creek/Kings Canyon analysis area. Forest growth has contributed to increased fuel hazards, which in turn have increased the risk of loss or degradation from wildfires in the montane conifer forests. Higher tree densities now compared to historical conditions also increase the forest's susceptibility to insects and disease. Wildfires-related forest disturbances and recreation-related human activities increase the risk of noxious weed or invasive plant infestations.

In the Clear Creek/Kings Canyon analysis area, the increased risk of catastrophic wildfires threatens properties, structures, and other ecosystem values within National Forest System lands and adjacent private lands. Landscape-level vegetation and fuels management strategies are needed to restore the forest and reduce fuels, and to effectively modify existing wildfire patterns. Efforts to reduce hazardous fuels are underway on private lands in the Clear Creek watershed. There are potential opportunities to enhance fire and fuels management at the landscape-scale by coordinating and prioritizing the activities on National Forest System lands in conjunction with private lands.

Recommendations:

Vegetation and Fuels

- Treat vegetation/fuels to reduce wildfire risk/hazard in the Clear Creek, Kings Canyon, and Voltaire Canyon areas. Vegetation/fuels treatment strategy include the following:
 - Treat fuels in the eastern edge of Section 5 (T14N, R19E), adjacent to the proposed golf course development (the Schneider Ranch property) (Map 3). Work with the developer to design more fire-safe conditions and reduce wildfire hazard/risk in the area.
 - Treat fuels in the area just south of U.S. Highway 50 in the southeast corner of Section 33 (T15N, R19E), directly west of the Nevada State Youth Camp (Map 3). The construction of an underpass associated with the Schneider Ranch property development is tentatively proposed just east of this area.
 - Reduce hazardous fuels by effectively treating dense sagebrush cover type, thus creating a fuelbreak near existing homes in the northeast portion of Section 23 (T15N, R19E) in the Kings Canyon area (Map 3).
 - Design fuel treatments cooperatively with the Nevada Division of Forestry, Carson City Fire Department, East Fork Fire District, and Douglas County for the Clear Creek watershed. Fire/fuels management is complex for this area as a result of the existing wildland urban interface communities.
 - Apply strategically placed area treatments (SPLATs) to effectively modify the wildland fire behavior and interrupt fire spread across the landscape (Map 3). The layout of the SPLATs should be modified as required by on-the-ground information.
 - Use mechanical thinning and/or prescribed fire for vegetation/fuels treatments in the SPLATs. Vegetation/fuels treatments should be consistent with the standards and guidelines outlined in the Sierra Nevada Forest Amendment (USDA Forest Service 2001a).
 - Use prescribed fires as follow-up fuels reduction treatments after stand structure modification by mechanical methods in the SPLATs. Use mechanical treatments such as mastication and piling when burning opportunities are limited because of concerns that the smoke may affect air quality.
 - Use mechanical treatments and/or prescribed fires to maintain the existing fuelbreak in the southwest portion of the Clear Creek area (Map 3).
 - Use mechanical thinning and/or prescribed fire for fuel reduction treatments in Old Forest Emphasis Areas and Riparian Conservation Areas (RCAs) within the proposed SPLATs (Maps 2 and 3). Use prescribed fires in RCAs to restore and enhance selected fire-adapted riparian vegetation and to reduce conifer encroachment in riparian and aspen cover types.

- Consider the use of grazing animals to reduce fuels in cheatgrass-dominated areas.

Noxious Weeds and Undesirable Plants

- Survey and map the occurrence and distribution of noxious weeds and undesirable plants. Focus surveys on travel corridors, recreation facilities, and recently burned areas.
- Manage the known occurrences of noxious weeds using an integrated weed management approach that establishes treatment priorities. Work with local weed management groups to ensure that noxious weeds are effectively being managed.

RECREATION

Key Findings

Recreational use, including mountain biking, off-highway vehicle (OHV) use, hiking, picnicking, camping, cross-country skiing, hunting, and fishing, of the Clear Creek/Kings Canyon analysis area is high as a result of the area's proximity to population centers such as Lake Tahoe, Carson City, and Douglas County. The residents of the Carson Front Range and other out-of-town visitors are demanding public access to more recreation opportunities. Hence, there is a need for additional looping trails system and developed recreation facilities such as day use areas and trailheads.

Recreation facilities on National Forest System lands should be linked with public facilities on Carson City and Douglas County lands by designating existing routes as potential connector trails, developing trailheads and parking facilities, and building new connector trails. Improvements for public recreation uses could include day use areas, motorized and non-motorized trails, and other facilities.

Recommendations:

Day Use Area

- Create a day use area in Kings Canyon. The proposed Borda Meadows day use area (locally referred to as Griffith Grove), which would be accessed from a spur road off of Kings Canyon Road, should be developed in partnership with Carson City (Map 4).

Trailheads

- Lower Kings Canyon Trailhead: This trailhead would be located on National Forest System lands off of Carlisle Court (near Kings Canyon Road) (Map 4). It would connect a National Forest System non-motorized trail with Carson City streets and trails through an existing public access easement.
- Borda Meadows Trailhead: In partnership with Carson City, improve the trailhead parking area and expand the information center located on National Forest System lands (Map 4).

- Upper Kings Canyon Trailhead: Create a trailhead, parking area, and information center (Map 4). Opportunities exist to access the scenic vista point to the southeast and connect to the Borda Meadows Day Use Area to the east via a trail.
- Voltaire Canyon Trailhead: In partnership with Carson City, create an OHV staging area with an information center in Voltaire Canyon near the Carson City watertank (Map 4). This facility will provide information on designated four-wheeled drive routes and guide OHV use in the area.
- Fuji Park: Establish an information center in Fuji Park in cooperation with Carson City to educate the public about the recreation opportunities in the area (Map 4).
- Clear Creek Trailhead: Improve the trailhead parking area along the Old Clear Creek Road, west of the Nevada State Youth Camp (Map 4). An opportunity exists to work with Douglas County and the Schnieder Ranch developers to improve the existing trailhead facilities or create new facilities on private property.
- Spooner Summit Day Use: Improve the existing Spooner Summit day use area and trailhead for year-round uses (Map 4). Explore ways for visitors using the Tahoe Rim Trail, Clear Creek Road, and Kings Canyon Road to safely cross U.S. Highway 50.

Non-Motorized Trails

- Kings Canyon Area: In partnership with Carson City, create a trail from the Upper Kings Canyon Trailhead to Borda Meadows Day Use area. Connect the Borda Meadows Day Use area to the Borda Meadows Trailhead and the Lower Kings Canyon Trailhead via new trail construction and conversion of existing two-track roads (Map 4).
- Capital to Capital Trail: In partnership with Carson City, explore the possibility of connecting Kings Canyon Road or other trails in the area with the Tahoe Rim Trail. This connection would facilitate the plan for a regional trail system from Sacramento, California to Carson City, Nevada.
- C Hill: In partnership with Carson City, connect C Hill with the trail system in Kings Canyon (Map 4). This would provide an additional connector to the trail system on National Forest System lands.
- Clear Creek Area: Retain the Old Clear Creek Road as a travel route for non-motorized use. Work with private landowners for developing a connector trail to link the Old Clear Creek Road to Spooner Summit Day Use area (Map 4).

Motorized Roads and Trails

- Voltaire Canyon and Kings Canyon: In partnership with Carson City, designate a system of OHV use roads and trails. The road network would utilize existing roads and may involve the relocation of some road segments and new road construction. Using existing roads and trails identify a travel route from the Voltaire Canyon OHV trailhead to Kings Canyon.

- Kings Canyon Road: The Kings Canyon Road to Spooner Summit should allow access for public recreation use and be maintained for high clearance vehicle.
- Old Clear Creek Road: Maintain the Old Clear Creek Road from the Clear Creek Trailhead on National Forest System lands to Spooner Summit for fire-related access and administrative use.

SCENERY MANAGEMENT

Key Findings

The scenery of the Clear Creek/Kings Canyon analysis area is important to both residents and visitors to the Carson Front Range. It forms the scenic backdrop to the communities of Carson City and Douglas County. The scenic backdrop contributes significantly towards the quality of life for people and communities in the Northern Sierra. This area provides visitors arriving from the East with their first views of the Sierra mountainous landscape after hundreds of miles of the Great Basin desert scenery. It provides visitors from the West with their first views of the dramatic east slope of the Sierra Nevada, with elevation dropping from 7,100 feet at Spooner Summit to 4,500 feet at Carson City over the course of a few miles.

Both Carson City and Douglas County cite visual integrity as a major criterion when identifying prime open space. Past scenery management for National Forest System lands focused on maintaining a natural landscape along major travel corridors. The current Toiyabe National Forest Plan (USDA Forest Service 1986) protects scenery mainly along the U.S. Highway 50 corridor. This scenery management direction needs to be updated to protect vistas and scenic backdrop throughout the Carson Front Range.

Recommendations:

- Amend the Toiyabe National Forest Plan (USDA Forest Service 1986) to update the scenery management objectives. The updated objectives should be a comprehensive, scenery management direction for key scenic areas, including the U.S. Highway 50 scenic corridor, the lands around well-traveled National Forest System trails, and the lands that form the scenic backdrop for Carson City and Douglas County.

WILDLIFE

Key Findings

Sagebrush/bitterbrush habitat is important breeding areas and winter range for mule deer. Increased development along the Carson Front Range, combined with the effects of periodic wildland fires, have resulted in loss and degradation of key winter range habitat and traditional migration/travel corridors for mule deer.

Old forest is key suitable habitat for California spotted owl, northern goshawk, flammulated owl, white-headed woodpecker, and American marten. Two old-growth Jeffrey pine stands (approximately 530 acres combined) are known to occur on National Forest System lands in

the upper reaches of Clear Creek watershed. The existing old forest is vulnerable to potential loss or degradation resulting from wildland fires.

Recommendations:

- Sagebrush/Bitterbrush Habitat: Implement mule deer habitat improvements in this vegetative cover type, including seeding of fire-damaged lands with sagebrush and planting bitterbrush. Cheatgrass invasion may be a problem after fires; thus, cheatgrass control is essential for habitat restoration with native plant species. The habitat improvement projects could be a collaborative effort between the U.S. Forest Service, Mule Deer Foundation, and Nevada Division of Wildlife. Sagebrush habitat improvement areas for mule deer are identified in Map 3.
- Old Forest Habitat: Implement habitat maintenance and/or enhancement actions (including mechanical thinning and/or prescribed fire) to protect or improve old forest characteristics and reduce the risk of wildfire in and adjacent to this tree-dominated habitat stage. Old forest habitat protection area is identified in Map 3.

WATERSHED AND ROADS

Key Findings

Watershed resources are identified as a key value in the Carson Front area. Accelerated erosion and sedimentation in Clear Creek drainage was documented in an erosion assessment (PBS&J 2003). Forest roads (including segment of U.S. Highway 50) and associated gullies were documented as the most significant sediment sources in the Clear Creek watershed (PBS&J 2003; USDA Forest Service 1993a). In addition, loss of vegetative cover from wildfires could result in increased soil erosion and adverse impacts on water quality as a result of sedimentation.

Recommendations:

- Coordinate with the Nevada Department of Transportation to implement the proposed watershed mitigation projects in the Clear Creek drainage. To the extent possible, the U.S. Forest Service should work with the Nevada Department of Transportation to implement the recommendations proposed in the PBS&J (2003) report for National Forest System lands (see Map 4 for locations of proposed projects). The proposed projects would include slope and gully stabilization or construction of sediment retention basins (see Appendix G for details).
- Repair road-stream crossings on Old Clear Creek Road and Kings Canyon Road on National Forest System lands to reduce sedimentation to Clear Creek and Kings Canyon Creek, respectively.
- Implement road maintenance to meet road management and water quality objectives for the Clear Creek/Kings Canyon landscape analysis area. Maintenance efforts for the travelways should be focused on existing road-stream crossings and roads in riparian conservation areas.

CULTURAL RESOURCES

Key Findings

Fifty-eight historic archaeological sites have been recorded in the Clear Creek/Kings Canyon analysis area. Of these sites, only a few have been evaluated for the National Register of Historic Places. The culturally significant resources include the Kings Canyon Road, Swift's Station, Rufus Walton Toll Road, and Clear Creek Flume/Spooner Summit Complex. Potential threats to the heritage resources in the analysis area consist of natural disturbances (e.g., soil erosion and wildland fires) and human activities (e.g., vehicular traffic, including OHV use). The National Historic Preservation Act of 1966 ensures the protection and enhancement of historic properties on National Forest System lands. A comprehensive and detailed management plan for cultural resources is needed for the analysis area.

The Washoe people have strong traditional ties to the area and are interested in National Forest System lands-related management activities and protection of natural and cultural resources. Tribal members actively use the Clear Creek, Kings Canyon, and Voltaire Canyon areas for traditional cultural purposes.

Recommendations:

- Develop a management, interpretation, and maintenance plan for Kings Canyon Road in consultation with the Nevada State Historic Preservation Office. Nominate Kings Canyon Road for the National Register of Historic Places.
- Create interpretative products focused on logging and transportation during the Comstock era, the roles of Chinese and Basque immigrants in Sierra history, and the use of the area by Native Americans. The interpretive products could include heritage resources website, informational videos and pamphlets, and informative kiosk or signs.
- Establish a stewardship program aimed at monitoring important historic/heritage sites, such as Kings Canyon Road, Clear Creek Road, and Swift's Station.
- In partnership with the University of Nevada in Reno, plan and implement Passport in Time excavations for Swift's Station.
- Develop cultural resources interpretative materials for the lower Kings Canyon loop trails.
- In cooperation and consultation with the Washoe Tribe of Nevada and California, develop management and protection measures for traditional use areas that are located within the analysis area.

LAW ENFORCEMENT

Key Findings

The Clear Creek/Kings Canyon analysis area has substantial incidents of late-night outdoor parties, trash dumping, illegal campfires, and unauthorized OHV use. There is a need for increased law enforcement presence on National Forest System lands in this area.

Recommendations:

- Develop an intergovernmental agreement with Carson City to patrol the future trailheads and parking areas along Kings Canyon Road, the proposed day use area in King's County, and Voltaire Canyon for nuisance activities.
- Increase public education of recreation opportunities and allowable activities. Updated materials on the access plan and allowable uses of the travel routes should be made available to the public. Increased signage and enforcement of rule violations are necessary for control of the nuisance activities to be effective.

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